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Analyses of Natural Gases, 1917-85

By B. J. Moore and Stella Sigler

UNITED STATES DEPARTMENT OF THE INTERIOR

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This publication contains 14,242 analyses of gas samples from oil and gas wells and natural gas pipelines in 40 States and 24 foreign countries. These gas samples were collected during the period 1917–85 as part of the Bureau of Mines survey for helium occurrences. The gas analyses contained herein were made by several methods over the period covered. Analytical work on samples collected early in the period was done on the Orsat apparatus. The one-cut apparatus and four-cut fractional distillation equipment were added later. A mass spectrometer was acquired in 1949 and used for all gas analyses made after that time. From 1917 to 1978, helium analyses were made on special helium analytical equipment designed and built by the Bureau of Mines Helium Operations Laboratory. In 1978, this apparatus was replaced in the quantitative helium analysis work by a gas chromatograph.

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UNITED STATES DEPARTMENT OF THE INTERIOR
Donald Paul Hodel, Secretary

BUREAU OF MINES
Robert C. Horton, Director

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environment and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT

Bcf	billion cubic feet	mA	milliampere
Btu per cu ft	British thermal unit per cubic foot	Mcfd	thousand cubic feet per day
°C	degree Celsius	mole pct	mole percent
cm^3	cubic centimeter	pct	percent
cm^3/s	cubic centimeter per second	ppm	part per million
°F	degree Fahrenheit	psia	pound (force) per square inch, absolute
ft	foot	psig	pound (force) per square inch, gauge
in	inch	yr	year

ANALYSES OF NATURAL GASES, 1917-85

B. J. Moore[1] and Stella Sigler[2]

ABSTRACT

This publication contains 14,242 analyses of gas samples from oil and gas wells and natural gas pipelines in 40 States and 24 foreign countries. These gas samples were collected in the period 1917-85 as part of the Bureau of Mines survey for helium occurrences. The gas analyses contained herein were made by several methods over the period covered. Analytical work on samples collected early in the period was done on the Orsat apparatus. The one-cut apparatus and four-cut fractional distillation equipment were added later. A mass spectrometer was acquired in 1949 and used for all gas analyses made after that time. From 1917 to 1978, helium analyses were made on special helium analytical equipment designed and built by the Bureau of Mines Helium Operations Laboratory. In 1978, this apparatus was replaced in the quantitative helium analysis work by a gas chromatograph.

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[3] Italic numbers in parentheses refer to items in the list of references preceding the tables at the end of this publication.

INTRODUCTION

Since 1917, gas samples from oil and gas wells and natural gas pipelines throughout the United States and other countries with free market economies have been collected by the Bureau of Mines in a continuing search for helium occurrences. Analyses of 14,242 of the samples, which were collected in 40 States and 24 foreign countries, are given in tables 1-4 at the end of this publication.

The Bureau is charged with the responsibility of ensuring a continuing supply of helium to meet essential Government needs, and this survey of the world's natural gas fields is made in connection with this responsibility.

Two previous publications (*1-2*)[3] presented the analyses made through 1974 and 1980; these documents contained 10,562 and 12,554 analyses, respectively. This publication is an update to those compilations.

Most of these analyses have also been published in other Bureau publications. The first of this series of publications, Bulletin 486(3), was published in 1951 and was followed by two more bulletins (*4-5*) published in 1958 and 1963. These three publications contained data on analyses of 5,218 gas samples collected from the beginning of the survey through 1960. Data on gas analyses since 1961 have been published on an annual basis, and 24 Information Circulars (*6-29*) have presented the analyses of 8,729 gas samples collected through 1984. The present compilation, reviewing 1917-85, was prepared to make available, in one source, information on composition of natural gases throughout the United States and in many other areas of the world. These data are also available in magnetic tape (*30*).

The helium survey program is conducted by soliciting natural gas samples throughout the United States and other countries with free market economies. Without the assistance of the oil and gas industry, State and national agencies, and many individuals engaged in oil and gas exploration and production, the helium survey with its present scope would be impossible.

[3] Italic numbers in parentheses refer to items in the list of references preceding the tables at the end of this publication.

HISTORICAL BACKGROUND

The survey to locate helium occurrences throughout the United States has been carried on since the inception of the Government's helium program in 1917. A major goal of this program has been to conserve helium that would otherwise be wasted. Through 1985, more than 17,900 gas samples have been collected and analyzed as a part of this survey. In addition to collecting samples from domestic gasfields, the search was expanded in 1965 to include foreign gasfields. Although several foreign samples had been analyzed prior to 1965, no active solicitation of samples had been made.

World War I caused a flurry of activity and interest in helium production. As a result of this interest, the Government's first helium extraction plant was constructed in Fort Worth, TX, by the Department of the Navy, to process gas from the Petrolia Field in Clay County, TX. Many of the samples collected for the helium survey during 1917-19 were analyzed for helium content only.

A second phase of the helium survey was begun in 1919 and continued until 1933. Samples collected during this period were analyzed by the Orsat combustion method and by a special helium apparatus. One result of this phase of the survey was the discovery of helium-rich gas at the Cliffside Field in Potter County, TX. The Government acquired the gas rights in fee in the Cliffside Field and subsequently built a second Government-owned helium extraction plant near Amarillo, TX, to process this gas. This plant was built by the Bureau of Mines in 1928-29, after the supply of gas to the plant at Fort Worth was nearly depleted.

The helium survey was relatively inactive from July 1933 to April 1941, when World War II began to create an increased demand for helium. The survey was intensified during the war and resulted in the location of sites for four new helium plants in Kansas, New Mexico, and Texas. These plants were built in 1943-44. After World War II, production capacity of the five plants was greater than postwar demand. Because of the excess capacity and a dwindling helium-rich gas supply, the Cunningham, KS, plant was dismantled. The Otis, KS, and Shiprock, NM, plants were placed on standby. The Amarillo, TX, plant operated intermittently from 1945 through 1951, while the Exell, TX, plant operated continuously.

In 1951, an increasing helium demand made it necessary to put the Otis, KS, plant back into production. The Shiprock, NM, plant resumed operations in 1953. Both of these plants were operated continuously until 1968, except for a shutdown of almost a year at Shiprock due to gas supply problems. In 1968, when Bureau of Mines sales of helium decreased markedly, both plants were shut down permanently. The Otis plant was sold, and the Shiprock plant was deeded to the Bureau of Indian Affairs, which turned it over to the Navajo Indian Tribe.

In the 1940's and 1950's, a major helium-rich gas source was being developed in the Oklahoma Panhandle. The Keyes Field was discovered in 1943, and gas samples from wells in the field contained an average of about 2 pct helium. In 1958, the Bureau obtained the exclusive helium processing rights to most of the gas for the life of the field. An extraction plant was built near Keyes, OK, to process Keyes Field gas. The plant began operations in 1959, but ceased gas processing in 1981 because of declining gas supplies and excessive cost of operations. The Amarillo plant ceased gas processing operations in April 1970. In September 1971, the Exell plant stopped processing West Panhandle Field gas, its source of supply since it began operation. Exell now supplies all demand for Bureau helium by purifying the helium that was purchased by the Government and is stored in the Cliffside Field.

In the early 1960's, demand for helium for Government programs continued the growth that started in 1950, while the helium-rich gas resources declined. Because of this decline, Congress passed legislation in 1960 authorizing a helium conservation program and promoting the growth of a private helium industry. The objective of this program was to save for future use about 52 Bcf of helium that would have otherwise been lost as the gas was used for fuel. To implement this program, four long-term contracts were negotiated with private firms for the Government's purchase of helium; these contracts obligated the Government for up to $47.5 million per year. Five private extraction plants were built adjacent to large natural gas transmission lines in Texas and Kansas. Most of the gas processed was produced from the West Panhandle Field of Texas and the

Hugoton Field in Texas, Oklahoma, and Kansas. These two fields contained the largest known helium reserves in the world. Previous helium resources evaluation work by the Bureau had established that this area was the most promising source for the recovery of helium. Minor volumes of gas were produced from smaller fields in the same area. The extracted helium was stored in the Government-owned Cliffside Field in Potter County, TX. This is the helium now being purified by the Bureau to supply current demand.

Through November 1973 when acceptance of helium under these contracts ceased, 34.2 Bcf of helium had been stored. As of January 1, 1986, helium stored in the Cliffside Field totaled 37.2 Bcf. This consisted of the 32.7 Bcf of helium purchased, 2.2 Bcf of excess production from Bureau plants, and 2.3 Bcf stored for private companies under separate contracts. In addition to the stored helium, the remaining native gas in Cliffside contains about 3.9 Bcf of helium. Helium is measured at a pressure and temperature base of 14.7 psia and 70° F.

HELIUM RESOURCES EVALUATION

Even though helium resources are more than adequate to supply Government needs at present and for some time in the future, the helium resources evaluation program is continued so that resources can be located that may be required to supply future demands. Experience shows that it takes about 15 yr from the time of discovery to the time of exploitation of a helium resource. Of particular interest are reserves of helium found in gases with low heating values. This gas is not as likely as higher heating value gases to be produced for fuel. Therefore, the helium is effectively "stored" and will be available for extraction when the need arises. These resources are classified as "nondepleting helium reserves" and serve as a backup to the helium stored in the Cliffside Field.

Many of these nondepleting helium reserves are located on Federal lands, and under the standard Government oil and gas lease, helium ownership is reserved to the Federal Government. These reserves are, therefore, under Federal control, and although a lessee may produce the gas with which the helium is associated, the Government has an option to extract, or have extracted, the helium contained in the gas.

When the helium survey was expanded to include foreign gasfields in 1965, it was believed that with the growing importance and use of helium, it was necessary to acquire reasonably detailed and documented knowledge of the helium resources outside the United States. Samples from 24 foreign countries have been received. Most of the analyses of these samples appear in tables 3-4.

The helium resource evaluation program has been carried on in varying degrees of intensity for almost 70 yr. Gas samples from most natural gas fields in the United States and from a few fields in foreign countries have been analyzed. Most of these analyses are presented in tables 1-4. While many of the fields in the gulf coast area have not been sampled for the survey, all major transmission lines carrying gas from that area have been sampled. The helium resource evaluation has accomplished its purpose in that it has identified the helium reserves and resources from which demand has been fully supplied. The evaluation is a continuing Bureau program with the objective of locating adequate supplies to meet future demands.

METHODS OF ANALYSES

The samples collected in the earlier years of the helium survey program were analyzed by the Orsat apparatus with the helium content being determined by a helium apparatus developed by H. P. Cady and D. F. McFarland, early researchers on helium occurrences in natural gases, and improved by Bureau of Mines personnel. In using the Orsat method, the hydrocarbons occurring in natural gases were calculated and reported as methane and ethane; thus, the true distribution of the hydrocarbon components is not known if the gas contained hydrocarbons other than methane and ethane. Because of this, the heating value and specific gravity calculated for samples analyzed before April 1949 are not considered as reliable as those calculated from other methods of analysis. Both the helium apparatus and the Orsat apparatus are described in detail in Bulletin 486 (*3*).

The one-cut apparatus and the four-cut fractional-distillation analytical equipment were used to analyze a few helium survey samples during the period when the Orsat apparatus was in general use. The one-cut apparatus, also described in Bulletin 486 (*3*), has all of the units normally found on an Orsat apparatus and, in addition, equipment for separating methane from ethane and the heavier hydrocarbons. An exact methane content is available, but all other hydrocarbons are reported together. The four-cut fractional-distillation apparatus has been described by Shepard and Porter (*31*).

The previously mentioned helium apparatus developed by Cady and McFarland was replaced by a device, again described in Bulletin 486 (*3*), that depends on pressure measurement at a constant volume rather than volume measurements at a constant pressure as did the first apparatus.

The mass spectrometer replaced the Orsat apparatus in the helium survey analytical work in 1949. The helium content was calculated from data from the mass spectrometer, but it also continued to be determined on the helium apparatus, which was similar to the helium apparatus described in Bulletin 486 (*3*) with a few modifications. Both the mass spectrometer and the modified helium apparatus are described in Bulletin 576 (*4*), a supplement to Bulletin 486 (*3*).

In 1978, the gas chromatograph replaced the helium apparatus in the quantitative helium analysis work. Currently being used in the analytical procedures are the CEC 21-103C modified mass spectrometer and the 0- to 10-pct helium chromatograph. Gas samples received for the helium survey program are submitted both in glass bottles at atmospheric pressure and in pressurized steel cylinders. The sample gas in the glass bottles is removed by using a water displacement system attached to the gas chromatograph. A 50-cm^3 sample is collected for the mass spectrometer analysis while the chromatographic sample loop is purged for the chromatograph helium analysis.

The quantitative gas chromatograph analysis for helium is accomplished at 46° C with two 3/16 in-OD stainless steel columns which are joined with a back-flush valve. The first column is 8 ft long with the first 2 ft packed with Porapak R (80 to 100 mesh) and the last 6 ft packed with activated charcoal (30 to 60 mesh). The second column uses 15 ft of charcoal (30 to 60 mesh) and 2 ft of molecular sieve. The first column is used to remove carbon dioxide, water, oxygen, and nitrogen. A thermister detector is used at 10 mA. Argon is used as the carrier gas at a flow rate of 20 cm^3/s. a 2-cm^3 sample loop provides a minimum detectable limit of about 18 ppm helium. System accuracy is 0.4 pct relative error at the 1-pct level and 0.15 pct relative error at the 5-pct level.

The mass spectrometer is an apparatus that produces a beam of gaseous ions from a sample, sorts out the resulting mixture of ions according to their mass charge ratios, and provides output signals that are measures of the relative abundance of each component in the sample. The mass spectrometer results are normalized with the helium content obtained from the 0- to 10-pct helium chromatograph after calculation of the digitalized output. The analysis and well information are stored as part of a helium resource computer data base. Individual data sheets are printed for transmission to the well owner.

The completed analysis includes helium, hydrogen, nitrogen, oxygen, argon, carbon dioxide, individual hydrocarbons through pentane, and a composite value for hexanes plus hydrocarbons. A calculated heating value and specific gravity are also included.

The components in the analyses are reported to the nearest 0.1 pct, except helium, which is reported to the nearest 0.01 pct. The word "trace" is used to denote quantities of helium of less than 0.005 pct and quantities of other components of less than 0.05 pct. The percent of hydrogen sulfide reported in each sample may not be completely reliable because of the transfer of the sample over water. Most samples submitted are taken by water displacement, and hydrogen sulfide is highly soluble in water.

GEOLOGICAL PROVINCES OF THE UNITED STATES

The tables include geologic province codes so that each sample source can be located within a specific geologic province as defined by the Committee on Statistics of Drilling of the American Association of Petroleum Geologists (*32*). This information was added in Information Circular 8749 (*21*) and is included with all analyses in the publication. These provinces, which are shown in figure 1 and the accompanying list, are delineated by political boundaries for convenience and for accommodation of data processing equipment. The list and figure 1 are taken from Meyer (*32*). Not all of the provinces shown are gas-producing areas, so many of the codes are not used in this publication. In offshore areas, only one code is used for each State since State or Federal ownership is not always known. Only one code, 972, is used for all wells in Alaska, both onshore and offshore, because of the lack of information on the location of wells in that State.

COMPOSITION OF NATURAL GASES AND THEIR HELIUM CONTENT

The tables included in this section give the results of analyses and related source data on 14,242 gas samples. Tables 1 and 2 show data on samples from the United States, and tables 3 and 4 show samples from foreign countries. The samples are further broken down as to their sources: Those in tables 1 and 3 are from individual gas or oil wells, and those in tables 2 and 4 are from pipeline or multiple-well sources. Some miscellaneous sources, such as water wells or gas seeps, are included with the individual well tables.

The results of some of the analyses made in connection with this program are not included in this compilation. Some reasons for exclusion of analyses are air contamination above permissible levels, incomplete analyses, and maintaining the confidentiality of data that were not released by the company supplying the gas sample. This confidentiality is promised to each company when it is contacted for a gas sample; however, most data are subsequently released for publication or public presentation by the company.

The following lists indicate the sources of the samples listed in the tables.

U.S. SAMPLES

Source	Number of samples	Tables	Source	Number of samples	Tables
Alabama	86	1,2	Montana	233	1,2
Alaska	79	1,2	Nebraska	28	1,2
Arizona	89	1,2	Nevada	7	1
Arkansas	281	1,2	New Jersey	1	1
California	306	1,2	New Mexico	817	1,2
Colorado	636	1,2	New York	113	1,2
Florida	5	1	North Carolina	2	1
Georgia	4	1,2	North Dakota	59	1,2
Idaho	21	1	Ohio	216	1,2
Illinois	21	1	Oklahoma	2,393	1,2
Indiana	41	1,2	Oregon	6	1
Iowa	4	1	Pennsylvania	202	1,2
Kansas	1,669	1,2	South Dakota	5	1,2
Kentucky	101	1,2	Tennessee	17	1,2
Louisiana	540	1,2	Texas	4,206	1,2
Maryland	9	1,2	Utah	360	1,2
Michigan	155	1,2	Virginia	20	1,2
Minnesota	2	1,2	Washington	15	1,2
Mississippi	120	1,2	West Virginia	440	1,2
Missouri	1	1	Wyoming	701	1,2

FOREIGN SAMPLES

Source	Number of samples	Tables	Source	Number of samples	Tables
Argentina	14	3,4	Italy	3	3
Australia	24	3,4	Mexico	31	3,4
Austria	1	3	Netherlands	10	3,4
Bangladesh	1	4	Norway	1	4
Bolivia	13	3	Pakistan	6	3,4
Canada	82	3,4	Peru	1	3
Colombia	3	4	Qatar	3	3
Ethiopia	1	3	Saudi Arabia	2	4
Germany, Fed. Rep. of	3	3	South Africa	1	3
Indonesia	4	4	Taiwan	12	3
Iran	1	3	Thailand	7	3,4
Iraq	3	3	United Kingdom	4	3,4

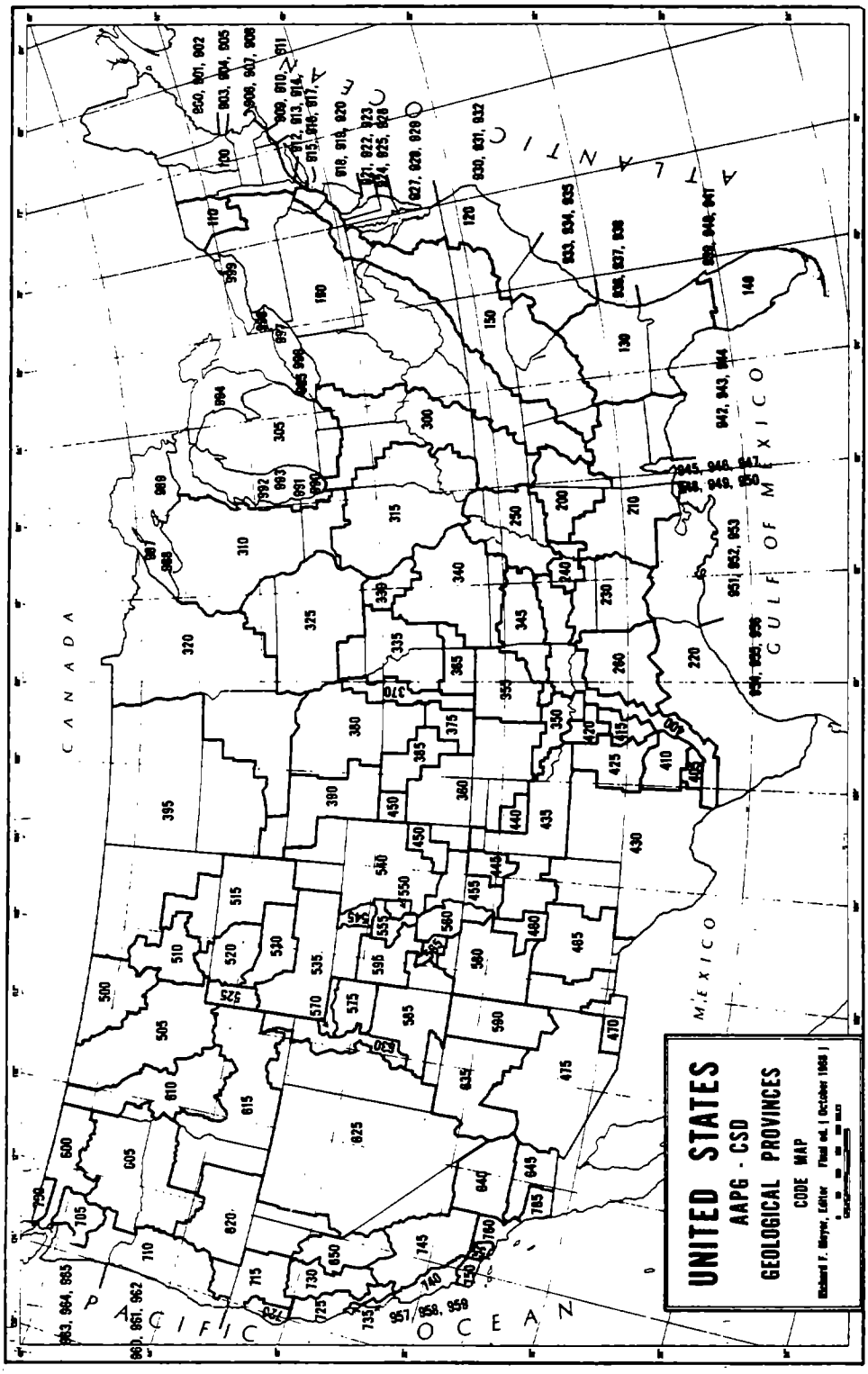


FIGURE 1. - Geologic provinces of the United States.

PROVINCE CODES FOR FIGURE 1

Code	Province
100	New England Province
110	Adirondack Uplift
120	Atlantic Coast Basin
130	South Georgia-North Florida Sedimentary Province
140	South Florida Province
150	Piedmont-Blue Ridge Province
160	Appalachian Basin
200	Warrior Basin
210	Mid-Gulf Coast Basin
220	Gulf Coast Basin
230	Arkla Basin
240	Desha Basin
250	Upper Mississippi Embayment
260	East Texas Basin
300	Cincinnati Arch
305	Michigan Basin
310	Wisconsin Arch
315	Illinois Basin
320	Sioux Uplift
325	Iowa Shelf
330	Lincoln Anticline
335	Forest City Basin
340	Ozark Uplift
345	Arkoma Basin
350	South Oklahoma Folded Belt Province
355	Chautauqua Platform
360	Anadarko Basin
365	Cherokee Basin
370	Nemaha Anticline
375	Sedgwick Basin
380	Salina Basin
385	Central Kansas Uplift
390	Chadron Arch
395	Williston Basin
400	Ouachita Tectonic Belt Province
405	Kerr Basin
410	Llano Uplift
415	Strawn Basin
420	Fort Worth Syncline
425	Bend Arch
430	Permian Basin
435	Palo Duro Basin
440	Amarillo Arch
445	Sierra Grande Uplift
450	Las Animas Arch
455	Las Vegas-Raton Basin
460	Estancia Basin
465	Orogrande Basin
470	Pedregosa Basin
475	Basin-and-Range Province
500	Sweetgrass Arch
505	Montana Folded Belt Province
510	Central Montana Uplift
515	Powder River Basin
520	Big Horn Basin
525	Yellowstone Province
530	Wind River Basin
535	Green River Basin
540	Denver Basin
545	North Park Basin
550	South Park Basin
555	Eagle Basin
560	San Luis Basin
565	San Juan Mountain Province
570	Uinta Uplift
575	Uinta Basin
580	San Juan Basin
585	Paradox Basin
590	Black Mesa Basin
595	Piceance Basin
600	Northern Cascade Range–Okanagan Province
605	Eastern Columbia Basin
610	Idaho Mountains Province
615	Snake River Basin
620	Southern Oregon Basin
625	Great Basin Province
630	Wasatch Uplift
635	Plateau Sedimentary Province
640	Mojave Basin
645	Salton Basin
650	Sierra Nevada Province
700	Bellingham Basin
705	Puget Sound Province
710	Western Columbia Basin
715	Klamath Mountains Province
720	Eel River Basin
725	Northern Coast Range Province
730	Sacramento Basin
735	Santa Cruz Basin
740	Coastal Basin
745	San Joaquin Basin
750	Santa Maria Basin
755	Ventura Basin
760	Los Angeles Basin
765	Capistrano Basin
800	Heceta Island Area
805	Keku Islands Area
810	Gulf of Alaska Basin
815	Copper River Basin
820	Cook Inlet Basin
830	Kandik Province
835	Kobuk Province
840	Koyukuk Province
845	Bristol Bay Basin
850	Bethel Basin
855	Norton Basin
860	Selawik Basin
863	Yukon Flats Basin
865	Lower Tanana Basin
867	Middle Tanana Basin
870	Upper Tanana Basin
873	Galena Basin
875	Innoko Basin
877	Minchumina Basin
880	Holitna Basin
885	Arctic Foothills Province
890	Arctic Slope Basin
900	Maine Atlantic offshore–general
901	Maine Atlantic offshore–State
902	Maine Atlantic offshore–Federal
903	New Hampshire Atlantic offshore–general
904	New Hampshire Atlantic offshore–State
905	New Hampshire Atlantic offshore–Federal
906	Massachusetts Atlantic offshore–general
907	Massachusetts Atlantic offshore–State
908	Massachusetts Atlantic offshore–Federal
909	Rhode Island Atlantic offshore–general
910	Rhode Island Atlantic offshore–State
911	Rhode Island Atlantic offshore–Federal
912	Connecticut Atlantic offshore–general
913	Connecticut Atlantic offshore–State
914	Connecticut Atlantic offshore–Federal
915	New York Atlantic offshore–general
916	New York Atlantic offshore–State
917	New York Atlantic offshore–Federal
918	New Jersey Altantic offshore–general
919	New Jersey Atlantic offshore–State
920	New Jersey Atlantic offshore–Federal
921	Delaware Atlantic offshore–general
922	Delaware Atlantic offshore–State
923	Delaware Atlantic offshore–Federal
924	Maryland Atlantic offshore–general
925	Maryland Atlantic offshore–State
926	Maryland Atlantic offshore–Federal
927	Virginia Atlantic offshore–general
928	Virginia Atlantic offshore–State
929	Virginia Atlantic offshore–Federal
930	North Carolina Atlantic offshore–general
931	North Carolina Atlantic offshore–State
932	North Carolina Atlantic offshore–Federal
933	South Carolina Atlantic offshore–general
934	South Carolina Atlantic offshore–State
935	South Carolina Atlantic offshore–Federal
936	Georgia Atlantic offshore–general
937	Georgia Atlantic offshore–State
938	Georgia Atlantic offshore–Federal
939	Florida Atlantic offshore–general
940	Florida Atlantic offshore–State
941	Florida Atlantic offshore–Federal
942	Florida Gulf of Mexico offshore–general
943	Florida Gulf of Mexico offshore–State
944	Florida Gulf of Mexico offshore–Federal
945	Alabama Gulf of Mexico offshore–general
946	Alabama Gulf of Mexico offshore–State
947	Alabama Gulf of Mexico offshore–Federal
948	Mississippi Gulf of Mexico offshore–general
949	Mississippi Gulf of Mexico offshore–State
950	Mississippi Gulf of Mexico offshore–Federal
951	Louisiana Gulf of Mexico offshore–general
952	Louisiana Gulf of Mexico offshore–State
953	Louisiana Gulf of Mexico offshore–Federal
954	Texas Gulf of Mexico offshore–general
955	Texas Gulf of Mexico offshore–State
956	Texas Gulf of Mexico offshore–Federal
957	California Pacific offshore–general
958	California Pacific offshore–State
959	California Pacific offshore–Federal
960	Oregon Pacific offshore–general
961	Oregon Pacific offshore–State
962	Oregon Pacific offshore–Federal
963	Washington Pacific offshore–general
964	Washington Pacific offshore–State
965	Washington Pacific offshore–Federal
972	Alaska Arctic offshore–general
973	Alaska Arctic offshore–State
974	Alaska Arctic offshore–Federal
975	Alaska Bering Sea offshore–general
976	Alaska Bering Sea offshore–State
977	Alaska Bering Sea offshore–Federal
978	Alaska Pacific offshore–general
979	Alaska Pacific offshore–State
980	Alaska Pacific offshore–Federal
987	Minnesota Lake Superior offshore
988	Wisconsin Lake Superior offshore
989	Michigan Lake Superior offshore
990	Indiana Lake Michigan offshore
991	Illinios Lake Michigan offshore
992	Wisconsin Lake Michigan offshore
993	Michigan Lake Michigan offshore
994	Michigan Lake Huron offshore
995	Michigan Lake Erie offshore
996	Ohio Lake Erie offshore
997	Pennsylvania Lake Erie offshore
998	New York Lake Erie offshore
999	New York Lake Ontario offshore

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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1 SAMPLE 16156	INDEX 2 SAMPLE 16157	INDEX 3 SAMPLE 16163
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	BALDWIN	BALDWIN	BALDWIN
FIELD	FOLEY	FOLEY	FOLEY
WELL NAME	MEYERS FOUNDATION 8-2 NO. 1	ROSE WEEK 7-2 NO. 1	FOLEY DAIRY NO. 1
LOCATION	NOT GIVEN	SEC. 7, T8S, R3E	SEC.31,T7S,R4E
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	12/19/80	12/12/80	08/01/80
SAMPLED	12/12/80	12/17/80	01/07/81
FORMATION	MIOC-STRAT	MIOC-AMOS	MIOC-AMOS
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	1324	1757	1650
WELLHEAD PRESSURE,PSIG	582	790	705
OPEN FLOW, MCFD	3700	2600	5700
COMPONENT, MOLE PCT			
METHANE	98.1	90.8	97.4
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.5	7.4	2.3
OXYGEN	0.0	1.5	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1005	922	988
SPECIFIC GRAVITY	0.571	0.596	0.566

	INDEX 4 SAMPLE 16165	INDEX 5 SAMPLE 16747	INDEX 6 SAMPLE 17143
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	BALDWIN	BALDWIN	BALDWIN
FIELD	FOLEY	FOLEY	FOLEY
WELL NAME	JOHN KRUPINSKI NO.2	ROSE WEEKS 7-2 NO. 1	PAUL KAISER NO. 1
LOCATION	SEC.31,T7S,R4E	SEC. 7, T8S, R3E	SEC. 6, T8S, R4E
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO. (USA)	CLAYTON W. WILLIAMS, JR.
COMPLETED	08/05/80	12/12/80	12/--/82
SAMPLED	01/08/81	12/--/82	12/02/83
FORMATION	MIOC-AMOS	NOT GIVEN	MIOC-SAND
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	1660	1757	1688
WELLHEAD PRESSURE,PSIG	697	790	750
OPEN FLOW, MCFD	5400	2600	704
COMPONENT, MOLE PCT			
METHANE	93.3	97.4	96.7
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	4.6	1.9	3.2
OXYGEN	0.4	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.1	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	952	994	981
SPECIFIC GRAVITY	0.595	0.564	0.568

	INDEX 7 SAMPLE 16673	INDEX 8 SAMPLE 17199	INDEX 9 SAMPLE 17087
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	BALDWIN	BALDWIN	BALDWIN
FIELD	FOLEY W	OYSTER BAY E	WEEKS BAY S
WELL NAME	DONALD GRANTHAM B 36-4 NO. 2	MAX K. LAWRENZ JR.UT-8-1NO.1	S. C. LIPSCOMB UNIT 7-9 NO.1
LOCATION	SEC. 36, T7S, R3E	SEC. 8, T9S, R4E	SEC. 7, T8S, R3E
OWNER	AMOCO PRODUCTION CO.	TIDELANDS RESOURCES, ET AL.	AMOCO PRODUCTION CO. (USA)
COMPLETED	07/--/82	11/--/83	03/--/83
SAMPLED	09/--/82	02/25/84	10/--/83
FORMATION	MIOC-AMOS	MIOC-MEYER	MIOC-AMOS
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	1662	1321	1766
WELLHEAD PRESSURE,PSIG	600	425	1040
OPEN FLOW, MCFD	850	1500	625
COMPONENT, MOLE PCT			
METHANE	97.4	95.4	97.8
ETHANE	0.1	TRACE	0.1
PROPANE	TRACE	0.0	TRACE
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	2.2	3.7	1.9
OXYGEN	TRACE	0.6	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	989	970	993
SPECIFIC GRAVITY	0.564	0.575	0.563

	INDEX 10 SAMPLE 17019	INDEX 11 SAMPLE 16599	INDEX 12 SAMPLE 12098
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	BLOUNT	ESCAMBIA	ESCAMBIA
FIELD	WILDCAT	BIG ESCAMBIA CREEK	FLOMATON
WELL NAME	E. J. MARTIN NO. 30-6	SCOTT PAPER CO. NO. S-10-2	E. L. GODWIN NO. 1
LOCATION	SEC. 30, T13S, R3W	SEC. 5, T1N, R7E	SEC. 18, T1N, R9E
OWNER	J. MANLEY DENTON	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.
COMPLETED	08/20/82	04/30/82	05/23/69
SAMPLED	08/19/83	07/30/82	10/30/69
FORMATION	MISS-HARTSELLE	JURA-SMACKOVER	JURA-NORPHLET
GEOLOGIC PROVINCE CODE	160	210	210
DEPTH, FEET	1180	15000	15430
WELLHEAD PRESSURE,PSIG	160	4600	4985
OPEN FLOW, MCFD	140	8000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.4	28.9	35.2
ETHANE	2.4	9.2	5.2
PROPANE	1.4	2.0	2.2
N-BUTANE	0.5	0.8	1.3
ISOBUTANE	0.2	0.5	1.0
N-PENTANE	0.1	0.2	0.6
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	2.4	1.8	3.0
OXYGEN	0.1	0.6	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.4	0.2	0.0
HYDROGEN SULFIDE**	0.0	14.6	4.6
CARBON DIOXIDE	0.1	46.0	49.9
HELIUM	0.13	0.02	0.02
HEATING VALUE*	1050	584	716
SPECIFIC GRAVITY	0.605	1.179	1.162

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11 SAMPLE 17211	INDEX 14 SAMPLE 17806	INDEX 15 SAMPLE 17396
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	BETHEL CHURCH	BETHEL CHURCH	BLOOMING GROVE
WELL NAME	MADDEN-WHITAKER 36-7 NO. 1	KIRKLAND 36-3 NO. 1	CONNORS NO. 18-10
LOCATION	SEC. 36, T14S, R13W	SEC. 36, T14S, R13W	SEC. 18, T15S, R13W
OWNER	CHARLES L. CHERRY & ASSOC.	MWJ PRODUCING CO.	TERRA RESOURCES, INC.
COMPLETED	11/07/83	01/09/85	12/--/82
SAMPLED	03/15/84	08/--/85	08/18/84
FORMATION	MISS-CARTER	MISS-MILLERELLA	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	2267	2253	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1200	800	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1178	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.8	94.4	96.7
ETHANE	1.3	1.3	2.0
PROPANE	0.1	0.1	TRACE
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	TRACE
NITROGEN	1.6	3.0	0.8
OXYGEN	0.0	0.5	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.1	0.2
CARBON DIOXIDE	TRACE	0.0	0.06
HELIUM	0.08	0.08	
HEATING VALUE*	1005	1004	1023
SPECIFIC GRAVITY	0.567	0.588	0.573

	INDEX 16 SAMPLE 17210	INDEX 17 SAMPLE 17217	INDEX 18 SAMPLE 14966
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	BLUFF	BLUFF	DAVIS CHAPEL
WELL NAME	ROBERTSON-REECE NO. 10-3	TAYLOR NO. 10-1	CANNON NO. 33-15
LOCATION	SEC. 10, T14S, R13W	SEC. 10, T14S, R13W	SEC. 33, T14S, R11W
OWNER	CHARLES L. CHERRY & ASSOC.	CHARLES L. CHERRY & ASSOC.	CLEARY PETROLEUM CORP.
COMPLETED	01/26/84	--/--/00	--/--/00
SAMPLED	03/15/84	03/15/84	04/--/77
FORMATION	MISS-GILMER	MISS-GILMER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	1922	2018	2366
WELLHEAD PRESSURE,PSIG	1050	1060	550
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2600
COMPONENT, MOLE PCT			
METHANE	93.5	96.0	93.7
ETHANE	2.2	1.1	1.6
PROPANE	0.7	0.1	0.1
N-BUTANE	0.2	0.1	TRACE
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	2.8	2.5	1.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	3.2
HELIUM	0.08	0.07	0.10
HEATING VALUE*	1024	998	980
SPECIFIC GRAVITY	0.593	0.573	0.598

	INDEX 19 SAMPLE 17605	INDEX 20 SAMPLE 17411	INDEX 21 SAMPLE 15611
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	HAPPY HILL	HUBBERTVILLE	MCCRACKEN MOUNTAIN
WELL NAME	CANNON NO. 26-14	STEINER-SCHWAB 17-13 NO. 1	G. O. GRAY NO. 1
LOCATION	SEC. 26, T13S, R12W	SEC. 17, T14S, R11W	SEC. 21, T16S, R12W
OWNER	CARLESS RESOURCES, INC.	CARLESS RESOURCES, INC.	TERRA RESOURCES, INC.
COMPLETED	07/20/84	09/11/84	--/--/00
SAMPLED	02/27/85	09/11/84	04/26/79
FORMATION	MISS-CARTER	MISS-CARTER	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	1997	1844	2313
WELLHEAD PRESSURE,PSIG	835	835	NOT GIVEN
OPEN FLOW, MCFD	900	729	11000
COMPONENT, MOLE PCT			
METHANE	89.9	96.8	92.3
ETHANE	8.4	1.1	4.6
PROPANE	0.2	TRACE	0.8
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	9.0	1.5	1.3
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	0.05	0.10	0.09
HEATING VALUE*	924	1000	1057
SPECIFIC GRAVITY	0.595	0.570	0.604

	INDEX 22 SAMPLE 17468	INDEX 23 SAMPLE 15925	INDEX 24 SAMPLE 16683
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	MCCRACKEN MOUNTAIN	MUSGROVE CREEK	MUSGROVE CREEK
WELL NAME	BRANTON NO. 1	SMITH NO. 32-14	WOODWARD 26-9 NO. 1
LOCATION	NOT GIVEN	SEC. 32, T14S, R12W	SEC. 26, T15S, R12W
OWNER	BROWNING & WELCH, INC.	GRACE PETROLEUM CORP.	TERRA RESOURCES, INC.
COMPLETED	09/30/84	08/28/79	04/25/82
SAMPLED	09/30/84	03/20/80	09/30/82
FORMATION	MISS-LEWIS	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	3280	2950	2601
WELLHEAD PRESSURE,PSIG	600	1099	650
OPEN FLOW, MCFD	30	4739	1318
COMPONENT, MOLE PCT			
METHANE	98.7	97.5	95.3
ETHANE	0.9	0.9	2.8
PROPANE	0.6	0.1	0.3
N-BUTANE	0.6	0.1	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.8	1.1	1.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	TRACE
HELIUM	0.07	0.08	0.11
HEATING VALUE*	1100	1010	1024
SPECIFIC GRAVITY	0.625	0.564	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 25 SAMPLE 16771	INDEX 26 SAMPLE 17193	INDEX 27 SAMPLE 14747
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	MUSGROVE CREEK	STUD HORSE CREEK	WILDCAT
WELL NAME	MADISON NO. 29-13	LANNINGHAM NO. 2-15	M. D. HUBBERT NO. 1
LOCATION	SEC. 29, T15S, R11W	SEC. 2, T14S, R12W	SEC. 28, T15S, R11W
OWNER	MOWELL PETROLEUM CORP.	GRACE PETROLEUM CORP.	TERRA RESOURCES, INC.
COMPLETED	09/20/82	03/--/82	03/11/75
SAMPLED	02/15/83	02/--/84	08/--/76
FORMATION	MISS-CARTER	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	2713	NOT GIVEN	2712
WELLHEAD PRESSURE,PSIG	1050	NOT GIVEN	1100
OPEN FLOW, MCFD	935	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	95.1	97.6	98.0
ETHANE	2.5	0.8	0.8
PROPANE	0.3	TRACE	0.1
N-BUTANE	0.1	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	1.3	1.5	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.11	0.04	0.08
HEATING VALUE*	1025	1001	1010
SPECIFIC GRAVITY	0.579	0.564	0.563

	INDEX 28 SAMPLE 14867	INDEX 29 SAMPLE 15052	INDEX 30 SAMPLE 17460
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	FAYETTE	FAYETTE	FRANKLIN
FIELD	WILDCAT	WILDCAT	BLUEGUT CREEK
WELL NAME	A. M. GRIMSLEY NO. 1	J. C. RANDOLPH NO. 1	MASSEY 33-16 NO. 21
LOCATION	SEC. 31, T14S, R13W	SEC. 17, T15S, R12W	SEC. 33, T8S, R15W
OWNER	TERRA RESOURCES, INC.	TERRA RESOURCES, INC.	L. W. JOHNSON & ASSOC.
COMPLETED	08/21/76	--/--/80	02/--/84
SAMPLED	11/17/76	07/13/77	10/--/84
FORMATION	MISS-CARTER	MISS-CARTER	MISS-EVANS
GEOLOGIC PROVINCE CODE	200	200	300
DEPTH, FEET	2696	2570	1120
WELLHEAD PRESSURE,PSIG	1180	1100	475
OPEN FLOW, MCFD	3340	8225	1600
COMPONENT, MOLE PCT			
METHANE	96.3	97.5	97.8
ETHANE	2.2	0.7	0.4
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	1.1	1.5	1.3
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.08	0.07
HEATING VALUE*	1022	1003	1006
SPECIFIC GRAVITY	0.574	0.567	0.566

	INDEX 31 SAMPLE 17708	INDEX 32 SAMPLE 16920	INDEX 33 SAMPLE 17191
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	JEFFERSON	LAMAR	LAMAR
FIELD	OAK GROVE	ARMSTRONG BRANCH	BEARERTON
WELL NAME	NO. 29-4-3	ANDERSON NO. 28-8	LOGGINS NO. 4-11
LOCATION	NOT GIVEN	SEC. 28, T13S, R14W	SEC. 4, T13S, R15W
OWNER	UNITED STATES STEEL CORP.	HUGHES & HUGHES OIL & GAS EX	GRACE PETROLEUM CORP.
COMPLETED	10/--/83	05/04/83	05/--/82
SAMPLED	06/13/85	05/04/83	02/--/84
FORMATION	PENN-POTTSVILLE	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	160	200	200
DEPTH, FEET	1100	2226	NOT GIVEN
WELLHEAD PRESSURE,PSIG	200	550	NOT GIVEN
OPEN FLOW, MCFD	119	1550	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.8	89.9	97.9
ETHANE	0.0	4.1	0.6
PROPANE	0.0	1.9	0.1
N-BUTANE	0.0	0.8	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.6	1.0	1.1
OXYGEN	0.0	0.1	TRACE
ARGON	1.6	TRACE	TRACE
HYDROGEN	TRACE	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	TRACE	0.05	0.07
HEATING VALUE*	991	1111	1005
SPECIFIC GRAVITY	0.572	0.636	0.563

	INDEX 34 SAMPLE 15251	INDEX 35 SAMPLE 16500	INDEX 36 SAMPLE 16921
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	BLOOMING GROVE	BLOWHORN CREEK	BLOWHORN CREEK N
WELL NAME	MURPHY-RANDOLPH NO. 1	KINBROUGH 22-1 NO. 1	JOHNSON USA NO. 1
LOCATION	SEC. 12, T15S, R14W	SEC. 22, T14S, R14W	NOT GIVEN
OWNER	TERRA RESOURCES, INC.	PRUET PRODUCTION CO.	HUGHES & HUGHES OIL & GAS EX
COMPLETED	09/09/77	--/--/81	--/--/83
SAMPLED	03/28/78	04/--/82	05/04/83
FORMATION	MISS-CARTER	MISS-MILLERELLA	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	2812	2362	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1056	503	NOT GIVEN
OPEN FLOW, MCFD	3500	560	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.1	93.1	90.8
ETHANE	2.1	3.4	4.6
PROPANE	0.1	1.0	1.9
N-BUTANE	0.0	0.7	0.9
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.6	0.7	0.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.04	0.01
HEATING VALUE*	1024	1085	1128
SPECIFIC GRAVITY	0.569	0.611	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 37 SAMPLE 17510	INDEX 38 SAMPLE 16665	INDEX 39 SAMPLE 14817
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	BLOWHORN CREEK N	CROSSVILLE	FAIRVIEW
WELL NAME	SIZEMORE 3-10 NO. 1	MURPHY NO. 4-10	OGDEN NO. 9-5
LOCATION	SEC. 3, T14S, R14W	SEC. 4, T15S, R14W	SEC. 9, T14S, R14W
OWNER	GRACE PETROLEUM CORP.	HUGHES & HUGHES OIL & GAS	CLEARY PETROLEUM CORP.
COMPLETED	--/--/83	09/24/82	--/--/00
SAMPLED	10/27/84	09/24/82	10/--/76
FORMATION	MISS-CARTER	MISS-MILLERELLA	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	NOT GIVEN	2676	2415
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1190	705
OPEN FLOW, MCFD	NOT GIVEN	1547	2005
COMPONENT, MOLE PCT			
METHANE	89.8	92.6	90.0
ETHANE	5.4	3.7	4.4
PROPANE	1.9	1.0	1.8
N-BUTANE	0.6	0.3	0.6
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.2	1.4	2.2
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.10	0.09	0.06
HEATING VALUE*	1108	1069	1086
SPECIFIC GRAVITY	0.629	0.605	0.626

	INDEX 40 SAMPLE 16501	INDEX 41 SAMPLE 17192	INDEX 42 SAMPLE 17319
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	FERNBANK	HELLS CREEK	LITTLE HELLS CREEK
WELL NAME	BRYANT 30-1 NO. 1	BOYETTE NO. 25-7	VERLA HARRISON NO. 16-1
LOCATION	SEC. 30, T17S, R15W	NOT GIVEN	SEC. 16, T15S, R14W
OWNER	PRUET PRODUCTION CO.	GRACE PETROLEUM CORP.	MICHIGAN OIL CO.
COMPLETED	--/--/81	--/--/00	08/16/82
SAMPLED	04/--/82	02/--/84	06/10/84
FORMATION	MISS-LEWIS	MISS-LEWIS	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4853	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1660	NOT GIVEN	178
OPEN FLOW, MCFD	3050	NOT GIVEN	100
COMPONENT, MOLE PCT			
METHANE	90.8	97.9	82.9
ETHANE	5.3	0.6	5.4
PROPANE	0.1	TRACE	3.4
N-BUTANE	TRACE	0.0	2.8
ISOBUTANE	0.2	0.0	1.5
N-PENTANE	0.0	0.0	0.6
ISOPENTANE	0.1	0.0	1.4
CYCLOPENTANE	0.1	0.0	0.4
HEXANES PLUS	0.1	0.0	0.5
NITROGEN	1.5	0.8	1.0
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.5	TRACE
HELIUM	0.09	0.06	0.06
HEATING VALUE*	1037	1002	1296
SPECIFIC GRAVITY	0.611	0.566	0.743

	INDEX 43 SAMPLE 16053	INDEX 44 SAMPLE 16054	INDEX 45 SAMPLE 17748
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	MAGEE LAKE	MAGEE LAKE	MCGEE LAKE
WELL NAME	SARAH C. SPROUSE NO. 1	SARAH C. SPROUSE NO. 1	CLARENCE DAY NO. 1-1
LOCATION	SEC. 30, T16S, R15W	SEC. 30, T16S, R15W	SEC. 1, T17S, R16W
OWNER	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.	TUCKER OPERATING CO., INC.
COMPLETED	--/--/00	--/--/00	03/29/85
SAMPLED	08/08/80	08/08/80	06/27/85
FORMATION	MISS-CARTER	MISS-LEWIS	MISS-MILLERELLA
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4265	4820	4140
WELLHEAD PRESSURE,PSIG	900	430	1550
OPEN FLOW, MCFD	2200	665	1588
COMPONENT, MOLE PCT			
METHANE	91.6	87.1	88.3
ETHANE	4.2	7.3	4.8
PROPANE	1.4	2.4	2.2
N-BUTANE	0.4	0.6	0.9
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	1.0	1.1	1.4
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.4
HELIUM	0.11	0.08	0.11
HEATING VALUE*	1094	1137	1149
SPECIFIC GRAVITY	0.621	0.652	0.661

	INDEX 46 SAMPLE 16181	INDEX 47 SAMPLE 17221	INDEX 48 SAMPLE 17426
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	MILLPORT	MILLPORT	MILLPORT
WELL NAME	ODOM 11-9 NO. 1	C. C. CUNNINGHAM 7-11 NO. 1	COLEMAN 14-16 NO. 1
LOCATION	SEC. 11, T17S, R15W	NOT GIVEN	SEC. 14, T17S, R15W
OWNER	PRUET PRODUCTION CO.	DOUGLAS EXPLORATION CO., INC	TID PRODUCTION CORP.
COMPLETED	--/--/00	12/14/82	12/08/83
SAMPLED	01/28/81	03/23/84	09/24/84
FORMATION	MISS-CARTER	MISS-LEWIS	MISS-LEWIS
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4326	4602	4550
WELLHEAD PRESSURE,PSIG	1100	950	618
OPEN FLOW, MCFD	2102	NOT GIVEN	1501
COMPONENT, MOLE PCT			
METHANE	89.9	91.0	89.7
ETHANE	4.8	5.3	6.9
PROPANE	1.4	1.1	1.2
N-BUTANE	0.6	0.3	0.4
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	1.2	1.6	1.0
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.10	0.08	0.08
HEATING VALUE*	1127	1080	1101
SPECIFIC GRAVITY	0.645	0.614	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 49 SAMPLE 17827	INDEX 50 SAMPLE 17842	INDEX 51 SAMPLE 17921
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	MOUNT ZION	MOUNT ZION	NOT GIVEN
WELL NAME	SPANN 10-11 NO. 1	A.O. PROEST NO. 9-14	MARK-THOMAS NO. 6-6
LOCATION	SEC. 10, T16S, R15W	SEC. 9, T16S, R15W	SEC. 6, T17S, R15W
OWNER	ANDERMAN SMITH OPERATING CO.	PRUET PRODUCTION CO.	TUCKER OPERATING CO., INC.
COMPLETED	01/26/85	11/03/83	06/29/85
SAMPLED	08/--/85	09/24/85	11/30/85
FORMATION	MISS-LEWIS	CRET-CHANDLER	MISS-MILLERELLA
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4614	3672	4274
WELLHEAD PRESSURE,PSIG	1660	1350	1550
OPEN FLOW, MCFD	1575	770	1532
COMPONENT, MOLE PCT			
METHANE	86.5	85.2	67.6
ETHANE	6.1	7.5	4.1
PROPANE	2.4	2.6	1.9
N-BUTANE	0.9	1.0	1.0
ISOBUTANE	0.3	0.4	0.1
N-PENTANE	0.3	0.4	1.5
ISOPENTANE	0.3	0.4	0.0
CYCLOPENTANE	0.2	0.1	1.0
HEXANES PLUS	0.4	0.4	1.8
NITROGEN	2.2	1.8	0.4
OXYGEN	0.2	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	20.7
HELIUM	0.10	0.09	0.08
HEATING VALUE*	1142	1171	1038
SPECIFIC GRAVITY	0.663	0.672	0.905

	INDEX 52 SAMPLE 15687	INDEX 53 SAMPLE 17216	INDEX 54 SAMPLE 15745
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	LAMAR	LAMAR	LAMAR
FIELD	STAR	WATSON CREEK	WILDCAT
WELL NAME	L. J. MAYES NO. 1	TODD 35-12 NO. 1	MCLAUGHLIN NO. 1
LOCATION	SEC. 2, T16S, R16W	SEC. 35, T14S, R15W	SEC. 34, T13S, R15W
OWNER	SOUTHLAND ROYALTY CO.	CHARLES L. CHERRY & ASSOC.	WARRIOR DRILLING & ENG. CO.
COMPLETED	06/20/79	11/04/83	06/05/79
SAMPLED	07/12/79	03/16/84	09/07/79
FORMATION	MISS-CARTER	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4183	2653	2372
WELLHEAD PRESSURE,PSIG	1621	2000	930
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.8	90.7	85.8
ETHANE	5.0	3.9	1.1
PROPANE	1.9	2.0	0.4
N-BUTANE	0.6	0.7	0.2
ISOBUTANE	0.4	0.3	TRACE
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.3	1.3	9.8
OXYGEN	TRACE	0.1	2.2
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.10	0.07	0.07
HEATING VALUE*	1122	1105	920
SPECIFIC GRAVITY	0.637	0.628	0.626

	INDEX 55 SAMPLE 17461	INDEX 56 SAMPLE 17135	INDEX 57 SAMPLE 17136
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	MARION	MOBILE	MOBILE
FIELD	WILDCAT	CHUNCHULA	COLD CREEK
WELL NAME	EMERSON 11-4 NO. 21	M. W. KELLY NO. 10-3	NEWMAN NO. 9-11
LOCATION	SEC. 11, T9S, R15W	SEC. 10, T1S, R2W	SEC. 9, T1S, R1W
OWNER	L. W. JOHNSON & ASSOC.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	02/--/84	06/22/83	04/15/78
SAMPLED	10/--/84	11/10/83	11/10/83
FORMATION	MISS-HARTSELLE	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	200	210	210
DEPTH, FEET	990	18466	18425
WELLHEAD PRESSURE,PSIG	400	2400	943
OPEN FLOW, MCFD	300	700	324
COMPONENT, MOLE PCT			
METHANE	98.6	62.6	42.1
ETHANE	0.1	13.1	15.5
PROPANE	TRACE	6.6	12.7
N-BUTANE	0.0	2.0	5.5
ISOBUTANE	0.0	1.6	3.9
N-PENTANE	0.0	0.7	1.6
ISOPENTANE	0.0	0.3	1.7
CYCLOPENTANE	0.0	0.1	0.3
HEXANES PLUS	0.0	0.4	1.1
NITROGEN	1.1	10.7	13.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.6	2.1
HELIUM	0.10	0.11	0.15
HEATING VALUE*	1001	1228	1553
SPECIFIC GRAVITY	0.560	0.829	1.071

	INDEX 58 SAMPLE 17256	INDEX 59 SAMPLE 16243	INDEX 60 SAMPLE 17832
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	MOBILE	MOBILE	PICKENS
FIELD	DELCHAMP PROSPECT	MATTERS POND	COAL FIRE CREEK
WELL NAME	F.W.B.-ALTMAYER 22-16 NO. 1	CREOLA MINERALS 33-10 NO. 2	SHELTON NO. 17-6
LOCATION	SEC. 22, T7S, R2W	SEC. 33, T1S, R1W	SEC. 17, T18S, R14W
OWNER	TEXACO INC.	GETTY OIL CO.	SOUTHLAND ROYALTY CO.
COMPLETED	12/22/82	01/07/81	08/15/84
SAMPLED	08/10/84	04/21/81	09/12/85
FORMATION	MIOC-AMOS	JURA-SMACKOVER	MISS-CARTER
GEOLOGIC PROVINCE CODE	210	210	200
DEPTH, FEET	1902	18338	4670
WELLHEAD PRESSURE,PSIG	700	2500	1350
OPEN FLOW, MCFD	1138	5100	3114
COMPONENT, MOLE PCT			
METHANE	99.1	67.2	89.2
ETHANE	TRACE	10.8	7.5
PROPANE	TRACE	5.1	0.5
N-BUTANE	0.0	1.6	0.1
ISOBUTANE	0.0	1.1	0.4
N-PENTANE	0.0	0.4	0.1
ISOPENTANE	0.0	0.5	0.2
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.0	0.3	0.3
NITROGEN	0.8	5.1	1.0
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.9	0.0
CARBON DIOXIDE	TRACE	6.5	0.5
HELIUM	0.01	0.03	0.06
HEATING VALUE*	1004	1168	1103
SPECIFIC GRAVITY	0.557	0.819	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 61 SAMPLE 15704	INDEX 62 SAMPLE 15705	INDEX 63 SAMPLE 17614
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	TUSCALOOSA	TUSCALOOSA	TUSCALOOSA
FIELD	COAL MINE	COAL MINE	DEERLICK CREEK-COAL
WELL NAME	JIM WALTERS RES. NO. 4	JIM WALTERS RES. NO. 4	DEERLICK CREEK COMP. STA.
LOCATION	OAK GROVE AREA	OAK GROVE AREA	INLET FROM ALL WELLS
OWNER	JIM WALTERS RESOURCES	JIM WALTERS RESOURCES	TRN. INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	03/07/85
FORMATION	PENN-MARY LEE	PENN-MARY LEE	PENN-POTTSVILLE
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	650
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	170000
COMPONENT, MOLE PCT			
METHANE	97.7	97.9	98.7
ETHANE	TRACE	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.7	1.5	1.0
OXYGEN	0.4	0.4	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.05	0.02	0.04
HEATING VALUE*	990	994	1002
SPECIFIC GRAVITY	0.564	0.564	0.561

	INDEX 64 SAMPLE 17802	INDEX 65 SAMPLE 17003	INDEX 66 SAMPLE 17004
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	TUSCALOOSA	TUSCALOOSA	TUSCALOOSA
FIELD	DUNN CREEK	LEXINGTON	LEXINGTON
WELL NAME	JAMES GRAHAM BROWN NO.1	REPUBLIC STEEL NO. 23-7	TIERCE NO. 12-3
LOCATION	SEC. 6, T19S, R12W	SEC. 23, T17S, R11W	SEC. 12, T18S, R11W
OWNER	MUNT OIL CO	CARLESS RESOURCES, INC.	CARLESS RESOURCES, INC.
COMPLETED	02/11/85	06/05/81	03/22/83
SAMPLED	--/--/00	08/05/83	08/05/83
FORMATION	MISS-LEWIS	MISS-COATS	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	4967	3078	3994
WELLHEAD PRESSURE, PSIG	1643	1250	1269
OPEN FLOW, MCFD	2500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.6	91.1	86.9
ETHANE	8.3	2.8	6.8
PROPANE	0.3	0.9	1.9
N-BUTANE	0.1	0.4	0.6
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.3	3.3	2.6
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.4	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	0.10	0.22	0.16
HEATING VALUE*	1091	1040	1100
SPECIFIC GRAVITY	0.622	0.609	0.641

	INDEX 67 SAMPLE 17005	INDEX 68 SAMPLE 17410	INDEX 69 SAMPLE 17002
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	TUSCALOOSA	TUSCALOOSA	TUSCALOOSA
FIELD	LEXINGTON	NORTHSIDE	NOT GIVEN
WELL NAME	T A HOLMAN LUMBER NO. 10-7	FAUCETT 36-2 NO. 1	SMIMOLE NO. 26-A
LOCATION	SEC. 10, T18S, R11W	SEC. 36, T18S, R11W	SEC. 26, T18S, R11W
OWNER	CARLESS RESOURCES, INC.	CARLESS RESOURCES, INC.	CARLESS RESOURCES, INC.
COMPLETED	09/30/82	09/11/84	05/26/83
SAMPLED	08/05/83	09/11/84	08/05/83
FORMATION	MISS-MILLERELLA	MISS-MILLERELLA	MISS-TUSCUMBIA
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	3915	4095	4400
WELLHEAD PRESSURE, PSIG	1420	1630	1580
OPEN FLOW, MCFD	420	840	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.9	80.4	83.6
ETHANE	9.9	6.8	7.3
PROPANE	3.7	1.4	1.6
N-BUTANE	0.9	0.4	0.5
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	6.8	9.7	5.4
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.18	0.09	0.10
HEATING VALUE*	1120	1023	1066
SPECIFIC GRAVITY	0.700	0.668	0.652

	INDEX 70 SAMPLE 17403	INDEX 71 SAMPLE 14562	INDEX 72 SAMPLE 14784
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	WALKER	WALKER	WASHINGTON
FIELD	JASPER	UNNAMED	CHATOM
WELL NAME	WARRIOR ENERGY 33-6 NO. 1	FIRST NATIONAL BANK NO. 1	CHATOM UNIT NO. 1-2
LOCATION	SEC. 33, T13S, R7W	SEC. 36, T13S, R7W	SEC. 20, T6N, R4W
OWNER	WARRIOR BASIN ENERGY DEV. CO	SHENANDOAH OIL CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	07/--/84	03/15/74	--/--/00
SAMPLED	09/04/84	12/29/75	09/20/76
FORMATION	MISS-HARTSELLE	MISS-HARTSELLE	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	200	200	210
DEPTH, FEET	1822	1798	16039
WELLHEAD PRESSURE, PSIG	600	778	2200
OPEN FLOW, MCFD	200	2258	3900
COMPONENT, MOLE PCT			
METHANE	96.2	97.6	65.3
ETHANE	0.5	0.9	9.2
PROPANE	0.3	0.1	3.8
N-BUTANE	0.1	0.0	1.1
ISOBUTANE	TRACE	0.0	0.9
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	TRACE	0.0	0.4
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	2.0	1.8	1.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	13.8
CARBON DIOXIDE	0.2	TRACE	3.4
HELIUM	0.00	0.08	0.02
HEATING VALUE*	1004	999	1125
SPECIFIC GRAVITY	0.575	0.569	0.816

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 73 SAMPLE 4952	INDEX 74 SAMPLE 4124	INDEX 75 SAMPLE 14033
STATE	ALABAMA	ALABAMA	ALASKA
COUNTY	WASHINGTON	WINSTON	AK PENINSULA
FIELD	NOT GIVEN	NOT GIVEN	NATURAL GAS SEEP
WELL NAME	WATER WELL	FIRST NATNL BK OF BIRMINGHAM	AREA HOT SPRING
LOCATION	SEC. 24, T4N, R2E	SEC. 19, T12S, R8W	SEC. 2, T29S, R44W (SM)
OWNER	DAISEY FIELDS & HEIRS	GLEN D. ROSE OIL & GAS CO.	STATE OF ALASKA
COMPLETED	--/--/00	02/18/45	--/--/00
SAMPLED	08/29/50	09/28/46	06/24/74
FORMATION	NOT GIVEN	MISS---	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	200	972
DEPTH, FEET	29	1377	NOT GIVEN
WELLHEAD PRESSURE,PSIG	30	450	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	4.4	94.9	10.1
ETHANE	0.7	1.2	0.4
PROPANE	0.6	---	0.1
N-BUTANE	0.2	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	90.1	3.3	23.2
OXYGEN	0.0	0.4	TRACE
ARGON	1.2	---	0.4
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.5	0.2	65.3
HELIUM	TRACE	0.10	0.01
HEATING VALUE*	93	983	118
SPECIFIC GRAVITY	0.976	0.578	1.293

	INDEX 76 SAMPLE 14047	INDEX 77 SAMPLE 5374	INDEX 78 SAMPLE 13696
STATE	ALASKA	ALASKA	ALASKA
COUNTY	AK PENINSULA	ALASKA FLAT	COLEMAN
FIELD	NATURAL GAS SEEP	NOT GIVEN	NOT GIVEN
WELL NAME	SALMON CREEK	ODH NO. 2	WATER WELL
LOCATION	SEC. 11, T30S, R41W	NOT GIVEN	10 MI. NE HOMER, AK.
OWNER	ALASKA	U.S. GEOLOGICAL SURVEY	UNIVERSITY OF ALASKA
COMPLETED	--/--/00	--/--/00	08/06/73
SAMPLED	07/06/74	12/27/52	08/13/73
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	380
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	85
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	13
COMPONENT, MOLE PCT			
METHANE	15.7	73.8	92.5
ETHANE	0.2	0.0	0.0
PROPANE	TRACE	0.6	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.5	25.3	7.4
OXYGEN	0.3	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	81.3	0.0	0.1
HELIUM	0.01	0.03	0.01
HEATING VALUE*	163	763	937
SPECIFIC GRAVITY	1.360	0.655	0.586

	INDEX 79 SAMPLE 14764	INDEX 80 SAMPLE 14777	INDEX 81 SAMPLE 14760
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	COOK INLET BASIN	COOK INLET N	GRANITE POINT
WELL NAME	A-8S	NORTH COOK INLET UNIT A-5	GRANITE POINT NO. 20
LOCATION	SEC. 4, T9N, R13W	SEC. 6, T11N, R9W	SEC. 31, T11N, R11W
OWNER	UNION OIL CO. OF CALIF.	PHILLIPS PETROLEUM CO.	AMOCO PRODUCTION CO.
COMPLETED	11/11/67	08/14/69	05/04/68
SAMPLED	08/--/76	08/06/76	08/06/76
FORMATION	EOCE-TYONEK	EOCE-KENAI	EOCE-TYONEK & HEMLOCK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	4450	8690
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1592	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	22230	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.1	99.1	67.0
ETHANE	5.4	0.1	10.1
PROPANE	4.5	0.1	10.3
N-BUTANE	1.7	0.0	3.7
ISOBUTANE	1.5	0.0	2.3
N-PENTANE	0.4	0.0	0.6
ISOPENTANE	0.9	0.0	2.1
CYCLOPENTANE	0.2	0.0	0.5
HEXANES PLUS	0.3	0.0	0.7
NITROGEN	1.5	0.6	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.3
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1245	1008	1492
SPECIFIC GRAVITY	0.712	0.559	0.892

	INDEX 82 SAMPLE 14758	INDEX 83 SAMPLE 14759	INDEX 84 SAMPLE 14762
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MCARTHUR RIVER	MCARTHUR RIVER	MCARTHUR RIVER
WELL NAME	K-17	K-30 SHORT	G-14 SHORT
LOCATION	SEC. 21, T9N, R13W	SEC. 21, T9N, R13W	SEC. 29, T9N, R13W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIF.
COMPLETED	--/--/73	04/29/70	10/07/68
SAMPLED	08/06/76	08/06/76	08/--/76
FORMATION	EOCE-HEMLOCK	EOCE-TYONEK, G	EOCE-TYONEK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	11423	10876	4500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.8	82.3	98.2
ETHANE	5.5	4.0	0.1
PROPANE	6.2	4.7	TRACE
N-BUTANE	2.4	1.8	0.0
ISOBUTANE	1.3	1.1	0.0
N-PENTANE	0.5	0.4	0.0
ISOPENTANE	0.8	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.5	0.2	0.0
NITROGEN	10.9	4.9	1.5
OXYGEN	1.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1176	1178	997
SPECIFIC GRAVITY	0.787	0.710	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 85 SAMPLE 14776	INDEX 86 SAMPLE 14780	INDEX 87 SAMPLE 14781
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MCARTHUR RIVER	MCARTHUR RIVER	MIDDLE GROUND SHOAL
WELL NAME	NO. K-30 LONG	NO. G-33 LONG	NO. 13
LOCATION	SEC. 21, T9N, R13W	SEC. 29, T9N, R13W	SEC. 31, T9N, R12W
OWNER	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIF.	AMOCO PRODUCTION CO.
COMPLETED	04/29/70	03/18/70	01/01/68
SAMPLED	08/06/76	08/04/76	08/--/76
FORMATION	EOCE-KENAI	EOCE-KENAI	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	12006	10086	8825
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	726	600
COMPONENT, MOLE PCT			
METHANE	80.1	61.3	64.6
ETHANE	4.8	12.1	13.7
PROPANE	5.3	10.5	10.9
N-BUTANE	2.0	2.7	3.6
ISOBUTANE	1.0	1.6	1.8
N-PENTANE	0.4	0.3	0.6
ISOPENTANE	0.5	0.7	1.5
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	5.4	10.4	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1189	1312	1482
SPECIFIC GRAVITY	0.724	0.855	0.878

	INDEX 88 SAMPLE 14782	INDEX 89 SAMPLE 14761	INDEX 90 SAMPLE 14766
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET	COOK INLET
FIELD	MIDDLE GROUND SHOAL	NICOLAI CREEK	NICOLAI CREEK
WELL NAME	NO. 6	NO. 2	NO. 3
LOCATION	SEC. 31, T9N, R12W	SEC. 22, T11N, R12W	SEC. 20, T11N, R12W
OWNER	AMOCO PRODUCTION CO.	TEXACO INC.	TEXACO INC.
COMPLETED	05/01/76	10/24/66	05/06/67
SAMPLED	08/--/76	08/--/76	08/--/76
FORMATION	EOCE--TYONEK	EOCE-TYONEK	EOCE-BELUGA & TYONEK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	5782	3420	1900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	98.2	98.1
ETHANE	6.1	0.2	0.1
PROPANE	8.0	0.1	0.1
N-BUTANE	3.3	TRACE	0.0
ISOBUTANE	1.8	TRACE	0.0
N-PENTANE	0.7	0.0	0.0
ISOPENTANE	1.3	0.1	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.4	TRACE	0.0
NITROGEN	3.0	1.3	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1361	1005	998
SPECIFIC GRAVITY	0.808	0.563	0.563

	INDEX 91 SAMPLE 14765	INDEX 92 SAMPLE 17286	INDEX 93 SAMPLE 5960
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COOK INLET	COOK INLET BASI	COPPER RIVER BASIN
FIELD	TRADING BAY NE	MCARTHUR RIVER	ESKER SPRING NE
WELL NAME	TS-2	TRADING BAY UNIT NO. G-18DPN	NOT GIVEN
LOCATION	SEC. 34, T10N, R13W	SEC. 28, T9N, R13W	U. S. GEOLOGICAL SUR.
OWNER	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIF.	NOT GIVEN
COMPLETED	08/29/69	11/--/83	--/--/00
SAMPLED	08/--/76	05/05/84	09/15/55
FORMATION	EOCE-TYONEK & HEMLOCK	MIOC-GRAYLING GAS SAND D-1	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	9016	5690	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1870	NOT GIVEN
OPEN FLOW, MCFD	192	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.5	96.9	0.2
ETHANE	5.7	0.1	0.2
PROPANE	7.1	TRACE	0.0
N-BUTANE	2.3	0.0	0.0
ISOBUTANE	2.0	0.0	0.0
N-PENTANE	0.5	0.0	0.0
ISOPENTANE	0.7	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	11.6	2.6	42.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	56.4
HELIUM	0.01	0.14	0.02
HEATING VALUE*	1206	983	6
SPECIFIC GRAVITY	0.801	0.567	1.286

	INDEX 94 SAMPLE 14119	INDEX 95 SAMPLE 14120	INDEX 96 SAMPLE 14121
STATE	ALASKA	ALASKA	ALASKA
COUNTY	COPPER RIVER BASIN	COPPER RIVER BASIN	COPPER RIVER BASIN
FIELD	NATURAL GAS SEEP	NATURAL GAS SEEP	NATURAL GAS SEEP
WELL NAME	JOHNSON CREEK SEEP	CROOKED CREEK SEEP	JOHNSON CREEK SEEP
LOCATION	SEC. 7, T22S, R21E	SEC. 35, T21S, R19E	SEC. 7, T22S, R21E
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/16/74	07/--/74	07/--/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.0	93.1	84.1
ETHANE	TRACE	2.0	0.5
PROPANE	TRACE	0.5	0.1
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	2.0	0.7	5.9
OXYGEN	0.0	0.1	1.3
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	3.3	8.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	972	1000	863
SPECIFIC GRAVITY	0.581	0.608	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 97 SAMPLE 6503	INDEX 98 SAMPLE 14032	INDEX 99 SAMPLE 8101
STATE	ALASKA	ALASKA	ALASKA
COUNTY	GULKANA LAKE	KEJULIK RIVER	KENAI
FIELD	NOT GIVEN	NATURAL GAS SEEP	KENAI
WELL NAME	LAKE BOTTOM SEEP	KEJULIK RIVER	KENAI UNIT NO. 44-18
LOCATION	COPPER RIVER BASIN	SEC. 34, T26S, R38W (SM)	SEC. 18, T4N, R11W
OWNER	NOT GIVEN	STATE OF ALASKA	OHIO OIL CO.
COMPLETED	--/--/00	--/--/00	01/29/61
SAMPLED	10/--/57	06/24/74	07/12/61
FORMATION	NOT GIVEN	NOT GIVEN	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4798
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1895
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	32000
COMPONENT, MOLE PCT			
METHANE	54.2	73.5	98.9
ETHANE	0.0	TRACE	0.2
PROPANE	0.2	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	43.3	25.8	0.7
OXYGEN	0.1	0.0	TRACE
ARGON	0.7	0.5	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	TRACE	0.1
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	574	746	1005
SPECIFIC GRAVITY	0.746	0.664	0.559

	INDEX 100 SAMPLE 11258	INDEX 101 SAMPLE 11210	INDEX 102 SAMPLE 10573
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI	KENAI BOROUGH	KENAI BOROUGH
FIELD	KENAI	BEAVER CREEK	NICOLAI CREEK
WELL NAME	KENAI DEEP TEST NO. 1	BEAVER CREEK NO. 1-A	NICOLAI CREEK STATE NO. 1
LOCATION	KALIFONSKI BEACH	SEC. 33, T7N, R10W	SEC. 30, T11N, R12W
OWNER	UNION OIL CO. OF CALIF.	MARATHON OIL CO.	TEXACO INC., ET AL.
COMPLETED	11/13/67	08/01/67	04/28/66
SAMPLED	01/04/68	11/05/67	05/14/66
FORMATION	EOCE-KENAI D	EOCE-KENAI U	EOCE-KENAI U
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	9230	5420	3420
WELLHEAD PRESSURE,PSIG	3620	1863	1531
OPEN FLOW, MCFD	NOT GIVEN	26164	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.5	98.3	96.2
ETHANE	0.2	0.1	0.1
PROPANE	0.2	TRACE	0.0
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.9	1.4	3.4
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1029	998	976
SPECIFIC GRAVITY	0.578	0.561	0.570

	INDEX 103 SAMPLE 9968	INDEX 104 SAMPLE 10589	INDEX 105 SAMPLE 14771
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI BOROUGH	KENAI PENINSULA	KENAI PENINSULA
FIELD	WILDCAT	FALLS CREEK	KENAI
WELL NAME	BIRCH HILL UNIT 22-25	FALLS CREEK NO. 1	NO. 41-7
LOCATION	SEC. 25, T9N, R9W	SEC. 18, T1N, R13W	SEC. 7, T4N, R11W
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	06/09/65	04/24/61	--/--/00
SAMPLED	06/24/65	05/27/66	08/05/76
FORMATION	EOCE-KENAI	EOCE-KENAI	EOCE-TYONEK
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	8205	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2855	NOT GIVEN	2200
OPEN FLOW, MCFD	17500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.6	99.1	98.8
ETHANE	0.2	0.2	0.5
PROPANE	0.3	0.0	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.3	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1014	1015	1009
SPECIFIC GRAVITY	0.564	0.561	0.561

	INDEX 106 SAMPLE 14783	INDEX 107 SAMPLE 14772	INDEX 108 SAMPLE 9537
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI PENINSULA	KENAI PENINSULA	KENAI PENINSULA
FIELD	KENAI	STERLING	SWANSON RIVER
WELL NAME	NO. 34-31	NO. 43-9	SWANSON RIVER NO. 212-27
LOCATION	SEC. 31, T5N, R11W	SEC. 9, T5N, R10W	SEC. 27
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	11/23/59	07/05/63	10/06/61
SAMPLED	08/05/76	08/05/76	08/05/64
FORMATION	EOCE-KENAI	EOCE-STERLING	EOCE-KENAI
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7625
WELLHEAD PRESSURE,PSIG	1500	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.7	98.3	97.5
ETHANE	0.1	0.2	0.2
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	1.4	1.8
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1002	999	994
SPECIFIC GRAVITY	0.559	0.562	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 109 SAMPLE 9538	INDEX 110 SAMPLE 14241	INDEX 111 SAMPLE 11554
STATE	ALASKA	ALASKA	ALASKA
COUNTY	KENAI PENINSULA	N SLOPE	N SLOPE
FIELD	SWANSON RIVER	IKO BAY	PRUDHOE BAY
WELL NAME	SOLDOTNA CREEK NO. 234-8	IKO NO. 1	PRUDHOE NO. 1
LOCATION	SEC. 8	SEC. 16, T21N, R16W	N SLOPE
OWNER	STANDARD OIL CO. OF CALIF.	U.S. NAVY	ATLANTIC RICHFIELD CO.
COMPLETED	02/24/62	03/09/75	--/--/00
SAMPLED	08/05/64	03/09/75	--/--/00
FORMATION	EOCE-KENAI	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	5834	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.7	96.7	78.8
ETHANE	0.1	1.9	5.2
PROPANE	0.0	0.4	1.8
N-BUTANE	0.0	0.1	0.6
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	1.0	0.7	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	12.4
HELIUM	TRACE	0.009	0.02
HEATING VALUE*	1002	1031	972
SPECIFIC GRAVITY	0.561	0.575	0.737

	INDEX 112 SAMPLE 12367	INDEX 113 SAMPLE 12308	INDEX 114 SAMPLE 9429
STATE	ALASKA	ALASKA	ALASKA
COUNTY	N SLOPE	N SLOPE	N SLOPE-NPR4
FIELD	PRUDHOE BAY	PRUDHOE BAY	BARROW S
WELL NAME	PRUDHOE BAY STATE NO. 1	SAG RIVER STATE NO. 1	NO. 5
LOCATION	SEC. 10, T11N, R14E	SEC. 4, T10N, R15E	SEC. 14, T22N, R18W
OWNER	ARCO & HUMBLE OIL & REFINING	ARCO & HUMBLE OIL & REFINING	OFFICE OF NAVAL PET. RESERVC
COMPLETED	--/--/00	--/--/00	06/17/55
SAMPLED	05/05/70	04/09/70	07/01/64
FORMATION	PERM-SADLEROCHIT	PERM-SADLEROCHIT	JURA---
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2456
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	980
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7900
COMPONENT, MOLE PCT			
METHANE	78.3	73.7	97.8
ETHANE	5.2	7.1	0.9
PROPANE	2.3	3.1	0.2
N-BUTANE	0.8	0.7	0.0
ISOBUTANE	0.3	0.4	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.8	0.2	1.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	11.7	14.1	0.1
HELIUM	0.07	0.01	0.03
HEATING VALUE*	1007	1018	1012
SPECIFIC GRAVITY	0.748	0.788	0.566

	INDEX 115 SAMPLE 9430	INDEX 116 SAMPLE 11460	INDEX 117 SAMPLE 12558
STATE	ALASKA	ALASKA	ALASKA
COUNTY	N SLOPE-NPR4	N SLOPE-NPR4	N SLOPE-NPR4
FIELD	BARROW S	BARROW S	BARROW S
WELL NAME	NO. 5	NO. 7	SOUTH BARROW NO. 9
LOCATION	SEC. 14, T22N, R18W	SEC. 14, T22N, R18W	SEC. 11, T22N, R18W, UPM
OWNER	OFFICE OF NAVAL PET. RESERVE	U.S. NAVY	U.S. NAVY
COMPLETED	03/24/54	04/02/68	04/15/70
SAMPLED	07/01/64	04/25/68	04/04/70
FORMATION	JURA---	JURA---	CRET---
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	2363	2240	2040
WELLHEAD PRESSURE, PSIG	980	960	NOT GIVEN
OPEN FLOW, MCFD	8200	400	186
COMPONENT, MOLE PCT			
METHANE	97.9	98.1	98.4
ETHANE	0.9	1.1	0.6
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	0.6	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1010	1016	1008
SPECIFIC GRAVITY	0.564	0.565	0.561

	INDEX 118 SAMPLE 13980	INDEX 119 SAMPLE 13985	INDEX 120 SAMPLE 14003
STATE	ALASKA	ALASKA	ALASKA
COUNTY	N SLOPE-NPR4	N SLOPE-NPR4	N SLOPE-NPR4
FIELD	SOUTH BARROW EAST	SOUTH BARROW EAST	SOUTH BARROW EAST
WELL NAME	BARROW S NO. 12	BARROW S NO. 12	BARROW S NO. 12
LOCATION	SEC. 26, T22N, R17W	SEC. 26, T22N, R17W	SEC. 26, T22N, R17W
OWNER	U.S. NAVY	U.S. NAVY	U.S. NAVY
COMPLETED	--/--/00	--/--/00	05/04/74
SAMPLED	04/21/74	--/--/00	05/05/74
FORMATION	JURA-BARROW L	JURA-BARROW L	JURA-BARROW L
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	2087	NOT GIVEN	2087
WELLHEAD PRESSURE, PSIG	810	300	810
OPEN FLOW, MCFD	500	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	87.3	87.8	90.6
ETHANE	0.4	0.4	0.7
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	TRACE	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	7.9	7.7	5.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	3.74	3.69	2.60
HEATING VALUE*	910	904	938
SPECIFIC GRAVITY	0.584	0.577	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 121 SAMPLE 15889	INDEX 122 SAMPLE 15890	INDEX 123 SAMPLE 15891
STATE	ALASKA	ALASKA	ALASKA
COUNTY	N SLOPE-NPR4	N SLOPE-NPR4	N SLOPE-NPR4
FIELD	SOUTH BARROW EAST	SOUTH BARROW EAST	SOUTH BARROW EAST
WELL NAME	BARROW NO. 19	BARROW S NO. 12	BARROW NO. 17
LOCATION	SEC. 23, T22N, R17E	SEC. 26, T22N, R17W	SEC. 30, T22N, R16W
OWNER	HUSKY OIL NPR OPERATIONS INC	HUSKY OIL NPR OPERATIONS INC	HUSKY OIL NPR OPERATIONS INC
COMPLETED	05/16/78	05/04/74	04/13/78
SAMPLED	01/17/80	01/17/80	01/17/80
FORMATION	JURA-BARROW L	JURA-BARROW L	JURA-BARROW L
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	2050	2050	2100
WELLHEAD PRESSURE,PSIG	1000	1000	1000
OPEN FLOW, MCFD	7220	360	2960
COMPONENT, MOLE PCT			
METHANE	86.1	83.5	94.9
ETHANE	0.5	0.4	0.9
PROPANE	TRACE	0.2	0.3
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	TRACE	0.5	0.1
ISOPENTANE	0.1	0.5	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.5	0.2
NITROGEN	11.8	8.8	3.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	1.22	4.22	0.13
HEATING VALUE*	869	974	1019
SPECIFIC GRAVITY	0.604	0.630	0.587

	INDEX 124 SAMPLE 15892	INDEX 125 SAMPLE 16787	INDEX 126 SAMPLE 16788
STATE	ALASKA	ALASKA	ALASKA
COUNTY	N SLOPE-NPR4	N SLOPE-NPR4	N SLOPE-NPR4
FIELD	SOUTH BARROW EAST	SOUTH BARROW EAST	SOUTH BARROW EAST
WELL NAME	BARROW NO. 1A	BARROW S NO. 15	BARROW NO. 14
LOCATION	SEC. 25, T22N, R17W	NOT GIVEN	SEC. 25, T22N, R17W
OWNER	HUSKY OIL NPR OPERATIONS INC	U.S. GEOLOGICAL SURVEY	U.S. GEOLOGICAL SURVEY
COMPLETED	03/03/77	09/18/80	03/03/77
SAMPLED	01/17/80	03/01/83	03/01/83
FORMATION	JURA-BARROW L	JURA-BARROW U	JURA-BARROW L
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	2050	2110	2057
WELLHEAD PRESSURE,PSIG	1000	905	855
OPEN FLOW, MCFD	3700	1700	2300
COMPONENT, MOLE PCT			
METHANE	94.3	97.8	96.4
ETHANE	2.2	0.9	0.4
PROPANE	2.0	0.1	TRACE
N-BUTANE	0.8	0.0	0.2
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.0	0.8	2.2
OXYGEN	0.6	0.8	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.05	0.03	0.05
HEATING VALUE*	1074	1010	1005
SPECIFIC GRAVITY	0.600	0.563	0.575

	INDEX 127 SAMPLE 16789	INDEX 128 SAMPLE 16790	INDEX 129 SAMPLE 16858
STATE	ALASKA	ALASKA	ALASKA
COUNTY	N SLOPE-NPR4	N SLOPE-NPR4	N SLOPE-NPR4
FIELD	SOUTH BARROW EAST	SOUTH BARROW EAST	SOUTH BARROW EAST
WELL NAME	BARROW S NO. 18	BARROW S NO. 12	BARROW NO. 19
LOCATION	NOT GIVEN	SEC. 26, T22N, R17W	SEC. 23, T22N, R17E
OWNER	U.S. GEOLOGICAL SURVEY	U.S. GEOLOGICAL SURVEY	U.S. GEOLOGICAL SURVEY
COMPLETED	10/14/80	04/05/84	05/16/78
SAMPLED	03/01/83	03/01/83	03/29/83
FORMATION	JURA-BARROW L	JURA-BARROW L	JURA-BARROW L
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	2052	2031	1988
WELLHEAD PRESSURE,PSIG	845	855	850
OPEN FLOW, MCFD	1400	360	7700
COMPONENT, MOLE PCT			
METHANE	94.9	89.0	89.1
ETHANE	0.5	0.6	0.7
PROPANE	TRACE	0.2	0.0
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	3.6	6.8	9.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.58	2.54	0.43
HEATING VALUE*	986	933	923
SPECIFIC GRAVITY	0.579	0.587	0.597

	INDEX 130 SAMPLE 16250	INDEX 131 SAMPLE 10703	INDEX 132 SAMPLE 14048
STATE	ALASKA	ALASKA	ALASKA
COUNTY	N SLOPE-NPR4	NOT GIVEN	NOT GIVEN
FIELD	WALAKPA	EXPLORATORY	GAS SEEP
WELL NAME	WALAKPA NO. 2	NORTH FORK NO. 41-35	OIL CREEK
LOCATION	SEC. 31, T20N, R19WUM	SEC. 35, T4S, R14W	SEC. 3, T29S, R40W
OWNER	U.S. GEOLOGICAL SURVEY	STANDARD OIL CO. OF CALIF.	NOT GIVEN
COMPLETED	--/--/00	12/20/65	--/--/00
SAMPLED	02/11/81	01/19/66	07/06/74
FORMATION	CRET-NOT GIVEN	EOCE-KENAI	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	2606	8025	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2813	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.0	98.1	91.2
ETHANE	2.0	0.5	TRACE
PROPANE	0.5	0.1	TRACE
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.2	1.2	6.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.9
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1038	1002	924
SPECIFIC GRAVITY	0.574	0.560	0.601

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 135 SAMPLE 14050	INDEX 134 SAMPLE 10752	INDEX 135 SAMPLE 13372
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	GAS SEEP	IVAN RIVER	KATALLA
WELL NAME	BLUE CREEK GAS SEEP	IVAN RIVER NO. 44-1	KATALLA NATURAL GAS SEEP
LOCATION	SEC. 13, T29S, R44W	SEC. 11, T13N, R9W	SEC. 36, T29S, R5E
OWNER	NOT GIVEN	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	--/--/00	10/08/66	--/--/00
SAMPLED	07/06/71	10/08/66	08/14/72
FORMATION	NOT GIVEN	EOCE-KENAI	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	7935	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3465	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	5600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	7.2	98.9	68.3
ETHANE	0.0	0.1	13.4
PROPANE	TRACE	TRACE	10.6
N-BUTANE	0.0	0.0	3.1
ISOBUTANE	0.0	0.0	2.8
N-PENTANE	0.0	0.0	0.6
ISOPENTANE	0.0	0.0	0.4
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	20.6	0.8	0.8
OXYGEN	1.9	0.1	0.0
ARGON	0.3	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	70.1	0.1	3.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	715	1004	1427
SPECIFIC GRAVITY	1.335	0.560	0.883

	INDEX 136 SAMPLE 4388	INDEX 137 SAMPLE 4389	INDEX 138 SAMPLE 5335
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	NAVAL PET. RESERVE NO. 4	NAVAL PET. RESERVE NO. 4	NOT GIVEN
WELL NAME	SAMPLE NO. 1	SAMPLE NO. 2	NATURAL GAS SEEP
LOCATION	NOT GIVEN	NOT GIVEN	COPPER RIVER BASIN
OWNER	OFFICE OF NAVAL PET. RESERVE	OFFICE OF NAVAL PET. RESERVE	U.S. GEOLOGICAL SURVEY
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/01/47	12/01/47	--/--/00
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.8	99.0	48.6
ETHANE	0.0	0.0	0.2
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.0	0.0	50.6
OXYGEN	0.0	0.0	0.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	1.0	0.2
HELIUM	0.02	0.02	0.12
HEATING VALUE*	1011	1003	496
SPECIFIC GRAVITY	0.556	0.564	0.767

	INDEX 139 SAMPLE 7672	INDEX 140 SAMPLE 7673	INDEX 141 SAMPLE 7733
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	60 ANI-0-229	60 ANI-0-224D	TOLSONA NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	U.S. GEOLOGICAL SURVEY	U.S. GEOLOGICAL SURVEY	U.S. GEOLOGICAL SURVEY
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/15/60	09/15/60	11/01/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.2	44.6	63.4
ETHANE	0.0	0.0	TRACE
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	40.4	55.0	35.9
OXYGEN	0.1	TRACE	0.1
ARGON	0.2	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.1	0.2
HELIUM	0.10	TRACE	0.10
HEATING VALUE*	592	454	645
SPECIFIC GRAVITY	0.733	0.784	0.706

	INDEX 142 SAMPLE 13278	INDEX 143 SAMPLE 13371	INDEX 144 SAMPLE 13373
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	KEMIK NO. 1	NATURAL GAS SEEP	ROTHBUN NO. 101
LOCATION	SEC. 17, T1N, R20E	SEC. 15, T18S, R6E	BERING LAKE
OWNER	FOREST OIL CORP.	NOT GIVEN	U.S. FOREST SERVICE
COMPLETED	--/--/00	--/--/00	--/--/06
SAMPLED	06/11/72	08/14/72	08/14/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.4	99.8	71.3
ETHANE	0.3	TRACE	0.1
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.2	4.5	27.2
OXYGEN	0.1	0.5	0.8
ARGON	TRACE	0.1	0.5
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.02	0.1
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	986	960	724
SPECIFIC GRAVITY	0.582	0.577	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 145 SAMPLE 11547	INDEX 146 SAMPLE 9422	INDEX 147 SAMPLE 13542
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	PRUDHOE BAY	STERLING	WELLS CREEK AREA
WELL NAME	PRUDHOE BAY STATE NO. 1	STERLING NO. 23-15	WELLS CREEK NO. 1
LOCATION	NOT GIVEN	SEC. 15, T5N, R10W	SEC. 11, T6S, R24W
OWNER	ATLANTIC RICHFIELD CO.	UNION OIL CO. OF CALIF.	NOT GIVEN
COMPLETED	--/--/15	07/11/51	--/--/03
SAMPLED	--/--/00	06/30/64	06/14/73
FORMATION	NOT GIVEN	EOCE-KENAI	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	NOT GIVEN	5254	1000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1964	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	36000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.6	97.7	79.2
ETHANE	4.8	0.1	0.0
PROPANE	2.1	TRACE	TRACE
N-BUTANE	0.9	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	9.2	2.0	20.4
OXYGEN	2.1	0.0	0.0
ARGON	0.2	TRACE	0.2
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	10.0	0.1	0.1
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	886	991	802
SPECIFIC GRAVITY	0.761	0.564	0.641

	INDEX 148 SAMPLE 13641	INDEX 149 SAMPLE 14051	INDEX 150 SAMPLE 14118
STATE	ALASKA	ALASKA	ALASKA
COUNTY	NOT GIVEN	SEWARD MERIDIAN	SEWARD MERIDIAN
FIELD	WILDCAT	GAS SEEP	NOT GIVEN
WELL NAME	SALMON CREEK NO. 2	GAS ROCKS	WARFIELD SEEP
LOCATION	SEC. 10, T30S, R41W (SM)	SEC. 9, T27S, R44W	SEC. 20, T18N, R3W
OWNER	NOT GIVEN	STATE OF ALASKA	U.S. BUREAU OF MINES
COMPLETED	03/--/40	--/--/00	--/--/00
SAMPLED	06/25/73	07/06/74	07/03/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	972	972	972
DEPTH, FEET	7500	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	18.9	0.1	71.1
ETHANE	0.2	0.0	0.0
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	3.0	12.3	22.4
OXYGEN	0.4	3.0	0.2
ARGON	0.0	0.2	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	77.3	84.5	6.2
HELIUM	0.01	TRACE	0.03
HEATING VALUE*	198	1	781
SPECIFIC GRAVITY	1.324	1.447	0.651

	INDEX 151 SAMPLE 5338	INDEX 152 SAMPLE 6135	INDEX 153 SAMPLE 13217
STATE	ALASKA	ARIZONA	ARIZONA
COUNTY	YAKATAGE REEF	APACHE	APACHE
FIELD	NOT GIVEN	BITA PEAK	BLACK ROCK
WELL NAME	SAMPLE NO. 52, AMR 110	BITA PEAK NO. 1	MONSANTO-NAVAJO NO. A-1
LOCATION	NOT GIVEN	SEC. 19, T41N, R31E	SEC. 21, T40N, R29E
OWNER	U.S. GEOLOGICAL SURVEY	EL PASO NATURAL GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	08/19/56	09/14/11
SAMPLED	--/--/00	08/27/56	08/23/72
FORMATION	NOT GIVEN	PENN-PARADOX	PENN-PINKERTON
GEOLOGIC PROVINCE CODE	972	590	590
DEPTH, FEET	NOT GIVEN	5080	5553
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1847	1350
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7400
COMPONENT, MOLE PCT			
METHANE	87.9	71.2	80.1
ETHANE	0.1	5.9	5.3
PROPANE	0.0	2.8	2.6
N-BUTANE	0.0	1.1	0.8
ISOBUTANE	0.1	0.6	0.4
N-PENTANE	0.0	0.5	0.3
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	10.5	12.1	7.3
OXYGEN	0.2	0.1	0.0
ARGON	0.2	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	4.1	2.1
HELIUM	TRACE	0.88	0.57
HEATING VALUE*	896	1006	1045
SPECIFIC GRAVITY	0.610	0.748	0.687

	INDEX 154 SAMPLE 13484	INDEX 155 SAMPLE 13485	INDEX 156 SAMPLE 5600
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BLACK ROCK	BLACK ROCK	BOUNDARY BUTTE E
WELL NAME	NAVAJO NO. 1-15	NAVAJO NO. 1-15	E. BOUNDARY BUTTE NO. 1
LOCATION	SEC. 15, T40N, R29E	SEC. 15, T40N, R29E	SEC. 6, T41N, R29E
OWNER	UNIVERSAL RESOURCES CORP.	UNIVERSAL RESOURCES CORP.	SHELL OIL CO.
COMPLETED	01/16/73	01/16/73	--/--/00
SAMPLED	12/03/72	12/03/72	03/17/54
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5282	5282	4884
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.9	80.9	87.0
ETHANE	5.1	5.2	4.9
PROPANE	2.7	2.6	2.6
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.5	0.5	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	8.2	6.7	3.0
OXYGEN	0.5	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.7	0.1
HELIUM	0.51	0.55	0.40
HEATING VALUE*	1052	1067	1118
SPECIFIC GRAVITY	0.702	0.687	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 157 SAMPLE 5674	INDEX 158 SAMPLE 5679	INDEX 159 SAMPLE 5681
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BOUNDARY BUTTE E	BOUNDARY BUTTE E	BOUNDARY BUTTE E
WELL NAME	BOUNDARY BUTTE E NO. 2	BOUNDARY BUTTE E NO. 2	BOUNDARY BUTTE E NO. 2
LOCATION	SEC. 3, T41N, R28E	SEC. 3, T41N, R28E	SEC. 3, T41N, R28E
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/17/54	09/21/54	08/29/54
FORMATION	PENN-HERMOSA U	PENN-HERMOSA	PENN-PARADOX
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4601	4620	4974
WELLHEAD PRESSURE,PSIG	4535	1500	NOT GIVEN
OPEN FLOW, MCFD	2700	85	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.9	76.0	70.8
ETHANE	5.0	9.1	3.0
PROPANE	1.9	0.9	0.1
N-BUTANE	1.0	0.4	0.1
ISOBUTANE	0.9	0.4	0.2
N-PENTANE	0.6	0.1	TRACE
ISOPENTANE	0.6	0.3	0.1
CYCLOPENTANE	0.6	0.1	0.1
HEXANES PLUS	1.3	0.2	0.1
NITROGEN	9.8	11.0	8.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	5.1	15.4
HELIUM	0.83	1.10	1.10
HEATING VALUE*	1113	925	797
SPECIFIC GRAVITY	0.745	0.701	0.761

	INDEX 160 SAMPLE 5682	INDEX 161 SAMPLE 5695	INDEX 162 SAMPLE 5718
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BOUNDARY BUTTE E	BOUNDARY BUTTE E	BOUNDARY BUTTE E
WELL NAME	BOUNDARY BUTTE E NO. 2	BOUNDARY BUTTE E NO. 2	BOUNDARY BUTTE E NO. 2
LOCATION	SEC. 3, T41N, R28E	SEC. 3, T41N, R28E	SEC. 3, T41N, R29E
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/31/54	09/27/54	10/07/54
FORMATION	PENN-HERMOSA	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5190	4740	4886
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	115
COMPONENT, MOLE PCT			
METHANE	86.2	86.6	72.7
ETHANE	3.1	3.7	4.2
PROPANE	0.6	1.7	3.3
N-BUTANE	0.2	0.4	1.9
ISOBUTANE	0.3	0.5	1.0
N-PENTANE	0.1	0.2	0.6
ISOPENTANE	0.1	0.2	0.9
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.7
NITROGEN	8.1	6.3	4.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	9.4
HELIUM	1.02	0.49	0.34
HEATING VALUE*	975	1040	1103
SPECIFIC GRAVITY	0.619	0.639	0.810

	INDEX 163 SAMPLE 5948	INDEX 164 SAMPLE 5959	INDEX 165 SAMPLE 7362
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	BOUNDARY BUTTE E	BOUNDARY BUTTE E	BOUNDARY BUTTE E
WELL NAME	NAVAJO INDIANS NO. 1	NAVAJO INDIAN TRIBE NO. 1	FED NO. 23-11
LOCATION	SEC. 4, T41N, R28E	SEC. 4, T41N, R28E	SEC. 11, T41N, R28E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	SHELL OIL CO.
COMPLETED	--/--/00	--/--/00	04/25/59
SAMPLED	10/--/55	10/25/55	01/21/60
FORMATION	MISS-LEADVILLE	PENN-PARADOX	PENN-HERMOSA U
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5570	4805	4460 P
WELLHEAD PRESSURE,PSIG	1540	NOT GIVEN	1120 P
OPEN FLOW, MCFD	4261	4385	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.7	70.3	84.5
ETHANE	2.5	3.6	9.4
PROPANE	1.0	1.7	1.9
N-BUTANE	0.5	0.3	0.4
ISOBUTANE	TRACE	0.3	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	36.9	8.2	7.2
OXYGEN	1.6	0.0	0.0
ARGON	0.3	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	9.6	13.8	0.2
HELIUM	3.79	1.00	0.80
HEATING VALUE*	533	871	1009
SPECIFIC GRAVITY	0.827	0.778	0.634

	INDEX 166 SAMPLE 10964	INDEX 167 SAMPLE 10967	INDEX 168 SAMPLE 10971
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KETAH	DINEH BI KETAH	DINEH BI KETAH
WELL NAME	NAVAJO TRACT 140 NO. 1	NAVAJO TRACT 140 NO. 1	NAVAJO TRACT 87 NO. 1
LOCATION	SEC. 8, T35N, R30E	SEC. 8, T35N, R30E	SEC. 23, T36N, R29E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/00	--/--/02	--/--/00
SAMPLED	05/23/67	05/25/67	05/26/67
FORMATION	DEVO-MCCRACKEN	DEVO-ANETH	DEVO-MCCRACKEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4532	4663	5223
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1500	50	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	2.2	3.4	3.1
ETHANE	0.2	0.5	0.4
PROPANE	0.1	0.2	0.2
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	83.9	78.7	78.8
OXYGEN	0.0	0.0	0.1
ARGON	0.8	0.8	0.8
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.8	11.1	10.6
HELIUM	5.18	5.23	5.58
HEATING VALUE*	35	35	47
SPECIFIC GRAVITY	0.964	0.980	0.973

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 169 SAMPLE 11131	INDEX 170 SAMPLE 11137	INDEX 171 SAMPLE 11167
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KEYAH	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	NAVAJO TRIBAL 88 NO. 1	NAVAJO TRIBAL 88 NO. 1	NAVAJO TRACT 88 NO. 2
LOCATION	SEC. 25, T36N, R29E	SEC. 25, T36N, R29E	SEC. 25, T36N, R29E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/20/67	08/24/68	--/--/00
SAMPLED	09/21/67	09/26/67	--/--/00
FORMATION	PENN-SILL	PENN-SILL	DEVO-MCCRACKEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	3407	3407	NOT GIVEN
WELLHEAD PRESSURE,PSIG	620	620	NOT GIVEN
OPEN FLOW, MCFD	250	2919	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	29.0	23.9	2.7
ETHANE	3.7	3.8	0.4
PROPANE	2.2	2.3	0.1
N-BUTANE	0.6	0.7	0.2
ISOBUTANE	0.3	0.4	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	63.5	63.8	78.1
OXYGEN	0.0	0.0	0.1
ARGON	0.6	0.6	0.8
HYDROGEN	0.2	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	12.6
HELIUM	0.39	0.04	5.16
HEATING VALUE*	415	423	44
SPECIFIC GRAVITY	0.865	0.872	0.992

	INDEX 172 SAMPLE 11196	INDEX 173 SAMPLE 11205	INDEX 174 SAMPLE 11269
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KEYAH	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	NAVAJO TRACT 88 NO. 2	NAVAJO TRACT 88 NO. 1	NAVAJO TRACT 88-3
LOCATION	SEC. 25, T36N, R29E	SEC. 25, T36N, R29E	SEC. 36, T36N, R29E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/00	--/--/00	01/31/68
SAMPLED	10/30/67	11/03/67	01/31/68
FORMATION	DEVO-MCCRACKEN	PENN-SILL	PENN-SILL
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4625	3407	3692
WELLHEAD PRESSURE,PSIG	737	625	580
OPEN FLOW, MCFD	2	2900	2163
COMPONENT, MOLE PCT			
METHANE	2.7	23.3	30.2
ETHANE	0.4	3.9	4.5
PROPANE	0.1	2.0	3.2
N-BUTANE	0.3	0.7	1.5
ISOBUTANE	0.0	0.2	1.1
N-PENTANE	0.0	0.2	0.5
ISOPENTANE	0.0	0.2	0.6
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.0	0.1	0.4
NITROGEN	77.3	63.9	53.8
OXYGEN	0.0	0.0	0.0
ARGON	0.8	0.6	0.5
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	13.3	0.1	TRACE
HELIUM	5.17	4.57	5.74
HEATING VALUE*	47	414	625
SPECIFIC GRAVITY	1.001	0.874	0.891

	INDEX 175 SAMPLE 11512	INDEX 176 SAMPLE 11513	INDEX 177 SAMPLE 11514
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KEYAH	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	NAVAJO TRACT 151 NO. 1	NAVAJO TRACT 151 NO. 1	NAVAJO TRACT 151 NO. 1
LOCATION	SEC. 35, T35N, R30E	SEC. 35, T35N, R30E	SEC. 35, T35N, R30E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	05/11/68	05/11/68	05/11/68
SAMPLED	05/11/68	04/26/68	04/22/68
FORMATION	DEVO-MCCRACKEN	DEVO-ANETH	DEVO-ANETH
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	3695	3788	3836
WELLHEAD PRESSURE,PSIG	850	790	790
OPEN FLOW, MCFD	1500	2500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.3	0.2	0.2
ETHANE	0.0	0.0	0.0
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	90.9	92.6	94.2
OXYGEN	0.0	0.3	0.0
ARGON	0.9	0.9	0.9
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	1.3	1.6
HELIUM	4.81	4.59	3.11
HEATING VALUE*	3	2	2
SPECIFIC GRAVITY	0.947	0.939	0.958

	INDEX 178 SAMPLE 11521	INDEX 179 SAMPLE 11903	INDEX 180 SAMPLE 11945
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DINEH BI KEYAH	DINEH BI KEYAH	DINEH BI KEYAH
WELL NAME	NAVAJO TRACT 140 NO. 1	NAVAJO TRACT 146 NO. 1	NAVAJO BW
LOCATION	SEC. 8, T35N, R30E	SEC. 15, T35N, R30E	SEC. 36, T4N, R7W
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	GULF OIL CORP.
COMPLETED	05/23/68	07/16/68	--/--/00
SAMPLED	05/23/68	06/03/69	06/26/69
FORMATION	DEVO-MCCRACKEN	DEVO-MCCRACKEN	DEVO-ANETH
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4570	3832	1930
WELLHEAD PRESSURE,PSIG	702	50	NOT GIVEN
OPEN FLOW, MCFD	1600	370	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	2.0	0.5	TRACE
ETHANE	0.3	0.0	0.0
PROPANE	0.2	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	84.4	89.6	94.8
OXYGEN	0.0	0.0	0.1
ARGON	0.8	0.9	0.6
HYDROGEN	0.0	0.5	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.2	4.2	0.1
HELIUM	5.08	4.40	4.32
HEATING VALUE*	31	7	0
SPECIFIC GRAVITY	0.962	0.953	0.934

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 181 SAMPLE 7274	INDEX 182 SAMPLE 7584	INDEX 183 SAMPLE 7585
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	DRY MESA	DRY MESA	DRY MESA
WELL NAME	NAVAJO TRACT 138 NO. 1	NAVAJO TRACT 138 NO. 3	NAVAJO TRACT 138 NO. 3
LOCATION	SEC. 11, T40N, R28E	SEC. 2, T40N, R28E	SEC. 2, T40N, R28E
OWNER	TEXAS PACIFIC COAL & OIL CO.	TEXAS PACIFIC COAL & OIL CO.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	07/28/59	--/--/00	--/--/00
SAMPLED	11/03/59	06/18/60	06/18/60
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5566	5324	5324
WELLHEAD PRESSURE,PSIG	12	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	32	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.0	41.5	42.5
ETHANE	9.6	15.3	15.3
PROPANE	1.9	16.1	15.7
N-BUTANE	1.3	7.3	6.8
ISOBUTANE	1.1	1.5	1.5
N-PENTANE	0.2	2.3	1.8
ISOPENTANE	1.6	1.4	1.7
CYCLOPENTANE	0.3	0.4	0.3
HEXANES PLUS	0.8	1.1	0.9
NITROGEN	43.3	12.2	13.1
OXYGEN	TRACE	TRACE	0.1
ARGON	0.2	0.1	0.2
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	TRACE	0.1
HELIUM	2.60	0.30	0.30
HEATING VALUE*	312	1648	1599
SPECIFIC GRAVITY	0.910	1.081	1.067

	INDEX 184 SAMPLE 7775	INDEX 185 SAMPLE 11203	INDEX 186 SAMPLE 11204
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NAVAJO SPRINGS	NAVAJO SPRINGS	NAVAJO SPRINGS
WELL NAME	SANTA FE NO. 8	SANTA FE NO. 21	SANTA FE NO. 8
LOCATION	SEC. 25, T20N, R27E	SEC. 31, T20N, R28E	SEC. 25, T20N, R27E
OWNER	ERESI OIL CO.	APACHE DRILLING CO.	APACHE DRILLING CO.
COMPLETED	11/20/60	09/15/67	11/21/60
SAMPLED	11/15/60	10/31/67	10/31/67
FORMATION	PERM-COCONINO	TRIA-SHINARUMP	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1356	1172	1351
WELLHEAD PRESSURE,PSIG	NOT GIVEN	134	199
OPEN FLOW, MCFD	NOT GIVEN	177	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.1	0.1	TRACE
ETHANE	TRACE	0.1	0.1
PROPANE	TRACE	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	85.8	80.5	88.9
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.8	0.7
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	9.8	0.7
HELIUM	9.80	8.71	9.68
HEATING VALUE*	1	3	2
SPECIFIC GRAVITY	0.897	0.953	0.895

	INDEX 187 SAMPLE 12527	INDEX 188 SAMPLE 12528	INDEX 189 SAMPLE 6925
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NAVAJO SPRINGS E	NAVAJO SPRINGS E	NOT GIVEN
WELL NAME	SANTA FE-FEE NO. 21-A	ANSON 21-1	STATE NO. 1
LOCATION	SEC. 31, T20N, R28E	SEC. 31, T20N, R28E	SEC. 20, T9N, R31E
OWNER	WESTERN HELIUM CORP.	WESTERN HELIUM CORP.	MAE BELCHER
COMPLETED	09/15/70	10/18/65	06/17/59
SAMPLED	10/05/70	10/05/70	--/--/00
FORMATION	PERM-COCONINO	TRIA-SHINARUMP	NOT GIVEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1232	1196	NOT GIVEN
WELLHEAD PRESSURE,PSIG	131	129	NOT GIVEN
OPEN FLOW, MCFD	470	610	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	0.0	0.1
ETHANE	0.0	0.0	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	89.8	83.5	12.1
OXYGEN	0.1	TRACE	0.1
ARGON	0.8	0.8	0.5
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	87.3
HELIUM	8.73	9.23	0.17
HEATING VALUE*	0	0	3
SPECIFIC GRAVITY	0.903	0.895	1.458

	INDEX 190 SAMPLE 7803	INDEX 191 SAMPLE 7913	INDEX 192 SAMPLE 8513
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	WATER WELL NO. 2	NO. 2	BITA PEAK NO. 1
LOCATION	NOT GIVEN	SEC. 3, T36N, R29E	SEC. 19, T41N, R31E
OWNER	U.S. BUREAU OF INDIAN AFFAIR	U.S. BUREAU OF INDIAN AFFAIR	EL PASO NATURAL GAS CO.
COMPLETED	04/23/60	04/23/60	08/27/56
SAMPLED	12/22/60	03/24/61	04/16/62
FORMATION	NOT GIVEN	NOT GIVEN	PENN-PARADOX
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5080
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1847
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	399
COMPONENT, MOLE PCT			
METHANE	4.5	4.6	72.4
ETHANE	0.4	0.4	5.5
PROPANE	0.3	0.1	3.3
N-BUTANE	0.0	0.0	0.9
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	89.0	88.9	11.7
OXYGEN	TRACE	0.1	0.1
ARGON	0.7	0.7	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	4.3
HELIUM	5.50	5.10	0.88
HEATING VALUE*	61	56	980
SPECIFIC GRAVITY	0.911	0.910	0.731

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 193 SAMPLE 11689	INDEX 194 SAMPLE 11690	INDEX 195 SAMPLE 4840
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	NOT GIVEN	NOT GIVEN	PINTA
WELL NAME	SANTA FE NO. 8X	SANTA FE NO. 1	MACIE NO. 1
LOCATION	SEC. 25, T20N, R27E	SEC. 25, T20N, R27E	SEC. 34, T20N, R26E
OWNER	CREST - ARIZONA HELIUM	CREST - ARIZONA HELIUM	KIPLING PETROLEUM CO.
COMPLETED	10/29/68	11/08/68	--/--/00
SAMPLED	11/25/68	11/26/68	05/08/50
FORMATION	PERM-COCONINO	PERM-COCONINO	TRIA-SHINARUMP
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1345	1225	775
WELLHEAD PRESSURE,PSIG	200	135	NOT GIVEN
OPEN FLOW, MCFD	299	470	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.1	TRACE	3.2
ETHANE	0.0	0.0	2.3
PROPANE	0.0	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	88.8	90.0	86.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.6	0.8	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.7	0.6
HELIUM	9.99	8.61	7.30
HEATING VALUE*	1	0	74
SPECIFIC GRAVITY	0.889	0.904	0.899

	INDEX 196 SAMPLE 4841	INDEX 197 SAMPLE 4842	INDEX 198 SAMPLE 4908
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA	PINTA	PINTA
WELL NAME	MACIE NO. 1	MACIE NO. 1	MACIE NO. 1
LOCATION	SEC. 34, T20N, R26E	SEC. 34, T20N, R26E	SEC. 34, T20N, R26E
OWNER	KIPLING PETROLEUM CO.	KIPLING PETROLEUM CO.	KIPLING PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/26/50	05/26/50	06/10/50
FORMATION	TRIA-SHINARUMP	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	780	1032	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	50000	50000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.9	1.0	0.3
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	90.8	89.1	89.4
OXYGEN	0.3	0.8	0.3
ARGON	0.6	0.7	0.7
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.9	0.9
HELIUM	6.98	8.09	8.19
HEATING VALUE*	13	16	10
SPECIFIC GRAVITY	0.912	0.907	0.909

	INDEX 199 SAMPLE 4909	INDEX 200 SAMPLE 5651	INDEX 201 SAMPLE 8599
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA	PINTA	PINTA
WELL NAME	MACIE NO. 1	MACIE NO. 1	SANTA FE NO. 13
LOCATION	SEC. 34, T20N, R26E	SEC. 34, T20N, R26E	SEC. 31, T20N, R27E
OWNER	KIPLING PETROLEUM CO.	ARIZONA GAS & CHEMICAL CORP.	EASTERN PETROLEUM CO.
COMPLETED	--/--/00	--/--/50	06/25/52
SAMPLED	06/10/50	07/23/54	06/25/62
FORMATION	TRIA-SHINARUMP	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	1032	977
WELLHEAD PRESSURE,PSIG	NOT GIVEN	98	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2800	1300
COMPONENT, MOLE PCT			
METHANE	0.2	TRACE	0.1
ETHANE	TRACE	0.0	0.0
PROPANE	0.1	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	88.1	89.8	89.6
OXYGEN	2.9	TRACE	0.5
ARGON	0.7	0.6	0.8
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	1.1	0.9
HELIUM	6.85	8.40	8.16
HEATING VALUE*	4	0	4
SPECIFIC GRAVITY	0.923	0.905	0.910

	INDEX 202 SAMPLE 8615	INDEX 203 SAMPLE 8616	INDEX 204 SAMPLE 8643
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA	PINTA	PINTA
WELL NAME	HORTENSTINE NO. 1-9	STATE NO. 1	HORTENSTINE NO. 1-3
LOCATION	SEC. 9, T19N, R26E	SEC. 14, T19N, R26E	SEC. 9, T19N, R26E
OWNER	RAM OIL CO.	RAM OIL CO.	RAM OIL CO.
COMPLETED	--/--/00	03/05/62	--/--/00
SAMPLED	07/25/62	06/12/62	08/21/62
FORMATION	TRIA-CHINLE	TRIA-CHINLE	TRIA-CHINLE
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	732	773	732
WELLHEAD PRESSURE,PSIG	125	164	40
OPEN FLOW, MCFD	NOT GIVEN	150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	TRACE	TRACE
ETHANE	0.0	0.0	0.0
PROPANE	0.0	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	75.2	93.6	90.9
OXYGEN	TRACE	TRACE	0.1
ARGON	0.4	0.4	0.5
HYDROGEN	20.4	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	4.02	5.75	8.58
HEATING VALUE*	66	0	4
SPECIFIC GRAVITY	0.753	0.920	0.896

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 205 SAMPLE 8583	INDEX 206 SAMPLE 6131	INDEX 207 SAMPLE 9164
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	PINTA S	RED MESA	TEEC NOS POS
WELL NAME	STATE NO. 1	NAVAJO NO. A-1	NAVAJO TRIBAL O
LOCATION	SEC. 14, T19N, R26E	SEC. 22, T41N, R28E	SEC. 23, T41N, R30E
OWNER	RAM OIL CO.	FRANCO-WESTERN OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/05/62	--/--/00	06/26/63
SAMPLED	06/12/62	08/28/56	11/14/63
FORMATION	TRIA-CHINLE BASAL	PENN-PARADOX	PENN-ISMAY
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	773	NOT GIVEN	5122
WELLHEAD PRESSURE,PSIG	164	1450	1799
OPEN FLOW, MCFD	150	NOT GIVEN	5818
COMPONENT, MOLE PCT			
METHANE	TRACE	28.5	69.1
ETHANE	0.0	10.5	3.7
PROPANE	0.0	15.8	1.9
N-BUTANE	0.0	13.7	0.8
ISOBUTANE	0.0	6.4	TRACE
N-PENTANE	0.0	5.9	0.3
ISOPENTANE	0.0	5.9	0.1
CYCLOPENTANE	0.0	0.7	0.1
HEXANES PLUS	0.0	3.5	0.3
NITROGEN	93.9	0.1	11.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.4	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	7.9	11.1
HELIUM	5.56	0.01	1.20
HEATING VALUE*	0	2301	979
SPECIFIC GRAVITY	0.923	1.484	0.771

	INDEX 208 SAMPLE 6132	INDEX 209 SAMPLE 11240	INDEX 210 SAMPLE 11560
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	TOM ATIN N	TOHACHE WASH	TOHACHE WASH
WELL NAME	NAVAJO NO. A-1	NAVAJO Z NO. 1	NAVAJO Z NO. 1
LOCATION	SEC. 23, T41N, R28E	SEC. 36, T41N, R30E	SEC 36, T41N, R30E
OWNER	FRANCO-WESTERN OIL CO.	TEXACO INC.	AIRCO INDUSTRIAL GASES
COMPLETED	08/21/56	--/--/00	01/17/67
SAMPLED	08/--/56	--/--/00	06/--/68
FORMATION	PENN-PARADOX	MISS-LEADVILLE	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5359	NOT GIVEN	6270
WELLHEAD PRESSURE,PSIG	1450	NOT GIVEN	693
OPEN FLOW, MCFD	7450	NOT GIVEN	3203
COMPONENT, MOLE PCT			
METHANE	35.5	19.6	14.8
ETHANE	9.6	1.0	1.1
PROPANE	15.5	0.4	0.4
N-BUTANE	11.1	0.2	0.3
ISOBUTANE	5.8	0.2	TRACE
N-PENTANE	5.1	0.2	0.3
ISOPENTANE	4.5	TRACE	0.0
CYCLOPENTANE	0.9	TRACE	0.1
HEXANES PLUS	3.8	0.2	0.3
NITROGEN	0.3	53.1	53.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.6	0.6
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	23.5	23.0
HELIUM	0.110	5.84	5.99
HEATING VALUE*	2143	208	222
SPECIFIC GRAVITY	1.386	1.006	1.006

	INDEX 211 SAMPLE 11887	INDEX 212 SAMPLE 12033	INDEX 213 SAMPLE 6166
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	TOHACHE WASH	TOHACHE WASH	WILDCAT
WELL NAME	NAVAJO Z NO. 1	NAVAJO Z NO. 1	MACIE NO. 3
LOCATION	SEC. 36, T41N, R30E	SEC. 36, T41N, R30E	SEC. 30, T20N, R26E
OWNER	TEXACO INC.	TEXACO INC.	KERR-MCGEE CORP.
COMPLETED	07/17/60	07/17/60	10/20/56
SAMPLED	05/19/69	08/27/69	10/24/56
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	6270	6270	1000
WELLHEAD PRESSURE,PSIG	1357	NOT GIVEN	99
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2560
COMPONENT, MOLE PCT			
METHANE	15.1	14.7	0.1
ETHANE	1.1	1.0	0.0
PROPANE	0.6	0.5	0.0
N-BUTANE	0.2	0.2	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	53.4	54.1	98.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	22.3	22.1	0.9
HELIUM	6.08	5.91	8.25
HEATING VALUE*	221	217	1
SPECIFIC GRAVITY	0.999	1.001	0.906

	INDEX 214 SAMPLE 6327	INDEX 215 SAMPLE 7028	INDEX 216 SAMPLE 7071
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STATE NO. 4	CHAMBERS-SANDERS NO. 2	CHAMBERS-SANDERS NO. 2
LOCATION	SEC. 32, T20N, R26E	SEC. 27, T21N, R28E	SEC. 27, T21N, R28E
OWNER	KERR-MCGEE OIL IND., INC.	JAMES E. BROWN & ASSOC.	JAMES E. BROWN & ASSOC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/11/57	04/20/59	05/09/59
FORMATION	PERM-COCONINO	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	542	542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.2	TRACE	TRACE
ETHANE	TRACE	0.0	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	90.1	93.6	94.1
OXYGEN	0.1	0.0	2.9
ARGON	0.4	1.2	1.2
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	2.8	0.2
HELIUM	8.70	2.30	1.50
HEATING VALUE*	2	0	0
SPECIFIC GRAVITY	0.900	0.969	0.964

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 217 SAMPLE 7089	INDEX 218 SAMPLE 7146	INDEX 219 SAMPLE 7539
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO NO. 1-138	STATE NO. 1-28	SANTA FE NO. 2
LOCATION	SEC. 11, T40N, R28E	SEC. 28, T20N, R26E	SEC. 33, T20N, R27E
OWNER	TEXAS PACIFIC COAL & OIL CO.	EASTERN PETROLEUM CO.	CREST OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/06/59	07/--/59	05/09/60
FORMATION	PENN-PARADOX	PERM-COCONINO	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	5045	NOT GIVEN	1063
WELLHEAD PRESSURE,PSIG	1450	NOT GIVEN	105
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	589
COMPONENT, MOLE PCT			
METHANE	80.6	0.1	0.2
ETHANE	5.2	0.0	TRACE
PROPANE	3.3	0.1	0.1
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.4	0.0	0.0
HEXANES PLUS	0.9	0.0	0.0
NITROGEN	4.0	89.6	89.9
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.6	0.7
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	9.8	0.9
HELIUM	0.40	8.50	6.16
HEATING VALUE*	1125	3	5
SPECIFIC GRAVITY	0.722	0.904	0.908

	INDEX 220 SAMPLE 7668	INDEX 221 SAMPLE 8050	INDEX 222 SAMPLE 8664
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STATE NO. 1-6	NAVAJO 7 NO. 1	SANTA FE NO. 7
LOCATION	SEC. 6, T19N, R26E	SEC. 7, T40N, R29E	SEC. 6, T19N, R27E
OWNER	EASTERN PETROLEUM CO.	ATLANTIC REFINING CO.	CREST OIL CO.
COMPLETED	09/03/60	--/--/00	09/07/62
SAMPLED	08/07/60	06/30/61	09/09/62
FORMATION	TRIA-CHINLE	MISS-L	PERM-COCONINO
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	675	5604	1044
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	120
OPEN FLOW, MCFD	NOT GIVEN	500	185
COMPONENT, MOLE PCT			
METHANE	0.2	11.5	0.0
ETHANE	0.0	1.5	0.0
PROPANE	0.3	1.3	0.0
N-BUTANE	TRACE	0.4	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	95.6	76.3	90.6
OXYGEN	0.0	TRACE	0.0
ARGON	1.1	0.6	0.5
HYDROGEN	2.6	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	2.9	0.8
HELIUM	0.20	5.10	8.03
HEATING VALUE*	118	209	0
SPECIFIC GRAVITY	0.948	0.914	0.907

	INDEX 223 SAMPLE 10408	INDEX 224 SAMPLE 10409	INDEX 225 SAMPLE 10410
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SANTA FE NO. 8	ANSON 21	RAM NO. 1-14
LOCATION	SEC. 25, T20N, R27E	SEC. 31, T20N, R28E	SEC. 14, T19N, R26E
OWNER	CREST OIL CO.	EASTERN PETROLEUM CO.	APACHE DRILLING CO.
COMPLETED	11/21/56	10/18/65	03/01/63
SAMPLED	01/21/66	01/21/66	01/21/66
FORMATION	PERM-COCONINO	TRIA-CHINLE	TRIA-CHINLE
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1372	1196	806
WELLHEAD PRESSURE,PSIG	206	136	166
OPEN FLOW, MCFD	1720	210	93
COMPONENT, MOLE PCT			
METHANE	TRACE	0.1	TRACE
ETHANE	0.0	0.0	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	89.0	64.8	93.8
OXYGEN	0.1	0.0	0.0
ARGON	0.7	0.6	0.5
HYDROGEN	0.0	0.7	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	27.0	0.2
HELIUM	9.50	6.80	5.39
HEATING VALUE*	0	1	0
SPECIFIC GRAVITY	0.895	1.058	0.925

	INDEX 226 SAMPLE 11691	INDEX 227 SAMPLE 11944	INDEX 228 SAMPLE 11980
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	APACHE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SPURLOCK NO. 1	NAVAJO BW	NAVAJO CS NO. 1
LOCATION	SEC. 3, T17N, R26E	SEC. 36, T4N, R7W	SEC. 34, T37N, R30E
OWNER	CREST - ARIZONA HELIUM	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	--/--/00	--/--/01	--/--/00
SAMPLED	11/26/68	06/25/69	07/19/69
FORMATION	PERM-SUPAI	DEVO-MCCRACKEN	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1450	1806	3650
WELLHEAD PRESSURE,PSIG	30	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.1	4.1
ETHANE	0.0	0.0	0.6
PROPANE	TRACE	TRACE	0.3
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	99.2	93.8	85.8
OXYGEN	0.0	0.3	TRACE
ARGON	0.1	0.5	1.0
HYDROGEN	0.5	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.05	5.22	7.43
HEATING VALUE*	2	1	88
SPECIFIC GRAVITY	0.961	0.927	0.905

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 223 SAMPLE 11995	INDEX 230 SAMPLE 12395	INDEX 231 SAMPLE 1011
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	APACHE	APACHE	NAVAJO
FIELD	WILDCAT	WILDCAT	HOLBROOK
WELL NAME	NAVAJO C-Z	NAVAJO NO. 1-6	TAYLOR-FULLER NO. 1
LOCATION	SEC. 21, T29N, R24E	SEC. 6, T36N, R30E	SEC. 21, T17N, R20E
OWNER	GULF OIL CORP.	UNION TEXAS PETROLEUM CORP.	GREAT BASIN OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/17/60	08/31/70	03/07/25
FORMATION	DEVO-ELBERT	CRET-BARKER CREEK	NOT GIVEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	4475	3337	3590
WELLHEAD PRESSURE,PSIG	NOT GIVEN	15	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	100
COMPONENT, MOLE PCT			
METHANE	0.2	5.3	TRACE
ETHANE	0.0	0.6	TRACE
PROPANE	0.1	0.4	---
N-BUTANE	0.0	0.3	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	90.3	78.1	19.0
OXYGEN	2.7	0.0	0.5
ARGON	1.4	0.7	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	9.9	79.4
HELIUM	5.19	4.74	1.07
HEATING VALUE*	5	85	0
SPECIFIC GRAVITY	0.935	0.971	1.405

	INDEX 232 SAMPLE 998	INDEX 233 SAMPLE 7243	INDEX 234 SAMPLE 8670
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	NAVAJO	NAVAJO	NAVAJO
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	TAYLOR-FULLER NO. 1	AZTEC LAND & CATTLE CO. NO.2	L. M. LOCKHART NO. 1
LOCATION	SEC. 21, T17N, R20E	NOT GIVEN	SEC. 33, T14N, R20E
OWNER	GREAT BASIN OIL CO.	LYDIA JOHNSON	L. M. LOCKHART
COMPLETED	--/--/00	--/--/00	06/05/49
SAMPLED	02/19/25	--/--/00	08/25/62
FORMATION	NOT GIVEN	NOT GIVEN	PERM-FORT APACHE
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1678
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	---	3.3	23.8
ETHANE	---	0.4	3.2
PROPANE	---	0.0	1.1
N-BUTANE	---	TRACE	0.3
ISOBUTANE	---	TRACE	0.3
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	TRACE	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	18.9	90.1	70.7
OXYGEN	0.4	TRACE	TRACE
ARGON	---	TRACE	0.1
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	79.5	5.9	0.1
HELIUM	1.12	0.10	0.27
HEATING VALUE*	0	44	357
SPECIFIC GRAVITY	1.404	0.984	0.888

	INDEX 235 SAMPLE 9078	INDEX 236 SAMPLE 7077	INDEX 237 SAMPLE 9060
STATE	ARIZONA	ARIZONA	ARIZONA
COUNTY	NAVAJO	NAVAJO	NAVAJO
FIELD	PENZANCE	WILDCAT	WILDCAT
WELL NAME	WOODMAN FED. NO. 1X	NEW MEXICO & ARIZONA NO. 1	FEE NO. 1
LOCATION	SEC. 30, T18N, R20E	SEC. 23, T12N, R23E	SEC. 27, T17N, R22E
OWNER	BEN HUNT	PAN AMERICAN PETROLEUM CORP.	NEW MEXICO-ARIZONA LAND CO.
COMPLETED	--/--/60	--/--/00	--/--/00
SAMPLED	09/07/63	05/14/59	08/02/63
FORMATION	PERM-COCONINO	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	590	590	590
DEPTH, FEET	1556	NOT GIVEN	1007
WELLHEAD PRESSURE,PSIG	25	NOT GIVEN	364
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	3.8	0.8	0.0
ETHANE	0.3	0.0	0.0
PROPANE	0.1	0.0	0.0
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	93.4	94.4	96.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	1.0	0.1
HYDROGEN	0.4	0.9	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	2.8	2.4
HELIUM	1.20	TRACE	0.10
HEATING VALUE*	48	11	2
SPECIFIC GRAVITY	0.943	0.975	0.975

	INDEX 238 SAMPLE 9532	INDEX 239 SAMPLE 7329	INDEX 240 SAMPLE 2832
STATE	ARIZONA	ARKANSAS	ARKANSAS
COUNTY	NAVAJO	CLEBURNE	COLUMBIA
FIELD	WILDCAT	QUITMAN	BIG CREEK
WELL NAME	N. M.-ARIZ. LAND CO. NO. C-1	R. A. EVANS NO. 1	PETTY STAVE NO. 1
LOCATION	SEC. 27, T18N, R23E	SEC. 32, T9N, R11W	SEC. 4, T17S, R21W
OWNER	FRANKLIN ASTON & FAIR, INC.	BEARD OIL CO.	STANDARD OIL CO. OF LA.
COMPLETED	06/20/63	07/06/59	12/23/39
SAMPLED	08/07/64	01/02/60	02/21/40
FORMATION	TRIA-SHINARUMP	PENN-ATOKA	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	590	345	230
DEPTH, FEET	200	1960	7956
WELLHEAD PRESSURE,PSIG	40	740	3730
OPEN FLOW, MCFD	NOT GIVEN	430	50000
COMPONENT, MOLE PCT			
METHANE	0.3	98.6	45.6
ETHANE	0.0	0.8	17.0
PROPANE	0.1	0.2	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	93.5	0.3	33.7
OXYGEN	0.2	TRACE	0.6
ARGON	0.4	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	3.1
HELIUM	5.13	0.10	0.11
HEATING VALUE*	16	1018	767
SPECIFIC GRAVITY	0.926	0.561	0.811

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 241 SAMPLE 3170	INDEX 242 SAMPLE 13888	INDEX 243 SAMPLE 3171
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	COLUMBIA	COLUMBIA	COLUMBIA
FIELD	BIG CREEK	CHALYBEAT SPRINGS	DORCHEAT
WELL NAME	PETTY STAVE NO. 1	DELTIC UNIT NO. 1	SAYERS NO. 1
LOCATION	SEC. 4, T17S, R21W	SEC. 35, T19S, R19W	T18S, R22W
OWNER	CARTER OIL CO.	AMOCO PRODUCTION CO.	MCALESTER FUEL CO.
COMPLETED	12/--/39	10/17/73	--/--/00
SAMPLED	02/14/42	01/31/74	02/14/42
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	7956	9959	8850
WELLHEAD PRESSURE,PSIG	3723	2100	3569
OPEN FLOW, MCFD	6000	595	1166
COMPONENT, MOLE PCT			
METHANE	22.3	83.6	25.3
ETHANE	61.6	6.7	65.2
PROPANE	---	2.9	---
N-BUTANE	---	1.1	---
ISOBUTANE	---	1.0	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.2	---
NITROGEN	9.3	2.5	1.2
OXYGEN	0.2	TRACE	0.1
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	6.5	1.1	8.0
HELIUM	0.30	0.03	0.00
HEATING VALUE*	1330	1157	1425
SPECIFIC GRAVITY	0.963	0.689	0.962

	INDEX 244 SAMPLE 3168	INDEX 245 SAMPLE 2833	INDEX 246 SAMPLE 4934
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	COLUMBIA	COLUMBIA	COLUMBIA
FIELD	MACEDONIA	VILLAGE	WARNOCK SPRINGS
WELL NAME	MCALESTER FUEL CO.	W. P. PHILLIPS NO. 1 & 2	PHILLIPS-SHOCKLEE NO. A-1
LOCATION	T18S, R21W	SEC. 15, T17S, R19W	SEC. 33, T16S, R19W
OWNER	MCALESTER FUEL CO.	STANDARD OIL CO.	MCALESTER FUEL CO.
COMPLETED	07/08/41	05/27/38	12/08/49
SAMPLED	04/14/42	02/26/40	08/29/50
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	NOT GIVEN	7387	7396
WELLHEAD PRESSURE,PSIG	4038	3320	2900
OPEN FLOW, MCFD	2025	600	1000
COMPONENT, MOLE PCT			
METHANE	69.7	44.5	57.1
ETHANE	18.5	34.8	6.8
PROPANE	---	---	2.7
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.4
NITROGEN	6.7	16.5	28.3
OXYGEN	0.4	0.6	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	4.9	3.6	3.1
HELIUM	0.04	0.05	0.08
HEATING VALUE*	1059	1074	856
SPECIFIC GRAVITY	0.723	0.833	0.806

	INDEX 247 SAMPLE 11157	INDEX 248 SAMPLE 11214	INDEX 249 SAMPLE 6755
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CONWAY	CONWAY	CONWAY
FIELD	BLICK	BLICK	JERUSALEM
WELL NAME	J. L. CARR NO. 1	J. L. CARR NO. 1-T	RHEA SPEARS UNIT NO. 1
LOCATION	SEC. 4, T8N, R16W	SEC. 4, T8N, R16W	SEC. 28, T9N, R17W
OWNER	SUNRAY DX OIL CO.	SUNRAY DX OIL CO.	CARTER OIL CO.
COMPLETED	04/16/67	04/15/67	04/01/58
SAMPLED	10/09/67	11/07/67	07/21/58
FORMATION	PENN-BARTON A	PENN-BARTON B	PENN-BARTON B
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2299	2356	2100
WELLHEAD PRESSURE,PSIG	1000	967	880
OPEN FLOW, MCFD	17559	13200	15830
COMPONENT, MOLE PCT			
METHANE	97.6	97.3	94.4
ETHANE	0.1	0.8	0.0
PROPANE	TRACE	0.0	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.6	1.0	4.8
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.0
HELIUM	0.27	0.25	0.30
HEATING VALUE*	990	1000	971
SPECIFIC GRAVITY	0.564	0.566	0.580

	INDEX 250 SAMPLE 7319	INDEX 251 SAMPLE 16934	INDEX 252 SAMPLE 16935
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CONWAY	CONWAY	CONWAY
FIELD	OLD HICKORY	OLD HICKORY	OLD HICKORY
WELL NAME	BERTHA BARRETT NO. 1	MASSINGILL NO. 1-15	MASSINGILL NO. 1-15
LOCATION	SEC. 22, T8N, R17W	SEC. 15, T8N, R17W	SEC. 15, T8N, R17W
OWNER	BEARD OIL CO.	HAWKINS OIL & GAS, INC.	HAWKINS OIL & GAS, INC.
COMPLETED	09/28/58	09/09/82	09/09/82
SAMPLED	12/21/59	05/15/83	05/15/83
FORMATION	PENN-BARTON	PENN-BARTON A	PENN-MCGUIRE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2875	2678	2016
WELLHEAD PRESSURE,PSIG	1245	750	260
OPEN FLOW, MCFD	5000	3420	570
COMPONENT, MOLE PCT			
METHANE	92.6	89.6	84.5
ETHANE	0.6	0.6	0.5
PROPANE	0.0	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	5.6	8.1	13.3
OXYGEN	0.0	0.0	0.9
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.5	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	TRACE
HELIUM	0.40	0.45	0.44
HEATING VALUE*	949	920	866
SPECIFIC GRAVITY	0.586	0.593	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 253 SAMPLE 10975	INDEX 254 SAMPLE 10978	INDEX 255 SAMPLE 10980
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CRAWFORD	CRAWFORD	CRAWFORD
FIELD	ALMA	ALMA	ALMA
WELL NAME	EARL ROSS UNIT NO. 1-C	EARL ROSS UNIT NO. 1	EARL ROSS UNIT NO. 1
LOCATION	SEC. 18, T9N, R30W	SEC. 18, T9N, R30W	SEC. 18, T9N, R30W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	12/30/66	12/30/66	12/30/66
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PENN-CASEY	PENN-HALE	PENN-DUNN A
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4252	5492	4480
WELLHEAD PRESSURE,PSIG	590	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3650	8400	13799
COMPONENT, MOLE PCT			
METHANE	95.9	97.1	98.0
ETHANE	1.3	1.0	1.1
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.9	0.8	0.9
OXYGEN	0.4	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	0.07	0.05	0.05
HEATING VALUE*	998	1018	1012
SPECIFIC GRAVITY	0.573	0.576	0.565

	INDEX 256 SAMPLE 12933	INDEX 257 SAMPLE 14517	INDEX 258 SAMPLE 14518
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CRAWFORD	CRAWFORD	CRAWFORD
FIELD	DYER	DYER	DYER
WELL NAME	ALEXANDER NO. 3	LETHA CHANCELLOR NO. 1	LETHA CHANCELLOR NO. 1
LOCATION	SEC. 9, T9N, R29W	SEC. 31, T10N, R29W	SEC. 31, T10N, R29W
OWNER	ARKANSAS LOUISIANA GAS CO.	WESTRANS PETROLEUM, INC.	WESTRANS PETROLEUM, INC.
COMPLETED	05/04/71	04/06/75	04/06/75
SAMPLED	07/21/71	10/25/75	10/25/75
FORMATION	PENN-CASEY	PENN-DUNN A	PENN-BARTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4882	4820	4890
WELLHEAD PRESSURE,PSIG	1095	1175	1110
OPEN FLOW, MCFD	4100	19243	18337
COMPONENT, MOLE PCT			
METHANE	97.9	97.3	89.8
ETHANE	0.9	1.2	1.1
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.8	0.6	7.2
OXYGEN	0.0	0.0	1.6
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.6
HELIUM	0.13	0.07	0.07
HEATING VALUE*	1013	1010	924
SPECIFIC GRAVITY	0.565	0.569	0.605

	INDEX 259 SAMPLE 10876	INDEX 260 SAMPLE 9831	INDEX 261 SAMPLE 16710
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CRAWFORD	CRAWFORD	CRAWFORD
FIELD	HOLLIS LAKE	KIBLER-WILLIAMS	KIBLER-WILLIAMS
WELL NAME	T. W. ARNOLD NO. 1-T	MCVEY NO. 1	CLAUDE MEADORS NO. 2-14
LOCATION	SEC. 14, T8N, R31W	SEC. 13, T9N, R30W	SEC. 14, T9N, R30W
OWNER	STEPHENS PRODUCTION CO.	STEPHENS CORP.	GULF OIL EXPL. & PROD. CO.
COMPLETED	11/02/56	01/22/65	04/06/82
SAMPLED	02/22/67	03/30/65	10/18/82
FORMATION	PENN-SPIRO	PENN-HALE	PENN-PAUL BARTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5388	5601	6041
WELLHEAD PRESSURE,PSIG	952	1788	1156
OPEN FLOW, MCFD	6400	4750	2456
COMPONENT, MOLE PCT			
METHANE	95.8	97.5	96.9
ETHANE	1.1	1.1	1.3
PROPANE	0.1	0.3	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.6	0.4	0.3
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.6	0.9
HELIUM	0.07	0.05	0.06
HEATING VALUE*	993	1015	1011
SPECIFIC GRAVITY	0.577	0.570	0.571

	INDEX 262 SAMPLE 16897	INDEX 263 SAMPLE 16759	INDEX 264 SAMPLE 16760
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CRAWFORD	CRAWFORD	CRAWFORD
FIELD	RUDY	WILDCAT	WILDCAT
WELL NAME	PHILLIPS NO. 1-30	BROWN NO. 1-21	BROWN NO. 1-21
LOCATION	SEC. 30, T10N, R31W	SEC. 21, T10N, R32W	SEC. 21, T10N, R32W
OWNER	BROCK HYDROCARBONS, INC.	CARLYLE PETROLEUM CO.	CARLYLE PETROLEUM CO.
COMPLETED	12/19/83	02/03/83	02/03/83
SAMPLED	04/29/83	02/03/83	02/03/83
FORMATION	PENN-DUNN C	MISS-BOONE	PENN-HALE L
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1586	2310	2148
WELLHEAD PRESSURE,PSIG	900	995	NOT GIVEN
OPEN FLOW, MCFD	1664	NOT GIVEN	3840
COMPONENT, MOLE PCT			
METHANE	90.1	89.6	94.1
ETHANE	1.9	2.2	2.7
PROPANE	0.3	0.9	0.4
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	6.7	6.0	1.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.3	0.3	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	TRACE
HELIUM	0.39	0.30	0.19
HEATING VALUE*	964	975	1024
SPECIFIC GRAVITY	0.599	0.605	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 265 SAMPLE 9971	INDEX 266 SAMPLE 9972	INDEX 267 SAMPLE 11568
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	AETNA	AETNA	AETNA
WELL NAME	HUNT-HEMBREE NO. 2	HUNT-HEMBREE NO. 2	R. H. SMITH UNIT NO. 1
LOCATION	SEC. 11, T8N, R26W	SEC. 11, T8N, R26W	SEC. 19, T9N, R26W
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	TENNECO OIL CO.
COMPLETED	07/24/64	07/24/64	12/13/67
SAMPLED	07/14/65	07/14/65	06/28/68
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-DUNN A
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4282	5509	4742
WELLHEAD PRESSURE,PSIG	1045	1126	718
OPEN FLOW, MCFD	1875	6500	111
COMPONENT, MOLE PCT			
METHANE	98.0	97.8	98.0
ETHANE	1.0	0.8	0.9
PROPANE	0.2	0.3	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.2	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.5
HELIUM	0.14	0.20	0.05
HEATING VALUE*	1015	1013	1012
SPECIFIC GRAVITY	0.565	0.568	0.565

	INDEX 268 SAMPLE 11559	INDEX 269 SAMPLE 10270	INDEX 270 SAMPLE 10271
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	AETNA	ALTUS	ALTUS
WELL NAME	R. H. SMITH UNIT NO. 1	WESTERN COAL CO. NO. 1	WESTERN COAL CO. NO. 1
LOCATION	SEC. 19, T9N, R26W	SEC. 23, T9N, R26W	SEC. 23, T9N, R26W
OWNER	TENNECO OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/13/67	06/05/65	06/05/64
SAMPLED	06/28/68	11/03/65	11/03/65
FORMATION	PENN-BARTON	PENN-DUNN & SPIRO	PENN-BARTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4834	4865	4353
WELLHEAD PRESSURE,PSIG	966	1125	1125
OPEN FLOW, MCFD	10307	2700	2700
COMPONENT, MOLE PCT			
METHANE	97.8	97.3	95.0
ETHANE	1.0	1.1	1.9
PROPANE	0.1	0.2	0.2
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.9	0.7	2.9
OXYGEN	0.0	0.1	0.7
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.06	0.09	0.10
HEATING VALUE*	1013	1023	985
SPECIFIC GRAVITY	0.563	0.573	0.578

	INDEX 271 SAMPLE 11144	INDEX 272 SAMPLE 16871	INDEX 273 SAMPLE 17490
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	ALTUS	ALTUS	BOONEVILLE
WELL NAME	OCHSNER	BESS O'KANE NO. 1-36	BRADLEY NO. 1-28
LOCATION	SEC. 24, T9N, R26W	SEC. 36, T9N, R26W	SEC. 28, T7N, R28W
OWNER	ARKANSAS WESTERN GAS CO.	GULF OIL EXPL. & PROD. CO.	STEPHENS PRODUCTION CO.
COMPLETED	05/19/67	07/27/82	11/17/82
SAMPLED	10/02/67	03/09/83	10/17/84
FORMATION	ORDO-JENKINS	PENN-TACKETT	PENN-CARPENTER L
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4285	3110	5283
WELLHEAD PRESSURE,PSIG	1153	1098	1541
OPEN FLOW, MCFD	3500	5981	2900
COMPONENT, MOLE PCT			
METHANE	98.0	97.7	96.6
ETHANE	1.1	0.9	1.1
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.6	1.2
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.5	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.7
HELIUM	0.11	0.13	0.09
HEATING VALUE*	1015	1009	1001
SPECIFIC GRAVITY	0.567	0.563	0.572

	INDEX 274 SAMPLE 6358	INDEX 275 SAMPLE 6521	INDEX 276 SAMPLE 10520
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	CECIL	CECIL	CECIL
WELL NAME	JETA TAYLOR NO. 1	EDWARD C. EVANS NO. 1	SAM HARDING NO. 1
LOCATION	SEC. 33, T9N, R28W	SEC. 4, T8N, R28W	SEC. 9, T9N, R27W
OWNER	ARKANSAS LOUISIANA GAS CO.	STEPHENS, INC.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	05/26/57	12/21/57	03/23/66
SAMPLED	08/27/57	03/17/58	04/12/66
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4374	4510	4450
WELLHEAD PRESSURE,PSIG	1000	1015	1600
OPEN FLOW, MCFD	13700	24000	2200
COMPONENT, MOLE PCT			
METHANE	97.9	97.8	97.1
ETHANE	1.2	1.3	1.5
PROPANE	TRACE	0.2	0.2
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.3	0.3	0.9
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.08	0.10	0.04
HEATING VALUE*	1019	1019	1012
SPECIFIC GRAVITY	0.561	0.566	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 277 SAMPLE 10521	INDEX 278 SAMPLE 10522	INDEX 279 SAMPLE 11200
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	CECIL	CECIL	CECIL
WELL NAME	SAM HARDING NO. 1	SAM HARDING NO. 1	J. C. JONES NO. 1
LOCATION	SEC. 9, T9N, R27W	SEC. 9, T9N, R27W	SEC. 32, T10N, R27W
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	03/23/66	03/23/66	04/04/67
SAMPLED	04/12/66	04/12/66	11/01/67
FORMATION	PENN-DUNN A & C	PENN-DUNN A & C	PENN-DUNN A & C
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4070	3100	3758
WELLHEAD PRESSURE,PSIG	1000	1000	873
OPEN FLOW, MCFD	NOT GIVEN	5000	755
COMPONENT, MOLE PCT			
METHANE	98.2	98.6	98.5
ETHANE	1.0	1.0	0.8
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.2	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.10	0.09	0.12
HEATING VALUE*	1018	1019	1015
SPECIFIC GRAVITY	0.564	0.561	0.562

	INDEX 280 SAMPLE 11201	INDEX 281 SAMPLE 17933	INDEX 282 SAMPLE 14932
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	CECIL	CECIL	JETHRO
WELL NAME	J. C. JONES NO. 1	JOHNSON NO. 2-T	CARR NO. 1
LOCATION	SEC. 32, T10N, R27W	SEC. 20, T9N, R28 W	SEC. 21, T11N, R27W
OWNER	ARKANSAS WESTERN GAS CO.	ARKOMA PRODUCTION CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	04/04/67	03/12/85	09/08/76
SAMPLED	11/01/67	12/17/85	03/09/77
FORMATION	PENN-CASEY	PENN-SPIRO	PENN-DUNN A
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3434	3622	1600
WELLHEAD PRESSURE,PSIG	946	1600	494
OPEN FLOW, MCFD	21000	1010	3500
COMPONENT, MOLE PCT			
METHANE	98.0	96.8	98.0
ETHANE	1.0	1.4	0.9
PROPANE	0.1	0.2	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.5	1.0	0.8
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	TRACE
HELIUM	0.09	0.07	0.09
HEATING VALUE*	1014	1011	1011
SPECIFIC GRAVITY	0.564	0.570	0.563

	INDEX 283 SAMPLE 10898	INDEX 284 SAMPLE 10899	INDEX 285 SAMPLE 17547
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	LONE ELM	LONE ELM	LONE ELM
WELL NAME	NOEL LEWIS NO. 1	NOEL LEWIS NO. 1-T	KIRBY NO. 1-8
LOCATION	SEC. 28, T10N, R28W	SEC. 28, T10N, R28W	SEC. 8, T10N, R21W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	TENNECO OIL CO.
COMPLETED	11/11/66	11/13/66	02/19/84
SAMPLED	--/--/00	--/--/00	12/14/84
FORMATION	PENN-CASEY & HENSON	PENN-KELLY	PENN-FRIEBERG
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3041	3967	2042
WELLHEAD PRESSURE,PSIG	580	1160	850
OPEN FLOW, MCFD	4000	5400	2712
COMPONENT, MOLE PCT			
METHANE	98.2	98.0	98.8
ETHANE	1.0	1.0	0.9
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.5	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.11	0.12	0.10
HEATING VALUE*	1015	1013	1012
SPECIFIC GRAVITY	0.564	0.563	0.563

	INDEX 286 SAMPLE 17548	INDEX 287 SAMPLE 17629	INDEX 288 SAMPLE 9037
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	LONE ELM	LONE ELM	PETER PENDER
WELL NAME	KIRBY NO. 1-8	MCCLURKIN NO. 2	G. F. TERRY
LOCATION	SEC. 8, T10N, R21W	SEC. 17, T10N, R28W	SEC. 16, T8N, R28W
OWNER	TENNECO OIL CO.	SEECO, INC.	MOBIL OIL CO.
COMPLETED	02/09/84	05/02/84	10/09/62
SAMPLED	12/14/84	03/22/85	07/06/63
FORMATION	PENN-CECIL SPIRO	ORDO-JENKINS	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2653	2700	7396
WELLHEAD PRESSURE,PSIG	850	977	1875
OPEN FLOW, MCFD	1150	3171	1900
COMPONENT, MOLE PCT			
METHANE	97.8	98.2	97.0
ETHANE	0.9	0.8	1.1
PROPANE	0.1	0.1	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	0.7	0.5
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	1.0
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1010	1012	1010
SPECIFIC GRAVITY	0.564	0.564	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 289 SAMPLE 9038	INDEX 290 SAMPLE 11681	INDEX 291 SAMPLE 16315
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	PETER PENDER	PETER PENDER	PETER PENDER
WELL NAME	MARTHA MCGEE	FLANAGAN NO. 1	TURNER NO. 1
LOCATION	SEC. 15, T8N, R28W	SEC. 27, T8N, R28W	SEC. 3, T7N, R28W
OWNER	MOBIL OIL CO.	GULF OIL CORP.	ARKLA EXPLORATION CO.
COMPLETED	11/09/61	08/05/68	12/05/80
SAMPLED	07/06/63	11/06/68	08/20/81
FORMATION	PENN-HALE	PENN-CARPENTER	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6574	3315	9990
WELLHEAD PRESSURE,PSIG	1725	767	3400
OPEN FLOW, MCFD	4400	9550	4500
COMPONENT, MOLE PCT			
METHANE	97.0	98.1	95.4
ETHANE	1.1	1.0	0.9
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	0.4	0.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.2	2.5
HELIUM	0.10	0.09	0.12
HEATING VALUE*	1005	1015	985
SPECIFIC GRAVITY	0.572	0.563	0.587

	INDEX 292 SAMPLE 16316	INDEX 293 SAMPLE 10973	INDEX 294 SAMPLE 10974
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	PETER PENDER	POSSUMTROT	POSSUMTROT
WELL NAME	TURNER NO. 1	FRED CANNON UNIT NO. 1	CARL STRONG UNIT NO. 1
LOCATION	SEC. 3, T7N, R28W	SEC. 8, T10N, R27W	SEC. 10, T10N, R27W
OWNER	ARKLA EXPLORATION CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	12/05/80	12/03/66	01/03/67
SAMPLED	08/20/81	--/--/00	--/--/00
FORMATION	PENN-HALE	PENN-HALE	PENN-BRENTWOOD
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5000	4667	4711
WELLHEAD PRESSURE,PSIG	1700	1040	1150
OPEN FLOW, MCFD	600	10500	280
COMPONENT, MOLE PCT			
METHANE	95.5	97.6	97.2
ETHANE	0.9	0.9	1.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.7	0.9
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	0.4	0.2
HELIUM	0.12	0.09	0.07
HEATING VALUE*	986	1007	1011
SPECIFIC GRAVITY	0.589	0.566	0.567

	INDEX 295 SAMPLE 10976	INDEX 296 SAMPLE 10977	INDEX 297 SAMPLE 10979
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	POSSUMTROT	POSSUMTROT	POSSUMTROT
WELL NAME	ROBBIE BLACK UNIT NO. 1	ROBBIE BLACK UNIT NO. 1	ROBBIE BLACK UNIT NO. 1
LOCATION	SEC. 7, T10N, R27W	SEC. 7, T10N, R27W	SEC. 7, T10N, R27W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	01/03/67	01/03/67	01/03/67
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PENN-DUNN A	PENN-BARTON R	PENN-CASEY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3506	3580	3182
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	930
OPEN FLOW, MCFD	14000	7400	6474
COMPONENT, MOLE PCT			
METHANE	98.1	91.8	95.1
ETHANE	1.0	0.9	1.1
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	5.6	2.9
OXYGEN	TRACE	1.1	0.6
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	ERACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.10	0.08	0.08
HEATING VALUE*	1012	949	986
SPECIFIC GRAVITY	0.562	0.593	0.577

	INDEX 298 SAMPLE 14703	INDEX 299 SAMPLE 15997	INDEX 300 SAMPLE 16228
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	ROCK CREEK	ROCK CREEK	ROSS
WELL NAME	E. WALKER NO. 1-32	STARDUANT NO. 1-15	J. A. CROOTS NO. 2
LOCATION	SEC. 32, T11N, R26W	SEC. 15, T11N, R26W	SEC. 16, T9N, R21W
OWNER	ARKANSAS WESTERN GAS CO.	SEECO, INC.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	05/19/76	03/19/80	01/19/81
SAMPLED	06/16/76	07/02/80	04/06/81
FORMATION	MISS-WEDINGTON	PENN-CANNON	PENN-RUSSELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2560	2258	3621
WELLHEAD PRESSURE,PSIG	999	596	1500
OPEN FLOW, MCFD	1600	925	2200
COMPONENT, MOLE PCT			
METHANE	97.0	97.3	97.6
ETHANE	0.9	1.3	1.1
PROPANE	0.1	0.2	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.8	1.0	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.14	0.12	0.10
HEATING VALUE*	1001	1014	1011
SPECIFIC GRAVITY	0.568	0.568	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 301 SAMPLE 14942	INDEX 302 SAMPLE 14944	INDEX 303 SAMPLE 17635
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	VESTA	VESTA	WATALULA
WELL NAME	ALLEN W. KING NO. 1	ALLEN W. KING NO. 1	HUDSON NO. 1-6
LOCATION	SEC. 29, T 8N, R28W	SEC. 29, T 8N, R28W	SEC. 6, T10N, R27W
OWNER	STEPHENS PRODUCTION CO.	STEPHENS PRODUCTION CO.	SEECO, INC.
COMPLETED	04/14/76	04/14/76	01/13/84
SAMPLED	03/17/77	03/17/77	03/22/85
FORMATION	PERM-ALMA	PENN-HALE	PENN-CASEY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2513	7600	3068
WELLHEAD PRESSURE,PSIG	1015	2377	740
OPEN FLOW, MCFD	2200	2750	240
COMPONENT, MOLE PCT			
METHANE	96.3	96.8	97.9
ETHANE	1.6	1.6	1.1
PROPANE	0.2	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.5	0.7
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	0.1
HELIUM	0.07	0.08	0.09
HEATING VALUE*	1009	1014	1014
SPECIFIC GRAVITY	0.579	0.576	0.565

	INDEX 304 SAMPLE 17637	INDEX 305 SAMPLE 5939	INDEX 306 SAMPLE 10873
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	WATALULA	WHITE OAK	WHITE OAK
WELL NAME	HUDSON NO. 1-6	WOOLSEY	CONATSER UNIT NO. 1-C
LOCATION	SEC. 6, T10N, R27W	SEC. 13, T10N, R27W	SEC. 17, T10N, R27W
OWNER	SEECO, INC.	ARKANSAS WESTERN GAS CO.	TENNECO OIL CO.
COMPLETED	01/13/84	07/31/55	10/11/66
SAMPLED	03/22/85	09/06/55	02/20/67
FORMATION	PENN-BARTON,PAUL	PENN-ATOKA-BYNUM	PENN-BYNUM
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3614	3173	2851
WELLHEAD PRESSURE,PSIG	1095	942	728
OPEN FLOW, MCFD	340	5000	6700
COMPONENT, MOLE PCT			
METHANE	97.8	98.3	98.1
ETHANE	1.4	1.0	1.0
PROPANE	0.1	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.3	0.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.08	0.10	0.09
HEATING VALUE*	1018	1019	1014
SPECIFIC GRAVITY	0.565	0.563	0.563

	INDEX 307 SAMPLE 10874	INDEX 308 SAMPLE 17829	INDEX 309 SAMPLE 9671
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	FRANKLIN	FRANKLIN	FRANKLIN
FIELD	WHITE OAK	WHITE OAK	WILDCAT
WELL NAME	CONATSER UNIT NO. 1-C	MUGGINS NO. 2-T	W. E. FLANAGAN NO. 1
LOCATION	SEC. 17, T10N, R27W	SEC. 15, T10N, R27W	SEC. 8, T7N, R28W
OWNER	TENNECO OIL CO.	SEECO, INC.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	10/11/66	05/02/85	09/23/64
SAMPLED	02/20/67	09/12/85	12/14/64
FORMATION	PENN-BRENTWOOD	PENN-HALE M	PERM-MORRIS
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4244	3978	4931
WELLHEAD PRESSURE,PSIG	1669	1660	1800
OPEN FLOW, MCFD	2275	11908	1040
COMPONENT, MOLE PCT			
METHANE	97.7	97.8	97.7
ETHANE	1.3	1.2	1.3
PROPANE	0.1	0.1	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.4	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.06	0.05	0.08
HEATING VALUE*	1016	1015	1021
SPECIFIC GRAVITY	0.565	0.565	0.568

	INDEX 310 SAMPLE 14180	INDEX 311 SAMPLE 14181	INDEX 312 SAMPLE 13990
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	ALTUS	ALTUS	BATSON
WELL NAME	WOODROW HOING NO. 1-28	WOODROW HOING NO. 1-28	FED. ES5263 NO. 1
LOCATION	SEC. 28, T9N, R25W	SEC. 28, T9N, R25W	SEC. 14, T11N, R25W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	03/18/74	03/18/74	02/15/74
SAMPLED	10/12/74	10/12/74	04/26/74
FORMATION	PENN-TACKETT	PENN-ATOKA	PENN-CANNON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2709	5706	1706
WELLHEAD PRESSURE,PSIG	1625	1625	320
OPEN FLOW, MCFD	3158	3542	1100
COMPONENT, MOLE PCT			
METHANE	97.8	97.8	98.0
ETHANE	1.0	1.0	0.1
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.5	1.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.12	0.12	0.13
HEATING VALUE*	1012	1012	995
SPECIFIC GRAVITY	0.564	0.564	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 313 SAMPLE 13991	INDEX 314 SAMPLE 13992	INDEX 315 SAMPLE 13993
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON	BATSON	BATSON
WELL NAME	FED. ES5263 NO. 1	FED. ES4068 NO. 1	FED. ES5276 NO. 1
LOCATION	SEC. 14, T11N, R25W	SEC. 28, T12N, R24W	SEC. 33, T12N, R24W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	02/15/74	03/05/74	04/19/74
SAMPLED	04/26/74	04/26/74	04/26/74
FORMATION	PENN-HALE M	MISS-BOONE D	PENN-BRENTWOOD
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1906	2280	1408
WELLHEAD PRESSURE,PSIG	500	790	300
OPEN FLOW, MCFD	2500	2000	2000
COMPONENT, MOLE PCT			
METHANE	98.0	90.1	97.8
ETHANE	0.1	1.6	TRACE
PROPANE	TRACE	0.2	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.6	7.7	1.7
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.12	0.25	0.13
HEATING VALUE*	995	947	991
SPECIFIC GRAVITY	0.562	0.595	0.563

	INDEX 316 SAMPLE 13994	INDEX 317 SAMPLE 13995	INDEX 318 SAMPLE 14000
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON	BATSON	BATSON
WELL NAME	FED. ES5262	COOPER NO. 1	FED. ES5269 NO. 1
LOCATION	SEC. 12, T11N, R25W	SEC. 15, T11N, R25W	SEC. 13, T11N, R25W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	12/14/73	11/20/73	10/25/73
SAMPLED	04/26/74	04/26/74	04/26/74
FORMATION	MISS-BOONE U	PENN-ATOKA	PENN-ORR
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2578	1909	1482
WELLHEAD PRESSURE,PSIG	820	156	300
OPEN FLOW, MCFD	7600	1000	1000
COMPONENT, MOLE PCT			
METHANE	91.2	97.9	98.1
ETHANE	1.7	0.2	0.1
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	6.5	1.2	1.5
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	TRACE
HELIUM	0.26	0.13	0.12
HEATING VALUE*	957	995	996
SPECIFIC GRAVITY	0.591	0.563	0.561

	INDEX 319 SAMPLE 15120	INDEX 320 SAMPLE 16297	INDEX 321 SAMPLE 16298
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON	BATSON	BATSON
WELL NAME	BIBLER BROTHERS NO. 1	WOOTEN-FEDERAL NO. 1	WOOTEN-FEDERAL NO. 1
LOCATION	SEC. 8, T11N, R24W	SEC. 10, T11N, R25W	SEC. 10, T11N, R25W
OWNER	ARKANSAS WESTERN GAS CO.	SEECO, INC.	SEECO, INC.
COMPLETED	09/27/77	07/22/81	07/22/81
SAMPLED	10/13/77	07/21/81	07/21/81
FORMATION	PENN-SELLS	PENN-ATOKA-ORR	PENN-ATOKA-PATTERSON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1015	1418	1264
WELLHEAD PRESSURE,PSIG	116	323	225
OPEN FLOW, MCFD	290	890	734
COMPONENT, MOLE PCT			
METHANE	97.6	97.9	98.1
ETHANE	0.2	0.3	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	1.4	1.4	1.5
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.11	0.11	0.12
HEATING VALUE*	997	1006	996
SPECIFIC GRAVITY	0.565	0.567	0.561

	INDEX 322 SAMPLE 16299	INDEX 323 SAMPLE 13997	INDEX 324 SAMPLE 14001
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BATSON	BATSON-OZONE	BATSON-OZONE
WELL NAME	WOOTEN-FEDERAL NO. 1	MOORE NO. 1	PAINE NO. 1
LOCATION	SEC. 10, T11N, R25W	SEC. 6, T11N, R23W	NOT GIVEN
OWNER	SEECO, INC.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	07/22/81	02/12/74	03/15/74
SAMPLED	07/21/81	04/26/74	04/26/74
FORMATION	PENN-MORROW & CANNON	PENN-HALE	PENN-ORR
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1580	2278	NOT GIVEN
WELLHEAD PRESSURE,PSIG	384	420	NOT GIVEN
OPEN FLOW, MCFD	1300	1300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.7	98.8	84.9
ETHANE	0.4	0.2	TRACE
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.6	0.7	10.2
OXYGEN	TRACE	0.0	2.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	2.2
HELIUM	0.12	0.09	0.09
HEATING VALUE*	999	1005	860
SPECIFIC GRAVITY	0.563	0.558	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 325 SAMPLE 1625	INDEX 326 SAMPLE 1778	INDEX 327 SAMPLE 9004
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	CLARKSVILLE	CLARKSVILLE	CLARKSVILLE
WELL NAME	NOT GIVEN	MCPHERSON NO. 1	S. R. HUDSON UNIT NO. 1
LOCATION	SEC. 14, T10N, R24W	SEC. 10, T11N, R24W	SEC. 15, T10N, R24W
OWNER	EMPIRE OIL & REFINING CO.	ARKANSAS NATURAL GAS CORP.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	00/--/27	05/11/29	12/26/98
SAMPLED	03/23/28	05/18/29	--/--/00
FORMATION	NOT GIVEN	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3012	3345	3400
WELLHEAD PRESSURE,PSIG	1250	1000	1372
OPEN FLOW, MCFD	18000	NOT GIVEN	2400
COMPONENT, MOLE PCT			
METHANE	96.0	98.5	98.7
ETHANE	2.3	0.6	0.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.1	0.6	0.1
OXYGEN	0.3	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.5
HELIUM	0.04	0.06	0.06
HEATING VALUE*	1014	1009	1007
SPECIFIC GRAVITY	0.575	0.562	0.562

	INDEX 328 SAMPLE 11129	INDEX 329 SAMPLE 11130	INDEX 330 SAMPLE 11225
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	CLARKSVILLE	CLARKSVILLE	CLARKSVILLE
WELL NAME	BLACKBURN NO. 1-C	BLACKBURN NO. 1-C	GROVER POTEET UNIT NO. 1
LOCATION	SEC. 16, T10N, R24W	SEC. 16, T10N, R24W.	SEC. 16, T10N, R24W
OWNER	J. M. HUBER CORP.	J. M. HUBER CORP.	TENNECO OIL CO.
COMPLETED	10/29/65	10/29/65	05/03/67
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PENN-ATOKA & HUDSON	PENN-HALE	PENN-HUDSON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2516	3586	2430
WELLHEAD PRESSURE,PSIG	857	1317	714
OPEN FLOW, MCFD	12300	3400	147
COMPONENT, MOLE PCT			
METHANE	95.8	97.3	97.5
ETHANE	1.0	1.1	0.9
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.4	1.0	0.8
OXYGEN	0.4	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.00	0.06	0.09
HEATING VALUE*	991	1008	1005
SPECIFIC GRAVITY	0.574	0.567	0.562

	INDEX 331 SAMPLE 14179	INDEX 332 SAMPLE 16105	INDEX 333 SAMPLE 17859
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	COAL HILL	COAL HILL	HUNT
WELL NAME	J. E. MOING NO. 1-20	GREENWOOD NO. 2-31	PEABODY COAL NO. 1
LOCATION	SEC. 20, T9N, R25W	SEC. 31, T10N, R25W	SEC. 12, T10N, R25W
OWNER	TENNECO OIL CO.	SOUTHERN UNION EXPL. CO.	TXO PRODUCTION CORP.
COMPLETED	03/18/74	01/15/80	11/11/84
SAMPLED	10/12/74	10/22/80	10/03/85
FORMATION	PENN-CASEY	PENN-DUNN A	PENN-HALE L
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3655	3420	4200
WELLHEAD PRESSURE,PSIG	1350	1141	NOT GIVEN
OPEN FLOW, MCFD	3732	6449	2631
COMPONENT, MOLE PCT			
METHANE	97.8	98.5	97.5
ETHANE	1.1	0.8	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.5	0.3	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	0.13	0.12	0.10
HEATING VALUE*	1013	1015	1008
SPECIFIC GRAVITY	0.562	0.562	0.568

	INDEX 334 SAMPLE 6854	INDEX 335 SAMPLE 15021	INDEX 336 SAMPLE 16325
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	KNOXVILLE	KNOXVILLE	KNOXVILLE
WELL NAME	TACKETT NO. 1	STOKES NO. 1-35	DIXON NO. 1
LOCATION	SEC. 2, T8N, R22W	SEC. 35, T9N, R23W	SEC. 29, T9N, R22W
OWNER	GULF OIL CORP.	TENNECO OIL CO.	OXLEY PETROLEUM CO.
COMPLETED	12/31/57	10/--/76	08/29/81
SAMPLED	11/04/58	06/08/77	08/29/81
FORMATION	PENN-TACKETT	PENN-ARECI	PENN-ALLEN L
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3308	4648	6060
WELLHEAD PRESSURE,PSIG	427	840	1389
OPEN FLOW, MCFD	8	4963	3961
COMPONENT, MOLE PCT			
METHANE	97.9	98.8	96.6
ETHANE	0.9	1.2	1.1
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.2	0.4	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	1.4
HELIUM	0.20	0.13	0.18
HEATING VALUE*	1010	1017	1003
SPECIFIC GRAVITY	0.565	0.562	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 337 SAMPLE 16327	INDEX 338 SAMPLE 17065	INDEX 339 SAMPLE 15087
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	KNOXVILLE	KNOXVILLE	LINVILLE
WELL NAME	DIXON NO. 1	BILLIE WITTENAUER NO. 1	G. PAYNE NO. 1-24
LOCATION	SEC. 29, T9N, R22W	SEC. 15, T8N, R22W	SEC. 24, T11N, R25W
OWNER	OXLEY PETROLEUM CO.	SUN EXPLORATION & PRODUCTION	OIL DEVELOPMENT CO. OF UTAH
COMPLETED	08/29/81	02/02/83	--/--/00
SAMPLED	08/29/81	09/19/83	08/30/77
FORMATION	PENN-MCGUIRE	PENN-TACKETT	PENN-ORR
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5784	3537	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1430	366	265
OPEN FLOW, MCFD	2233	1813	664
COMPONENT, MOLE PCT			
METHANE	96.7	92.5	98.4
ETHANE	1.0	0.9	0.2
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	5.6	1.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.6	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.1	0.1
HELIUM	0.17	0.17	0.13
HEATING VALUE*	1000	958	1003
SPECIFIC GRAVITY	0.574	0.580	0.561

	INDEX 340 SAMPLE 15088	INDEX 341 SAMPLE 15124	INDEX 342 SAMPLE 5019
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	LINVILLE	LINVILLE	LOW GAP
WELL NAME	G. PAYNE NO. 1-24	G. PAYNE NO. 1-24	LOW GAP UNIT NO. 1
LOCATION	SEC. 24, T11N, R25W	JOHNSON	SEC. 17, T11N, R24W
OWNER	OIL DEVELOPMENT CO. OF UTAH	OIL DEVELOPMENT CO. OF UTAH	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/30/77	10/17/77	03/06/51
FORMATION	PENN-PATTERSON	PENN-HALE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1427
WELLHEAD PRESSURE,PSIG	241	510	195
OPEN FLOW, MCFD	1838	2031	728
COMPONENT, MOLE PCT			
METHANE	97.4	98.1	98.0
ETHANE	0.2	0.1	0.5
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.2	0.0	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	1.4	1.5	1.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.13	0.11	0.11
HEATING VALUE*	1013	996	1011
SPECIFIC GRAVITY	0.571	0.563	0.564

	INDEX 343 SAMPLE 5138	INDEX 344 SAMPLE 5390	INDEX 345 SAMPLE 5391
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	LOW GAP	LOW GAP	LOW GAP
WELL NAME	NO. 2	LOW GAP UNIT NO. 4-A	LOW GAP NO. 3
LOCATION	SEC. 33, T12N, R24W	SEC. 6, T11N, R23W	SEC. 30, T11N, R24W
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO. & BIG CHIEF DRI
COMPLETED	06/21/51	10/04/52	04/23/52
SAMPLED	09/18/51	02/06/53	02/06/53
FORMATION	PENN-ATOKA	PENN-HALE	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1273	2324	1295
WELLHEAD PRESSURE,PSIG	250	510	495
OPEN FLOW, MCFD	566	1300	462
COMPONENT, MOLE PCT			
METHANE	97.4	98.9	98.5
ETHANE	TRACE	0.3	0.1
PROPANE	0.1	0.0	0.0
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.8	0.7	1.2
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.12	0.10	0.11
HEATING VALUE*	1001	1007	1000
SPECIFIC GRAVITY	0.571	0.558	0.562

	INDEX 346 SAMPLE 8671	INDEX 347 SAMPLE 17803	INDEX 348 SAMPLE 15543
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	LOW GAP	LUDWIG	LUTHERVILLE
WELL NAME	NORTH LOW GAP NO. 2	WEBB "C" NO.1	LEAVILLE NO. 1-25
LOCATION	SEC. 14, T11N, R25W	SEC. 25, T10N, R23W	SEC. 25, T10N, R22W
OWNER	PHILLIPS PETROLEUM CO.	TXO PRODUCTION CORP.	SEECO, INC.
COMPLETED	05/28/62	12/28/84	08/11/78
SAMPLED	09/13/62	08/11/85	12/19/78
FORMATION	PENN-ATOKA	PENN-DUNN & BARTON	PENN-ATOKA ORR
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1584	3473	4380
WELLHEAD PRESSURE,PSIG	261	NOT GIVEN	1550
OPEN FLOW, MCFD	1900	460	9000
COMPONENT, MOLE PCT			
METHANE	96.1	97.1	96.1
ETHANE	0.5	1.0	1.1
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.8	1.0	2.1
OXYGEN	0.3	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.3
HELIUM	0.13	0.12	0.18
HEATING VALUE*	985	1004	996
SPECIFIC GRAVITY	0.570	0.566	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 349 SAMPLE 2322	INDEX 350 SAMPLE 13996	INDEX 351 SAMPLE 13998
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	NOT GIVEN	OZONE	OZONE
WELL NAME	COLLIER NO. 1	MOORE NO. 1-C	TAYLOR NO. 1-T
LOCATION	SEC. 21, T9N, R25W	SEC. 6, T11N, R23W	SEC. 14, T11N, R24W
OWNER	RIVER VALLEY GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
COMPLETED	--/--/00	02/12/74	02/19/74
SAMPLED	05/09/31	04/26/74	04/26/74
FORMATION	NOT GIVEN	PENN-DUNN C	MISS-BOONE U
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1965	1376	2620
WELLHEAD PRESSURE,PSIG	600	120	820
OPEN FLOW, MCFD	NOT GIVEN	900	600
COMPONENT, MOLE PCT			
METHANE	98.9	98.0	96.7
ETHANE	0.3	0.3	1.3
PROPANE	---	0.1	0.1
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.4	1.2	1.7
OXYGEN	0.1	0.3	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.17	0.11	0.10
HEATING VALUE*	1007	1001	1005
SPECIFIC GRAVITY	0.561	0.561	0.568

	INDEX 352 SAMPLE 13999	INDEX 353 SAMPLE 14847	INDEX 354 SAMPLE 11126
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	OZONE	OZONE	ROSS
WELL NAME	TAYLOR NO. 1-C	LEONARD ADAMS NO. 1-10	REYNOLDS NO. 1
LOCATION	SEC. 14, T11N, R24W	SEC. 10, T11N, R24W	SEC. 10, T9N, R22W
OWNER	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	GULF OIL CORP.
COMPLETED	02/19/74	08/13/76	11/07/66
SAMPLED	04/26/74	10/27/76	09/11/67
FORMATION	PENN-ORR	PENN-PATTERSON	PENN-ALLEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1439	1658	4478
WELLHEAD PRESSURE,PSIG	245	244	1185
OPEN FLOW, MCFD	3000	500	19200
COMPONENT, MOLE PCT			
METHANE	96.4	97.9	85.1
ETHANE	1.9	0.1	1.1
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.7	1.8	10.3
OXYGEN	0.1	0.1	2.5
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.6
HELIUM	0.10	0.15	0.07
HEATING VALUE*	1004	994	884
SPECIFIC GRAVITY	0.571	0.562	0.623

	INDEX 355 SAMPLE 11127	INDEX 356 SAMPLE 16953	INDEX 357 SAMPLE 17223
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	ROSS	ROSS	ROSS
WELL NAME	REYNOLDS NO. 1	HARGRAVE NO. 2-8	CASTLEBERRY NO. 1-7
LOCATION	SEC. 10, T9N, R22W	SEC. 8, T9N, R22W	SEC. 7, T9N, R22W
OWNER	GULF OIL CORP.	HAWKINS OIL & GAS, INC.	SANTA FE ENERGY CO.
COMPLETED	11/07/66	05/17/83	12/--/82
SAMPLED	09/11/67	05/17/83	03/27/84
FORMATION	PENN-MCGUIRE	PENN-HALE	PENN-MCGUIRE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4320	6316	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1185	1888	1190
OPEN FLOW, MCFD	8800	3275	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.4	96.7	97.8
ETHANE	1.2	1.3	1.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.5	0.4
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.2
HELIUM	0.09	0.11	0.09
HEATING VALUE*	1011	1007	1017
SPECIFIC GRAVITY	0.569	0.570	0.566

	INDEX 358 SAMPLE 11224	INDEX 359 SAMPLE 12121	INDEX 360 SAMPLE 16878
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SCRANTON	SCRANTON	SCRANTON
WELL NAME	R. L. ANDERSON UNIT NO. 1	YEAGER NO. 1-C	MC ALESTER FUEL NO. 2-31
LOCATION	SEC. 29, T9N, R24W	SEC. 22, T9N, R24W	SEC. 31, T9N, R24W
OWNER	TENNECO OIL CO.	LEBEN DRILLING, INC.	GULF OIL EXPL. & PROD. CO.
COMPLETED	02/22/67	02/19/69	11/22/82
SAMPLED	--/--/00	11/20/69	03/09/83
FORMATION	PENN-BARTON	PENN-DUNN B	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6415	5376	6538
WELLHEAD PRESSURE,PSIG	1565	1439	1382
OPEN FLOW, MCFD	4100	2050	6818
COMPONENT, MOLE PCT			
METHANE	96.4	94.5	95.5
ETHANE	1.1	1.1	1.2
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	2.5	0.5
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.1	2.1
HELIUM	0.11	0.06	0.09
HEATING VALUE*	999	980	993
SPECIFIC GRAVITY	0.577	0.584	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 361 SAMPLE 17422	INDEX 362 SAMPLE 17398	INDEX 363 SAMPLE 17684
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SCRANTON	SILEX	SILEX
WELL NAME	U S A NO. 1-32	SILEX NO. 8	ALDERSON A NO. 31-1
LOCATION	SEC. 32, T9N, R24W	SEC. 21, T10N, R21W	SEC. 31, T10N, R21W
OWNER	HAWKINS OIL & GAS, INC.	ARKANSAS LOUISIANA GAS CO.	ALEXANDER ENERGY CORP.
COMPLETED	09/--/84	01/08/84	01/05/85
SAMPLED	09/--/84	08/31/84	--/--/00
FORMATION	PENN-KELLY & HALE B	PENN-KELLY	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6726	2848	5900
WELLHEAD PRESSURE,PSIG	1358	1100	NOT GIVEN
OPEN FLOW, MCFD	1181	3021	5478
COMPONENT, MOLE PCT			
METHANE	96.5	96.1	97.7
ETHANE	1.2	1.1	1.3
PROPANE	0.1	TRACE	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	2.2	0.5
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.3	0.1
HELIUM	0.14	0.11	0.10
HEATING VALUE*	1002	993	1019
SPECIFIC GRAVITY	0.580	0.573	0.565

	INDEX 364 SAMPLE 9681	INDEX 365 SAMPLE 10914	INDEX 366 SAMPLE 10915
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SPADRA	SPADRA	SPADRA
WELL NAME	J. R. ROGERS NO. 1	NEW JERSEY ZINC CO. NO. 1	NEW JERSEY ZINC CO. NO. 1
LOCATION	SEC. 23, T9N, R24W	SEC. 8, T9N, R23W	SEC. 8, T9N, R23W
OWNER	ARKANSAS LOUISIANA GAS CO.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	10/29/64	09/21/66	09/21/66
SAMPLED	01/06/65	04/03/67	04/03/67
FORMATION	PENN-CARPENTER	PENN-MCGUIRE	PENN-CASEY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2127	5168	4798
WELLHEAD PRESSURE,PSIG	700	1289	834
OPEN FLOW, MCFD	2400	18500	85
COMPONENT, MOLE PCT			
METHANE	98.6	97.2	98.4
ETHANE	0.6	1.0	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.8	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	TRACE
HELIUM	0.16	0.10	0.13
HEATING VALUE*	1012	1005	1017
SPECIFIC GRAVITY	0.560	0.572	0.561

	INDEX 367 SAMPLE 11707	INDEX 368 SAMPLE 11796	INDEX 369 SAMPLE 11797
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SPADRA	SPADRA	SPADRA
WELL NAME	EARL WHITE NO. 1	TED MELTON NO. 1	TED MELTON NO. 1
LOCATION	SEC. 4, T9N, R23W	SEC. 23, T9N, R23W	SEC. 23, T9N, R23W
OWNER	GULF OIL CORP.	SUN OIL CO., DX DIVISION	SUN OIL CO., DX DIVISION
COMPLETED	02/21/67	10/08/68	10/08/68
SAMPLED	12/02/68	03/18/69	03/18/69
FORMATION	PENN-CASEY	PENN-MCGUIRE	PENN-CARPENTER C
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4776	6221	2672
WELLHEAD PRESSURE,PSIG	1534	1434	402
OPEN FLOW, MCFD	2701	7900	1280
COMPONENT, MOLE PCT			
METHANE	97.7	97.4	97.5
ETHANE	1.3	1.9	0.7
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.5	0.7
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.7
HELIUM	0.08	0.18	0.18
HEATING VALUE*	1016	1008	1001
SPECIFIC GRAVITY	0.567	0.568	0.567

	INDEX 370 SAMPLE 11817	INDEX 371 SAMPLE 16572	INDEX 372 SAMPLE 6809
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SPADRA	SPADRA	UNION CITY
WELL NAME	TED MELTON NO. 2	HURLEY ENTERPRISE NO. 1-20	BEN HARDGRAVES
LOCATION	SEC. 23, T9N, R23W	SEC. 20, T9N, R23W	SEC. 5, T9N, R24W
OWNER	SUN OIL CO., DX DIVISION	HAWKINS OIL & GAS, INC.	STEPHENS PRODUCTION CO.
COMPLETED	03/20/69	--/--/81	06/17/57
SAMPLED	03/18/69	07/08/82	09/24/58
FORMATION	PENN-GLASSY U	PENN-BARTON & DUNN	PENN-ATOKA KELLY
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2913	6790	4659
WELLHEAD PRESSURE,PSIG	402	893	1940
OPEN FLOW, MCFD	293000	3112	25
COMPONENT, MOLE PCT			
METHANE	96.4	96.9	97.0
ETHANE	0.7	1.3	1.5
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.6	0.3	0.6
OXYGEN	0.4	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.1	0.4
HELIUM	0.17	0.07	0.10
HEATING VALUE*	992	1008	1015
SPECIFIC GRAVITY	0.571	0.572	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 373 SAMPLE 13298	INDEX 374 SAMPLE 13498	INDEX 375 SAMPLE 17206
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	UNION CITY	UNION CITY	UNION CITY
WELL NAME	FELKINS, BRYANT NO. 1	BAXTER-CARTER NO. 2	OZARK REAL ESTATE NO. 2
LOCATION	SEC. 2, T9N, R24W	SEC. 7, T9N, R24W	SEC. 14, T9N, R24W
OWNER	DIAMOND SHAMROCK CORP.	STEPHENS PRODUCTION CO.	ARKOMA PRODUCTION CO.
COMPLETED	04/11/72	02/08/72	12/15/83
SAMPLED	07/14/72	01/02/73	03/13/84
FORMATION	PENN-KELLY-ORR	PENN-CASEY	PENN-BARTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6200	3831	5600
WELLHEAD PRESSURE, PSIG	1875	1405	1850
OPEN FLOW, MCFD	25500	25000	10000
COMPONENT, MOLE PCT			
METHANE	97.1	98.2	97.1
ETHANE	1.4	1.0	1.2
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.4	0.3	0.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	0.9
HELIUM	0.06	0.10	0.07
HEATING VALUE*	1011	1015	1008
SPECIFIC GRAVITY	0.572	0.564	0.572

	INDEX 376 SAMPLE 11402	INDEX 377 SAMPLE 17556	INDEX 378 SAMPLE 17557
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	JOHNSON	LAFAYETTE	LAFAYETTE
FIELD	WILDCAT	KEOUN CREEK	KEOUN CREEK
WELL NAME	JOHNSON NO. 1	GLADYS BURTON MOORE NO. 1	C. W. MC DONALD NO. 1
LOCATION	SEC. 28, T10N, R22W	SEC. 33, T19S, R23W	SEC. 32, T19S, R23W
OWNER	W. A. MONCRIEF	CUMMINS AND WALKER OIL CO.	CUMMINS AND WALKER OIL CO.
COMPLETED	10/25/67	04/25/83	12/08/82
SAMPLED	03/20/68	01/07/85	01/07/85
FORMATION	PENN-BARTON A	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	345	230	230
DEPTH, FEET	3900	10906	10991
WELLHEAD PRESSURE, PSIG	1575	2565	2552
OPEN FLOW, MCFD	2500	2021	1072
COMPONENT, MOLE PCT			
METHANE	97.2	86.2	84.9
ETHANE	1.0	4.7	4.8
PROPANE	0.1	2.2	2.4
N-BUTANE	0.0	1.0	1.2
ISOBUTANE	0.0	1.0	1.3
N-PENTANE	0.0	0.5	0.7
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.0	0.7	1.2
NITROGEN	1.3	1.5	1.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.8	1.8
HELIUM	0.18	0.02	0.02
HEATING VALUE*	1005	1151	1196
SPECIFIC GRAVITY	0.567	0.686	0.711

	INDEX 379 SAMPLE 9583	INDEX 380 SAMPLE 3164	INDEX 381 SAMPLE 17208
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LAFAYETTE	LAFAYETTE	LAFAYETTE
FIELD	LAKE ENLING	MCKAMIE	WILDCAT
WELL NAME	INTERNATIONAL PAPER NO. 4	CORNELIUS NO. 1	MABRY NO. 1
LOCATION	SEC. 36, T19S, R24W	SEC. 28, T17S, R23W	SEC. 24, T16S, R24W
OWNER	AUSTRAL OIL CO., INC.	BARNSDALL OIL CO.	GOLDSBERRY OPERATING CO., IN
COMPLETED	11/00/63	01/--/42	10/19/83
SAMPLED	10/03/64	02/14/42	03/13/84
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	11043	9200	7942
WELLHEAD PRESSURE, PSIG	3174	4242	324
OPEN FLOW, MCFD	NOT GIVEN	1600	1980
COMPONENT, MOLE PCT			
METHANE	86.5	34.4	65.4
ETHANE	4.8	48.6	6.9
PROPANE	2.5	---	3.6
N-BUTANE	1.0	---	1.5
ISOBUTANE	0.8	---	1.5
N-PENTANE	0.5	---	0.6
ISOPENTANE	0.2	---	0.7
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.4	---	0.3
NITROGEN	1.6	3.6	17.1
OXYGEN	0.1	0.3	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.6	13.1	2.2
HELIUM	TRACE	0.00	0.08
HEATING VALUE*	1138	1219	1052
SPECIFIC GRAVITY	0.677	0.939	0.794

	INDEX 382 SAMPLE 6855	INDEX 383 SAMPLE 17154	INDEX 384 SAMPLE 17155
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	BOONEVILLE	BOONEVILLE	BOONEVILLE
WELL NAME	BORUM NO. 1	LEFTWICH NO. 1	LEFTWICH NO. 1
LOCATION	SEC. 18, T6N, R28W	SEC. 30, T6N, R28W	SEC. 30, T6N, R28W
OWNER	GULF OIL CORP.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	01/25/58	01/12/84	01/12/84
SAMPLED	10/05/58	01/12/84	01/12/84
FORMATION	PENN-ATOKA	PENN-BORUM U&L	PENN-ALMA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4888	1297	4952
WELLHEAD PRESSURE, PSIG	1625	320	1100
OPEN FLOW, MCFD	3	1442	1715
COMPONENT, MOLE PCT			
METHANE	97.4	97.0	93.7
ETHANE	1.7	0.9	1.4
PROPANE	0.2	TRACE	0.1
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	0.5
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	TRACE	1.6	3.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.18	0.06	0.09
HEATING VALUE*	1023	1004	998
SPECIFIC GRAVITY	0.566	0.566	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 385 SAMPLE 9975	INDEX 386 SAMPLE 17539	INDEX 387 SAMPLE 17816
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CAULKSVILLE	CAULKSVILLE	CAULKSVILLE
WELL NAME	JOHN WEEKS HEIRS NO. 1	BEASLEY CATTLE CO. NO. 1C	WATSON "E" NO. 1
LOCATION	SEC. 4, T7N, R27W	SEC. 30, T7N, R27W	SEC. 20, T7N, R27W
OWNER	ARKANSAS LOUISIANA GAS CO.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED	06/08/64	09/30/84	05/02/85
SAMPLED	07/14/65	12/10/84	08/22/85
FORMATION	PENN-ORR	PENN-ALMA UPPER	PENN-CARPENTER B
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	8190	2930	4698
WELLHEAD PRESSURE,PSIG	1675	1320	750
OPEN FLOW, MCFD	3650	2277	355
COMPONENT, MOLE PCT			
METHANE	95.5	96.8	97.0
ETHANE	1.2	1.3	2.0
PROPANE	0.2	0.1	0.3
N-BUTANE	0.6	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	1.3	0.3
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	0.2	0.0
HELIUM	0.08	0.04	0.06
HEATING VALUE*	999	1006	1026
SPECIFIC GRAVITY	0.589	0.569	0.572

	INDEX 388 SAMPLE 7298	INDEX 389 SAMPLE 17164	INDEX 390 SAMPLE 17167
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CHISMVILLE	CHISMVILLE	CHISMVILLE
WELL NAME	BETH WILLIAMS NO. 1	LOWDER GU NO. 1	CHISMVILLE NO. 4
LOCATION	SEC. 7, T6N, R27W	SEC. 2, T6N, R28W	SEC. 8, T6N, R27W
OWNER	ANDERSON-PRICHARD OIL CORP.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	04/04/59	06/15/83	10/12/83
SAMPLED	12/02/59	01/25/84	01/27/84
FORMATION	PENN-ATOKA	PENN-NICHOLS	PENN-TURNER L&U
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1131	5391	2444
WELLHEAD PRESSURE,PSIG	315	2150	468
OPEN FLOW, MCFD	1100	15353	2065
COMPONENT, MOLE PCT			
METHANE	98.1	96.0	95.0
ETHANE	1.1	1.9	1.4
PROPANE	0.3	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.2	1.5	3.2
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.10	0.05	0.07
HEATING VALUE*	1021	1012	991
SPECIFIC GRAVITY	0.564	0.574	0.575

	INDEX 391 SAMPLE 17224	INDEX 392 SAMPLE 16720	INDEX 393 SAMPLE 11653
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CHISMVILLE	DELAWARE	MANSFIELD
WELL NAME	ISAACS	CHARLES NO. 1-33	WORTH JAMES NO. 1
LOCATION	SEC. 4, T6N, R26W	SEC. 33, T8N, R22W	SEC. 31, T5N, R29W
OWNER	SEPCO, INC.	MADSON PETROLEUM CO.	J. C. TRAHAN DRILLING CONT.
COMPLETED	10/21/83	01/--/81	01/03/68
SAMPLED	03/21/84	11/05/82	09/20/68
FORMATION	PENN-ATOKA	PENN-CARPENTER	PENN-HARTFORD
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5876	NOT GIVEN	6414
WELLHEAD PRESSURE,PSIG	1942	447	1723
OPEN FLOW, MCFD	2200	3397	5388
COMPONENT, MOLE PCT			
METHANE	60.8	93.1	97.4
ETHANE	0.9	0.9	1.4
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	37.4	4.1	0.3
OXYGEN	0.1	0.2	0.0
ARGON	0.1	0.1	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.1	0.6
HELIUM	0.04	0.13	0.06
HEATING VALUE*	635	966	1017
SPECIFIC GRAVITY	0.720	0.590	0.570

	INDEX 394 SAMPLE 11654	INDEX 395 SAMPLE 10402	INDEX 396 SAMPLE 17630
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	MANSFIELD	NOT GIVEN	NOT GIVEN
WELL NAME	WORTH JAMES NO. 1	SANATORIUM NO. 1	ISAACS NO.1-4
LOCATION	SEC. 31, T5N, R29W	SEC. 28, T5N, R28W	SEC. 4, T6N, R26W
OWNER	J. C. TRAHAN DRILLING CONT.	MIDWEST OIL CORP.	SOUTHWESTERN ENERGY PROD. CO
COMPLETED	01/03/68	11/14/65	10/21/83
SAMPLED	09/20/68	02/17/66	03/21/85
FORMATION	EOCE-MANSFIELD	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2336	2592	5876
WELLHEAD PRESSURE,PSIG	300	282	1957
OPEN FLOW, MCFD	480	461	2200
COMPONENT, MOLE PCT			
METHANE	97.7	98.0	59.5
ETHANE	0.9	1.1	0.8
PROPANE	0.1	0.2	0.1
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.5	0.3	38.8
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.4
HELIUM	0.07	0.08	0.04
HEATING VALUE*	1034	1024	620
SPECIFIC GRAVITY	0.574	0.565	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 397 SAMPLE 6855	INDEX 398 SAMPLE 16631	INDEX 399 SAMPLE 16632
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	PARIS	PARIS	PARIS
WELL NAME	MEMBREE NO. 1	WOOD NO.1-T	WOOD NO.1-T
LOCATION	SEC. 13, T8N, R26W	SEC. 8, T8N, R25W	SEC. 8, T8N, R25W
OWNER	GULF OIL CORP.	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.
COMPLETED	03/06/58	12/29/81	12/29/81
SAMPLED	11/04/58	09/03/82	09/03/82
FORMATION	PENN-ATOKA BASAL	PENN-DUNN C	PENN-BARTON R
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7274	6198	6023
WELLHEAD PRESSURE,PSIG	1675	1110	1050
OPEN FLOW, MCFD	2	700	800
COMPONENT, MOLE PCT			
METHANE	96.5	98.7	95.6
ETHANE	1.2	0.8	0.9
PROPANE	0.2	0.1	0.1
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.3	2.1	1.4
OXYGEN	TRACE	0.6	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.3	1.9
HELIUM	0.03	0.16	0.15
HEATING VALUE*	1018	984	987
SPECIFIC GRAVITY	0.580	0.586	0.579

	INDEX 400 SAMPLE 15938	INDEX 401 SAMPLE 17476	INDEX 402 SAMPLE 17792
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	PRAIRIE VIEW	SCRANTON	SCRANTON
WELL NAME	MIDLAND OIL CORP. NO. 1	KERN "C" NO. 1	THOMPSON L NO. 2
LOCATION	SEC. 22, T8N, R24W	SEC. 34, T9N, R24W	SEC. 12, T8N, R25W
OWNER	SANTA FE ENERGY CO.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED	--/--/00	09/26/83	05/20/85
SAMPLED	04/10/80	10/10/84	07/29/85
FORMATION	PENN-ORR	PENN-CARPENTER	PENN-ARECI
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6477	2040	4251
WELLHEAD PRESSURE,PSIG	650	500	880
OPEN FLOW, MCFD	2113	1500	2400
COMPONENT, MOLE PCT			
METHANE	94.9	93.9	97.7
ETHANE	0.9	0.7	1.0
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.9	4.8	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	TRACE	0.5
HELIUM	0.27	0.16	0.16
HEATING VALUE*	988	964	1011
SPECIFIC GRAVITY	0.591	0.575	0.565

	INDEX 403 SAMPLE 6852	INDEX 404 SAMPLE 7300	INDEX 405 SAMPLE 1985
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	RADISON
FIELD	SPADRA	WILDCAT	WILDCAT
WELL NAME	ARECI NO. 1	BIRCH NO. 1	BANKS NO. 1
LOCATION	SEC. 32, T9N, R23W	SEC. 2, T6N, R27W	SEC. 6, T16N, R27W
OWNER	GULF OIL CORP.	ANDERSON-PRICHARD OIL CORP.	INDEPENDENT OIL & GAS CO.
COMPLETED	07/17/58	11/01/59	--/--/00
SAMPLED	11/04/58	11/30/59	04/07/30
FORMATION	PENN-ATOKA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5574	5818	NOT GIVEN
WELLHEAD PRESSURE,PSIG	850	1960	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.3	97.5	92.6
ETHANE	1.3	1.4	1.1
PROPANE	0.2	TRACE	---
N-BUTANE	0.0	TRACE	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	TRACE	---
NITROGEN	0.1	0.3	5.8
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.1	0.5	0.3
HELIUM	0.10	0.10	TRACE
HEATING VALUE*	1014	1013	958
SPECIFIC GRAVITY	0.574	0.566	0.588

	INDEX 406 SAMPLE 17608	INDEX 407 SAMPLE 5966	INDEX 408 SAMPLE 15578
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	MILLER	MILLER	MILLER
FIELD	BLOOMBURG	FOUKE	GENOA
WELL NAME	BRACKMAN NO. 1	E. H. SILBERBERG NO. 1	ROSA MEEK NO. 1
LOCATION	SEC. 19, T18S, R28W	SEC. 36, T16S, R27W	SEC. 16, T16S, R27W
OWNER	MARSHALL EXPLORATION, INC.	CARTER OIL CO.	AMERICAN PETROFINA CO.
COMPLETED	01/08/85	08/08/55	05/16/78
SAMPLED	03/07/85	11/01/55	03/05/79
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	10632	8977	7823
WELLHEAD PRESSURE,PSIG	1000	3137	2750
OPEN FLOW, MCFD	3000	3050	3250
COMPONENT, MOLE PCT			
METHANE	64.4	55.4	43.2
ETHANE	11.1	4.1	4.3
PROPANE	4.7	2.4	2.5
N-BUTANE	2.1	0.8	0.9
ISOBUTANE	1.0	0.6	0.7
N-PENTANE	0.7	0.3	0.2
ISOPENTANE	0.5	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	4.4	29.1	45.7
OXYGEN	0.3	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	6.8	0.6	0.0
CARBON DIOXIDE	3.2	5.9	1.8
HELIUM	0.02	0.08	0.12
HEATING VALUE*	1202	789	665
SPECIFIC GRAVITY	0.834	0.819	0.845

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 409 SAMPLE 15579		INDEX 410 SAMPLE 3607		INDEX 411 SAMPLE 9009	
STATE	ARKANSAS		ARKANSAS		ARKANSAS	
COUNTY	MILLER		MILLER		POPE	
FIELD	GENOA		NOT GIVEN		BOOGER HOLLOW	
WELL NAME	MCININCH NO. 1		LENA ORR NO. 1		A. F. JONES NO. 1	
LOCATION	SEC. 17, T16S, R27W		SEC. 3, T16S, R28W		SEC. 31, T10N, R20W	
OWNER	AMERICAN PETROFINA CO.		CARTER OIL CO.		SUN OIL CO.	
COMPLETED	11/12/77		--/--/00		01/15/62	
SAMPLED	03/05/79		10/08/42		06/11/63	
FORMATION	JURA-SMACKOVER		JURA-SMACKOVER		PENN-ALLEN U	
GEOLOGIC PROVINCE CODE	230		230		345	
DEPTH, FEET	7900		7343		3223	
WELLHEAD PRESSURE,PSIG	2741		2600		1000	
OPEN FLOW, MCFD	7500		21000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	42.9		59.6		98.3	
ETHANE	4.3		0.0		0.9	
PROPANE	2.6		---		0.1	
N-BUTANE	1.0		---		0.0	
ISOBUTANE	0.7		---		0.0	
N-PENTANE	0.2		---		0.0	
ISOPENTANE	0.3		---		0.0	
CYCLOPENTANE	TRACE		---		0.0	
HEXANES PLUS	0.1		---		0.0	
NITROGEN	45.8		38.7		0.5	
OXYGEN	0.0		0.6		0.0	
ARGON	TRACE		---		0.0	
HYDROGEN	TRACE		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	1.8		1.0		0.2	
HELIUM	0.12		0.09		0.10	
HEATING VALUE*	663		604		1014	
SPECIFIC GRAVITY	0.845		0.727		0.564	

	INDEX 412 SAMPLE 13393		INDEX 413 SAMPLE 13394		INDEX 414 SAMPLE 7637	
STATE	ARKANSAS		ARKANSAS		ARKANSAS	
COUNTY	POPE		POPE		POPE	
FIELD	BOOGER HOLLOW		BOOGER HOLLOW		DOVER	
WELL NAME	ARTHUR NO. 1		ARTHUR NO. 1		JOHN P. GRAHAM NO. 1	
LOCATION	SEC. 33, T10N, R20W		SEC. 33, T10N, R20W		SEC. 19, T9N, R19W	
OWNER	FERGUSON OIL CO., INC.		FERGUSON OIL CO., INC.		HUMBLE OIL & REFINING CO.	
COMPLETED	07/18/72		07/18/72		04/24/60	
SAMPLED	09/22/72		09/22/72		08/10/60	
FORMATION	PENN-BARTON B		PENN-BARTON A		PENN-HALE	
GEOLOGIC PROVINCE CODE	345		345		345	
DEPTH, FEET	3170		3094		3992	
WELLHEAD PRESSURE,PSIG	1300		1310		1600	
OPEN FLOW, MCFD	43120		49171		13	
COMPONENT, MOLE PCT						
METHANE	97.6		97.7		97.6	
ETHANE	1.1		1.1		1.1	
PROPANE	0.1		0.1		0.2	
N-BUTANE	TRACE		TRACE		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	TRACE		TRACE		0.0	
ISOPENTANE	TRACE		TRACE		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	TRACE		TRACE		0.0	
NITROGEN	0.8		0.8		0.5	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.3	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	0.09		0.11		0.10	
HEATING VALUE*	1011		1012		1015	
SPECIFIC GRAVITY	0.565		0.566		0.564	

	INDEX 415 SAMPLE 11151		INDEX 416 SAMPLE 11202		INDEX 417 SAMPLE 11648	
STATE	ARKANSAS		ARKANSAS		ARKANSAS	
COUNTY	POPE		POPE		POPE	
FIELD	DOVER		DOVER		DOVER	
WELL NAME	JESSIE JENNINGS NO. 1		KINSLOW NO. 1		NEWTON POWERS NO. 1	
LOCATION	SEC. 3, T9N, R19W		SEC. 10, T8N, R20W		SEC. 9, T9N, R20W	
OWNER	SKELLY OIL CO.		SUNRAY DX OIL CO.		DIAMOND SHAMROCK CORP.	
COMPLETED	07/15/66		07/13/66		06/05/68	
SAMPLED	09/20/67		10/26/67		09/15/68	
FORMATION	PENN-ATOKA		PENN-ALLEN		PENN-MCGUIRE	
GEOLOGIC PROVINCE CODE	345		345		345	
DEPTH, FEET	2155		NOT GIVEN		3324	
WELLHEAD PRESSURE,PSIG	710		1154		932	
OPEN FLOW, MCFD	7800		528		6350	
COMPONENT, MOLE PCT						
METHANE	97.7		96.9		94.0	
ETHANE	1.0		1.6		0.9	
PROPANE	0.1		0.3		TRACE	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.7		0.5		4.0	
OXYGEN	0.0		0.0		0.7	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.6		0.1	
HELIUM	0.09		0.13		0.08	
HEATING VALUE*	1010		1018		966	
SPECIFIC GRAVITY	0.565		0.573		0.579	

	INDEX 418 SAMPLE 15645		INDEX 419 SAMPLE 17555		INDEX 420 SAMPLE 17810	
STATE	ARKANSAS		ARKANSAS		ARKANSAS	
COUNTY	POPE		POPE		POPE	
FIELD	DOVER		DOVER		DOVER	
WELL NAME	GRANT NO. 1		KYLE "A" NO. 1		FREEMAN "C" NO. 2	
LOCATION	SEC. 35, T9N, R20W		SEC. 26, T9N, R20W		SEC. 31, T10N, R20W	
OWNER	RESERVE OIL, INC.		TXO PRODUCTION CORP.		TXO PRODUCTION CORP.	
COMPLETED	--/--/00		12/17/84		02/20/85	
SAMPLED	12/16/71		12/17/84		08/13/85	
FORMATION	PENN-SPIRO & ATOKA		PENN-DUNN A		PENN-BARTON A	
GEOLOGIC PROVINCE CODE	345		345		345	
DEPTH, FEET	4656		4158		4251	
WELLHEAD PRESSURE,PSIG	1660		650		NOT GIVEN	
OPEN FLOW, MCFD	3000		500		2988	
COMPONENT, MOLE PCT						
METHANE	87.8		98.1		86.0	
ETHANE	1.2		0.9		1.0	
PROPANE	0.1		0.1		0.1	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.4		0.5		10.3	
OXYGEN	1.9		0.1		2.3	
ARGON	0.1		TRACE		0.2	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.3		0.1	
HELIUM	0.11		0.14		0.12	
HEATING VALUE*	914		1012		892	
SPECIFIC GRAVITY	0.609		0.566		0.618	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 421 SAMPLE 17811	INDEX 422 SAMPLE 17812	INDEX 423 SAMPLE 15516
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	DOVER	FERGERSON	KNOXVILLE
WELL NAME	BIBLER "C" NO. 1	BLAIR LAWS NO. 4-3	DORN UNIT NO. 1-C
LOCATION	SEC. 25, T10N, R21W	SEC. 4, T8N, R20W	SEC. 33, T9N, R21W
OWNER	TXO PRODUCTION CORP.	TEXACO PRODUCING, INC.	SAMSON RESOURCES CO.
COMPLETED	04/10/84	04/30/85	07/31/78
SAMPLED	08/13/85	08/15/85	10/10/78
FORMATION	PENN-PENTERS	PENN-DUNN B & PAUL BARTON	PENN-TACKETT
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4430	4866	3178
WELLHEAD PRESSURE,PSIG	215	1060	655
OPEN FLOW, MCFD	1600	2827	5300
COMPONENT, MOLE PCT			
METHANE	95.1	94.1	96.7
ETHANE	0.9	1.0	1.1
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.8	4.4	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.1	0.5
HELIUM	0.10	0.10	0.23
HEATING VALUE*	982	974	1005
SPECIFIC GRAVITY	0.586	0.578	0.568

	INDEX 424 SAMPLE 15955	INDEX 425 SAMPLE 15956	INDEX 426 SAMPLE 17569
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	KNOXVILLE	KNOXVILLE	MASSARD
WELL NAME	MARTIN NO. 1	MARTIN NO. 1	AIRPORT "83" NO. 1
LOCATION	SEC. 32, T9N, R21W	SEC. 32, T9N, R21W	SEC. 34, T8N, R22W
OWNER	SAMSON RESOURCES CO.	SAMSON RESOURCES CO.	HANNA OIL & GAS CO.
COMPLETED	11/15/79	11/15/79	--/--/00
SAMPLED	04/24/80	04/24/80	01/18/85
FORMATION	PENN-ARECI	PENN-ARECI	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3710	3730	6066
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2200	NOT GIVEN	5385
COMPONENT, MOLE PCT			
METHANE	93.6	83.6	88.7
ETHANE	1.6	1.4	1.1
PROPANE	0.2	0.2	0.1
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	3.5	11.5	8.6
OXYGEN	0.8	3.0	0.4
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.7
HELIUM	0.14	0.12	0.31
HEATING VALUE*	982	877	921
SPECIFIC GRAVITY	0.582	0.627	0.605

	INDEX 427 SAMPLE 6560	INDEX 428 SAMPLE 15964	INDEX 429 SAMPLE 15965
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	MORELAND	MORELAND	MORELAND
WELL NAME	C. A. RAINWATER NO. 1	W. G. BLACKWELL NO. 1-T	W. G. BLACKWELL NO. 1
LOCATION	SEC. 11, T8N, R19W	SEC. 7, T8N, R19W	SEC. 7, T8N, R19W
OWNER	MURPHY CORP.	CHARLES E. MCRAY & ASSOC.	CHARLES E. MCRAY & ASSOC.
COMPLETED	01/19/58	03/14/80	03/14/80
SAMPLED	04/21/58	05/16/80	05/16/80
FORMATION	PENN-ATOKA	PENN-CLINE	PENN-MCGUIRE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3914	5535	4358
WELLHEAD PRESSURE,PSIG	1500	2025	1425
OPEN FLOW, MCFD	20500	1883	9998
COMPONENT, MOLE PCT			
METHANE	97.9	97.5	97.1
ETHANE	1.0	1.1	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.8	0.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.7
HELIUM	0.10	0.10	0.09
HEATING VALUE*	1012	1010	1004
SPECIFIC GRAVITY	0.563	0.566	0.570

	INDEX 430 SAMPLE 16087	INDEX 431 SAMPLE 16454	INDEX 432 SAMPLE 17623
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	MORELAND	MORELAND	MORELAND
WELL NAME	CAMMIE VIRDEN NO. 9-1	CHARLES E. MCRAY & ASSOC.	JERRY LOCK NO. 1-17
LOCATION	SEC. 9, T8N, R19W	SEC. 8, T8N, R19W	SEC. 17, T8N, R19W
OWNER	GETTY OIL CO.	CHARLES E. MCRAY & ASSOC.	CHARLES E. MCRAY & ASSOC.
COMPLETED	--/--/00	12/15/81	06/28/83
SAMPLED	09/25/80	03/17/82	02/15/85
FORMATION	NOT GIVEN	PENN-HALE	PENN-HALE M
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	5081	6503
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1600	1525
OPEN FLOW, MCFD	NOT GIVEN	1000	26620
COMPONENT, MOLE PCT			
METHANE	91.5	97.6	96.1
ETHANE	1.0	1.3	0.9
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	6.7	0.7	1.4
OXYGEN	0.2	0.1	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	1.0
HELIUM	0.08	0.09	0.11
HEATING VALUE*	947	1015	992
SPECIFIC GRAVITY	0.591	0.564	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 433 SAMPLE 7975	INDEX 434 SAMPLE 10086	INDEX 435 SAMPLE 10087
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	NEW HOPE	NEW HOPE	NEW HOPE
WELL NAME	IDA JONES NO. 1	ALICE SMITH UNIT NO. 1	ALICE SMITH UNIT NO. 1
LOCATION	SEC. 18, T9N, R20W	SEC. 17, T9N, R20W	SEC. 17, T9N, R20W
OWNER	GULF OIL CORP.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	01/27/61	08/21/64	08/21/64
SAMPLED	05/10/61	08/24/65	08/24/65
FORMATION	PENN-CASEY	PENN-HALE	PENN-BARTON & ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3063	4200	3789
WELLHEAD PRESSURE,PSIG	871	1604	1778
OPEN FLOW, MCFD	5300	1642	3657
COMPONENT, MOLE PCT			
METHANE	97.7	97.7	98.2
ETHANE	1.0	1.1	1.0
PROPANE	0.2	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	0.9	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.2
HELIUM	0.10	0.06	0.06
HEATING VALUE*	1013	1009	1013
SPECIFIC GRAVITY	0.567	0.567	0.563

	INDEX 436 SAMPLE 10088	INDEX 437 SAMPLE 16427	INDEX 438 SAMPLE 17801
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	NEW HOPE	OAK GROVE	OAK GROVE
WELL NAME	ALICE SMITH UNIT NO. 1	TEAGUE NO. 21-1	HOWARD NO.2
LOCATION	SEC. 17, T9N, R20W	SEC. 21, T8N, R18W	SEC. 26, T8N, R18W
OWNER	GULF OIL CORP.	TOWNER PETROLEUM CO.	REVERE CORP.
COMPLETED	08/21/64	01/24/82	03/28/85
SAMPLED	08/24/65	01/24/82	08/08/85
FORMATION	PENN-BARTON	PENN-BARTON	PENN-MCGUIRE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3729	4692	4421
WELLHEAD PRESSURE,PSIG	1488	1566	1157
OPEN FLOW, MCFD	4513	3000	7652
COMPONENT, MOLE PCT			
METHANE	97.6	94.2	93.5
ETHANE	1.0	0.8	0.9
PROPANE	0.0	0.1	0.0
N-BUTANE	0.0	0.0	1.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	1.0	4.1	2.9
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.1	0.3
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.8
HELIUM	0.14	0.29	0.36
HEATING VALUE*	1007	971	1029
SPECIFIC GRAVITY	0.565	0.581	0.608

	INDEX 439 SAMPLE 13207	INDEX 440 SAMPLE 13208	INDEX 441 SAMPLE 16770
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	ROSS	ROSS	ROSS
WELL NAME	EUBANKS NO. 1	EUBANKS NO. 1	HOGREFE NO. 2
LOCATION	SEC. 11, T9N, R21W	SEC. 11, T9N, R21W	SEC. 22, T9N, R21W
OWNER	FERGUSON OIL CO., INC.	FERGUSON OIL CO., INC.	HILLIARD OIL & GAS, INC.
COMPLETED	02/02/72	02/02/72	10/08/82
SAMPLED	05/13/72	05/13/72	02/14/83
FORMATION	PENN-ALLEN	PENN-SPIRO	PENN-TACKETT
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4120	4390	2400
WELLHEAD PRESSURE,PSIG	1725	1654	630
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8500
COMPONENT, MOLE PCT			
METHANE	97.8	97.6	97.8
ETHANE	1.3	0.9	1.1
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.08	0.08	0.10
HEATING VALUE*	1017	1008	1014
SPECIFIC GRAVITY	0.566	0.565	0.561

	INDEX 442 SAMPLE 17885	INDEX 443 SAMPLE 5742	INDEX 444 SAMPLE 7662
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	ROSS	RUSSELLVILLE	SCOTTSVILLE
WELL NAME	GEORGIA BROWN NO. 1	BARTON NO. 1	S. E. LEE ESTATE NO. 1
LOCATION	SEC. 12, T9N, R21W	SEC. 10, T8N, R19W	SEC. 4, T9N, R19W
OWNER	TXO PRODUCTION CORP.	MURPHY CORP.	MURPHY CORP.
COMPLETED	06/24/85	12/07/54	08/17/60
SAMPLED	08/25/85	12/10/54	09/02/60
FORMATION	PENN-HALE R & B	PENN-ATOKA	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5320	4000	1936
WELLHEAD PRESSURE,PSIG	1880	NOT GIVEN	803
OPEN FLOW, MCFD	995	7600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.4	97.4	81.1
ETHANE	1.3	1.0	0.0
PROPANE	0.1	0.2	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.9	14.5
OXYGEN	0.0	0.1	3.4
ARGON	TRACE	TRACE	0.2
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.1
HELIUM	0.05	0.10	0.10
HEATING VALUE*	1015	1010	822
SPECIFIC GRAVITY	0.569	0.567	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 445 SAMPLE 3796	INDEX 446 SAMPLE 14558	INDEX 447 SAMPLE 17529
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	POPE	POPE
FIELD	SILEX	SILEX	SILEX
WELL NAME	LADD & STRONG NO. 1	SILEX G.U. NO. 3	SILEX NO. 7
LOCATION	SEC. 22, T10N, R21W	SEC. 22, T10N, R21W	SEC. 22, T10N, T21W
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	ARKLA GAS CO.
COMPLETED	07/07/44	04/06/75	04/06/84
SAMPLED	08/25/44	01/19/76	11/30/84
FORMATION	PENN-ATOKA	PENN-KELLY	PENN-HUDSON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2861	2814	2174
WELLHEAD PRESSURE,PSIG	560	1100	940
OPEN FLOW, MCFD	6250	6782	1074
COMPONENT, MOLE PCT			
METHANE	95.0	97.9	97.9
ETHANE	1.4	1.0	1.0
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	3.0	0.8	0.8
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.13	0.10	0.10
HEATING VALUE*	987	1010	1010
SPECIFIC GRAVITY	0.577	0.563	0.563

	INDEX 448 SAMPLE 17530	INDEX 449 SAMPLE 10403	INDEX 450 SAMPLE 11502
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	POPE	SCOTT	SCOTT
FIELD	SILEX	MANSFIELD	MANSFIELD
WELL NAME	SILEX NO. 7	WARP NO. 1	QUICK NO. 1
LOCATION	SEC. 22, T10N, R21W	SEC. 4, T4N, R30E	SEC. 25, T5N, R30W
OWNER	ARKLA GAS CO.	MIDWEST OIL CORP.	MIDWEST OIL CORP.
COMPLETED	04/06/84	11/12/65	10/01/67
SAMPLED	11/30/84	02/17/66	05/16/68
FORMATION	PENN-KELLY	PENN-HARTFORD	PENN-HARTFORD
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2770	5788	6250
WELLHEAD PRESSURE,PSIG	1115	2392	2450
OPEN FLOW, MCFD	7774	3200	11506
COMPONENT, MOLE PCT			
METHANE	97.4	96.7	97.1
ETHANE	1.0	1.6	1.4
PROPANE	TRACE	0.3	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	0.6	0.4
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.7
HELIUM	0.10	0.06	0.06
HEATING VALUE*	1005	1016	1014
SPECIFIC GRAVITY	0.565	0.574	0.571

	INDEX 451 SAMPLE 16220	INDEX 452 SAMPLE 8597	INDEX 453 SAMPLE 10034
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SCOTT	SEBASTIAN	SEBASTIAN
FIELD	MANSFIELD	BONANZA	BONANZA
WELL NAME	GLASS #C* NO. 1	WESTERN COAL & MINING NO. 1	HAMILTON 1-12
LOCATION	SEC. 27, T5N, R30W	SEC. 36, T7N, R32W	SEC. 12, T6N, R32W
OWNER	TEXAS OIL & GAS CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	01/15/81	04/02/62	02/19/64
SAMPLED	03/24/81	07/26/62	08/04/65
FORMATION	PENN-HARTFORD	DEVO-HUNTON	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6200	7936	3933
WELLHEAD PRESSURE,PSIG	1525	3050	1100
OPEN FLOW, MCFD	1500	6009	3690
COMPONENT, MOLE PCT			
METHANE	97.1	92.8	97.5
ETHANE	1.5	2.1	1.2
PROPANE	0.3	0.4	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	3.0	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.5	0.5
HELIUM	0.09	0.12	0.07
HEATING VALUE*	1018	988	1017
SPECIFIC GRAVITY	0.573	0.595	0.569

	INDEX 454 SAMPLE 10037	INDEX 455 SAMPLE 10201	INDEX 456 SAMPLE 16368
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	BONANZA	BONANZA	BONANZA
WELL NAME	JOHNSON 2-19	HAMILTON NO.1-12A	KERSEY NO. 1
LOCATION	SEC. 19, T6N, R32W	SEC. 12, T6N, R32W	SEC. 4, T6N, R31W
OWNER	SHELL OIL CO.	SHELL OIL CO.	ARKLA EXPLORATION CO.
COMPLETED	02/06/65	02/19/64	04/20/81
SAMPLED	08/04/65	10/07/65	10/27/81
FORMATION	PENN-HALE	PENN-SPIRO	PENN-ATOKA A
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7304	3933	9000
WELLHEAD PRESSURE,PSIG	2083	650	1125
OPEN FLOW, MCFD	4120	700	6196
COMPONENT, MOLE PCT			
METHANE	94.8	95.4	97.5
ETHANE	0.9	1.0	1.5
PROPANE	0.3	0.3	0.2
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.7	0.5	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	2.7	0.4
HELIUM	0.10	0.11	0.09
HEATING VALUE*	984	992	1025
SPECIFIC GRAVITY	0.590	0.590	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 457 SAMPLE 16369	INDEX 458 SAMPLE 16593	INDEX 459 SAMPLE 17778
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	BONANZA	BONANZA	BONANZA
WELL NAME	KERSEY NO. 1	REVERE TROTTER NO. 1	STEPHENS "6" NO. 1
LOCATION	SEC. 4, T6N, R31W	SEC. 12, T6N, R32W	SEC. 27, T7N, R31W
OWNER	ARKLA EXPLORATION CO.	REVERE CORP.	TXO PRODUCTION CORP.
COMPLETED	04/20/81	07/-/82	03/11/85
SAMPLED	10/26/81	07/20/82	07/01/85
FORMATION	PENN-ATOKA B	PENN-ATOKA U	PENN-ORR
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	9000	3488	7323
WELLHEAD PRESSURE,PSIG	1170	360	1000
OPEN FLOW, MCFD	153187	1750	500
COMPONENT, MOLE PCT			
METHANE	97.7	97.4	77.0
ETHANE	1.5	1.3	0.6
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.2	0.2	19.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	2.2
HELIUM	0.05	0.06	0.07
HEATING VALUE*	1022	1013	797
SPECIFIC GRAVITY	0.569	0.568	0.662

	INDEX 460 SAMPLE 6856	INDEX 461 SAMPLE 17153	INDEX 462 SAMPLE 9983
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	BOONEVILLE	BOONEVILLE	EWING
WELL NAME	P. X. WILLIAMS NO. 1	BOONEVILLE NO. 1	FRANK WRIGHT UNIT NO. 1
LOCATION	SEC. 13, T6N, R29W	SEC. 23, T6N, R29W	SEC. 13, T8N, R30W
OWNER	GULF OIL CORP.	EXXON CO., U.S.A.	STEPHENS PRODUCTION CO.
COMPLETED	05/08/58	01/12/84	03/03/64
SAMPLED	11/05/58	01/12/84	07/19/65
FORMATION	PENN-ATOKA	PENN-BORUM L	PENN-BARTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1470	5777	6152
WELLHEAD PRESSURE,PSIG	375	1560	832
OPEN FLOW, MCFD	NOT GIVEN	3788	7500
COMPONENT, MOLE PCT			
METHANE	97.3	82.2	97.6
ETHANE	1.6	1.3	0.9
PROPANE	0.2	0.1	0.3
N-BUTANE	0.1	TRACE	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.4	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.1	15.6	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.4	0.8
HELIUM	0.03	0.06	0.12
HEATING VALUE*	1050	868	1015
SPECIFIC GRAVITY	0.578	0.634	0.570

	INDEX 463 SAMPLE 13177	INDEX 464 SAMPLE 13178	INDEX 465 SAMPLE 13501
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	EWING	EWING	EWING
WELL NAME	A. C. WILSON NO. 2	A. C. WILSON NO. 2	BONNIE STEWART NO. 1
LOCATION	SEC. 17, T8N, R29W	SEC. 17, T8N, R29W	SEC. 2, T7N, R30W
OWNER	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.	STEPHENS PRODUCTION CO.
COMPLETED	06/04/71	06/04/71	02/14/72
SAMPLED	04/03/72	04/03/72	01/02/73
FORMATION	PENN-DUNN C	PENN-DUNN A	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6875
WELLHEAD PRESSURE,PSIG	921	864	2184
OPEN FLOW, MCFD	400	11033	7000
COMPONENT, MOLE PCT			
METHANE	97.6	98.0	97.3
ETHANE	1.0	0.9	1.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.9
HELIUM	0.09	0.09	0.05
HEATING VALUE*	1009	1011	1012
SPECIFIC GRAVITY	0.567	0.565	0.571

	INDEX 466 SAMPLE 13502	INDEX 467 SAMPLE 13503	INDEX 468 SAMPLE 12641
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	EWING	EWING	EXCELSIOR
WELL NAME	BONNIE STEWART NO. 1	BONNIE STEWART NO. 1	PLUNKETT NO. 1
LOCATION	20 IN. DISCHARGE	SEC. 2, T7N, R30W	SEC. 29, T6N, R31W
OWNER	STEPHENS PRODUCTION CO.	STEPHENS PRODUCTION CO.	FERGUSON OIL CO., INC.
COMPLETED	02/14/72	02/14/72	06/30/70
SAMPLED	01/02/73	01/02/73	01/21/71
FORMATION	PERM-MORRIS	PENN-BARTON R	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3529	5767	5400
WELLHEAD PRESSURE,PSIG	612	1112	1809
OPEN FLOW, MCFD	4100	5700	7000
COMPONENT, MOLE PCT			
METHANE	97.7	97.1	97.2
ETHANE	1.3	1.3	1.5
PROPANE	0.1	0.2	0.2
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.3	0.4	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.8
HELIUM	0.07	0.09	0.06
HEATING VALUE*	1016	1012	1017
SPECIFIC GRAVITY	0.568	0.568	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 469 SAMPLE 7970	INDEX 470 SAMPLE 17491	INDEX 471 SAMPLE 17492
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	GRAGG	GRAGG	GREENWOOD
WELL NAME	A. M. DUCKETT NO. 1	FRENCH NO. 1-33	PEERLESS COAL NO. 2-13
LOCATION	SEC. 20, T6N, R29W	SEC. 33, T6N, R29W	SEC. 13, T6N, R31W
OWNER	GULF OIL CORP.	STEPHENS PRODUCTION CO.	STEPHENS PRODUCTION CO.
COMPLETED	05/11/61	11/05/82	11/16/82
SAMPLED	05/11/61	10/17/84	10/17/84
FORMATION	PENN-NICHOLS	PENN-NICHOLS	PENN-BORUM
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4183	3642	6029
WELLHEAD PRESSURE,PSIG	1401	1190	1543
OPEN FLOW, MCFD	20000	3450	3025
COMPONENT, MOLE PCT			
METHANE	97.5	96.6	95.1
ETHANE	1.8	1.1	1.1
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	TRACE	1.2	2.4
OXYGEN	0.0	0.1	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.8
HELIUM	0.03	0.09	0.02
HEATING VALUE*	1023	1001	986
SPECIFIC GRAVITY	0.565	0.572	0.579

	INDEX 472 SAMPLE 17855	INDEX 473 SAMPLE 17857	INDEX 474 SAMPLE 17858
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	DEE NO. 1	JOHNSON "AH" NO. 1-C	JOHNSON "AH" NO. 1-T
LOCATION	SEC. 3, T6N, R30W	SEC. 6, T6N, R30W	SEC. 6, T6N, R30W
OWNER	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED	05/10/85	02/28/85	02/28/85
SAMPLED	09/25/85	09/25/85	09/25/85
FORMATION	PENN-NICHOLS	PERM-ALMA U	PERM-ALMA U
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6455	2070	2070
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1300	4000	4000
COMPONENT, MOLE PCT			
METHANE	81.4	98.5	96.5
ETHANE	1.1	0.9	1.4
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	16.6	0.1	1.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.2
HELIUM	0.05	0.09	0.06
HEATING VALUE*	849	1017	1006
SPECIFIC GRAVITY	0.634	0.560	0.571

	INDEX 475 SAMPLE 15940	INDEX 476 SAMPLE 2277	INDEX 477 SAMPLE 6286
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	HOLLIS LAKE	LAVACA	MASSARD
WELL NAME	FT. CHAFFEE FED. NO. 2	LAWRENCE WRIGHT NO. 1	MARY FISHER ALLEN NO. 1
LOCATION	SEC. 26, R31W, R31W	SEC. 29, T8, R30	SEC. 30, T8N, R31W
OWNER	GULF OIL EXPL. & PROD. CO.	OZARK NATURAL GAS CO.	STEPHENS PRODUCTION CO.
COMPLETED	01/29/80	12/20/30	01/15/57
SAMPLED	04/16/80	02/18/31	04/01/57
FORMATION	PENN-SPIRO	PENN-ATOKA	PENN-HALE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5737	2820	5392
WELLHEAD PRESSURE,PSIG	987	280	1600
OPEN FLOW, MCFD	2803	5000	27000
COMPONENT, MOLE PCT			
METHANE	96.5	98.5	96.4
ETHANE	1.3	0.0	1.2
PROPANE	0.2	---	0.0
N-BUTANE	0.0	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.8	0.8	1.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.2	0.6	0.9
HELIUM	0.07	0.08	0.08
HEATING VALUE*	1015	998	998
SPECIFIC GRAVITY	0.579	0.564	0.576

	INDEX 478 SAMPLE 6731	INDEX 479 SAMPLE 8020	INDEX 480 SAMPLE 16334
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	MASSARD	MASSARD	MASSARD
WELL NAME	THOMAS HORAN	DORA A. PIGG NO. 1	AIRPORT #81 NO. 1
LOCATION	SEC. 19, T6N, R31W	SEC. 31, T6N, R31W	SEC. 34, T6N, R32W
OWNER	FORT SMITH GAS CORP.	STEPHENS PRODUCTION CO.	HAMRA OIL AND GAS CO.
COMPLETED	03/11/58	01/24/61	04/28/81
SAMPLED	07/15/58	06/11/61	09/09/81
FORMATION	PENN-ATOKA BASAL	PENN-SPIRO	PENN-SPIRO & DEVO-PEETERS
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5150	5424	5210
WELLHEAD PRESSURE,PSIG	985	670	3474
OPEN FLOW, MCFD	4000	16500	5276
COMPONENT, MOLE PCT			
METHANE	97.3	96.6	90.1
ETHANE	1.2	1.2	1.5
PROPANE	0.0	0.1	0.2
N-BUTANE	0.0	0.0	0.5
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.5	0.5	7.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.5	0.6
HELIUM	0.10	0.10	0.30
HEATING VALUE*	1007	1005	945
SPECIFIC GRAVITY	0.571	0.578	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 481 SAMPLE 17511	INDEX 482 SAMPLE 17512	INDEX 483 SAMPLE 11221
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	MASSARD	MASSARD	URSULA
WELL NAME	LARCO UPPER TBG.	LARCO LOWER TBG.	EARL WHITE NO. 1
LOCATION	SEC. 21, T8N, R32W	SEC. 21, T8N, R32W	SEC. 5, T7N, R29W
OWNER	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	GULF OIL CORP.
COMPLETED	--/--/00	--/--/00	02/21/67
SAMPLED	10/26/84	10/26/84	11/06/67
FORMATION	PENN-ORR	PENN-PENTERS	PENN-CARPENTER
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5992	6970	3064
WELLHEAD PRESSURE,PSIG	2637	1080	268
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5500
COMPONENT, MOLE PCT			
METHANE	90.9	94.8	97.5
ETHANE	1.6	1.3	1.4
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	6.3	2.5	0.3
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.5
HELIUM	0.26	0.13	0.08
HEATING VALUE*	952	987	1018
SPECIFIC GRAVITY	0.592	0.579	0.569

	INDEX 484 SAMPLE 14415	INDEX 485 SAMPLE 14416	INDEX 486 SAMPLE 16066
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD	WITCHERVILLE	WITCHERVILLE	WITCHERVILLE
WELL NAME	CARTER NO. 1	CARTER NO. 1	FRANKLIN-HOLLAND NO. 1
LOCATION	SEC. 26, T6N, R31W	SEC. 26, T6N, R31W	SEC.31,T6N,R30W
OWNER	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.
COMPLETED	03/10/75	03/10/75	07/21/80
SAMPLED	07/17/75	07/17/75	09/16/80
FORMATION	PENN-TURNER U	PENN-TURNER L	PENN-BORUM
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3581	3776	4500
WELLHEAD PRESSURE,PSIG	550	1075	760
OPEN FLOW, MCFD	1200	2100	5428
COMPONENT, MOLE PCT			
METHANE	97.7	97.8	96.9
ETHANE	1.4	1.3	1.1
PROPANE	0.2	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.3	1.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	TRACE
HELIUM	0.07	0.07	0.08
HEATING VALUE*	1020	1019	1004
SPECIFIC GRAVITY	0.567	0.568	0.567

	INDEX 487 SAMPLE 16067	INDEX 488 SAMPLE 618	INDEX 489 SAMPLE 619
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	SEBASTIAN	UNION	UNION
FIELD	WITCHERVILLE	EL DORADO	EL DORADO
WELL NAME	FRANKLIN-HOLLAND NO. 1	MCCAULDIN NO. 1	HEARTHSTONE
LOCATION	SEC.31,T6N,R30W	SEC. 31, T15S, R17W	SEC. 26, T16S, R17W
OWNER	ARKLA EXPLORATION CO.	EL DORADO NATURAL GAS CO.	EL DORADO NATURAL GAS CO.
COMPLETED	07/21/80	03/--/21	05/--/21
SAMPLED	09/16/80	07/17/21	07/17/21
FORMATION	PENN-TURNER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	230	230
DEPTH, FEET	3573	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	250	250
OPEN FLOW, MCFD	5598	25	15
COMPONENT, MOLE PCT			
METHANE	95.2	87.0	87.3
ETHANE	1.9	11.7	11.5
PROPANE	0.2	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	2.6	0.8	0.8
OXYGEN	0.0	0.3	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.05	0.01	0.01
HEATING VALUE*	1004	1091	1098
SPECIFIC GRAVITY	0.576	0.619	0.616

	INDEX 490 SAMPLE 5650	INDEX 491 SAMPLE 17815	INDEX 492 SAMPLE 5787
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	UNION	UNION	UNION
FIELD	HIBANK S	HOGG	RAINBOW S
WELL NAME	UNION SAW MILL NO. B-7	FIRST LAND & TIMBER NO.1-7	A. A. JERRY NO. 1
LOCATION	SEC. 35, T18S, R14W	SEC. 7, T18S, R16W	SEC. 29, T17S, R14W
OWNER	LAWTON OIL CORP.	MAY PETROLEUM, INC.	SPARTAN DRILLING CO.
COMPLETED	04/08/54	10/--/84	12/23/54
SAMPLED	07/17/54	08/22/85	03/01/55
FORMATION	CRET-OZAN	JURA-COTTON VALLEY	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2663	6720	3080
WELLHEAD PRESSURE,PSIG	1261	980	1150
OPEN FLOW, MCFD	NOT GIVEN	230	15000
COMPONENT, MOLE PCT			
METHANE	90.4	77.9	93.7
ETHANE	3.5	8.5	1.8
PROPANE	1.2	3.6	0.4
N-BUTANE	0.4	1.6	0.1
ISOBUTANE	0.3	1.4	0.4
N-PENTANE	0.1	0.6	0.1
ISOPENTANE	0.1	0.4	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.8	0.3
NITROGEN	3.5	3.5	3.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.05	0.03	0.05
HEATING VALUE*	1056	1223	1018
SPECIFIC GRAVITY	0.618	0.744	0.599

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 493 SAMPLE 3163	INDEX 494 SAMPLE 3169	INDEX 495 SAMPLE 7289
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	UNION	UNION	UNION
FIELD	SCHULER	SCHULER	ST. LONG N
WELL NAME	SEWELL NO. 3	SEPARATOR 36	OLIN D NO. 1
LOCATION	SEC. 18, T18S, R18W	SEC. 7, T18S, R18W	SEC. 19, T18S, R12W
OWNER	LION OIL & REFINING CO.	SCHULER UNIT	CADDO OIL CO., INC.
COMPLETED	01/16/39	12/10/38	10/31/58
SAMPLED	02/19/42	02/14/42	10/10/59
FORMATION	JURA-SMACKOVER	JURA-JONES	CRET-MACATOCH
GEOLOGIC PROVINCE CODE	230	230	250
DEPTH, FEET	7659	7608	2300
WELLHEAD PRESSURE, PSIG	3390	1500	925
OPEN FLOW, MCFD	140	NOT GIVEN	280
COMPONENT, MOLE PCT			
METHANE	61.3	64.5	91.3
ETHANE	22.7	23.7	2.5
PROPANE	---	---	0.6
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	11.5	8.8	4.4
OXYGEN	0.4	1.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	4.1	1.9	TRACE
HELIUM	TRACE	0.00	0.05
HEATING VALUE*	1028	1078	1025
SPECIFIC GRAVITY	0.756	0.733	0.608

	INDEX 496 SAMPLE 17636	INDEX 497 SAMPLE 9554	INDEX 498 SAMPLE 4448
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	WASHINGTON	WASHINGTON	YELL
FIELD	BRENTWOOD	NOT GIVEN	WILDCAT
WELL NAME	WRLTA NO.2	WATER WELL	NO. 1
LOCATION	SEC. 32, T14N, R29W	SEC. 30, T14N, R29W	SEC. 2, T6N, R21W
OWNER	KATY ENERGY CORP.	R. N. JACKSON	VAN WESLEY
COMPLETED	12/--/83	--/--/58	--/--/24
SAMPLED	03/26/85	08/21/64	04/15/88
FORMATION	MISS-MEDINGTON	DEVO-SYLAMORE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	930	420	1910
WELLHEAD PRESSURE, PSIG	45	100	35
OPEN FLOW, MCFD	20	200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.9	84.0	97.3
ETHANE	6.8	10.4	1.0
PROPANE	2.1	2.3	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	9.9	2.0	0.8
OXYGEN	2.2	0.8	0.3
ARGON	0.1	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.8	0.2	0.6
HELIUM	0.05	0.08	0.04
HEATING VALUE*	996	1134	1004
SPECIFIC GRAVITY	0.689	0.656	0.570

	INDEX 499 SAMPLE 4422	INDEX 500 SAMPLE 4123	INDEX 501 SAMPLE 4424
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	BUTTE	BUTTE	BUTTE
FIELD	CHICO	DURHAM AREA	DURHAM AREA
WELL NAME	TOWNE NO. 1	DONOMOE FEE NO. 1	WAHL COMM NO. 1
LOCATION	SEC. 18, T20N, R1E	SEC. 6, T20N, R1E	SEC. 32, T21N, R1E
OWNER	SUPERIOR OIL CO.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	12/03/47	07/17/46	08/10/47
SAMPLED	02/01/48	10/15/46	01/30/48
FORMATION	NOT GIVEN	NOT GIVEN	EOCE-CAPAY
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2175	2140	2090
WELLHEAD PRESSURE, PSIG	NOT GIVEN	915	930
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	67.6	66.2	69.2
ETHANE	1.4	1.8	0.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	29.9	30.5	29.7
OXYGEN	0.8	0.9	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.6	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	710	703	708
SPECIFIC GRAVITY	0.692	0.700	0.684

	INDEX 502 SAMPLE 11522	INDEX 503 SAMPLE 5141	INDEX 504 SAMPLE 7421
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	BUTTE	BUTTE	COLUSA
FIELD	LLANO SECO	NOT GIVEN	ARBUCKLE
WELL NAME	BUTTE LLANO SECO NO. 1	WILD GOOSE NO. 1	UNIT M NO. 1
LOCATION	SEC. 34, T20N, R1W	SEC. 17, T17N, R1E	SEC. 36, T14N, R2W
OWNER	CALIFORNIA TIME PETROLEUM CO	HONOLULU OIL CORP.	OCCIDENTAL PETROLEUM CORP.
COMPLETED	09/05/67	--/--/00	--/--/00
SAMPLED	05/21/68	12/14/51	05/--/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1787	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	676	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.4	79.1	95.8
ETHANE	0.0	0.1	0.4
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	15.4	20.2	3.6
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	855	818	981
SPECIFIC GRAVITY	0.618	0.647	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 529 SAMPLE 7238	INDEX 530 SAMPLE 7239	INDEX 531 SAMPLE 4088
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	CONTRA COSTA	FRESNO
FIELD	WILLOW PASS	WILLOW PASS	BURREL
WELL NAME	FARIA UNIT NO. 2	FARIA UNIT NO. 3	BURREL NO. 68-35
LOCATION	SEC. 21, T2N, R1W	SEC. 21, T2N, R1W	SEC. 35, T16S, R18E
OWNER	TRICO OIL & GAS CO.	TRICO OIL & GAS CO.	GENERAL PET. CORP. OF CALIF.
COMPLETED	07/20/59	08/11/59	10/26/43
SAMPLED	10/01/59	10/01/59	02/25/45
FORMATION	EOCE-	EOCE-	MIOC-
GEOLOGIC PROVINCE CODE	730	730	745
DEPTH, FEET	1498	1570	6484
WELLHEAD PRESSURE,PSIG	510	620	860
OPEN FLOW, MCFD	1500	3000	183
COMPONENT, MOLE PCT			
METHANE	98.6	98.2	69.8
ETHANE	TRACE	0.1	24.8
PROPANE	0.2	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.1	1.5	4.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.2	1.7
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1004	997	1143
SPECIFIC GRAVITY	0.560	0.563	0.712

	INDEX 532 SAMPLE 3850	INDEX 533 SAMPLE 3721	INDEX 534 SAMPLE 4090
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	FRESNO	FRESNO	FRESNO
FIELD	COALINGA	JACALITOS DOME	NOT GIVEN
WELL NAME	21-17E	WELL 67-17E	NO. 21-23E
LOCATION	SEC. 17, T21S, R15E	SEC. 17, T21N, R15E	SEC. 21, T21S, R15E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	04/18/44	02/01/44	--/--/00
SAMPLED	04/29/44	--/--/00	--/--/00
FORMATION	MIOC-TEMBLOR	MIOC-TEMBLOR	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	3173	3700	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6580	4392	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.5	80.6	10.6
ETHANE	20.4	17.3	5.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	1.7	75.4
OXYGEN	1.0	0.3	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.1	8.8
HELIUM	0.00	TRACE	0.00
HEATING VALUE*	1151	1127	201
SPECIFIC GRAVITY	0.672	0.650	0.977

	INDEX 535 SAMPLE 3800	INDEX 536 SAMPLE 14057	INDEX 537 SAMPLE 10518
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	FRESNO	FRESNO	FRESNO
FIELD	RAISIN CITY	SAN JOAQUIN	SAN JOAQUIN NW
WELL NAME	SAN JOAQUIN NO. 1-1	TEED NO. 1	TEED NO. 1
LOCATION	SEC. 18, T15S, R17E	NOT GIVEN	SEC. 23, T15S, R16E
OWNER	SHELL OIL CO.	TEXACO INC.	TEXACO & SUPERIOR
COMPLETED	10/04/53	--/--/00	11/01/65
SAMPLED	04/14/44	07/09/74	03/29/66
FORMATION	MIOC-	NOT GIVEN	EOCE-
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	4975	NOT GIVEN	6794
WELLHEAD PRESSURE,PSIG	600	1600	2550
OPEN FLOW, MCFD	150	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.2	97.1	97.9
ETHANE	1.5	0.9	0.8
PROPANE	---	0.2	0.2
N-BUTANE	---	TRACE	0.1
ISOBUTANE	---	0.1	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	TRACE	0.0
NITROGEN	0.0	1.5	1.4
OXYGEN	1.4	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.9	0.1	0.1
HELIUM	0.00	0.01	0.02
HEATING VALUE*	991	1015	1010
SPECIFIC GRAVITY	0.588	0.573	0.569

	INDEX 538 SAMPLE 10871	INDEX 539 SAMPLE 7399	INDEX 540 SAMPLE 10961
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	GLENN	GLENN	GLENN
FIELD	BLACK BUTTE	CAPAY RANCHO	MALTON
WELL NAME	SUN-PUTNAM NO. 1	MODA NO. 54-10	MALTON UNIT 1 NO. 1
LOCATION	SEC. 1, T22N, R4W	SEC. 10, T22N, R2W	SEC. 5, T22N, R3E
OWNER	MCCULLOCH OIL CORP. OF CALIF	MOBIL OIL CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	01/11/65	08/21/59	09/19/60
SAMPLED	02/06/67	02/10/60	05/12/67
FORMATION	CRET-FORBES	PLIO-TEHAMA	CRET-FORBES
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	4320	1710	3541
WELLHEAD PRESSURE,PSIG	2332	714	1759
OPEN FLOW, MCFD	9600	12700	1220
COMPONENT, MOLE PCT			
METHANE	97.9	83.9	98.6
ETHANE	0.3	0.0	0.2
PROPANE	0.0	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.7	15.8	0.9
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	997	852	1002
SPECIFIC GRAVITY	0.567	0.621	0.560

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 541 SAMPLE 3747	INDEX 542 SAMPLE 3748	INDEX 543 SAMPLE 17626
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	GLENN	GLENN	GLENN
FIELD	ORD BEND	ORD BEND	ORLAND
WELL NAME	KNIGHT NO. 1	CAPAY GRANT COMM.-1 NO. 2	WHITE NO. 1
LOCATION	SEC. 13, T21N, R2W	SEC. 13, T21N, R2W	SEC. 29, T22N, R3W
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	NATURAL GAS CORP. OF CALIF.
COMPLETED	08/24/43	03/02/44	10/14/84
SAMPLED	04/29/44	04/29/44	03/16/85
FORMATION	CRET-KIONE	CRET-KIONE	CRET-KIONE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	3653	3670	6375
WELLHEAD PRESSURE,PSIG	1480	1500	780
OPEN FLOW, MCFD	4150	4550	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	88.4	91.0
ETHANE	0.0	0.0	0.0
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	8.9	11.2	8.9
OXYGEN	0.5	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.00	0.00	0.01
HEATING VALUE*	895	895	922
SPECIFIC GRAVITY	0.594	0.603	0.592

	INDEX 544 SAMPLE 16543	INDEX 545 SAMPLE 15706	INDEX 546 SAMPLE 2778
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	GLENN	GLENN	HUMBOLDT
FIELD	PRINCETON	RANCHO CAPAY	TOMPKINS HILL
WELL NAME	TORRES NO. 1-18	WELOGEN EDDINS NO. 1	EUREKA NO. 2
LOCATION	SEC. 18, T18N, R1W	SEC. 14, T22N, R2W	SEC. 22, T3N, R1W
OWNER	JORDAN OIL & GAS CO.	GULF OIL CORP.	TEXAS CO.
COMPLETED	--/--/82	07/23/79	07/18/37
SAMPLED	06/10/82	07/23/79	11/29/37
FORMATION	NOT GIVEN	CRET-FORBES	PLIO-
GEOLOGIC PROVINCE CODE	730	730	720
DEPTH, FEET	NOT GIVEN	5354	4010
WELLHEAD PRESSURE,PSIG	950	2402	2286
OPEN FLOW, MCFD	905	5100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	97.8	96.9
ETHANE	TRACE	0.2	1.5
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	13.1	1.8	1.4
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	879	994	1005
SPECIFIC GRAVITY	0.609	0.563	0.570

	INDEX 547 SAMPLE 4283	INDEX 548 SAMPLE 5970	INDEX 549 SAMPLE 4797
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	HUMBOLDT	INYO	KERN
FIELD	TOMPKINS HILL	NOT GIVEN	ANTELOPE PLAINS
WELL NAME	HOLMES-EUREKA NO. 3	WATER WELL	BOLTON 83
LOCATION	SEC. 22, T3N, R1W	NOT GIVEN	SEC. 27, T27S, R19E
OWNER	TEXAS CO.	ELMO R. JENKINS	INDEPENDENT EXPLORATION CO.
COMPLETED	10/10/46	--/--/00	03/05/49
SAMPLED	03/11/47	--/--/00	10/24/49
FORMATION	PLIO-	NOT GIVEN	EOCE-
GEOLOGIC PROVINCE CODE	720	625	745
DEPTH, FEET	3940	NOT GIVEN	3203
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	350
OPEN FLOW, MCFD	1500	NOT GIVEN	200
COMPONENT, MOLE PCT			
METHANE	95.6	5.1	97.1
ETHANE	1.2	0.1	1.5
PROPANE	---	0.0	0.5
N-BUTANE	---	0.0	0.1
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	1.8	34.1	0.3
OXYGEN	0.8	TRACE	TRACE
ARGON	---	0.4	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.6	60.2	0.2
HELIUM	TRACE	0.16	TRACE
HEATING VALUE*	990	55	1036
SPECIFIC GRAVITY	0.578	1.285	0.575

	INDEX 550 SAMPLE 5168	INDEX 551 SAMPLE 12694	INDEX 552 SAMPLE 16529
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	BELGIAN ANTICLINE	BELGIAN ANTICLINE	BOWERBANK
WELL NAME	TULARE FEE NO. 1	USL-62-25	SALISBURY NO. 3
LOCATION	SEC. 19, T30S, R22E	NOT GIVEN	SEC. 7, T29S, R24E
OWNER	OHIO OIL CO.	NORRIS OIL CO.	TEXACO U.S.A.
COMPLETED	11/14/51	--/--/70	04/05/81
SAMPLED	02/28/52	02/--/71	05/24/82
FORMATION	EOCE-	EOCE-POINT OF ROCKS 2ND	PLIO-MYA 2ND & ROOT U
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	6544	5400	3418
WELLHEAD PRESSURE,PSIG	3100	NOT GIVEN	900
OPEN FLOW, MCFD	10000	4000	310
COMPONENT, MOLE PCT			
METHANE	93.1	86.9	99.1
ETHANE	3.5	6.0	0.1
PROPANE	1.5	3.2	TRACE
N-BUTANE	0.5	0.8	0.0
ISOBUTANE	TRACE	0.7	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.4	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.7	0.8	0.6
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1082	1161	1006
SPECIFIC GRAVITY	0.607	0.670	0.559

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ADSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 505 SAMPLE 17585	INDEX 506 SAMPLE 17300	INDEX 507 SAMPLE 17301
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	COLUSA	COLUSA	COLUSA
FIELD	ARBUCKLE N	BOUNDE CREEK	BOUNDE CREEK
WELL NAME	ZUMWALT NO. 1	TORRES NO. 24-1	TORRES NO. 24-1
LOCATION	SEC. 10, T14N, R2W	SEC. 24, T18N, R2W	SEC. 24, T18N, R2W
OWNER	NORTHERN MICHIGAN EXPL. CO.	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.
COMPLETED	05/05/83	12/23/83	12/23/83
SAMPLED	02/01/85	05/23/84	05/23/84
FORMATION	CRET-FORBES	CRET-FORBES LOWER ZONE TBG.	CRET-FORBES UPPER ZONE CSG.
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6957	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2000	3751	3210
OPEN FLOW, MCFD	3456	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.1	97.2	96.8
ETHANE	0.3	0.2	0.3
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.4	2.5	2.8
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	989	988	986
SPECIFIC GRAVITY	0.567	0.565	0.567

	INDEX 508 SAMPLE 7623	INDEX 509 SAMPLE 3711	INDEX 510 SAMPLE 16255
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	COLUSA	COLUSA	COLUSA
FIELD	BUCKEYE	COLUSA	GRIMES
WELL NAME	WILKINS UNIT B-1	CAPITAL NO. 1	POUNDSTONE NO. 24-1
LOCATION	SEC. 13, T15N, R1W	SEC. 15, T16N, R1W	SEC. 24, T14N, R1W
OWNER	WESTERN GULF OIL CO.	GENERAL PETROLEUM CORP.	TENNECO OIL CO.
COMPLETED	04/26/60	12/06/43	12/01/80
SAMPLED	07/27/60	12/22/43	05/01/81
FORMATION	CRET-	CRET-	CRET-FORBES
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	8112	2919	6979
WELLHEAD PRESSURE,PSIG	4330	1300	3200
OPEN FLOW, MCFD	13000	620	2000
COMPONENT, MOLE PCT			
METHANE	97.3	78.7	98.9
ETHANE	0.7	0.9	0.3
PROPANE	0.1	---	TRACE
N-BUTANE	0.0	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	TRACE	---	0.0
NITROGEN	1.5	20.2	0.7
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.2	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1001	813	1007
SPECIFIC GRAVITY	0.565	0.643	0.560

	INDEX 511 SAMPLE 12330	INDEX 512 SAMPLE 15815	INDEX 513 SAMPLE 7929
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	COLUSA	COLUSA	COLUSA
FIELD	GRIMES SE	GRIMES SW	NOT GIVEN
WELL NAME	BROWNING NO. 1	ARBUCKLE ROAD NO. 1	SAUMREITER NO. 1
LOCATION	SEC. 21, T14N, R1E	SEC. 7, T14N, R1E	SEC. 4, T14N, R1W
OWNER	KING RESOURCES CO.	GAS PRODUCING ENTERPRISES	OCCIDENTAL PETROLEUM CORP.
COMPLETED	03/26/69	01/--/79	--/--/00
SAMPLED	07/01/70	10/24/79	05/11/61
FORMATION	CRET-FORBES	CRET-FORBES	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	8107	8378	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5087	NOT GIVEN
OPEN FLOW, MCFD	10100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.0	99.2	89.8
ETHANE	0.2	0.2	0.4
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.5	9.5
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1006	1008	919
SPECIFIC GRAVITY	0.559	0.558	0.599

	INDEX 514 SAMPLE 10867	INDEX 515 SAMPLE 10868	INDEX 516 SAMPLE 16222
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	COLUSA	COLUSA	CONTRA COSTA
FIELD	WILDCAT	WILDCAT	BRENTWOOD E
WELL NAME	HALSEY NO. 1-3	STEIDLMAYER NO. 1-10	WESTERN-ENDS-NUNN NO. 1
LOCATION	SEC. 3, T15N, R1W	SEC. 10, T15N, R1W	SEC. 8, T1N, R3E
OWNER	GREAT BASINS PETROLEUM CO.	GREAT BASINS PETROLEUM CO.	NATURAL GAS CORP. OF CALIF.
COMPLETED	--/--/00	--/--/00	03/28/80
SAMPLED	02/08/67	02/08/67	03/27/81
FORMATION	NOT GIVEN	NOT GIVEN	EOCE-MEGAMOS
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	4103	8230
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	13300
OPEN FLOW, MCFD	NOT GIVEN	4090	28000
COMPONENT, MOLE PCT			
METHANE	91.1	92.5	92.7
ETHANE	0.6	0.8	3.8
PROPANE	0.1	TRACE	1.5
N-BUTANE	0.0	0.1	0.3
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	8.0	6.7	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.4
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	936	959	1079
SPECIFIC GRAVITY	0.598	0.585	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 517 SAMPLE 17428		INDEX 518 SAMPLE 17429		INDEX 519 SAMPLE 8893	
STATE	CALIFORNIA		CALIFORNIA		CALIFORNIA	
COUNTY	CONTRA COSTA		CONTRA COSTA		CONTRA COSTA	
FIELD	BRENTWOOD E		BRENTWOOD E		CONCORD	
WELL NAME	NGC-CESA NO. 1		NGC-KTSM NO. 1		BOYLAN NO. 1	
LOCATION	SEC. 1, T1N, R2E		SEC. 6, T1N, R3E		SEC. 24, T2N, R2W	
OWNER	WESTERN CONTINENTAL OPER. CO		WESTERN CONTINENTAL OPER. CO		STANDARD OIL CO. OF CALIF.	
COMPLETED	05/17/83		05/--/84		12/23/62	
SAMPLED	03/24/84		09/24/84		05/19/63	
FORMATION	CRET-MASSIVE 3RD ZONE		NOT GIVEN		CRET-FORBES	
GEOLOGIC PROVINCE CODE	730		730		730	
DEPTH, FEET	8000		8357		2208	
WELLHEAD PRESSURE,PSIG	750		720		1139	
OPEN FLOW, MCFD	490		NOT GIVEN		2700	
COMPONENT, MOLE PCT						
METHANE	92.6		92.6		97.8	
ETHANE	4.1		4.2		0.1	
PROPANE	1.2		1.3		TRACE	
N-BUTANE	0.3		0.5		0.0	
ISOBUTANE	0.3		0.2		0.0	
N-PENTANE	0.0		TRACE		0.0	
ISOPENTANE	0.3		0.3		0.0	
CYCLOPENTANE	0.2		0.1		0.0	
HEXANES PLUS	0.2		0.1		0.0	
NITROGEN	0.4		0.8		2.1	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.8		0.0	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1093		1086		991	
SPECIFIC GRAVITY	0.616		0.611		0.564	

	INDEX 520 SAMPLE 13198		INDEX 521 SAMPLE 16730		INDEX 522 SAMPLE 17310	
STATE	CALIFORNIA		CALIFORNIA		CALIFORNIA	
COUNTY	CONTRA COSTA		CONTRA COSTA		CONTRA COSTA	
FIELD	DUTCH SLOUGH		DUTCH SLOUGH		LOS MEDANOS	
WELL NAME	UNION STEFFENSON NO. 1		LOO NO. 1 REDRILL NO. 4		NEELY NO. 1	
LOCATION	SEC. 8, T2N, R3E		SEC. 31, T2N, R3E		SEC. 8, T2N, R1W	
OWNER	TRI-VALLEY OIL & GAS CO.		ATLANTIC OIL CO.		CHEVRON U.S.A., INC.	
COMPLETED	08/29/71		05/28/81		10/01/83	
SAMPLED	04/24/72		12/13/82		05/--/84	
FORMATION	EOCE-MEGANOS		CRET-MASSIVE 3RD ZONE		EOCE-DOMENGINE	
GEOLOGIC PROVINCE CODE	730		730		730	
DEPTH, FEET	7269		8034		3135	
WELLHEAD PRESSURE,PSIG	2035		2882		800	
OPEN FLOW, MCFD	9000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	91.5		95.4		95.8	
ETHANE	3.1		3.6		2.4	
PROPANE	1.2		1.2		0.3	
N-BUTANE	0.2		0.2		0.1	
ISOBUTANE	0.3		0.4		TRACE	
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.6		1.5		TRACE	
CYCLOPENTANE	0.3		0.8		TRACE	
HEXANES PLUS	0.4		0.6		TRACE	
NITROGEN	2.0		0.7		1.1	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.5		0.2	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1088		1157		1025	
SPECIFIC GRAVITY	0.627		0.659		0.577	

	INDEX 523 SAMPLE 17681		INDEX 524 SAMPLE 16233		INDEX 525 SAMPLE 11627	
STATE	CALIFORNIA		CALIFORNIA		CALIFORNIA	
COUNTY	CONTRA COSTA		CONTRA COSTA		CONTRA COSTA	
FIELD	LOS MEDANOS		OAKLEY S		RIVER BREAK	
WELL NAME	PERRY NO. 1		NGC-NUNN NO. 1		MASSONI-DEMARTINI NO. 1	
LOCATION	SEC. 8, T2N, R1W		SEC. 7, T1N, R3E		SEC. 27, T2N, R2E	
OWNER	CHEVRON U.S.A., INC.		WESTERN CONTINENTAL OPER. CO		GREAT YELLOWSTONE CORP.	
COMPLETED	08/24/83		--/--/00		06/18/68	
SAMPLED	05/23/85		04/--/81		08/26/68	
FORMATION	EOCE-DOMENGINE		NOT GIVEN		TERT-MASSIVE	
GEOLOGIC PROVINCE CODE	730		730		730	
DEPTH, FEET	2630		NOT GIVEN		5523	
WELLHEAD PRESSURE,PSIG	850		NOT GIVEN		2246	
OPEN FLOW, MCFD	1800		NOT GIVEN		3700	
COMPONENT, MOLE PCT						
METHANE	97.9		90.5		92.6	
ETHANE	0.3		3.9		3.9	
PROPANE	0.1		1.3		1.7	
N-BUTANE	0.0		0.3		0.6	
ISOBUTANE	0.0		0.2		0.4	
N-PENTANE	0.0		TRACE		0.3	
ISOPENTANE	0.0		0.2		TRACE	
CYCLOPENTANE	0.0		0.1		0.1	
HEXANES PLUS	0.0		0.1		0.2	
NITROGEN	1.2		2.5		0.5	
OXYGEN	0.0		0.5		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.4		0.0	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1000		1055		1105	
SPECIFIC GRAVITY	0.567		0.619		0.618	

	INDEX 526 SAMPLE 11628		INDEX 527 SAMPLE 16226		INDEX 528 SAMPLE 7237	
STATE	CALIFORNIA		CALIFORNIA		CALIFORNIA	
COUNTY	CONTRA COSTA		CONTRA COSTA		CONTRA COSTA	
FIELD	RIVER BREAK		RIVER BREAK		WILLOW PASS	
WELL NAME	TRANSAMERICA NO. 1		AUDREY SMITH NO. 1		FARIA UNIT NO. 1	
LOCATION	SEC. 34, T1N, R2E		SEC. 35, T2N, R2E		SEC. 21, T2N, R1W	
OWNER	GREAT YELLOWSTONE CORP.		WESTERN CONTINENTAL CO.		TRICO OIL & GAS CO.	
COMPLETED	09/22/68		09/06/80		05/31/59	
SAMPLED	08/26/68		04/06/81		10/01/59	
FORMATION	-WILLIAMSON		TERT-MASSIVE		EOCE-	
GEOLOGIC PROVINCE CODE	730		730		730	
DEPTH, FEET	4297		5416		1714	
WELLHEAD PRESSURE,PSIG	1835		NOT GIVEN		625	
OPEN FLOW, MCFD	1900		3500		4300	
COMPONENT, MOLE PCT						
METHANE	93.5		93.4		53.5	
ETHANE	3.3		3.6		0.1	
PROPANE	1.0		1.2		0.0	
N-BUTANE	0.3		0.5		0.0	
ISOBUTANE	0.0		0.2		0.0	
N-PENTANE	0.2		TRACE		0.0	
ISOPENTANE	0.1		0.2		0.0	
CYCLOPENTANE	0.1		0.1		0.0	
HEXANES PLUS	0.3		0.1		0.0	
NITROGEN	1.2		0.9		40.7	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		0.4	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		4.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1074		1076		567	
SPECIFIC GRAVITY	0.605		0.605		0.760	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX SAMPLE 553 1958	INDEX SAMPLE 554 2758	INDEX SAMPLE 555 4859
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	BUTTON WILLOW	BUTTON WILLOW	BUTTON WILLOW
WELL NAME	HARRIS NO. 1	KERN NO. 4	NO. CL 27-6
LOCATION	SEC. 8, T28S, R23E	SEC. 5, T28S, R23E	SEC. 5, T28S, R23E
OWNER	MILHAM EXPLORATION CO.	SEABOARD OIL CO.	STANDARD OIL CO. OF CALIF.
COMPLETED	02/28/29	04/07/28	10/13/49
SAMPLED	03/14/30	06/25/37	02/21/50
FORMATION	PLIO-PASO ROBLES	PLIO-MYA	PLIO-SAN JOAQUIN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	2450	2483	3903
WELLHEAD PRESSURE,PSIG	1040	1050	950
OPEN FLOW, MCFD	NOT GIVEN	8200	400
COMPONENT, MOLE PCT			
METHANE	97.8	97.4	98.1
ETHANE	0.6	0.8	0.4
PROPANE	---	---	0.3
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	0.6	1.5	0.4
OXYGEN	0.3	0.6	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.5	0.0
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1001	987	1034
SPECIFIC GRAVITY	0.570	0.569	0.573

	INDEX SAMPLE 556 15318	INDEX SAMPLE 557 4109	INDEX SAMPLE 558 5219
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	CAL CANAL	ELK HILLS	ELK HILLS
WELL NAME	CHEVRON CAL CANAL NO. 1	NO. 86-22R	NO. X-55
LOCATION	SEC. 31, T28S, R22E	SEC. 22, T30S, R23E	SEC. 30, T30S, R23E
OWNER	OCCIDENTAL EXPL. & PROD. CO.	OFFICE OF NAVAL PET. RESERVE	STANDARD OIL CO. OF CALIF.
COMPLETED	09/09/77	05/03/46	01/10/52
SAMPLED	07/12/78	08/--/46	02/28/52
FORMATION	MIOC-STEVENS	PLIO-SUB MULINIA ZONE	MIOC-CARNEROS
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	11050	2526	9330
WELLHEAD PRESSURE,PSIG	4600	313	4188
OPEN FLOW, MCFD	2200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.0	95.1	83.1
ETHANE	8.6	3.0	8.4
PROPANE	5.6	---	3.2
N-BUTANE	2.4	---	0.8
ISOBUTANE	1.4	---	0.4
N-PENTANE	0.8	---	0.2
ISOPENTANE	1.1	---	0.2
CYCLOPENTANE	0.5	---	0.0
HEXANES PLUS	0.9	---	0.1
NITROGEN	0.2	1.5	0.7
OXYGEN	TRACE	0.4	0.1
ARGON	0.0	---	0.0
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	4.3	0.2	2.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1332	1017	1138
SPECIFIC GRAVITY	0.825	0.579	0.687

	INDEX SAMPLE 559 9302	INDEX SAMPLE 560 5653	INDEX SAMPLE 561 4222
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	ENGLISH COLONY	JOHE RANCH	MCKITTRICK AREA
WELL NAME	KCL 55 NO. 28	HANCOCK NO. 25 A-7	WEST PET NO. 1
LOCATION	SEC. 22, T29S, R26E	SEC. 7, T30S, R21E	SEC. 29, T30S, R22E
OWNER	STANDARD OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	TEXAS CO.
COMPLETED	11/08/63	04/23/54	10/21/46
SAMPLED	04/14/64	07/21/54	01/10/47
FORMATION	MIOC-STEVENS	MIOC-PHACOIDES	MIOC-OCEANIC
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	6968	1502	5113
WELLHEAD PRESSURE,PSIG	2625	408	2651
OPEN FLOW, MCFD	8000	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	86.5	94.9	74.7
ETHANE	5.0	2.6	8.3
PROPANE	3.4	0.5	---
N-BUTANE	1.3	0.2	---
ISOBUTANE	0.9	0.1	---
N-PENTANE	0.4	0.0	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	TRACE	---
NITROGEN	0.5	0.9	2.5
OXYGEN	TRACE	0.0	1.5
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.5	13.0
HELIUM	TRACE	0.03	0.01
HEATING VALUE*	1209	1040	905
SPECIFIC GRAVITY	0.691	0.589	0.741

	INDEX SAMPLE 562 1957	INDEX SAMPLE 563 1622	INDEX SAMPLE 564 3726
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	MIDWAY	MIDWAY-SUNSET	MOUNT POSO
WELL NAME	NOT GIVEN	NOT GIVEN	VEDDER NO. 1-18
LOCATION	SEC. 1, T32S, R23E	NOT GIVEN	SEC. 18, T27S, R28E
OWNER	STANDARD OIL CO. OF CALIF.	MIDWAY GAS CO.	DWIGHT G. VEDDER
COMPLETED	--/--/00	--/--/00	12/27/43
SAMPLED	03/14/30	03/23/28	03/19/44
FORMATION	PLIO-ETCHEGOIN	NOT GIVEN	MIOC-L
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	2500	NOT GIVEN	2440
WELLHEAD PRESSURE,PSIG	300	300	650
OPEN FLOW, MCFD	6000	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	55.9	75.9	98.1
ETHANE	20.8	10.7	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.8	3.4	0.9
OXYGEN	1.7	1.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	11.7	8.8	0.6
HELIUM	0.00	0.00	0.00
HEATING VALUE*	939	961	998
SPECIFIC GRAVITY	0.823	0.713	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 565 SAMPLE 2757	INDEX 566 SAMPLE 5801	INDEX 567 SAMPLE 7706
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	SEMI-TROPIC	SHAFTER	SHALE FLATS AREA
WELL NAME	CONTINENTAL 63-15	LOEPP NO. 63-18	UNIT NO. 15
LOCATION	SEC. 15, T27S, R23E	SEC. 18, T28S, R25E	SEC. 9, T27S, R19E
OWNER	SEABOARD OIL CO.	TWA CAPITAL CO. & GEOCHEMICA	SHELL OIL CO., ET AL.
COMPLETED	07/16/35	12/10/54	07/19/60
SAMPLED	06/28/37	04/08/55	10/06/60
FORMATION	MIOC-	PLIO-ETCHEGOIN	EOCE-M
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	2395	4315	2805
WELLHEAD PRESSURE,PSIG	750	1686	1094
OPEN FLOW, MCFD	17028	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.1	99.3	98.6
ETHANE	0.0	0.1	0.8
PROPANE	---	0.3	TRACE
N-BUTANE	---	TRACE	TRACE
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	1.7	0.0	0.3
OXYGEN	0.6	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.0	0.1
HELIUM	TRACE	0.15	0.02
HEATING VALUE*	984	1016	1013
SPECIFIC GRAVITY	0.571	0.557	0.559

	INDEX 568 SAMPLE 4419	INDEX 569 SAMPLE 8312	INDEX 570 SAMPLE 4872
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KINGS
FIELD	SHEEP SPRINGS	TEN SECTION	HARWESTER
WELL NAME	CYRRIC NO. 12A	KCL-96-36-33	HARWESTER UNIT NO. 1
LOCATION	SEC. 21, T29S, R21E	SEC. 33, T30S, R26E	SEC. 11, T23S, R21E
OWNER	INDEPENDENT EXPLORATION CO.	STANDARD OIL CO. OF CALIF.	SHELL OIL CO.
COMPLETED	10/09/47	08/--/61	02/01/50
SAMPLED	01/12/48	11/26/61	04/19/50
FORMATION	NOT GIVEN	MIOC-U	PLIO-MYA
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	4692	8073	2797
WELLHEAD PRESSURE,PSIG	1900	157	1250
OPEN FLOW, MCFD	5000	4150	
COMPONENT, MOLE PCT			
METHANE	78.3	82.4	98.6
ETHANE	19.7	7.7	0.3
PROPANE	---	4.8	0.1
N-BUTANE	---	1.7	0.1
ISOBUTANE	---	1.1	0.0
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	0.5	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	1.4	0.5	0.7
OXYGEN	0.2	TRACE	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.8	0.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1146	1240	1018
SPECIFIC GRAVITY	0.663	0.716	0.567

	INDEX 571 SAMPLE 4688	INDEX 572 SAMPLE 1936	INDEX 573 SAMPLE 1959
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	KINGS
FIELD	KETTLEMAN	KETTLEMAN HILLS	KETTLEMAN HILLS
WELL NAME	S. F. & F. L. NO. 68-4Z	NO. 8	NO. 8
LOCATION	SEC. 4, T24S, R19E	SEC. 1, T22S, R17E	SEC. 1, T22S, R17E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	--/--/00	12/30/29	12/26/29
SAMPLED	04/08/49	02/17/30	03/14/30
FORMATION	MIOC-L	MIOC-TEMBLOR	MIOC-TEMBLOR
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	10487	6100	6100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2500
OPEN FLOW, MCFD	NOT GIVEN	108000	101000
COMPONENT, MOLE PCT			
METHANE	83.9	66.7	65.2
ETHANE	7.9	30.6	30.5
PROPANE	3.3	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.6	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.5	---	---
NITROGEN	0.2	1.9	3.7
OXYGEN	TRACE	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.5	0.2	0.3
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1202	1224	1207
SPECIFIC GRAVITY	0.699	0.715	0.725

	INDEX 574 SAMPLE 4716	INDEX 575 SAMPLE 5593	INDEX 576 SAMPLE 5594
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	KINGS
FIELD	KETTLEMAN MIDDLE DOME	MCCLURE VALLEY	MCCLURE VALLEY
WELL NAME	S. F. & F. L. 68-9Z	AL&O NO. 22-13X	AL&O NO. 22-13X
LOCATION	SEC. 9, T24S, R19E	SEC. 13, T24S, R17E	SEC. 13, T24S, R17E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/08/49	02/06/54	02/07/54
FORMATION	MIOC-L	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	10805	3551	3611
WELLHEAD PRESSURE,PSIG	6500	800	1500
OPEN FLOW, MCFD	70	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	96.6	96.6
ETHANE	8.7	1.8	1.8
PROPANE	5.7	0.9	0.8
N-BUTANE	2.7	TRACE	0.1
ISOBUTANE	1.2	0.0	0.0
N-PENTANE	1.2	0.1	0.1
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	1.4	TRACE	TRACE
NITROGEN	0.9	0.4	0.4
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.4	0.0	0.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1345	1038	1038
SPECIFIC GRAVITY	0.815	0.575	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 577 SAMPLE 2548	INDEX 578 SAMPLE 4119	INDEX 579 SAMPLE 4598
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	LOS ANGELES
FIELD	NOT GIVEN	TRICO	ALISO CANYON
WELL NAME	WISHON-WATSON CO. WELL	DISCOMBE COMMUNITY NO. 1	FREW NO. 1-5
LOCATION	SEC. 7, T23S, R20E	SEC. 1, T24S, R22E	SEC. 29, T3N, R16W
OWNER	WISHON-WATSON CO.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	--/--/00	08/05/46	07/29/48
SAMPLED	09/09/32	10/--/46	10/25/48
FORMATION	NOT GIVEN	PLIO-	NIOC-
GEOLOGIC PROVINCE CODE	745	745	760
DEPTH, FEET	1241	2468	8360
WELLHEAD PRESSURE, PSIG	NOT GIVEN	1130	3350
OPEN FLOW, MCFD	NOT GIVEN	3000	300
COMPONENT, MOLE PCT			
METHANE	97.1	99.2	82.2
ETHANE	1.0	0.0	16.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	0.0	0.6
OXYGEN	0.5	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.4	0.2
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1002	1005	1134
SPECIFIC GRAVITY	0.573	0.561	0.643

	INDEX 580 SAMPLE 903	INDEX 581 SAMPLE 904	INDEX 582 SAMPLE 905
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	DOMINGUEZ	DOMINGUEZ	DOMINGUEZ
WELL NAME	CALLENDER NO. 1	CALLENDER NO. 2	REYER NO. 4
LOCATION	SEC. 33, T3S, R13W	SEC. 33, T3S, R13W	SEC. 33, T3S, R13W
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/07/24	07/07/24	07/07/24
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	4090	4365	4355
WELLHEAD PRESSURE, PSIG	83	87	32
OPEN FLOW, MCFD	887000	4752	5853
COMPONENT, MOLE PCT			
METHANE	64.6	68.6	59.4
ETHANE	33.1	29.5	37.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	0.8	1.5
OXYGEN	0.7	0.6	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1248	1224	1279
SPECIFIC GRAVITY	0.726	0.709	0.753

	INDEX 583 SAMPLE 1967	INDEX 584 SAMPLE 1968	INDEX 585 SAMPLE 1960
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	INGLEWOOD	INGLEWOOD	SANTA FE SPRINGS
WELL NAME	RICKERS 1-3	RICKERS 1-16	WALKER NO. 11
LOCATION	SEC. 17, T2S, R14W	SEC. 7, T2S, R14W	SEC. 6, T3S, R11W
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	03/17/28	--/--/00	06/25/29
SAMPLED	03/17/30	02/11/30	03/14/30
FORMATION	PLIO-VICKERS	PLIO-VICKERS & MACHADO	PLIO-OCONNELL
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	1671	1475	6296
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.3	84.9	66.5
ETHANE	5.0	10.0	32.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.0	2.6	0.0
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	2.3	0.5
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1025	1039	1260
SPECIFIC GRAVITY	0.591	0.639	0.723

	INDEX 586 SAMPLE 1961	INDEX 587 SAMPLE 1963	INDEX 588 SAMPLE 2681
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	MADERA
FIELD	SANTA FE SPRINGS	SEAL BEACH	CHOWCHILLA
WELL NAME	WALKER NO. 19	NOT GIVEN	CHOWCHILLA NO. 1
LOCATION	SEC. 6, T3S, R11W	NOT GIVEN	SEC. 7, T10S, R14E
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	PURE OIL CO.
COMPLETED	09/21/29	--/--/00	11/13/34
SAMPLED	03/15/30	03/17/30	11/20/34
FORMATION	PLIO-CLARKE	PLIO-	CRET-
GEOLOGIC PROVINCE CODE	760	760	745
DEPTH, FEET	7720	4800	7765
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	3000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	16000
COMPONENT, MOLE PCT			
METHANE	66.6	64.6	39.0
ETHANE	32.7	12.0	1.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.3	20.4	58.9
OXYGEN	0.3	2.9	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.00	0.00	0.02
HEATING VALUE*	1261	869	427
SPECIFIC GRAVITY	0.722	0.716	0.808

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 589 SAMPLE 5447	INDEX 590 SAMPLE 3801	INDEX 591 SAMPLE 3773
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MADERA	MADERA	MADERA
FIELD	CHOWCHILLA	GILL AREA HERMINGHAUS	MOFFAT AREA
WELL NAME	REDMAN-STONE 1-7	GILL NO. 38-18	MOFFAT NO. 1-7
LOCATION	SEC. 7, T10S, R14E	SEC. 18, T13S, R16E	SEC. 7, T12S, R15E
OWNER	TIDEWATER ASSOC. OIL CO.	SHELL OIL CO.	TEXAS CO.
COMPLETED	02/01/53	12/08/43	09/16/43
SAMPLED	04/17/53	04/14/44	04/05/44
FORMATION	MIOC-2ILCH	EOCE-M	EOCE-DOMENGINE
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	2614	4410	3920
WELLHEAD PRESSURE,PSIG	1050	1805	1750
OPEN FLOW, MCFD	1000	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	88.2	88.6	91.2
ETHANE	TRACE	1.4	0.0
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	11.5	9.5	8.3
OXYGEN	0.1	0.4	0.4
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.00	0.00
HEATING VALUE*	894	923	924
SPECIFIC GRAVITY	0.603	0.604	0.592

	INDEX 592 SAMPLE 2704	INDEX 593 SAMPLE 11190	INDEX 594 SAMPLE 2529
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MADERA	MENDOCINO	MERCED
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	CHOWCHILLA NO. 1	FEL-GLENN NO. 9-CORE HOLE	GEORGE BLOSS
LOCATION	SEC. 7, T10S, R14E	SEC. 1, T21N, R10W	SEC. 14, T8S, R13E
OWNER	PURE OIL CO.	CALIF. DEPT. WATER RESOURCES	SAN JOAQUIN LIGHT & POWER CO
COMPLETED	11/14/34	--/--/00	--/--/00
SAMPLED	05/21/35	--/--/00	--/--/00
FORMATION	CRET-	JURA-FRANCISCAN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	725	745
DEPTH, FEET	7768	1350	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1440	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	10000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.5	90.5	71.3
ETHANE	1.9	0.1	0.6
PROPANE	---	0.1	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	59.0	5.1	27.5
OXYGEN	0.6	0.0	0.3
ARGON	---	0.1	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	TRACE	0.3
HELIUM	0.00	0.06	0.01
HEATING VALUE*	424	934	733
SPECIFIC GRAVITY	0.811	0.558	0.676

	INDEX 595 SAMPLE 14313	INDEX 596 SAMPLE 15739	INDEX 597 SAMPLE 17683
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MERCED	MERCED	MERCED
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	PACHECO TUNNEL	GAS SEEP IN LAKE	SLOPE INDICATOR HOLE SI-6
LOCATION	SEC. 14, T10S, R1E	SEC. 18, T10S, R9E	O'NEILL PUMPING PLANT
OWNER	U.S. BUREAU OF RECLAMATION	U.S. BUREAU OF RECLAMATION	U.S. BUREAU OF RECLAMATION
COMPLETED	--/--/00	--/--/00	10/28/80
SAMPLED	12/26/75	08/28/79	05/15/85
FORMATION	JURA-FRANCISCAN	PLIO-PLEISTOCENE	CRET-MARINE
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	130
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	35.1	40.8	37.2
ETHANE	0.1	0.1	0.4
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	63.6	54.8	1.2
OXYGEN	0.0	0.0	0.5
ARGON	0.8	0.7	0.1
HYDROGEN	0.0	0.8	57.7
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.6	0.9
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	365	415	571
SPECIFIC GRAVITY	0.834	0.822	0.302

	INDEX 598 SAMPLE 15969	INDEX 599 SAMPLE 4603	INDEX 600 SAMPLE 955
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MERCED	MONTEREY	NAPA
FIELD	O'NEILL FOREBAY DAM	SAN ARDO	BERRYESSA
WELL NAME	GAS SEEP	FERRINI NO. 73	NO. 5
LOCATION	DOWNSTREAM OF DAM	SEC. 11, T23S, R10E	SEC. 7, T8N, R3W
OWNER	U.S. BUREAU OF RECLAMATION	JERGINS OIL CO.	GRIFFITHS OIL CO.
COMPLETED	--/--/00	07/02/48	--/--/00
SAMPLED	05/08/80	10/21/48	12/26/24
FORMATION	UNKN-ALLUVIAN	MIOC-U	CRET-
GEOLOGIC PROVINCE CODE	745	740	725
DEPTH, FEET	2	1954	3360
WELLHEAD PRESSURE,PSIG	NOT GIVEN	875	160
OPEN FLOW, MCFD	NOT GIVEN	100	2000
COMPONENT, MOLE PCT			
METHANE	1.1	94.2	96.1
ETHANE	0.1	2.7	0.0
PROPANE	TRACE	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	94.7	0.1	2.7
OXYGEN	0.0	0.3	0.7
ARGON	0.8	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.0	2.7	0.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	21	1003	973
SPECIFIC GRAVITY	0.985	0.596	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 601 SAMPLE 1624	INDEX 602 SAMPLE 7647	INDEX 603 SAMPLE 7661
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	ORANGE	ORANGE	ORANGE
FIELD	HUNTINGTON BEACH	SUNSET BEACH	YORBA LINDA
WELL NAME	NOT GIVEN	BOARD OF SUPV. NO. 1	MID CONTINENT NO. 3A
LOCATION	NOT GIVEN	SEC. 29, T5S, R11W	SEC. 16, T3S, R9W
OWNER	MIDWAY GAS CO.	GOLDEN WEST OIL CORP.	MID COUNTIES OIL CORP.
COMPLETED	--/--/00	10/21/55	10/30/56
SAMPLED	03/23/28	08/12/60	08/18/60
FORMATION	NOT GIVEN	MIOC-	PLIO-L
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	NOT GIVEN	7720	2560
WELLHEAD PRESSURE,PSIG	80	1800	610
OPEN FLOW, MCFD	NOT GIVEN	5000	300
COMPONENT, MOLE PCT			
METHANE	67.3	71.3	86.2
ETHANE	24.4	6.5	0.6
PROPANE	---	7.6	0.0
N-BUTANE	---	4.5	0.1
ISOBUTANE	---	0.9	0.1
N-PENTANE	---	1.4	TRACE
ISOPENTANE	---	2.2	0.1
CYCLOPENTANE	---	1.7	TRACE
HEXANES PLUS	---	1.6	0.1
NITROGEN	3.9	0.0	1.3
OXYGEN	0.9	TRACE	0.2
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	3.5	2.2	11.0
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1119	1518	907
SPECIFIC GRAVITY	0.730	0.906	0.681

	INDEX 604 SAMPLE 2555	INDEX 605 SAMPLE 5464	INDEX 606 SAMPLE 4912
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	RIVERSIDE	SACRAMENTO	SACRAMENTO
FIELD	NOT GIVEN	FREEPORT	ISLETON
WELL NAME	FACEMEYER	SIMS COMMUNITY NO. 1	GARDINER NO. 1
LOCATION	SEC. 35, T3S, R2W	SEC. 19, T7N, R5E	SEC. 35, T4N, R3E
OWNER	FACEMEYER	STANDARD OIL CO. OF CALIF.	BRAZOS OIL & GAS CO.
COMPLETED	02/--/32	05/22/52	05/18/48
SAMPLED	10/07/32	05/01/53	05/29/50
FORMATION	NOT GIVEN	CRET-	EOCE-CAPAY
GEOLOGIC PROVINCE CODE	645	730	730
DEPTH, FEET	NOT GIVEN	5778	4494
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1881	1700
OPEN FLOW, MCFD	NOT GIVEN	2000	1000
COMPONENT, MOLE PCT			
METHANE	91.7	87.8	94.6
ETHANE	0.0	0.6	2.6
PROPANE	---	0.6	0.6
N-BUTANE	---	0.0	0.1
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.0
NITROGEN	4.7	11.0	1.6
OXYGEN	0.6	TRACE	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	3.0	0.0	0.1
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	929	916	1031
SPECIFIC GRAVITY	0.606	0.609	0.584

	INDEX 607 SAMPLE 4917	INDEX 608 SAMPLE 17612	INDEX 609 SAMPLE 10294
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SACRAMENTO	SACRAMENTO
FIELD	ISLETON	NOT GIVEN	POPPY RIDGE
WELL NAME	MARIA NO. 1	NOT GIVEN	ATKISON NO. 1
LOCATION	SEC. 1, T3N, R3E	NOT GIVEN	SEC. 9, T6N, R5E
OWNER	BRAZOS OIL & GAS CO.	U.S. BUREAU OF RECLAMATION	MILON L. JOHNSTON
COMPLETED	07/14/48	02/08/85	01/01/62
SAMPLED	05/29/50	03/11/85	11/11/65
FORMATION	EOCE-MIDLAND	NOT GIVEN	CRET-F ZONE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	4595	NOT GIVEN	7300
WELLHEAD PRESSURE,PSIG	1623	NOT GIVEN	2600
OPEN FLOW, MCFD	500	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	94.2	69.7	72.4
ETHANE	2.8	TRACE	0.3
PROPANE	0.7	TRACE	0.0
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.4	16.2	27.3
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.3	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	1.0	0.0
CARBON DIOXIDE	0.1	12.6	0.0
HELIUM	TRACE	TRACE	0.04
HEATING VALUE*	1054	712	739
SPECIFIC GRAVITY	0.598	0.753	0.669

	INDEX 610 SAMPLE 16719	INDEX 611 SAMPLE 10944	INDEX 612 SAMPLE 16552
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SACRAMENTO	SACRAMENTO
FIELD	SACRAMENTO AIRPORT	SHERMAN ISLAND	STONE LAKE
WELL NAME	CHILTON NO. 1-2	REYNOLDS UNIT 1 NO. 4	ELLIOTT RANCH NO. 1-73
LOCATION	SEC. 2, T9N, R3E	SEC. 27, T2N, R2E	SEC. 1, T6N, R4E
OWNER	SHELL CALIFORNIA PROD., INC.	OCCIDENTAL PETROLEUM CORP.	ARGO PETROLEUM CORP.
COMPLETED	05/04/82	09/19/66	06/15/82
SAMPLED	11/30/82	04/16/67	06/15/82
FORMATION	CRET-MORENO	PALE-ANDERSON	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	3060	6105	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1130	2450	1100
OPEN FLOW, MCFD	500	6842	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.3	93.7	87.3
ETHANE	TRACE	1.8	0.3
PROPANE	0.1	0.5	0.1
N-BUTANE	0.2	0.2	0.0
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	28.5	3.3	12.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	749	1018	893
SPECIFIC GRAVITY	0.688	0.594	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 613 SAMPLE 7088	INDEX 614 SAMPLE 1620	INDEX 615 SAMPLE 9536
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SAN BERNARDINO	SAN BERNARDINO
FIELD	WALNUT GROVE	BREA	NOT GIVEN
WELL NAME	FONG UNIT NO. 1	NOT GIVEN	NOT GIVEN
LOCATION	SEC. 2, T4N, R4E	NOT GIVEN	SEC. 11, T1N, R4W
OWNER	BRAZOS OIL & GAS CO.	MIDWAY GAS CO.	CAMPUS CRUSADE FOR CHRIST
COMPLETED	04/19/59	--/--/00	05/--/63
SAMPLED	06/04/59	03/23/28	08/13/64
FORMATION	EOCE-MEGANOS	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	640	640
DEPTH, FEET	4566	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1800	250	NOT GIVEN
OPEN FLOW, MCFD	11000	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	95.4	66.3	8.3
ETHANE	0.2	31.7	0.0
PROPANE	0.0	---	0.0
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	4.4	1.2	98.1
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	1.4
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.01	0.00	0.15
HEATING VALUE*	970	1240	3
SPECIFIC GRAVITY	0.575	0.723	0.972

	INDEX 616 SAMPLE 10429	INDEX 617 SAMPLE 16326	INDEX 618 SAMPLE 3751
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	BOULDIN ISLAND	BUTTES-COLDANI	LODI
WELL NAME	WEST CAL. CAN. NO. 5	COLDANI NO. 15-44	COMMUNITY 9 NO. 1
LOCATION	SEC. 7, T3N, R4E	SEC. 15, T3N, R5E	SEC. 9, T4N, R7E
OWNER	SIGNAL OIL & GAS CO.	ARGO PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	10/01/65	08/28/81	04/03/43
SAMPLED	02/28/66	08/31/81	04/01/44
FORMATION	EOCE-CAPAY	CRET-STARKEY	EOCE-DOMENGINE
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	4300	NOT GIVEN	2240
WELLHEAD PRESSURE,PSIG	1725	NOT GIVEN	934
OPEN FLOW, MCFD	3800	2525	5000
COMPONENT, MOLE PCT			
METHANE	92.4	91.6	71.7
ETHANE	0.4	0.2	2.8
PROPANE	0.1	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	7.1	8.1	25.1
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.01	0.01	0.00
HEATING VALUE*	946	931	777
SPECIFIC GRAVITY	0.587	0.588	0.674

	INDEX 619 SAMPLE 3753	INDEX 620 SAMPLE 7599	INDEX 621 SAMPLE 7600
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	LODI	MCMULLIN RANCH	MCMULLIN RANCH
WELL NAME	COMMUNITY 10 NO. 1	SIGNET-WHITING 66-23	SIGNET-PERRIN 33-25
LOCATION	SEC. 10, T4N, R7E	SEC. 23, T2S, R6E	SEC. 25, T2S, R6E
OWNER	AMERADA PETROLEUM CORP.	GREAT BASINS PETROLEUM CO.	GREAT BASINS PETROLEUM CO.
COMPLETED	06/15/43	05/05/60	05/27/60
SAMPLED	04/01/44	07/10/60	07/10/60
FORMATION	EOCE-DOMENGINE	CRET-TRACY 1ST	CRET-TRACY 1ST
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2380	5925	5266
WELLHEAD PRESSURE,PSIG	935	2440	2200
OPEN FLOW, MCFD	5000	5000	10800
COMPONENT, MOLE PCT			
METHANE	75.0	84.8	84.9
ETHANE	0.0	0.7	0.7
PROPANE	---	0.6	0.1
N-BUTANE	---	TRACE	TRACE
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	24.7	13.4	13.8
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.2	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.00	0.01	0.01
HEATING VALUE*	760	897	869
SPECIFIC GRAVITY	0.658	0.622	0.623

	INDEX 622 SAMPLE 2549	INDEX 623 SAMPLE 2715	INDEX 624 SAMPLE 11445
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	NOT GIVEN	NOT GIVEN	RIPON W
WELL NAME	SAN JOAQUIN LIGHT&POWER CO.	F. D. L. NO. 2	ALPINE-GREAT BASIN NO. 1-28
LOCATION	CITY OF STOCKTON	SEC. 15, T2S, R5E	SEC. 28, T2S, R7E
OWNER	PACIFIC GAS & ELECTRIC CO.	AMERADA PETROLEUM CORP.	GREAT BASINS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	12/29/67
SAMPLED	09/12/32	12/13/35	04/10/68
FORMATION	NOT GIVEN	CRET-TRACY	CRET-BLEWETT
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	3000	4803	5125
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1559	2040
OPEN FLOW, MCFD	NOT GIVEN	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.0	86.2	85.6
ETHANE	1.0	5.0	0.8
PROPANE	---	---	0.2
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	30.1	18.6	12.6
OXYGEN	2.1	0.2	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.0	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	687	927	907
SPECIFIC GRAVITY	0.783	0.614	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 625 SAMPLE 10858	INDEX 626 SAMPLE 7449	INDEX 627 SAMPLE 9216
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	ROBERTS ISLAND	STATEN ISLAND	STATEN ISLAND
WELL NAME	DE CARLI NO. 2-3	M & T NO. 2	MILTON & TOWNE A NO. 1
LOCATION	SEC. 3, T1N, R5E	SEC. 14, T4N, R4E	SEC. 13, T4N, R4E, MDB&M SUR
OWNER	ARCADY OIL CO.	SUNRAY-BRAZOS-VISTARIO	BRAZOS OIL & GAS CO.
COMPLETED	--/--/00	08/10/59	08/18/63
SAMPLED	01/31/67	02/14/60	01/07/64
FORMATION	-DE CARLI	PENN-WEWOKA M	CRET-WINTERS
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6496	4096	8463
WELLHEAD PRESSURE,PSIG	2500	1625	3365
OPEN FLOW, MCFD	NOT GIVEN	8600	28000
COMPONENT, MOLE PCT			
METHANE	92.4	92.5	90.5
ETHANE	0.5	0.2	8.5
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.0	7.0	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	948	941	928
SPECIFIC GRAVITY	0.587	0.584	0.595

	INDEX 628 SAMPLE 2731	INDEX 629 SAMPLE 3752	INDEX 630 SAMPLE 14626
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	STOCKTON	THORNTON	UNION ISLAND
WELL NAME	MCDONALD ISL. FARMS NO. 1	MCGILLIVRAY COMM. NO. 1	YAMADA NO. 1
LOCATION	SEC. 25, T2N, R4E	SEC. 29, T5N, R5E	SEC. 16, T1S, R5E
OWNER	STANDARD OIL CO. OF CALIF.	AMERADA PETROLEUM CORP.	UNION OIL CO. OF CALIF.
COMPLETED	05/30/36	03/08/44	03/--/75
SAMPLED	09/16/36	04/01/44	04/01/76
FORMATION	EOCE-	EOCE-CAPAY	CRET-WINTERS
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	5176	3333	10000
WELLHEAD PRESSURE,PSIG	2086	1382	4250
OPEN FLOW, MCFD	26647	5000	7000
COMPONENT, MOLE PCT			
METHANE	93.6	92.2	87.0
ETHANE	0.0	0.9	0.4
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	5.5	6.7	11.8
OXYGEN	0.7	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.0	0.6
HELIUM	0.02	0.00	TRACE
HEATING VALUE*	948	950	891
SPECIFIC GRAVITY	0.583	0.588	0.612

	INDEX 631 SAMPLE 11237	INDEX 632 SAMPLE 2764	INDEX 633 SAMPLE 1970
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN LUIS OBISPO	SANTA BARBARA
FIELD	VERNALIS	TEMBOR	ELWOOD
WELL NAME	NAVARRA NO. 1	TEMBOR OIL CO. NO. 1	BLUE GOOSE
LOCATION	SEC. 29, T3S, R6E	SEC. 22, T31S, R21E	SEC. 16, T4N, R29W
OWNER	W. E. STRANGMAN	STANDARD OIL CO. OF CALIF.	STANDARD GASOLINE CO.
COMPLETED	--/--/00	--/--/00	11/16/29
SAMPLED	12/06/67	09/04/37	03/18/30
FORMATION	NOT GIVEN	MIOC-VAQUEROS	MIOC-VAQUEROS
GEOLOGIC PROVINCE CODE	730	740	750
DEPTH, FEET	NOT GIVEN	3045	3435
WELLHEAD PRESSURE,PSIG	NOT GIVEN	165	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	18	2500
COMPONENT, MOLE PCT			
METHANE	88.7	76.8	56.8
ETHANE	0.6	18.9	42.3
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	10.4	3.5	0.4
OXYGEN	0.1	0.6	0.3
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	912	1117	1335
SPECIFIC GRAVITY	0.603	0.668	0.769

	INDEX 634 SAMPLE 2565	INDEX 635 SAMPLE 17831	INDEX 636 SAMPLE 14419
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SANTA BARBARA	SANTA BARBARA	SHASTA
FIELD	GOLETA	MOLINO	NOT GIVEN
WELL NAME	NO. 1	MOLINO NO. 7	DRAINAGE HOLE
LOCATION	SEC. 21, T4N, R28W	SEC. 8, T4N, R31W	WHISKEYTOWN DAMSITE
OWNER	GENERAL PETROLEUM CORP. OF C	PHILLIPS PETROLEUM CO.	U.S., BUREAU OF RECLAMATION
COMPLETED	07/14/32	--/--/83	--/--/65
SAMPLED	10/18/32	09/16/85	07/23/75
FORMATION	NOT GIVEN	EOCE-MATILIJA	DEVO-
GEOLOGIC PROVINCE CODE	750	750	715
DEPTH, FEET	4182	10195	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1680	4300	NOT GIVEN
OPEN FLOW, MCFD	58000	25000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	88.5	68.4
ETHANE	8.5	5.5	0.1
PROPANE	---	2.3	TRACE
N-BUTANE	---	0.7	0.0
ISOBUTANE	---	0.5	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.4	0.0
CYCLOPENTANE	---	0.2	0.0
HEXANES PLUS	---	0.4	0.0
NITROGEN	0.2	1.0	30.7
OXYGEN	0.7	0.1	0.0
ARGON	---	TRACE	0.5
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	TRACE
CARBON DIOXIDE	0.0	0.2	0.5
HELIUM	0.00	TRACE	0.01
HEATING VALUE*	1078	1149	695
SPECIFIC GRAVITY	0.601	0.655	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 637 SAMPLE 16575	INDEX 638 SAMPLE 2771	INDEX 639 SAMPLE 4011
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SHASTA	SISKIYOU	SOLANO
FIELD	WHISKEYTOWN DAM	NOT GIVEN	CACHE SLOUGH AREA
WELL NAME	TUNNEL OUTLET AT DAM	GAS SEEP AT BOGUS CREEK	CAL. PAC. CORP. NO. 2
LOCATION	OUTLET WORK TUNNEL - SEEP	SEC. 24, T47N, R5W	SEC. 6, T4N, R3E
OWNER	U.S. BUREAU OF RECLAMATION	R. S. BRADLEY	STANDARD OIL CO. OF CALIF.
COMPLETED	--/--/00	--/--/00	03/02/45
SAMPLED	06/--/82	11/01/37	04/26/45
FORMATION	DEVO-BALAKALA METARHYOLITE	PLIE-TUFFA	EOCE-MIDLAND
GEOLOGIC PROVINCE CODE	715	715	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4810
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1598
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	8.9	0.0	90.2
ETHANE	TRACE	0.0	5.6
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	72.1	4.2	0.0
OXYGEN	18.3	0.2	0.2
ARGON	0.9	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	TRACE	---	---
CARBON DIOXIDE	1.9	95.6	0.0
HELIUM	TRACE	0.60	TRACE
HEATING VALUE*	111	0	975
SPECIFIC GRAVITY	0.989	1.505	0.598

	INDEX 640 SAMPLE 4613	INDEX 641 SAMPLE 11106	INDEX 642 SAMPLE 16936
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	DENVERTON	DENVERTON	DIXON CREEK
WELL NAME	PETERSON NO. 1	LAMBIE NO. 1	SCHROEDER UNIT NO. 1
LOCATION	SEC. 25, T5N, R1W	SEC. 9, T4N, R1E	SEC. 9, T7N, R1E, MDB&M
OWNER	HONOLULU OIL CORP.	MOBIL OIL CORP.	MILLIARD OIL & GAS, INC.
COMPLETED	08/27/48	08/13/67	12/29/82
SAMPLED	11/02/48	09/08/67	03/31/83
FORMATION	EOCE-L	EOCE-ANDERSON-WAGENET	CRET-WINTERS
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1425	8587	6326
WELLHEAD PRESSURE,PSIG	900	2810	2410
OPEN FLOW, MCFD	NOT GIVEN	6000	3536
COMPONENT, MOLE PCT			
METHANE	68.2	91.5	87.8
ETHANE	18.5	2.6	3.2
PROPANE	---	0.9	1.3
N-BUTANE	---	0.2	0.3
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	13.8	3.7	5.3
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.3
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1022	1032	1020
SPECIFIC GRAVITY	0.703	0.612	0.626

	INDEX 643 SAMPLE 4018	INDEX 644 SAMPLE 4371	INDEX 645 SAMPLE 11302
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	KIRBY HILL	KIRBY HILL	LINDSEY SLOUGH
WELL NAME	LAMBIE NO. 1A	WAGENET NO. 2	PETERSEN ESTATE NO. 2
LOCATION	SEC. 24, T4N, R1W	SEC. 19, T4N, R1E	SEC. 34, T5N, R2E
OWNER	SHELL OIL CO.	SHELL OIL CO.	AMERADA PETROLEUM CORP.
COMPLETED	01/10/45	04/30/47	--/--/00
SAMPLED	04/13/45	10/13/47	--/--/00
FORMATION	EOCE-	EOCE-	CRET-PETERSON
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2273	5398	9057
WELLHEAD PRESSURE,PSIG	1128	2360	NOT GIVEN
OPEN FLOW, MCFD	3980	17500	4728
COMPONENT, MOLE PCT			
METHANE	97.0	89.1	90.7
ETHANE	0.4	5.5	3.9
PROPANE	---	---	1.3
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.1
NITROGEN	1.3	4.5	2.5
OXYGEN	0.8	0.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.2	0.0
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	998	1008	1069
SPECIFIC GRAVITY	0.571	0.606	0.622

	INDEX 646 SAMPLE 11303	INDEX 647 SAMPLE 15996	INDEX 648 SAMPLE 4226
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	LINDSEY SLOUGH	LINDSEY SLOUGH	MAINE PRAIRIE
WELL NAME	PETERSEN ESTATE NO. 2	HASTING RANCH NO. 1-21	I & L WIEMAN
LOCATION	SEC. 34, T5N, R2E	SEC. 21, T 5N, R 2E	SEC. 26, T6N, R2E
OWNER	AMERADA PETROLEUM CORP.	MCOR OIL & GAS CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	01/28/80	03/02/45
SAMPLED	--/--/00	06/27/80	12/27/46
FORMATION	-K-1 ZONE	CRET-PETERSON	EOCE-CAPAY
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	10122	9335	4763
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3250	1911
OPEN FLOW, MCFD	5232	16000	6000
COMPONENT, MOLE PCT			
METHANE	86.7	91.7	97.3
ETHANE	4.2	4.5	0.6
PROPANE	1.4	1.5	---
N-BUTANE	0.4	0.5	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	5.2	1.4	1.4
OXYGEN	0.8	TRACE	0.3
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1045	1083	996
SPECIFIC GRAVITY	0.643	0.615	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 649 SAMPLE 10620	INDEX 650 SAMPLE 10621	INDEX 651 SAMPLE 11471
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	MAINE PRAIRIE	MAINE PRAIRIE	MILLAR W
WELL NAME	MILLER UNIT NO. 1	MILLER UNIT NO. 1	CAMPBELL RANCH NO. 1
LOCATION	SEC. 3, T5N, R2E	SEC. 3, T5N, R2E	SEC. 4, T6N, R2E
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	09/10/65	09/10/65	10/25/68
SAMPLED	06/13/66	06/13/66	05/09/68
FORMATION	EOCE-MARTINEZ	EOCE-MARTINEZ	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6550	6425	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2192	2255	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	91.1	93.1
ETHANE	3.7	3.8	1.8
PROPANE	1.4	1.5	TRACE
N-BUTANE	0.4	0.3	0.0
ISOBUTANE	0.2	0.3	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.3	0.3	0.0
HEXANES PLUS	0.4	0.3	0.0
NITROGEN	2.0	1.9	4.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1098	1090	976
SPECIFIC GRAVITY	0.630	0.624	0.584

	INDEX 652 SAMPLE 16639	INDEX 653 SAMPLE 2730	INDEX 654 SAMPLE 11424
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	NOT GIVEN	RIO VISTA	RIO VISTA
WELL NAME	BOTTOM MUD IN RESERVOIR	EMIGH NO. 1	EMIGH NO. 12
LOCATION	SOLANO RES. ON PUTAHN CR.	SEC. 26, T4N, R2E	SEC. 27, T4N, R2E
OWNER	U.S. BUREAU OF RECLAMATION	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	06/10/36	01/15/68
SAMPLED	09/07/82	09/16/36	03/29/68
FORMATION	HOLO-	EOCE-EMIGH	CRET-MCCORMICK
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	4278	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1724	2500
OPEN FLOW, MCFD	NOT GIVEN	81255	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.9	94.7	93.2
ETHANE	TRACE	3.1	3.4
PROPANE	0.0	---	1.0
N-BUTANE	0.0	---	0.4
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.1
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.1
NITROGEN	59.7	1.6	1.5
OXYGEN	1.7	0.4	0.0
ARGON	0.8	---	0.0
HYDROGEN	0.1	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.2	0.1
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	374	1015	1062
SPECIFIC GRAVITY	0.824	0.581	0.603

	INDEX 655 SAMPLE 11212	INDEX 656 SAMPLE 11213	INDEX 657 SAMPLE 3749
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	SHERMAN ISLAND	SHERMAN ISLAND	WILDCAT
WELL NAME	DECKER ISLAND UNIT 1, NO. 2	DECKER ISLAND UNIT 1, NO. 1	S. O. HONKER COMM. 1-A
LOCATION	SEC. 27, T3N, R2E	SEC. 27, T3N, R2E	SEC. 25, T3N, R1W
OWNER	SIGNAL OIL & GAS CO.	SIGNAL OIL & GAS CO.	STANDARD OIL CO. OF CALIF.
COMPLETED	09/17/66	09/17/66	--/--/00
SAMPLED	11/06/67	11/06/67	03/29/44
FORMATION	PALE-ANDERSON	EOCE-HAMILTON	EOCE-
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6165	6165	7190
WELLHEAD PRESSURE,PSIG	2250	2250	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.3	94.9	88.2
ETHANE	1.9	1.3	7.1
PROPANE	0.5	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	3.5	3.5	3.4
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.5
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1028	985	1021
SPECIFIC GRAVITY	0.600	0.574	0.612

	INDEX 658 SAMPLE 17882	INDEX 659 SAMPLE 2434	INDEX 660 SAMPLE 2616
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	STANISLAUS	SUTTER
FIELD	WINTERS	WATERFORD	MARYSVILLE BUTTES
WELL NAME	MARGARET EDWARDS NO. 1	WATERFORD NO. 1	BUTTES NO. 1
LOCATION	SEC. 4, T7N, R1E	SEC. 34, T3S, R11E	SEC. 35, T16N, R1E
OWNER	HILLIARD OIL & GAS, INC.	J. A. WENGER & ASSOC.	BUTTES OILFIELDS, INC.
COMPLETED	05/04/84	--/--/00	02/02/33
SAMPLED	10/24/85	11/09/31	04/18/33
FORMATION	CRET-STARKEY	NOT GIVEN	CRET-CHICO
GEOLOGIC PROVINCE CODE	730	745	730
DEPTH, FEET	4572	390	2188
WELLHEAD PRESSURE,PSIG	1755	NOT GIVEN	1235
OPEN FLOW, MCFD	1389	NOT GIVEN	3861
COMPONENT, MOLE PCT			
METHANE	95.0	46.8	96.5
ETHANE	0.9	0.5	0.8
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	3.9	51.5	1.8
OXYGEN	TRACE	0.6	0.8
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.02	TRACE	0.00
HEATING VALUE*	981	483	992
SPECIFIC GRAVITY	0.577	0.779	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 661 SAMPLE 2747	INDEX 662 SAMPLE 16999	INDEX 663 SAMPLE 11363
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SUTTER	SUTTER	SUTTER
FIELD	MARYSVILLE BUTTES	NOT GIVEN	SUTTER BUTTES
WELL NAME	SOPHIA DAVIS NO. 1	O.P.I. MC LURE NO. 1-5	BUTTES COMMUNITY 2 NO. 81
LOCATION	SEC. 2, T15N, R1E	SEC. 5, T14N, R2E	SEC. 31, T15N, R1E
OWNER	BUTTES OILFIELDS, INC.	NATURAL GAS CORP. OF CALIF.	SANTA FE DRILLING CO.
COMPLETED	02/09/33	--/--/82	09/02/67
SAMPLED	03/12/37	08/--/83	03/03/68
FORMATION	CRET-CHICO	CRET-F ZONE	CRET-FORBES
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2450	6082	6390
WELLHEAD PRESSURE,PSIG	1420	2420	4000
OPEN FLOW, MCFD	3425	1463	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.5	93.4	97.2
ETHANE	0.0	0.2	0.3
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	13.3	5.9	2.4
OXYGEN	3.9	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	836	951	990
SPECIFIC GRAVITY	0.634	0.580	0.565

	INDEX 664 SAMPLE 17218	INDEX 665 SAMPLE 3984	INDEX 666 SAMPLE 4056
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SUTTER	TEHAMA	TEHAMA
FIELD	TISDALE	CORNING	CORNING
WELL NAME	SEAWARD-SHANNON NO. 1-32	SALDUBEHERE NO. 1	SALDUBEHERE NO. 1
LOCATION	SEC. 32, T15N, R2E	SEC. 12, T24N, R3W	SEC. 12, T24N, R3W
OWNER	NATURAL GAS CORP. OF CALIF.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	02/21/84	10/21/44	10/21/45
SAMPLED	03/19/84	01/10/45	08/31/45
FORMATION	CRET-FORBES	PLIO-TEHAMA	PLIO-TEHAMA
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	6062	1387	1070
WELLHEAD PRESSURE,PSIG	3059	660	560
OPEN FLOW, MCFD	NOT GIVEN	17	17000
COMPONENT, MOLE PCT			
METHANE	97.9	74.6	66.7
ETHANE	0.2	24.4	3.9
PROPANE	0.0	---	---
N-BUTANE	TRACE	---	0.0
ISOBUTANE	0.0	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	1.5	0.0	29.2
OXYGEN	TRACE	0.6	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	TRACE	0.00	0.03
HEATING VALUE*	1000	1193	746
SPECIFIC GRAVITY	0.563	0.682	0.696

	INDEX 667 SAMPLE 4057	INDEX 668 SAMPLE 5250	INDEX 669 SAMPLE 5251
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TEHAMA	TEHAMA
FIELD	CORNING	CORNING	CORNING
WELL NAME	SALDUBEHERE NO. 1	CORNING COMMUNITY NO. 1A	CORNING COMMUNITY NO. 1-A
LOCATION	SEC. 12, T24N, R3W	SEC. 1, T24N, R6W	SEC. 1, T24N, R3W
OWNER	SUPERIOR OIL CO.	BUTTES OILFIELDS, INC.	BUTTES OILFIELDS, INC.
COMPLETED	10/21/45	07/09/49	07/09/49
SAMPLED	08/31/45	05/24/52	05/24/52
FORMATION	PLIO-TEHAMA	PLIO-TEHAMA	PLIO-TEHAMA
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1070	1427	1427
WELLHEAD PRESSURE,PSIG	670	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	17000	16760	16760
COMPONENT, MOLE PCT			
METHANE	75.0	75.2	75.1
ETHANE	1.1	0.0	TRACE
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.1	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.1	TRACE
NITROGEN	23.8	24.5	24.8
OXYGEN	0.0	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.01	0.10
HEATING VALUE*	779	770	761
SPECIFIC GRAVITY	0.659	0.660	0.658

	INDEX 670 SAMPLE 5252	INDEX 671 SAMPLE 5253	INDEX 672 SAMPLE 5258
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TEHAMA	TEHAMA
FIELD	CORNING	CORNING	CORNING S
WELL NAME	CORNING COMMUNITY NO. 1	CORNING COMMUNITY NO. 1	WELL NO. 8
LOCATION	SEC. 1, T24N, R3W	SEC. 1, T24N, R3W	SEC. 31, T24N, R2W
OWNER	BUTTES OILFIELDS, INC.	BUTTES OILFIELDS, INC.	BUTTES OILFIELDS, INC.
COMPLETED	06/12/49	--/--/00	--/--/00
SAMPLED	05/24/52	05/24/52	06/25/52
FORMATION	PLIO-TEHAMA	PLIO-TEHAMA	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	1407	1407	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.6	75.1	84.8
ETHANE	0.0	TRACE	0.1
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	24.4	24.5	14.7
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	766	769	867
SPECIFIC GRAVITY	0.655	0.661	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 673 SAMPLE 10557	INDEX 674 SAMPLE 11098	INDEX 675 SAMPLE 11099
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TEHAMA	TEHAMA
FIELD	CORNING S	RICE CREEK	RICE CREEK
WELL NAME	BITHELL ESTATE UNIT NO. 1	LEPP NO. 1	ZIMMERMAN A-1
LOCATION	SEC. 12, T23N, R3W	NOT GIVEN	SEC. 23, T23N, R3W
OWNER	BUTTES GAS & OIL CO.	MCCULLOCH OIL CORP. OF CALIF	MCCULLOCH OIL CORP. OF CALIF
COMPLETED	02/20/66	08/01/66	07/01/66
SAMPLED	05/02/66	09/07/67	09/07/67
FORMATION	CRET-KIONE	CRET-FORBES	CRET-FORBES
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2446	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1010	2390	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.8	96.3	97.5
ETHANE	0.0	0.2	0.2
PROPANE	0.0	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	5.2	2.8	1.9
OXYGEN	0.0	0.6	0.4
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.01	0.01	0.04
HEATING VALUE*	960	979	991
SPECIFIC GRAVITY	0.576	0.570	0.565

	INDEX 676 SAMPLE 16084	INDEX 677 SAMPLE 4089	INDEX 678 SAMPLE 3930
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	TEHAMA	TULARE	VENTURA
FIELD	RICE CREEK E	TRICO	NOT GIVEN
WELL NAME	BETTENCOURT NO.1	ATWELL ISLAND COMM. NO. 1	LEONARD WELL
LOCATION	SEC. 28, T23N, R2W	SEC. 7, T24S, R23E	NOT GIVEN
OWNER	OXY PETROLEUM, INC.	STANDARD OIL CO. OF CALIF.	JAMES LEONARD INVESTMENT CO.
COMPLETED	--/--/00	10/15/45	03/--/44
SAMPLED	09/29/80	10/15/45	09/20/44
FORMATION	CRET-FORBES	PLIO-SAN JOAQUIN M	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	745	755
DEPTH, FEET	4946	3168	428
WELLHEAD PRESSURE,PSIG	2220	1400	NOT GIVEN
OPEN FLOW, MCFD	2762	24000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.5	98.2	64.8
ETHANE	0.4	1.4	----
PROPANE	TRACE	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	4.8	0.0	33.1
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.4	2.0
HELIUM	0.02	0.00	0.02
HEATING VALUE*	964	1020	656
SPECIFIC GRAVITY	0.575	0.565	0.711

	INDEX 679 SAMPLE 2221	INDEX 680 SAMPLE 1621	INDEX 681 SAMPLE 1623
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	VENTURA	VENTURA	VENTURA
FIELD	PIRU	NOT GIVEN	NOT GIVEN
WELL NAME	SNOW NO. 1 A	NOT GIVEN	NOT GIVEN
LOCATION	SEC. 4, T4N, R18W	VENTURA FUEL CO.	RIDWAY GAS CO.
OWNER	BOLSA CHICA OIL CORP.	--/--/00	--/--/00
COMPLETED	08/19/30	03/23/28	03/23/28
SAMPLED	10/20/30	NOT GIVEN	NOT GIVEN
FORMATION	MIOC-	755	755
GEOLOGIC PROVINCE CODE	755	NOT GIVEN	NOT GIVEN
DEPTH, FEET	2496	350	375
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	73.1	81.9	82.9
ETHANE	12.1	17.5	16.5
PROPANE	----	---	---
N-BUTANE	----	---	---
ISOBUTANE	----	---	---
N-PENTANE	----	---	---
ISOPENTANE	----	---	---
CYCLOPENTANE	----	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	0.1	0.2
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	14.2	0.3	0.3
HELIUM	0.00	0.00	0.00
HEATING VALUE*	957	1143	1135
SPECIFIC GRAVITY	0.756	0.645	0.641

	INDEX 682 SAMPLE 10716	INDEX 683 SAMPLE 10921	INDEX 684 SAMPLE 4432
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	CLARKSBURG	CLARKSBURG	DUNNIGAN HILLS
WELL NAME	SHERMAN UNIT NO. 5	PARSONS UNIT ONE NO. 1	DONAHUE NO. 1
LOCATION	SEC. 32, T7N, R4E	SEC. 24, T7N, R3E	SEC. 22, T11N, R1W
OWNER	OCCIDENTAL PETROLEUM CORP.	OCCIDENTAL PETROLEUM CORP.	SUPERIOR OIL CO.
COMPLETED	06/20/66	11/05/66	01/20/48
SAMPLED	09/12/66	--/--/00	01/24/48
FORMATION	CRET-FORBES	CRET-WINTERS	ECE-
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	11064	7300	2480
WELLHEAD PRESSURE,PSIG	4050	NOT GIVEN	1075
OPEN FLOW, MCFD	1122	5102	5000
COMPONENT, MOLE PCT			
METHANE	87.2	87.3	93.7
ETHANE	0.4	0.8	0.7
PROPANE	0.1	0.1	----
N-BUTANE	0.0	0.0	----
ISOBUTANE	0.0	0.0	----
N-PENTANE	0.0	0.0	----
ISOPENTANE	0.0	0.0	----
CYCLOPENTANE	0.0	0.0	----
HEXANES PLUS	0.0	0.0	----
NITROGEN	12.1	11.7	5.0
OXYGEN	0.1	TRACE	0.5
ARGON	TRACE	TRACE	----
HYDROGEN	0.0	0.0	----
HYDROGEN SULFIDE**	0.0	0.0	----
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	894	901	962
SPECIFIC GRAVITY	0.610	0.609	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 685 SAMPLE 4599	INDEX 686 SAMPLE 4877	INDEX 687 SAMPLE 9909
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	DUNNIGAN HILLS	DUNNIGAN HILLS	FAIRFIELD KNOLLS
WELL NAME	HERMLE NO. 1	DUNNIGAN UNIT NO. 1	CORCORAN 33-4
LOCATION	SEC. 22, T11N, R1W	SEC. 27, T11N, R1W	SEC. 33, T9N, R1E
OWNER	STANDARD OIL CO. OF CALIF.	TEXAS CO.	FRANCO-WESTERN OIL CO.
COMPLETED	07/29/48	09/27/47	04/01/64
SAMPLED	10/28/48	04/29/50	05/26/65
FORMATION	-HERMLE	CRET-U	CRET-NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2472	2630	5187
WELLHEAD PRESSURE,PSIG	900	1080	1918
OPEN FLOW, MCFD	3450	750	23200
COMPONENT, MOLE PCT			
METHANE	94.3	94.9	90.7
ETHANE	0.5	0.1	0.5
PROPANE	---	0.1	0.1
N-BUTANE	---	0.1	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.1	0.0
NITROGEN	4.7	4.6	8.6
OXYGEN	0.3	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.01	0.02	0.02
HEATING VALUE*	964	974	930
SPECIFIC GRAVITY	0.580	0.581	0.593

	INDEX 688 SAMPLE 10694	INDEX 689 SAMPLE 16225	INDEX 690 SAMPLE 4680
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	GREEN UNIT	MILLAR	PLEASANT CREEK
WELL NAME	GREEN UNIT NO. 2	ARCO-MOUND FARMS NO. 1	UNIT NO. 3-1
LOCATION	SEC. 21, T6N, R4E	SEC. 17, T6N, R3E	SEC. 8, T8N, R1W
OWNER	UNION OIL CO. OF CALIF.	MILLIARD OIL & GAS, INC.	SHELL OIL CO.
COMPLETED	04/24/66	10/01/79	12/22/48
SAMPLED	08/09/66	04/03/81	02/10/49
FORMATION	-COURTLAND	CRET-WINTERS	CRET-U
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	7400	7649	2783
WELLHEAD PRESSURE,PSIG	2900	2654	NOT GIVEN
OPEN FLOW, MCFD	10000	3512	9500
COMPONENT, MOLE PCT			
METHANE	87.5	82.8	90.4
ETHANE	1.3	0.8	0.3
PROPANE	0.5	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	10.6	16.0	8.5
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	923	860	924
SPECIFIC GRAVITY	0.610	0.628	0.596

	INDEX 691 SAMPLE 4801	INDEX 692 SAMPLE 12145	INDEX 693 SAMPLE 13189
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	PLEASANT CREEK	SAXON	SAXON
WELL NAME	UNIT NO. 4-1	M & C-GLIDE COLBY NO. 5	M & C-GLIDE NO. 1
LOCATION	SEC. 8, T8N, R1W	SEC. 29, T7N, R3E	SEC. 17, T7N, R3E
OWNER	SHELL OIL CO.	SIGNAL OIL & GAS CO.	SIGNAL OIL & GAS CO.
COMPLETED	06/29/49	09/02/69	11/04/71
SAMPLED	10/02/49	11/13/69	04/11/72
FORMATION	CRET-	CRET-STARKEY	CRET-WINTERS
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	2712	6260	6817
WELLHEAD PRESSURE,PSIG	1259	2412	2657
OPEN FLOW, MCFD	9900	4800	2600
COMPONENT, MOLE PCT			
METHANE	92.2	77.9	85.8
ETHANE	0.3	0.7	0.8
PROPANE	0.2	0.2	0.2
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	6.9	19.9	12.9
OXYGEN	TRACE	1.1	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	951	807	892
SPECIFIC GRAVITY	0.592	0.650	0.614

	INDEX 694 SAMPLE 11161	INDEX 695 SAMPLE 11833	INDEX 696 SAMPLE 4228
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	TODHUNTER LAKE	TODHUNTER LAKE	WINTERS
WELL NAME	REAVIS & BAKER NO. 1	A.C.C. NO. 1	UNIT 1-1
LOCATION	SEC. 33, T9N, R3E	SEC. 27, T9N, R3E	SEC. 19, T8N, R1E
OWNER	GETTY OIL CO.	GETTY OIL CO.	SHELL OIL CO.
COMPLETED	06/01/67	04/25/69	09/30/46
SAMPLED	10/11/67	04/25/69	02/28/47
FORMATION	CRET-STARKEY	NOT GIVEN	EOCE-
GEOLOGIC PROVINCE CODE	730	NOT GIVEN	730
DEPTH, FEET	3993	1550	4960
WELLHEAD PRESSURE,PSIG	1650	NOT GIVEN	2030
OPEN FLOW, MCFD	4750		4500
COMPONENT, MOLE PCT			
METHANE	86.6	87.0	87.4
ETHANE	0.2	0.0	2.5
PROPANE	0.1	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	12.9	12.9	9.8
OXYGEN	0.1	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	884	881	930
SPECIFIC GRAVITY	0.611	0.607	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 697 SAMPLE 5271	INDEX 698 SAMPLE 13634	INDEX 699 SAMPLE 5872
STATE	CALIFORNIA	COLORADO	COLORADO
COUNTY	YOLO	ADAMS	ADAMS
FIELD	WINTERS	AMBUSH	BEACON
WELL NAME	WINTERS COMMUNITY NO. 1	CHAMPLIN 75 AMOCO C NO. 1	COORDES
LOCATION	SEC. 13, T8N, R1W	SEC. 19, T2S, R64W	SEC. 7, T1S, R57W
OWNER	MOHAWK PETROLEUM CORP.	AMOCO PRODUCTION CO.	LION OIL CO.
COMPLETED	06/21/52	04/22/73	05/11/55
SAMPLED	07/20/52	06/22/73	07/11/55
FORMATION	CRET-MCCUNE	CRET-MUDDY J	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	730	540	540
DEPTH, FEET	5000	8006	5762
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1825	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2306	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.4	74.4	69.7
ETHANE	1.4	12.1	7.4
PROPANE	8.2	5.8	9.2
N-BUTANE	0.0	1.4	4.1
ISOBUTANE	0.0	0.9	1.6
N-PENTANE	0.0	0.4	1.0
ISOPENTANE	0.1	0.6	1.4
CYCLOPENTANE	TRACE	0.2	0.4
HEXANES PLUS	TRACE	0.4	0.8
NITROGEN	16.9	1.9	3.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	TRACE	1.8	1.1
HELIUM	0.05	0.05	0.05
HEATING VALUE*	879	1269	1424
SPECIFIC GRAVITY	0.627	0.765	0.868

	INDEX 700 SAMPLE 15008	INDEX 701 SAMPLE 10457	INDEX 702 SAMPLE 10574
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	CHIEFTAN	DEER TRAIL	DEER TRAIL
WELL NAME	AMOCO CHAMPLIN NO. 67D-1	LEASURE NO. 1	LEASURE NO. 1
LOCATION	SEC. 21, T2S, R63W	SEC. 24, T2S, R6W	SEC. 24, T2S, R60W
OWNER	AMOCO PRODUCTION CO.	PETROLEUM, INC.	PETROLEUM, INC.
COMPLETED	07/18/75	11/11/65	11/11/65
SAMPLED	05/23/77	03/08/66	05/19/66
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	7606	6234	6234
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	950
OPEN FLOW, MCFD	3938	1998	1998
COMPONENT, MOLE PCT			
METHANE	73.9	76.1	73.2
ETHANE	12.4	10.8	11.8
PROPANE	6.0	5.7	6.6
N-BUTANE	1.7	1.3	1.8
ISOBUTANE	0.7	1.0	1.0
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.5	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.2
NITROGEN	2.1	3.5	3.3
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.1	1.0
HELIUM	0.04	TRACE	0.03
HEATING VALUE*	1269	1207	1267
SPECIFIC GRAVITY	0.767	0.732	0.767

	INDEX 703 SAMPLE 13488	INDEX 704 SAMPLE 13668	INDEX 705 SAMPLE 5678
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	HOLSTER	HOMBRE	LEADER E
WELL NAME	STATE OF COLORADO A-8 NO. 1	UPRR IB PAN AM D NO. 1	UPRR-FLADER NO. A1
LOCATION	SEC. 16, T2S, R66W	SEC. 33, T3S, R61W	SEC. 27, T2S, R59W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	GINTHER, WARREN, & GINTHER
COMPLETED	04/03/72	02/06/73	--/--/08
SAMPLED	12/19/72	08/03/73	08/03/54
FORMATION	CRET-MUDDY J	CRET-MUDDY J	CRET-DAKOTA 2ND J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	8362	6824	6245
WELLHEAD PRESSURE,PSIG	1900	NOT GIVEN	1500
OPEN FLOW, MCFD	NOT GIVEN	2101	2700
COMPONENT, MOLE PCT			
METHANE	73.4	73.5	77.6
ETHANE	14.2	7.8	10.7
PROPANE	6.6	8.4	4.9
N-BUTANE	1.5	2.1	1.2
ISOBUTANE	0.8	0.9	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.1	0.4	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.5	5.1	2.8
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.0	0.8
HELIUM	0.02	0.05	0.06
HEATING VALUE*	1278	1238	1218
SPECIFIC GRAVITY	0.763	0.767	0.726

	INDEX 706 SAMPLE 5151	INDEX 707 SAMPLE 13644	INDEX 708 SAMPLE 7094
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	LITTLE BEAVER	LONGBRANCH	MIDJAY
WELL NAME	SCRITSMIRE NO. 1	MOBEL NO. A-1	MIDCAPP-RUGG
LOCATION	SEC. 1, T2S, R57W	SEC. 22, T2SS, R62W	SEC. 19, T1S, R57W
OWNER	SNOWDEN-TUCKER, ET AL.	MIDWEST OIL CORP.	AMERRA CORP.
COMPLETED	06/15/51	09/14/72	12/29/58
SAMPLED	08/10/51	07/11/73	06/13/59
FORMATION	CRET---	CRET-DAKOTA J	CRET-DAKOTA J 2ND BENCH
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5269	7117	5768
WELLHEAD PRESSURE,PSIG	760	1590	1180
OPEN FLOW, MCFD	1000	8300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.1	76.1	77.0
ETHANE	12.7	11.2	10.3
PROPANE	11.6	6.1	5.6
N-BUTANE	1.6	1.5	1.4
ISOBUTANE	1.0	0.7	0.8
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.0	0.3	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	5.7	2.0	3.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	1.5	0.8
HELIUM	0.05	0.04	0.05
HEATING VALUE*	1297	1244	1215
SPECIFIC GRAVITY	0.800	0.746	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 709 SAMPLE 13601	INDEX 710 SAMPLE 12415	INDEX 711 SAMPLE 14398
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ADAMS
FIELD	PYRAMID	KIRROCK	THIRD CREEK
WELL NAME	MURPHY NO. 1-8	UPPR-SAUTER NO. 1	STATE-A NO. 5
LOCATION	SEC. 8, T1S, R60W	SEC. 23, T2S, R60W	SEC. 36, T1S, R66W
OWNER	SUNDANCE OIL CO.	ENERGY MINERALS CORP.	ROCH EXPLORATION CO.
COMPLETED	09/01/72	12/24/69	05/02/74
SAMPLED	05/22/73	09/11/70	06/17/75
FORMATION	CRET-DAKOTA D	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6400	6360	8178
WELLHEAD PRESSURE,PSIG	1280	1600	NOT GIVEN
OPEN FLOW, MCFD	2375	1800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.0	75.1	71.3
ETHANE	6.8	11.5	15.1
PROPANE	7.1	6.3	6.7
N-BUTANE	2.0	1.7	1.6
ISOBUTANE	0.8	0.9	0.8
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	4.6	2.3	1.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	2.0
HELIUM	0.016	0.04	0.02
HEATING VALUE*	1211	1272	1301
SPECIFIC GRAVITY	0.743	0.756	0.781

	INDEX 712 SAMPLE 12838	INDEX 713 SAMPLE 5676	INDEX 714 SAMPLE 3001
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ADAMS	ADAMS	ALAMOSA
FIELD	TOTEM	WILDCAT	NOT GIVEN
WELL NAME	UPRR 48 PAN AM NO. 1	GEORGE E. LEASURE NO. 1	WATER WELL
LOCATION	SEC. 17, T2S, R62W	SEC. 17, T2S, R59W	SEC. 32, T40N, R11E
OWNER	AMOCO PRODUCTION CO.	GINTHER, WARREN, & GINTHER	J. M. CROW
COMPLETED	01/13/71	--/--/00	10/01/40
SAMPLED	05/25/71	08/03/54	11/22/41
FORMATION	CRET-MUDDY J	CRET-DAKOTA J	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	560
DEPTH, FEET	7270	6255	540
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1500	NOT GIVEN
OPEN FLOW, MCFD	3670	2800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	64.4	95.6
ETHANE	11.7	8.2	0.0
PROPANE	6.5	7.1	---
N-BUTANE	1.5	4.7	---
ISOBUTANE	0.8	2.7	---
N-PENTANE	0.5	2.2	---
ISOPENTANE	0.2	3.2	---
CYCLOPENTANE	0.1	0.8	---
HEXANES PLUS	0.2	2.3	---
NITROGEN	3.2	2.6	2.5
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	0.0	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.2	0.6	1.7
HELIUM	0.05	0.04	0.00
HEATING VALUE*	1244	1612	968
SPECIFIC GRAVITY	0.754	0.974	0.582

	INDEX 715 SAMPLE 3579	INDEX 716 SAMPLE 17368	INDEX 717 SAMPLE 17912
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ALAMOSA	ARAPAHOE	ARAPAHOE
FIELD	NOT GIVEN	CHALICE	CHINOOK
WELL NAME	CROW	COLUMBINE STATE NO. 1	RHINE NO. 12-29
LOCATION	SEC. 32, T39N, R11E	SEC. 16, T4S, R64W	SEC. 29, T3S, R62W
OWNER	J. M. CROW	GERBER ENERGY CORP.	ROCKY MOUNTAIN PROD. CO.
COMPLETED	--/--/00	12/05/83	02/--/85
SAMPLED	--/--/00	07/26/84	11/12/85
FORMATION	NOT GIVEN	CRET-DAKOTA J	CRET-MUDDY J
GEOLOGIC PROVINCE CODE	560	540	540
DEPTH, FEET	NOT GIVEN	8088	7518
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1858	1500
OPEN FLOW, MCFD	NOT GIVEN	500	600
COMPONENT, MOLE PCT			
METHANE	90.7	69.9	74.8
ETHANE	0.8	13.7	11.5
PROPANE	---	6.9	5.7
N-BUTANE	---	2.1	1.8
ISOBUTANE	---	1.0	0.4
N-PENTANE	---	0.5	0.7
ISOPENTANE	---	0.9	0.3
CYCLOPENTANE	---	0.3	0.1
HEXANES PLUS	---	0.6	0.3
NITROGEN	6.2	1.4	2.3
OXYGEN	1.5	TRACE	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	2.7	1.9
HELIUM	0.00	0.03	0.05
HEATING VALUE*	928	1339	1248
SPECIFIC GRAVITY	0.601	0.818	0.757

	INDEX 718 SAMPLE 12887	INDEX 719 SAMPLE 13602	INDEX 720 SAMPLE 12778
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ARAPAHOE	ARAPAHOE	ARAPAHOE
FIELD	LATIGO	PEACE PIPE	PEORIA
WELL NAME	VAN MATRE NO. 1	HERSKIND NO. 1	C. J. JOHNSON "B" NO. 4
LOCATION	SEC. 24, T5S, R61W	SEC. 2, T5S, R62W	SEC. 20, T4S, R60W
OWNER	TEXACO INC.	BROWNLEE, WALLACE & ARMSTRON	SUN OIL CO.
COMPLETED	05/25/71	08/17/72	02/16/71
SAMPLED	06/16/71	05/29/73	04/15/71
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6750	7208	6469
WELLHEAD PRESSURE,PSIG	1450	1600	1470
OPEN FLOW, MCFD	16736	7000	2802
COMPONENT, MOLE PCT			
METHANE	73.0	75.4	71.5
ETHANE	11.7	11.4	11.2
PROPANE	6.8	5.6	6.0
N-BUTANE	1.8	1.6	1.4
ISOBUTANE	0.5	0.7	0.7
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.5	0.4	0.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	4.9	2.5	6.9
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.6	1.0
HELIUM	0.07	0.05	0.06
HEATING VALUE*	1241	1244	1205
SPECIFIC GRAVITY	0.758	0.752	0.765

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 721 SAMPLE 12705	INDEX 722 SAMPLE 16319	INDEX 723 SAMPLE 4540
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ARAPAHOE	ARAPAHOE	ARCHULETA
FIELD	PEORIA N	POLLEN	CHROMO
WELL NAME	PRICE NO. 1	PRITCHETTE GREEN A NO. 1	YEARLEY ECHLER NO. 1
LOCATION	SEC. 14, T4S, R60W	SEC. 8, T4S, R62W	SEC. 10, T32S, R2E
OWNER	TOM VESSELS, JR.	AMOCO PRODUCTION CO.	YEARLEY OIL CO.
COMPLETED	04/10/70	05/--/80	11/--/28
SAMPLED	03/09/71	08/20/81	08/--/48
FORMATION	CRET-DAKOTA J	CRET-MUDDY J	CRET-MANCOS
GEOLOGIC PROVINCE CODE	540	540	580
DEPTH, FEET	6334	7400	407
WELLHEAD PRESSURE,PSIG	1480	NOT GIVEN	35
OPEN FLOW, MCFD	2558	2500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.3	57.9	80.2
ETHANE	10.9	15.7	16.8
PROPANE	6.6	13.9	---
N-BUTANE	1.7	4.2	---
ISOBUTANE	1.0	1.6	---
N-PENTANE	0.7	0.8	---
ISOPENTANE	0.4	1.0	---
CYCLOPENTANE	0.6	0.2	---
HEXANES PLUS	1.4	0.4	---
NITROGEN	4.8	1.7	1.9
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	2.5	0.8
HELIUM	0.06	0.01	0.10
HEATING VALUE*	1321	1529	1113
SPECIFIC GRAVITY	0.808	0.939	0.659

	INDEX 724 SAMPLE 4541	INDEX 725 SAMPLE 9137	INDEX 726 SAMPLE 8180
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ARCHULETA	ARCHULETA	ARCHULETA
FIELD	CHROMO	SAN JUAN-CHAMA PROJECT	WILDCAT
WELL NAME	YEARLEY CRAWLEY NO. 1	TEST HOLE NO. 108	SCHOMBURG NO. 1
LOCATION	SEC. 8, T32S, R2E	NOT GIVEN	SEC. 14, T34N, R4W, NM. UTE LINE
OWNER	YEARLEY OIL CO.	U.S. BUREAU OF RECLAMATION	BIG HORN-POWDER RIVER CORP.
COMPLETED	08/01/48	10/--/63	--/--/00
SAMPLED	08/--/48	10/22/63	08/22/61
FORMATION	NOT GIVEN	CRET-LEWIS	CRET-LEWIS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1410	1027	NOT GIVEN
WELLHEAD PRESSURE,PSIG	200	NOT GIVEN	50
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5
COMPONENT, MOLE PCT			
METHANE	83.8	88.0	90.5
ETHANE	12.4	2.5	6.8
PROPANE	---	1.5	1.7
N-BUTANE	---	0.5	0.3
ISOBUTANE	---	TRACE	0.3
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	2.9	4.7	0.2
OXYGEN	0.2	0.7	TRACE
ARGON	---	0.1	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	1.7	0.1
HELIUM	0.25	0.00	TRACE
HEATING VALUE*	1071	1006	1112
SPECIFIC GRAVITY	0.631	0.636	0.621

	INDEX 727 SAMPLE 8535	INDEX 728 SAMPLE 8875	INDEX 729 SAMPLE 8876
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	FLANK	FLANK	FLANK
WELL NAME	COLWIN NO. 1-8	PRIDEMORE NO. 1	PRIDEMORE NO. 2
LOCATION	SEC. 8, T34S, R42W	SEC. 8, T34S, R42W	SEC. 8, T34S, R42W
OWNER	SHELL OIL CO.	KERR-MCGEE OIL IND., INC.	KERR-MCGEE OIL IND., INC.
COMPLETED	03/05/62	10/01/61	01/21/62
SAMPLED	05/04/62	02/13/63	02/13/63
FORMATION	PENN-CHEROKEE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4102	4607	4528
WELLHEAD PRESSURE,PSIG	825	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.7	67.8	68.6
ETHANE	7.1	6.9	7.0
PROPANE	4.2	4.5	4.4
N-BUTANE	1.1	1.3	1.0
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.3	0.5	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	21.1	17.1	16.8
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.44	0.70	0.60
HEATING VALUE*	982	1039	1016
SPECIFIC GRAVITY	0.759	0.755	0.739

	INDEX 730 SAMPLE 8578	INDEX 731 SAMPLE 8884	INDEX 732 SAMPLE 5591
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	FLANK NW	FLANK NW	GREENWOOD
WELL NAME	GRIFFIN NO. 1	GRIFFITH NO. 1	AMERADA NO. 1 NEW
LOCATION	SEC. 15, T33S, R43W	SEC. 9, T34S, R42W	SEC. 33, T32S, R41W
OWNER	HENRY FROST OIL PROP., LTD.	KERR-MCGEE OIL IND., INC.	AMERADA PETROLEUM CORP.
COMPLETED	06/01/62	10/23/61	01/23/54
SAMPLED	07/02/62	02/13/63	01/30/54
FORMATION	PENN-TOPEKA	PENN-MORROW	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3158	4504	3106
WELLHEAD PRESSURE,PSIG	407	NOT GIVEN	440
OPEN FLOW, MCFD	2400	7300	2900
COMPONENT, MOLE PCT			
METHANE	62.8	67.0	65.5
ETHANE	5.1	6.2	6.6
PROPANE	3.2	4.0	3.4
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	26.1	19.6	21.4
OXYGEN	TRACE	0.6	0.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.60	0.70	0.51
HEATING VALUE*	889	964	945
SPECIFIC GRAVITY	0.755	0.738	0.744

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 733 SAMPLE 5616	INDEX 734 SAMPLE 5652	INDEX 735 SAMPLE 6537
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	C. A. NEWMAN NO. 1	SCHWEIZER NO. 1	R. H. PRIDE UNIT NO. 1
LOCATION	SEC. 12, T32S, R42W	SEC. 18, T32SS, R41W	SEC. 23, T33S, R42W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	02/24/54	04/04/54	12/31/58
SAMPLED	04/05/54	07/22/54	03/29/58
FORMATION	PENN-LANSING	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3068	3150	2986
WELLHEAD PRESSURE,PSIG	435	435	320
OPEN FLOW, MCFD	2000	13000	1426
COMPONENT, MOLE PCT			
METHANE	62.8	64.5	64.0
ETHANE	5.4	6.3	5.8
PROPANE	3.3	3.6	3.1
N-BUTANE	0.9	1.1	0.9
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	25.8	22.8	24.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.63	0.56	0.60
HEATING VALUE*	877	940	907
SPECIFIC GRAVITY	0.746	0.751	0.749

	INDEX 736 SAMPLE 7157	INDEX 737 SAMPLE 7908	INDEX 738 SAMPLE 7909
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	STATE MOLT NO. 1	WRIGHT NO. 1	WATKINS A-1
LOCATION	SEC. 15, T33S, R41W	SEC. 9, T33S, R41W	SEC. 20, T32S, R41W
OWNER	FRONTIER REFINING CO.	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.
COMPLETED	06/28/59	01/07/61	01/07/61
SAMPLED	08/--/59	03/15/61	03/15/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2863	3003	3139
WELLHEAD PRESSURE,PSIG	423	341	289
OPEN FLOW, MCFD	1390	1550	1670
COMPONENT, MOLE PCT			
METHANE	56.1	69.8	65.0
ETHANE	6.0	6.7	6.2
PROPANE	2.5	3.6	3.8
N-BUTANE	1.1	0.8	0.5
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.8	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	31.4	17.5	22.5
OXYGEN	0.1	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.80	0.50	0.60
HEATING VALUE*	841	986	932
SPECIFIC GRAVITY	0.785	0.724	0.743

	INDEX 739 SAMPLE 8774	INDEX 740 SAMPLE 8061	INDEX 741 SAMPLE 8063
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	GREENWOOD	MIDWAY	MIDWAY
WELL NAME	MOORE A	COGBURN NO. 1	BAUMAN A-1
LOCATION	SEC. 24, T34S, R42W	SEC. 22, T33S, R42W	SEC. 2, T33S, R42W
OWNER	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.
COMPLETED	11/15/62	07/28/60	04/09/61
SAMPLED	10/19/62	02/17/61	05/05/61
FORMATION	PENN-TOPEKA	PENN-MORROW U	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2770	4666	3124
WELLHEAD PRESSURE,PSIG	406	965	396
OPEN FLOW, MCFD	1550	7000	5600
COMPONENT, MOLE PCT			
METHANE	67.7	68.0	63.8
ETHANE	5.9	7.2	6.5
PROPANE	3.8	4.2	3.7
N-BUTANE	1.2	0.8	1.0
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	19.2	18.2	23.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.50	0.60	0.40
HEATING VALUE*	987	988	960
SPECIFIC GRAVITY	0.744	0.733	0.758

	INDEX 742 SAMPLE 4052	INDEX 743 SAMPLE 4197	INDEX 744 SAMPLE 4198
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	BORE HOLE NO. F614	INGLE NO. 1	INGLE NO. 1
LOCATION	SEC. 20, T29S, R50W	SEC. 27, T29S, R50W	SEC. 27, T29S, R50W
OWNER	SKELLY OIL CO.	J. R. HUBER CORP.	SHARPLES OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/25/49	01/--/47	02/11/47
FORMATION	JURA-EXETER	PENN-	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	210	4466	4332
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	1.9	0.0
ETHANE	0.0	0.0	1.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	7.0	0.3
OXYGEN	0.0	0.0	1.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	99.4	91.0	97.3
HELIUM	TRACE	0.13	0.05
HEATING VALUE*	0	19	22
SPECIFIC GRAVITY	1.526	1.470	1.515

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 745 SAMPLE 4199	INDEX 746 SAMPLE 8773	INDEX 747 SAMPLE 9878
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	NOT GIVEN	NOT GIVEN	PLAYA
WELL NAME	JACOBSON NO. 1	MOORE A 1-24	EASTMAN NO. 1-4
LOCATION	NOT GIVEN	SEC. 24, T34S, R42W	SEC. 4, T32S, R44W
OWNER	SHARPLES OIL CORP.	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.
COMPLETED	--/--/00	11/15/62	12/09/64
SAMPLED	02/11/47	10/16/62	04/29/65
FORMATION	NOT GIVEN	PERM-RED CAVE	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	1214	3354
WELLHEAD PRESSURE,PSIG	NOT GIVEN	330	416
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	788
COMPONENT, MOLE PCT			
METHANE	2.1	23.3	59.3
ETHANE	0.0	1.1	5.3
PROPANE	---	0.6	3.7
N-BUTANE	---	0.4	1.0
ISOBUTANE	---	0.3	0.6
N-PENTANE	---	0.1	0.3
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	6.6	71.2	26.8
OXYGEN	1.3	TRACE	TRACE
ARGON	---	0.2	0.1
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	90.0	TRACE	1.8
HELIUM	0.02	2.14	0.71
HEATING VALUE*	21	314	873
SPECIFIC GRAVITY	1.466	0.870	0.780

	INDEX 748 SAMPLE 10796	INDEX 749 SAMPLE 6517	INDEX 750 SAMPLE 6558
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	PLAYA	PRAIRIE DOG	PRAIRIE DOG
WELL NAME	ELLIS NO. 1-1	FED. LAND BANK NO. 1	COPENHAVER NO. 1
LOCATION	SEC. 1, T32S, R44W	SEC. 31, T34S, R44W	SEC. 6, T35N, R44W
OWNER	HORIZON OIL & GAS CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	09/06/66	--/--/00	04/20/58
SAMPLED	11/30/66	02/02/58	05/--/58
FORMATION	PENN-TOPEKA	PENN-CHEROKEE	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3221	4256	4049
WELLHEAD PRESSURE,PSIG	400	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	17200	NOT GIVEN	2200
COMPONENT, MOLE PCT			
METHANE	61.5	63.2	63.0
ETHANE	3.5	7.3	7.9
PROPANE	3.8	3.1	3.9
N-BUTANE	1.1	0.9	1.0
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	26.4	22.9	22.6
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	0.2
HELIUM	0.70	0.40	0.40
HEATING VALUE*	890	930	958
SPECIFIC GRAVITY	0.760	0.758	0.763

	INDEX 751 SAMPLE 10819	INDEX 752 SAMPLE 10622	INDEX 753 SAMPLE 10922
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	PRAIRIE DOG	VILAS	VILAS
WELL NAME	OLIVE F. LANTZ D NO. 1-12	OLIVER NO. 1-18	STATE ST. JOHN NO. 1-36
LOCATION	SEC. 12, T35S, R45W	SEC. 18, T31S, R44W	SEC. 36, T30S, R45W
OWNER	W. C. MCBRIDE, INC.	DAVIS DRILLING, INC.	W. C. MCBRIDE, INC.
COMPLETED	11/07/66	05/26/66	--/--/00
SAMPLED	12/15/66	06/16/66	04/14/67
FORMATION	PENN-CHEROKEE	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8204	3234	3294
WELLHEAD PRESSURE,PSIG	860	420	440
OPEN FLOW, MCFD	3087	8900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.9	55.9	43.5
ETHANE	6.3	5.4	5.7
PROPANE	3.1	3.7	3.7
N-BUTANE	1.0	1.0	1.3
ISOBUTANE	0.2	0.5	0.7
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.5	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	31.0	32.1	42.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.48	0.90	1.15
HEATING VALUE*	845	822	742
SPECIFIC GRAVITY	0.778	0.777	0.846

	INDEX 754 SAMPLE 11076	INDEX 755 SAMPLE 7870	INDEX 756 SAMPLE 7915
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	VILAS	WALSH	WALSH
WELL NAME	ROLLINS-RUTHERFORD B NO.1-20	BURCHFIELD NO. 1	BURCHFIELD NO. 1
LOCATION	SEC. 20, T31S, R44W	SEC. 4, T32S, R43W	SEC. 4, T32S, R43W
OWNER	W. C. MCBRIDE, INC.	KEITH L. RISING	GERMANY INVESTMENT CO.
COMPLETED	05/18/67	02/19/61	02/24/61
SAMPLED	04/26/67	02/14/61	04/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	3245	3245
WELLHEAD PRESSURE,PSIG	440	427	425
OPEN FLOW, MCFD	6160	1625	2500
COMPONENT, MOLE PCT			
METHANE	57.5	56.3	67.1
ETHANE	5.3	5.9	6.9
PROPANE	3.5	3.8	4.6
N-BUTANE	1.1	2.5	1.5
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	30.0	30.5	17.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.01	0.80	0.80
HEATING VALUE*	854	859	1037
SPECIFIC GRAVITY	0.779	0.785	0.757

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 757 SAMPLE 7916	INDEX 758 SAMPLE 8055	INDEX 759 SAMPLE 8665
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BACA	BACA	BACA
FIELD	WALSH	WALSH	WALSH
WELL NAME	GRIFFIN ESTATE NO. 1	KOELSCH	MOLT NO. 1-3
LOCATION	SEC. 17, T32S, R43W	SEC. 20, T32S, R43W	SEC. 3, T32S, R43W
OWNER	GERMANY INVESTMENT CO.	DAVIS DRILLING, INC.	DAVIS DRILLING, INC.
COMPLETED	04/15/61	06/30/61	--/--/00
SAMPLED	04/13/51	06/20/51	08/27/62
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3252	3265	NOT GIVEN
WELLHEAD PRESSURE,PSIG	440	450	NOT GIVEN
OPEN FLOW, MCFD	6000	1500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.0	58.9	56.1
ETHANE	5.9	5.4	5.4
PROPANE	3.7	3.6	3.7
N-BUTANE	1.1	1.3	1.1
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	24.4	28.3	31.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.7
HELIUM	0.60	0.80	0.69
HEATING VALUE*	925	882	833
SPECIFIC GRAVITY	0.759	0.776	0.783

	INDEX 760 SAMPLE 5925	INDEX 761 SAMPLE 8906	INDEX 762 SAMPLE 6137
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BENT	BENT	BENT
FIELD	BENTS FORT	HASTY	LUBERS
WELL NAME	CORDES & OBERLANDER NO. 1	U.S.A. NO. 1-16	EARL A NO. 1
LOCATION	SEC. 21, T21S, R51W	SEC. 16, T23S, R50W	SEC. 15, T22S, R49W
OWNER	STANSBURY OIL CO.	FRANKFORT OIL CO.	HARRINGTON, MARSH & WAGNER
COMPLETED	06/18/55	11/20/62	09/02/56
SAMPLED	08/30/55	03/25/63	08/31/56
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	5208	4677	4331
WELLHEAD PRESSURE,PSIG	1000	1288	NOT GIVEN
OPEN FLOW, MCFD	2500	1120	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.3	66.1	64.5
ETHANE	12.9	10.3	12.3
PROPANE	5.7	5.7	5.4
N-BUTANE	1.6	1.3	1.4
ISOBUTANE	1.1	0.7	0.7
N-PENTANE	0.5	0.3	0.3
ISOPENTANE	0.6	0.1	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.1	0.4
NITROGEN	4.1	14.8	14.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.15	0.28	0.21
HEATING VALUE*	1283	1095	1135
SPECIFIC GRAVITY	0.775	0.767	0.783

	INDEX 763 SAMPLE 8581	INDEX 764 SAMPLE 16328	INDEX 765 SAMPLE 17166
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BENT	BENT	BENT
FIELD	MCCLAVE	MCCLAVE	WILDCAT
WELL NAME	WALLERT STATE UNIT NO. 1	KICKING BIRD NO. 21-16	EARL HOFFMAN NO. 1
LOCATION	SEC. 5, T21S, R48W	SEC. 5, T21S, R48W	SEC. 31, T22S, R48W
OWNER	FRANKFORT OIL CO.	MRT EXPLORATION CO.	MURFIN DRILLING CO.
COMPLETED	01/29/62	08/05/80	12/--/82
SAMPLED	06/16/62	09/01/81	01/--/84
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4654	4719	4609
WELLHEAD PRESSURE,PSIG	790	920	NOT GIVEN
OPEN FLOW, MCFD	725	2283	1080
COMPONENT, MOLE PCT			
METHANE	68.5	69.1	65.8
ETHANE	13.6	12.2	7.6
PROPANE	7.1	5.7	2.5
N-BUTANE	1.6	1.2	0.3
ISOBUTANE	0.7	0.7	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	7.4	9.3	22.2
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.3
HELIUM	0.18	0.27	0.36
HEATING VALUE*	1226	1170	911
SPECIFIC GRAVITY	0.774	0.760	0.729

	INDEX 766 SAMPLE 16768	INDEX 767 SAMPLE 16726	INDEX 768 SAMPLE 17408
STATE	COLORADO	COLORADO	COLORADO
COUNTY	BOULDER	BOULDER	BOULDER
FIELD	BOULDER VALLEY	WATTENBERG	WILDCAT
WELL NAME	FUTHEY NO. 2	LABER K UNIT NO. 1	HOUSE NO. 1-36
LOCATION	SEC. 25, T1N, R69W	SEC. 24, T2N, R69W	SEC. 36, T2N, R70W
OWNER	CENTENNIAL PETROLEUM, INC.	VESSELS OIL AND GAS CO.	MARTIN EXPL. MGMT. CORP.
COMPLETED	07/26/82	04/20/82	04/20/83
SAMPLED	02/10/83	12/06/82	09/--/84
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	CRET-CODELL
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	8368	8000	7382
WELLHEAD PRESSURE,PSIG	700	1280	NOT GIVEN
OPEN FLOW, MCFD	200	560	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.6	85.1	70.8
ETHANE	9.6	8.0	14.3
PROPANE	2.4	2.0	6.9
N-BUTANE	0.5	0.6	2.3
ISOBUTANE	0.6	0.3	1.1
N-PENTANE	0.1	0.2	0.6
ISOPENTANE	0.4	0.3	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	0.3	0.5	1.6
OXYGEN	0.9	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	2.4	1.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1139	1129	1353
SPECIFIC GRAVITY	0.696	0.691	0.798

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 769 SAMPLE 15331	INDEX 770 SAMPLE 16510	INDEX 771 SAMPLE 15477
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	ARAPAHOE	ARCHER	CHEYENNE WELLS
WELL NAME	CHAMPLIN FUNK NO. 1	PELTON 41-31 NO. 1-A	CHAMPLIN-PELTON B NO. 1
LOCATION	SEC. 23, T14S, R42W	SEC. 31, T12S, R44W	SEC. 3, T14S, R44W
OWNER	TEXAS OIL & GAS CORP.	CHAMPLIN PETROLEUM CO.	MULL DRILLING CO., INC.
COMPLETED	07/03/77	07/31/81	--/--/00
SAMPLED	07/26/78	04/28/82	11/03/78
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	5063	5314	5397
WELLHEAD PRESSURE,PSIG	866	825	NOT GIVEN
OPEN FLOW, MCFD	8399	1720	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	26.5	22.3	9.8
ETHANE	2.1	2.4	1.3
PROPANE	1.5	2.1	2.1
N-BUTANE	0.6	1.1	1.9
ISOBUTANE	0.5	0.4	1.2
N-PENTANE	0.2	0.9	1.0
ISOPENTANE	0.3	0.4	1.0
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.2	0.5	0.8
NITROGEN	63.9	63.9	66.1
OXYGEN	0.1	TRACE	0.2
ARGON	0.2	0.4	1.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.8	1.8
HELIUM	2.46	5.20	11.40
HEATING VALUE*	417	431	417
SPECIFIC GRAVITY	0.881	0.889	0.943

	INDEX 772 SAMPLE 16912	INDEX 773 SAMPLE 16917	INDEX 774 SAMPLE 16937
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	CHEYENNE WELLS	CHEYENNE WELLS	CHEYENNE WELLS
WELL NAME	CHAMPLIN NO.124 AMOCO A BATT	CHAMPLIN NO. 124 AMOCO C2	CHAMPLIN 360 AMOCO "A" NO. 1
LOCATION	SEC. 33, T13S, R44W	SEC. 31, T13S, R44W	T13S, R44W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/83	--/--/83	--/--/83
SAMPLED	05/03/83	05/03/83	05/02/83
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	17.4	12.6	9.2
ETHANE	3.6	1.8	3.0
PROPANE	6.1	2.7	25.5
N-BUTANE	6.9	2.0	20.9
ISOBUTANE	3.1	1.7	10.2
N-PENTANE	3.2	1.9	3.7
ISOPENTANE	4.9	2.3	9.4
CYCLOPENTANE	0.8	1.0	1.1
HEXANES PLUS	2.3	2.6	2.6
NITROGEN	45.0	61.7	10.0
OXYGEN	TRACE	TRACE	0.1
ARGON	0.8	1.3	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	TRACE	0.0	1.8
CARBON DIOXIDE	1.3	3.5	2.4
HELIUM	2.63	5.06	0.12
HEATING VALUE*	1230	700	2605
SPECIFIC GRAVITY	1.227	1.086	1.713

	INDEX 775 SAMPLE 16916	INDEX 776 SAMPLE 16919	INDEX 777 SAMPLE 16915
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	GOLDEN SPIKE	GOLDEN SPIKE	GROUSE
WELL NAME	LOWE NO. 1	UPRR NO. 1-1	LOWE NO. 4
LOCATION	SEC. 12, T16S, R45W	SEC. 1, T16S, R45W	SEC. 26, T15S, R46W
OWNER	INEXCO OIL CO.	INEXCO OIL CO.	TXO PRODUCTION CORP.
COMPLETED	01/29/69	--/--/83	10/26/82
SAMPLED	05/03/83	05/03/83	05/03/83
FORMATION	MISS---	MISS---	MISS-SPERGEN
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	5455	NOT GIVEN	5572
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3
COMPONENT, MOLE PCT			
METHANE	11.4	11.7	16.7
ETHANE	1.8	4.1	17.2
PROPANE	2.6	9.8	24.1
N-BUTANE	2.4	12.9	9.9
ISOBUTANE	1.2	5.1	4.0
N-PENTANE	1.4	8.1	1.9
ISOPENTANE	1.5	10.7	5.6
CYCLOPENTANE	0.5	0.6	0.3
HEXANES PLUS	1.3	4.4	1.3
NITROGEN	64.0	25.7	16.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.8	0.3	0.3
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	3.0	4.5	0.9
HELIUM	7.08	1.66	0.80
HEATING VALUE*	546	2118	1970
SPECIFIC GRAVITY	0.994	1.580	1.352

	INDEX 778 SAMPLE 16939	INDEX 779 SAMPLE 16938	INDEX 780 SAMPLE 16944
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	GROUSE	LADDER CREEK	LADDER CREEK
WELL NAME	LOWE NO. 2	MILLER K 8 NO. 2	UPRR BAUGHMAN FARMS
LOCATION	SEC. 26, T15S, R46W	SEC. 12, T15S, R45W	NOT GIVEN
OWNER	TXO PRODUCTION CORP.	PHILLIPS PETROLEUM CO.	INEXCO OIL CO.
COMPLETED	02/13/81	--/--/83	--/--/83
SAMPLED	05/03/83	05/04/83	05/04/83
FORMATION	MISS-SPERGEN	MISS-SPERGEN	MISS-SPERGEN
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	5460	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	16.3	11.7	11.3
ETHANE	16.2	2.2	2.5
PROPANE	26.3	4.7	5.9
N-BUTANE	11.8	4.3	5.7
ISOBUTANE	4.4	2.2	3.0
N-PENTANE	3.1	2.1	2.8
ISOPENTANE	4.0	3.1	4.3
CYCLOPENTANE	0.2	0.8	1.1
HEXANES PLUS	1.3	2.0	2.8
NITROGEN	14.4	61.0	52.9
OXYGEN	TRACE	TRACE	0.3
ARGON	0.2	0.4	0.6
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.0	1.6
HELIUM	0.69	4.94	5.14
HEATING VALUE*	2071	854	1099
SPECIFIC GRAVITY	1.387	1.121	1.203

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 781 SAMPLE 16946	INDEX 782 SAMPLE 16947	INDEX 783 SAMPLE 16231
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	LADDER CREEK	LADDER CREEK	SORRENTO
WELL NAME	RODT NO. 24-7	BAUGHMAN A NO. 2	MCCORMICK NO. 3
LOCATION	SEC. 7, T15S, R45W	NOT GIVEN	SEC. 8, T14S, R49W
OWNER	CHAMPLIN PETROLEUM CO.	PHILLIPS PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/83	--/--/83	10/--/80
SAMPLED	05/04/83	05/04/83	04/06/81
FORMATION	MISS-SPERGEN	MISS-SPERGEN	PENN-MORROW GAS CAP
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5450
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	12.4	14.2	38.7
ETHANE	3.6	2.1	9.5
PROPANE	9.3	5.2	9.2
N-BUTANE	10.6	6.4	3.3
ISOBUTANE	4.4	2.4	1.2
N-PENTANE	5.1	3.6	0.8
ISOPENTANE	7.9	5.1	0.8
CYCLOPENTANE	0.7	0.6	0.2
HEXANES PLUS	2.9	2.3	0.4
NITROGEN	40.1	49.1	33.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.3	0.7	0.2
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	2.5	0.6
HELIUM	1.71	5.61	1.46
HEATING VALUE*	1651	1125	1043
SPECIFIC GRAVITY	1.396	1.195	0.945

	INDEX 784 SAMPLE 16573	INDEX 785 SAMPLE 16941	INDEX 786 SAMPLE 16942
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	SORRENTO	SORRENTO	SORRENTO
WELL NAME	MCCORMICK B NO. 2	MC CORMICK NO. 12	MC CORMICK NO. 5
LOCATION	SEC. 10, T14S, R49W	SEC. 9, T14S, R49W	SEC. 3, T14S, R49W
OWNER	MULL DRILLING CO., INC.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	07/12/82	--/--/83	--/--/83
SAMPLED	07/12/82	05/04/83	05/04/83
FORMATION	PENN-MORROW GAS CAP	PENN-MARMATON	PENN-MORROW GAS CAP
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	5454	NOT GIVEN	5482
WELLHEAD PRESSURE,PSIG	720	NOT GIVEN	280
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	73
COMPONENT, MOLE PCT			
METHANE	41.3	28.1	38.2
ETHANE	7.1	14.7	8.1
PROPANE	4.6	16.8	5.7
N-BUTANE	1.3	6.3	2.9
ISOBUTANE	0.4	2.7	0.9
N-PENTANE	0.3	2.2	0.7
ISOPENTANE	0.2	3.0	1.3
CYCLOPENTANE	TRACE	0.4	0.5
HEXANES PLUS	0.1	1.1	0.5
NITROGEN	42.2	23.0	37.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.2	0.1	0.2
HYDROGEN	0.2	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.1	1.0	0.8
HELIUM	1.98	0.28	1.72
HEATING VALUE*	749	1582	957
SPECIFIC GRAVITY	0.841	1.171	0.934

	INDEX 787 SAMPLE 16943	INDEX 788 SAMPLE 16945	INDEX 789 SAMPLE 16948
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	SORRENTO	SORRENTO	SORRENTO
WELL NAME	MC CORMICK NO.'S 5,6,7,& 8	MC CORMICK SEC. 34 BATT.	MC CORMICK NO. 3
LOCATION	SEC. 3, T14S, R49W	SEC. 33, T13S, R49W	SEC. 9, T14S, R49W
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/70	--/--/00	--/--/83
SAMPLED	05/04/83	05/04/83	05/04/83
FORMATION	PENN-MORROW GAS CAP	PENN-MORROW, SOLUTION&GASCAP	PENN-MORROW GAS CAP
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.5	37.8	39.4
ETHANE	8.3	11.5	8.0
PROPANE	6.7	11.4	6.0
N-BUTANE	2.8	5.2	2.4
ISOBUTANE	0.8	3.6	0.7
N-PENTANE	0.6	1.0	0.6
ISOPENTANE	1.1	2.1	1.0
CYCLOPENTANE	0.1	0.3	0.2
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	37.9	26.4	38.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.2	0.2	0.2
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.0	0.8
HELIUM	1.71	1.02	1.76
HEATING VALUE*	926	1289	894
SPECIFIC GRAVITY	0.917	1.026	0.905

	INDEX 790 SAMPLE 16949	INDEX 791 SAMPLE 16748	INDEX 792 SAMPLE 2759
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	DELTA
FIELD	SORRENTO	WILDCAT	BLACK CANYON
WELL NAME	MC CORMICK NO. 31-9	AMOCO-CHAMPLIN 558-A-1	NO. 1
LOCATION	SEC. 9, T14S, R49W	SEC. 17, T12S, R49W	SEC. 6, T15S, R94W
OWNER	CHAMPLIN PETROLEUM CO.	AMOCO PRODUCTION CO. (USA)	BILLSTROM BROTHERS
COMPLETED	09/11/80	--/06/83	06/--/36
SAMPLED	05/04/83	01/26/83	12/--/36
FORMATION	PENN-MORROW GAS CAP	PENN-MORROW	JURA-MORRISON
GEOLOGIC PROVINCE CODE	450	450	595
DEPTH, FEET	5494	5432	375
WELLHEAD PRESSURE,PSIG	NOT GIVEN	690	35
OPEN FLOW, MCFD	118	2010	280
COMPONENT, MOLE PCT			
METHANE	39.5	22.3	0.0
ETHANE	7.9	2.2	2.0
PROPANE	5.7	1.9	---
N-BUTANE	2.2	1.1	---
ISOBUTANE	0.8	0.5	---
N-PENTANE	0.5	0.4	---
ISOPENTANE	0.9	0.5	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	39.1	64.6	14.3
OXYGEN	TRACE	0.3	0.1
ARGON	0.2	0.4	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.8	0.7	82.3
HELIUM	1.80	4.81	1.26
HEATING VALUE*	867	427	36
SPECIFIC GRAVITY	0.893	0.894	1.421

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 793 SAMPLE 2348	INDEX 794 SAMPLE 2821	INDEX 795 SAMPLE 8755
STATE	COLORADO	COLORADO	COLORADO
COUNTY	DELTA	DELTA	DOLORES
FIELD	NOT GIVEN	NOT GIVEN	DOE CANYON
WELL NAME	NOT GIVEN	GAS SEEP	DOE CANYON NO. 1
LOCATION	SEC. 13, T15S, R96W	SEC. 29, T14, R98W	SEC. 13, T40N, R18W
OWNER	MOLLY SUGAR CO.	CHARLOTTE RAMBO	HUMBLE OIL & REFINING CO.
COMPLETED	01/01/25	--/--/00	12/02/62
SAMPLED	05/01/31	07/02/39	11/06/62
FORMATION	-SHALE	NOT GIVEN	MISS---
GEOLOGIC PROVINCE CODE	595	595	585
DEPTH, FEET	152	NOT GIVEN	8366
WELLHEAD PRESSURE,PSIG	35	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.5	56.3	1.1
ETHANE	10.4	1.1	0.1
PROPANE	---	---	0.1
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.2	34.6	5.2
OXYGEN	0.3	2.5	0.0
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	5.5	92.6
HELIUM	0.00	TRACE	0.65
HEATING VALUE*	1073	590	21
SPECIFIC GRAVITY	0.618	0.770	1.480

	INDEX 796 SAMPLE 8761	INDEX 797 SAMPLE 7927	INDEX 798 SAMPLE 16515
STATE	COLORADO	COLORADO	COLORADO
COUNTY	DOLORES	DOLORES	DOLORES
FIELD	DOE CANYON	GLADE CANYON	NOT GIVEN
WELL NAME	DOE CANYON NO. 1	GLADE CANYON UNIT NO. 1	FED. NO. 1-35
LOCATION	SEC. 13, T40N, R18W	SEC. 13, T40N, R17W	SEC. 35, T41N, R16W
OWNER	HUMBLE OIL & REFINING CO.	SINCLAIR OIL & GAS CO.	SANTA FE ENERGY CO.
COMPLETED	12/02/62	--/--/00	02/17/81
SAMPLED	11/11/62	04/07/61	05/06/82
FORMATION	MISS---	MISS-DEVO	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8366	9140	5254
WELLHEAD PRESSURE,PSIG	2560	1445	1025
OPEN FLOW, MCFD	5690	NOT GIVEN	200
COMPONENT, MOLE PCT			
METHANE	1.5	1.0	88.1
ETHANE	0.1	0.2	4.0
PROPANE	0.1	0.0	0.7
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	6.8	2.5	6.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	90.4	95.8	0.1
HELIUM	0.88	0.50	0.07
HEATING VALUE*	20	19	983
SPECIFIC GRAVITY	1.462	1.497	0.609

	INDEX 799 SAMPLE 16960	INDEX 800 SAMPLE 17705	INDEX 801 SAMPLE 6462
STATE	COLORADO	COLORADO	COLORADO
COUNTY	DOLORES	DOLORES	DOLORES
FIELD	PAPOOSE CANYON	PAPOOSE CANYON	WILDCAT
WELL NAME	DUNCAN NO. 44-7	WARREN NO. 1-15	GLADE NO. 1
LOCATION	SEC. 7, T39N, R19W	SEC. 16, T39N, R19W	SEC. 11, T41N, R17W
OWNER	RAYMOND T. DUNCAN	SAMSON RESOURCES CO.	CARTER OIL CO.
COMPLETED	05/27/83	--/--/00	--/--/00
SAMPLED	05/27/83	08/12/85	12/11/57
FORMATION	PENN-DESERT CREEK	PENN-DESERT CREEK	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5900	6280	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2600	NOT GIVEN
OPEN FLOW, MCFD	175	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.1	77.7	96.4
ETHANE	17.7	11.9	0.3
PROPANE	9.6	4.9	TRACE
N-BUTANE	3.0	1.5	TRACE
ISOBUTANE	1.7	0.9	0.0
N-PENTANE	0.4	0.4	TRACE
ISOPENTANE	1.4	0.4	0.0
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.2	0.1
NITROGEN	1.8	1.9	0.9
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.0
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1475	1253	1011
SPECIFIC GRAVITY	0.870	0.729	0.563

	INDEX 802 SAMPLE 12285	INDEX 803 SAMPLE 7516	INDEX 804 SAMPLE 7518
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ELBERT	GARFIELD	GARFIELD
FIELD	IRON HORSE	BAXTER PASS S	BAXTER PASS S
WELL NAME	SABO 13-20	GOVT. BUTTRAM NO. 1	NO. 2-20
LOCATION	SEC. 20, T6S, R62W	SEC. 30, T5S, R102W	SEC. 20, T5S, R102W
OWNER	SHELL OIL CO.* ET AL.	ARCO OIL CORP.	ARCO OIL CORP.
COMPLETED	04/20/TD	12/23/58	10/27/59
SAMPLED	06/04/TD	04/20/60	04/20/60
FORMATION	CRET-DAKOTA J	JURA-MORRISON	JURA-MORRISON
GEOLOGIC PROVINCE CODE	540	595	595
DEPTH, FEET	7638	5934	6959
WELLHEAD PRESSURE,PSIG	1502	1609	1481
OPEN FLOW, MCFD	3000	1000	2075
COMPONENT, MOLE PCT			
METHANE	70.6	63.1	62.1
ETHANE	11.9	3.4	2.9
PROPANE	7.2	2.3	2.1
N-BUTANE	1.8	0.4	0.3
ISOBUTANE	0.8	TRACE	0.0
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.7	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	4.3	26.9	28.7
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.1	0.1
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.8	2.8
HELIUM	0.04	0.80	0.90
HEATING VALUE*	1256	783	755
SPECIFIC GRAVITY	0.782	0.741	0.742

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 805 SAMPLE 15988	INDEX 806 SAMPLE 15989	INDEX 807 SAMPLE 15943
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	BAXTER PASS S	BAXTER PASS S	BRIDLE
WELL NAME	UNIT NO. 2-20	GOVT. BUTTRAM NO. 1	FED. NO. 6-13
LOCATION	SEC. 20, T 5S, R102W	SEC. 30, T 5S, R102W	SEC. 6, T8S, R104W
OWNER	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.	TENNECO OIL EXPL. & PROD. CO
COMPLETED	10/26/59	12/22/58	05/19/79
SAMPLED	06/17/80	06/17/80	04/15/80
FORMATION	JURA-MORRISON	JURA-MORRISON	CRET-DAKOTA & JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6959	5934	3724
WELLHEAD PRESSURE,PSIG	1280	1537	NOT GIVEN
OPEN FLOW, MCFD	933	1000	3752
COMPONENT, MOLE PCT			
METHANE	61.1	59.9	80.5
ETHANE	3.1	3.3	4.8
PROPANE	1.0	1.2	1.5
N-BUTANE	0.4	0.5	0.3
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.0	0.4
NITROGEN	28.9	27.9	10.1
OXYGEN	0.0	TRACE	0.5
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.8	5.3	0.7
HELIUM	0.84	0.86	0.44
HEATING VALUE*	751	755	1001
SPECIFIC GRAVITY	0.757	0.774	0.672

	INDEX 808 SAMPLE 16645	INDEX 809 SAMPLE 17710	INDEX 810 SAMPLE 6538
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	BRIDLE	CALF CANYON	CASTLE
WELL NAME	FED. NO. 23-4	CALF CANYON NO. 19-1	NICHOLS FED. NO. 1
LOCATION	SEC. 4, T8S, R104W	NOT GIVEN	SEC. 14, T7S, R99W
OWNER	TEXAS GAS EXPLORATION CORP.	AMERICAN RESOURCES MGMT. COR	EL PASO NATURAL GAS CO.
COMPLETED	04/15/81	11/29/83	12/14/57
SAMPLED	09/11/82	06/10/83	04/01/58
FORMATION	CRET-DAKOTA	CRET-MESAVERDE	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3376	5296	854
WELLHEAD PRESSURE,PSIG	NOT GIVEN	356	325
OPEN FLOW, MCFD	2306	100	4900
COMPONENT, MOLE PCT			
METHANE	81.1	94.3	94.7
ETHANE	4.3	2.5	2.4
PROPANE	1.4	0.7	0.8
N-BUTANE	0.4	0.1	0.4
ISOBUTANE	0.3	TRACE	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.1	0.7	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.5	0.0
HYDROGEN	0.1	0.8	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.3	0.2	0.1
HELIUM	0.37	TRACE	0.02
HEATING VALUE*	990	1034	1074
SPECIFIC GRAVITY	0.691	0.585	0.601

	INDEX 811 SAMPLE 16481	INDEX 812 SAMPLE 17025	INDEX 813 SAMPLE 16743
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	CLOUGH-RULISON	COLUMBINE SPGS.(BAXTER PASS)	DEBEQUE
WELL NAME	CLOUGH NO. 113	FED. NO. 16-2-5S-104	SPEARS NO. 2-36
LOCATION	SEC. 21, T6S, R94W	SEC. 2, T5S, R104W	SEC. 36, T7S, R99W
OWNER	NORTHWEST EXPLORATION CO.	COSEKA RESOURCES (USA), LTD.	COORS ENERGY CO.
COMPLETED	11/15/80	08/--/83	01/05/83
SAMPLED	12/22/81	08/29/83	01/05/83
FORMATION	EOCE-WASATCH	CRET-MESAVERDE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	995	NOT GIVEN	8309
WELLHEAD PRESSURE,PSIG	230	200	NOT GIVEN
OPEN FLOW, MCFD	425	300	230
COMPONENT, MOLE PCT			
METHANE	94.3	94.6	94.2
ETHANE	3.4	2.2	0.3
PROPANE	1.0	0.5	TRACE
N-BUTANE	0.3	0.1	TRACE
ISOBUTANE	0.2	0.2	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.3	1.7	0.7
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	4.2
HELIUM	0.01	0.03	0.03
HEATING VALUE*	1082	1031	969
SPECIFIC GRAVITY	0.601	0.588	0.603

	INDEX 814 SAMPLE 6903	INDEX 815 SAMPLE 7598	INDEX 816 SAMPLE 8764
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	DIVIDE CREEK	DIVIDE CREEK	DIVIDE CREEK
WELL NAME	DIVIDE CREEK UNIT NO. 5	OWEN BOULTON NO. 1	BOULTON NO. 1
LOCATION	SEC. 10, T6S, R91W	SEC. 22, T7S, R91W	SEC. 22, T7S, R91W
OWNER	SUN OIL CO.	MOUNTAIN STATES DRILLING CO.	SUN OIL & MTN. STATES DRLG.
COMPLETED	--/--/00	--/--/00	09/22/60
SAMPLED	12/12/58	07/07/60	11/08/62
FORMATION	CRET-MESAVERDE & MANCOS	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4734	7526	7525
WELLHEAD PRESSURE,PSIG	1550	3800	850
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1125
COMPONENT, MOLE PCT			
METHANE	96.4	94.1	93.5
ETHANE	1.0	1.7	1.5
PROPANE	0.8	0.7	0.2
N-BUTANE	0.1	0.5	0.1
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	0.9	0.0	2.7
OXYGEN	TRACE	TRACE	0.6
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.7	1.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1024	1064	983
SPECIFIC GRAVITY	0.588	0.613	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 817 SAMPLE 10581	INDEX 818 SAMPLE 10582	INDEX 819 SAMPLE 16423
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	DIVIDE CREEK	DIVIDE CREEK	DOUGLAS PASS
WELL NAME	DIVIDE CREEK UNIT 12L	DIVIDE CREEK UNIT 12U	DOUGLAS PASS USA NO. 20-15
LOCATION	SEC. 9, T8S, R91W	SEC. 9, T8S, R91W	SEC. 20, T5S, R102W
OWNER	SUN OIL CO.	SUN OIL CO.	TENNECO OIL EXPL. & PROD. CO
COMPLETED	08/12/65	08/12/65	06/11/81
SAMPLED	05/25/66	05/25/66	02/02/82
FORMATION	CRET-DIVIDE CREEK L	CRET-DIVIDE CREEK U	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4947	4651	5976
WELLHEAD PRESSURE,PSIG	1500	1500	1240
OPEN FLOW, MCFD	600	600	1200
COMPONENT, MOLE PCT			
METHANE	95.5	96.6	70.9
ETHANE	1.6	0.8	3.8
PROPANE	0.8	0.5	1.2
N-BUTANE	0.2	0.1	0.4
ISOBUTANE	TRACE	0.0	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.1	0.1	16.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.9	5.2
HELIUM	TRACE	TRACE	0.87
HEATING VALUE*	1033	1009	852
SPECIFIC GRAVITY	0.592	0.584	0.716

	INDEX 820 SAMPLE 1162	INDEX 821 SAMPLE 1326	INDEX 822 SAMPLE 2214
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARMESA	GARMESA	GARMESA
WELL NAME	NOT GIVEN	GARMESA NO. 1	GARMESA NO. 1
LOCATION	SEC. 5, T8S, R102W	SEC. 5, T8S, R102W	SEC. 8, T8S, R102W
OWNER	GYPSY OIL CO.	GYPSY OIL CO.	FULTON PETROLEUM CO.
COMPLETED	09/--/25	10/--/26	09/25/30
SAMPLED	11/12/25	11/19/26	12/07/30
FORMATION	NOT GIVEN	JURA-MCELMO	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3130	3760	2857
WELLHEAD PRESSURE,PSIG	900	1250	825
OPEN FLOW, MCFD	18893	22000	18900
COMPONENT, MOLE PCT			
METHANE	65.0	19.7	49.8
ETHANE	4.2	4.4	2.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.4	14.3	12.1
OXYGEN	0.4	0.3	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	20.0	61.1	35.6
HELIUM	0.26	0.30	0.31
HEATING VALUE*	754	278	542
SPECIFIC GRAVITY	0.816	1.232	0.961

	INDEX 823 SAMPLE 6199	INDEX 824 SAMPLE 8867	INDEX 825 SAMPLE 8868
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARMESA	GARMESA	GARMESA
WELL NAME	YOUNG NO. 1	NATIONAL NO. 1	GARMESA NO. 1
LOCATION	SEC. 6, T8S, R102W	SEC. 6, T8S, R102W	SEC. 8, T8S, R102W
OWNER	STANDARD URANIUM CORP.	KERR-MCGEE OIL IND., INC.	KERR-MCGEE OIL IND., INC.
COMPLETED	10/06/56	11/14/56	10/12/48
SAMPLED	11/25/56	02/14/63	02/14/63
FORMATION	JURA-MORRISON	JURA-ENTRADA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3085	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	865	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	18000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.6	20.5	70.4
ETHANE	1.1	0.7	1.0
PROPANE	0.0	0.3	0.3
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	2.3	19.6	7.0
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	57.6	20.8
HELIUM	0.11	0.46	0.21
HEATING VALUE*	980	245	752
SPECIFIC GRAVITY	0.595	1.209	0.799

	INDEX 826 SAMPLE 16461	INDEX 827 SAMPLE 10386	INDEX 828 SAMPLE 8040
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GASAWAY UNIT	MAM CREEK AREA	PRAIRIE CANYON
WELL NAME	SHEFFIELD NO. 1-17	JAKE SHAFFER NO. 1	NO. 1
LOCATION	SEC. 17, T6S, R99W	SEC. 12, T7S, R93W	SEC. 19, T7S, R104W
OWNER	NUCORP ENERGY, INC.	CHEVRON OIL CO.	HONOLULU OIL CORP.
COMPLETED	11/01/81	02/01/66	--/--/00
SAMPLED	03/23/82	02/01/66	06/21/61
FORMATION	CRET-DAKOTA	CRET-MESAVERDE	NOT GIVEN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	8850	6778	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1000	1400	860
OPEN FLOW, MCFD	NOT GIVEN	700	1083
COMPONENT, MOLE PCT			
METHANE	93.4	86.6	90.4
ETHANE	0.1	6.8	4.8
PROPANE	TRACE	2.0	1.8
N-BUTANE	0.0	0.3	0.3
ISOBUTANE	0.0	0.1	0.3
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.2	0.8	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.3	3.9	0.6
HELIUM	TRACE	TRACE	0.10
HEATING VALUE*	948	1074	1088
SPECIFIC GRAVITY	0.617	0.656	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 829 SAMPLE 14233	INDEX 830 SAMPLE 7325	INDEX 831 SAMPLE 14678
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	PRAIRIE CANYON	PRAIRIE CANYON NW	ROCK CANYON
WELL NAME	P. C. FED. NO. 1	GOVT. NO. 2	NO. 1-14
LOCATION	SEC. 17, T7S, R104W	SEC. 31, T7S, R104W	SEC. 14, T5S, R102W
OWNER	SELCO PETROLEUM CORP.	AMERICAN METAL CLIMAX, INC.	SWEET PEA OIL & GAS CO.
COMPLETED	11/27/73	10/07/58	06/14/73
SAMPLED	11/20/74	12/21/59	05/--/76
FORMATION	CRET-DAKOTA	CRET-DAKOTA BASAL	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4810	3880	6601
WELLHEAD PRESSURE,PSIG	853	860	245
OPEN FLOW, MCFD	2122	1070	540
COMPONENT, MOLE PCT			
METHANE	85.3	89.8	80.7
ETHANE	5.9	4.4	5.3
PROPANE	1.9	0.9	2.5
N-BUTANE	0.4	0.3	0.7
ISOBUTANE	0.7	0.4	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	3.5	2.6	5.1
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.9	3.0
HELIUM	0.28	0.28	0.44
HEATING VALUE*	1091	1049	1068
SPECIFIC GRAVITY	0.669	0.620	0.692

	INDEX 832 SAMPLE 8689	INDEX 833 SAMPLE 8692	INDEX 834 SAMPLE 8693
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	RULISON	RULISON	RULISON
WELL NAME	JUHAN-FED. NO. 1	GROSS-HAMNEWALD NO. 1	JUHAN NO. 1
LOCATION	SEC. 35, T6S, R94W	SEC. 8, T7S, R94W	SEC. 26, T6S, R94W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO
COMPLETED	06/29/57	12/08/60	09/26/56
SAMPLED	09/20/62	09/20/62	09/20/62
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4624	6180	5066
WELLHEAD PRESSURE,PSIG	2386	1778	2205
OPEN FLOW, MCFD	1064	6253	1937
COMPONENT, MOLE PCT			
METHANE	95.1	91.7	89.4
ETHANE	3.4	4.4	6.6
PROPANE	0.8	1.1	1.9
N-BUTANE	0.2	0.2	0.5
ISOBUTANE	0.2	0.3	0.5
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.0	0.8	0.7
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1063	1075	1121
SPECIFIC GRAVITY	0.588	0.615	0.632

	INDEX 835 SAMPLE 11790	INDEX 836 SAMPLE 17599	INDEX 837 SAMPLE 6400
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	RULISON	RULISON	SOUTH CANYON
WELL NAME	MAYWARD NO. 25-95	RULISON NO. 161	SOUTH CANYON FED. NO. 2
LOCATION	SEC. 25, T7S, R95W	SEC. 12, T6S, R94W	SEC. 35, T6S, R104W
OWNER	AUSTRAL OIL CO., INC.	WILLIAMS EXPLORATION CO.	GULF OIL CORP.
COMPLETED	05/05/68	04/16/84	04/22/57
SAMPLED	--/--/70	02/21/85	08/15/57
FORMATION	CRET-MESAVERDE	CRET-WASATCH	CRET-DAKOTA-BUCKHORN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	7302	1461	3938
WELLHEAD PRESSURE,PSIG	NOT GIVEN	390	736
OPEN FLOW, MCFD	15	NOT GIVEN	2520
COMPONENT, MOLE PCT			
METHANE	90.1	96.7	72.1
ETHANE	4.6	2.4	1.4
PROPANE	1.2	0.2	0.0
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.3	0.0	0.1
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	0.1	0.4	16.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.8	TRACE	8.4
HELIUM	0.02	0.02	0.90
HEATING VALUE*	1066	1031	776
SPECIFIC GRAVITY	0.634	0.570	0.714

	INDEX 838 SAMPLE 6565	INDEX 839 SAMPLE 15110	INDEX 840 SAMPLE 15111
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOUTH CANYON	SOUTH CANYON	SOUTH CANYON
WELL NAME	SOUTH CANYON FED. NO. 3	PALMER NO. 2-23	PALMER NO. 23-12
LOCATION	SEC. 7, T7S, R103W	SEC. 23, T7S, R104W	SEC. 23, T7S, R104W
OWNER	GULF OIL CORP.	PALMER OIL & GAS CO.	PALMER OIL & GAS CO.
COMPLETED	12/31/57	02/--/77	03/--/77
SAMPLED	04/25/58	09/27/77	09/27/77
FORMATION	CRET-DAKOTA-BUCKHORN	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3840	3900	3700
WELLHEAD PRESSURE,PSIG	857	635	840
OPEN FLOW, MCFD	1440	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.7	76.3	72.6
ETHANE	3.2	3.6	3.6
PROPANE	1.1	1.1	1.2
N-BUTANE	0.4	0.3	0.5
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	12.7	11.1	10.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	11.5	6.2	10.6
HELIUM	0.70	0.64	0.53
HEATING VALUE*	826	897	885
SPECIFIC GRAVITY	0.759	0.701	0.753

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 841 SAMPLE 15113	INDEX 842 SAMPLE 15114	INDEX 843 SAMPLE 15878
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOUTH CANYON	SOUTH CANYON	SOUTH CANYON
WELL NAME	PALMER NO. 27-11	PALMER NO. 27-8	FED. NO. 1-15
LOCATION	SEC. 27, T7S, R104W	SEC. 27, T7S, R104W	SEC. 15, T8S, R105W
OWNER	PALMER OIL & GAS CO.	PALMER OIL & GAS CO.	TENNECO OIL CO.
COMPLETED	06/--/77	09/--/76	06/09/79
SAMPLED	09/27/77	09/27/77	01/08/80
FORMATION	CRET-DAKOTA & JURA-MORRISON	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3700	3700	3738
WELLHEAD PRESSURE, PSIG	840	830	910
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	740
COMPONENT, MOLE PCT			
METHANE	70.0	71.2	90.8
ETHANE	3.2	3.4	4.6
PROPANE	1.0	1.0	1.4
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	10.8	11.9	1.2
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	13.8	10.7	0.8
HELIUM	0.59	0.67	0.10
HEATING VALUE*	823	849	1077
SPECIFIC GRAVITY	0.767	0.756	0.621

	INDEX 844 SAMPLE 16130	INDEX 845 SAMPLE 5274	INDEX 846 SAMPLE 5744
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOUTH CANYON	TWIN BUTTES	TWIN BUTTES
WELL NAME	FED. NO. 9-6	FED. NO. 1	TWIN BUTTES NO. 4
LOCATION	SEC. 9, T7S, R104W	SEC. 29, T5S, R102W	SEC. 13, T5S, R102W
OWNER	TENNECO OIL CO.	GREENBRIER OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	12/18/79	10/18/51	09/02/54
SAMPLED	11/06/80	07/29/52	12/14/54
FORMATION	CRET-DAKOTA	JURA-ENTRADA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6320	7136	2385
WELLHEAD PRESSURE, PSIG	900	1780	1640
OPEN FLOW, MCFD	3000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.4	87.1	91.6
ETHANE	3.4	1.3	2.1
PROPANE	1.0	0.4	0.7
N-BUTANE	0.3	0.0	0.1
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	24.1	9.2	3.9
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	4.7	0.4	1.5
HELIUM	0.42	0.32	0.30
HEATING VALUE*	777	919	987
SPECIFIC GRAVITY	0.737	0.646	0.600

	INDEX 847 SAMPLE 16516	INDEX 848 SAMPLE 16517	INDEX 849 SAMPLE 16718
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	UNDESIGNATED	UNDESIGNATED	UNDESIGNATED
WELL NAME	U.S.A. NO. 1-5 LW	U.S.A. NO. 1-6 LW	U.S.A. NO. 1-6 LW
LOCATION	SEC. 5, T8S, R97W	SEC. 6, T8S, R97W	SEC. 6, T8S, R97W
OWNER	COORS ENERGY CO.	COORS ENERGY CO.	COORS ENERGY CO.
COMPLETED	07/08/81	07/26/80	07/26/80
SAMPLED	05/11/82	05/10/82	11/24/82
FORMATION	CRET-COZZETTE CORCORAN	CRET-COZZETTE CORCORAN	CRET-COZZETTE CORCORAN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4331	4333	4333
WELLHEAD PRESSURE, PSIG	1075	1354	NOT GIVEN
OPEN FLOW, MCFD	338	8873	455
COMPONENT, MOLE PCT			
METHANE	87.5	83.7	86.7
ETHANE	6.6	5.4	6.9
PROPANE	2.0	2.0	2.4
N-BUTANE	0.4	0.7	0.5
ISOBUTANE	0.4	0.6	0.5
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.5	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	0.4	4.0	0.2
OXYGEN	0.1	1.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.4	1.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1110	1099	1139
SPECIFIC GRAVITY	0.655	0.684	0.664

	INDEX 850 SAMPLE 663	INDEX 851 SAMPLE 1052	INDEX 852 SAMPLE 14434
STATE	COLORADO	COLORADO	COLORADO
COUNTY	GUNNISON	HUERFANO	HUERFANO
FIELD	NOT GIVEN	NOT GIVEN	SHEEP MOUNTAIN
WELL NAME	RADIOACTIVE HOT SPRING WATER	LA VITA	ROSCOVE NO. 1
LOCATION	MAUMITA HOT SPRINGS	SEC. 10, T29S, R69W	SEC. 15, T27S, R70W
OWNER	STITZER BROS.	PANNCO EXPLORATION CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/00	--/--/00	07/11/74
SAMPLED	09/16/21	05/05/25	08/02/75
FORMATION	NOT GIVEN	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	455	455
DEPTH, FEET	4	1165	3344
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	700
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	46000
COMPONENT, MOLE PCT			
METHANE	0.0	77.7	1.8
ETHANE	0.0	17.7	0.2
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	99.0	3.5	0.6
OXYGEN	0.5	0.7	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.4	97.3
HELIUM	0.11	0.05	0.03
HEATING VALUE*	8	1104	29
SPECIFIC GRAVITY	0.969	0.664	1.507

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 853 SAMPLE 14909	INDEX 854 SAMPLE 14962	INDEX 855 SAMPLE 15072
STATE	COLORADO	COLORADO	COLORADO
COUNTY	HUERFANO	HUERFANO	HUERFANO
FIELD	SHEEP MOUNTAIN	SHEEP MOUNTAIN	SHEEP MOUNTAIN
WELL NAME	SHEEP MOUNTAIN UNIT NO. 7-9	SHEEP MOUNTAIN UNIT NO. 7	SHEEP MOUNTAIN NO. 12
LOCATION	SEC. 9, T27S, R70W	SEC. 9, T27S, R70W	SEC. 15, T27S, R70W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	02/--/76	02/--/76	01/05/77
SAMPLED	02/15/77	04/07/77	06/03/77
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	3380	3380	3078
WELLHEAD PRESSURE,PSIG	759	680	696
OPEN FLOW, MCFD	11500	11500	8000
COMPONENT, MOLE PCT			
METHANE	24.5	17.6	1.8
ETHANE	0.6	0.5	0.2
PROPANE	TRACE	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	10.9	6.5	0.2
OXYGEN	0.2	0.0	TRACE
ARGON	0.3	0.2	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	62.9	74.8	97.7
HELIUM	0.54	0.41	0.03
HEATING VALUE*	259	187	24
SPECIFIC GRAVITY	1.216	1.313	1.509

	INDEX 856 SAMPLE 15073	INDEX 857 SAMPLE 15074	INDEX 858 SAMPLE 16785
STATE	COLORADO	COLORADO	COLORADO
COUNTY	HUERFANO	HUERFANO	HUERFANO
FIELD	SHEEP MOUNTAIN	SHEEP MOUNTAIN	SHEEP MOUNTAIN
WELL NAME	SHEEP MOUNTAIN NO. 7	SHEEP MOUNTAIN NO. 7	NO. 1-22-H
LOCATION	SEC. 9, T27S, R70W	SEC. 9, T27S, R70W	SEC. 22, T27S, R70W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ARCO OIL & GAS CO.
COMPLETED	02/--/76	02/--/76	02/--/83
SAMPLED	07/21/77	07/21/77	03/03/83
FORMATION	CRET-DAKOTA	CRET-DAKOTA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	3380	3380	5320
WELLHEAD PRESSURE,PSIG	680	680	NOT GIVEN
OPEN FLOW, MCFD	11500	11500	9800
COMPONENT, MOLE PCT			
METHANE	6.1	3.4	1.6
ETHANE	0.3	0.2	0.2
PROPANE	0.1	0.1	0.0
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	2.1	1.1	1.5
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	91.1	95.0	96.6
HELIUM	0.12	0.08	0.03
HEATING VALUE*	70	41	27
SPECIFIC GRAVITY	1.454	1.488	1.506

	INDEX 859 SAMPLE 16984	INDEX 860 SAMPLE 16985	INDEX 861 SAMPLE 16987
STATE	COLORADO	COLORADO	COLORADO
COUNTY	HUERFANO	HUERFANO	HUERFANO
FIELD	SHEEP MOUNTAIN	SHEEP MOUNTAIN	SHEEP MOUNTAIN
WELL NAME	NO. 4-P	NO. S-9-A	NO. 3-9-D
LOCATION	SEC. 9, T27S, R70W	SEC. 9, T27S, R70W	SEC. 9, T27S, R70W
OWNER	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.
COMPLETED	--/--/00	04/07/82	--/--/00
SAMPLED	07/18/83	07/18/83	07/18/83
FORMATION	CRET-DAKOTA	JURA-ENTRADA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	3850	4000	3222
WELLHEAD PRESSURE,PSIG	NOT GIVEN	850	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	12300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.6	1.4	1.5
ETHANE	0.2	0.2	0.2
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.3	1.2	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	96.6	96.8	96.8
HELIUM	0.03	0.03	0.03
HEATING VALUE*	27	23	24
SPECIFIC GRAVITY	1.505	1.506	1.505

	INDEX 862 SAMPLE 16990	INDEX 863 SAMPLE 16991	INDEX 864 SAMPLE 16992
STATE	COLORADO	COLORADO	COLORADO
COUNTY	HUERFANO	HUERFANO	HUERFANO
FIELD	SHEEP MOUNTAIN	SHEEP MOUNTAIN	SHEEP MOUNTAIN
WELL NAME	NO. S-15-F	NO. 1-15-C	NO. 3-15-B
LOCATION	SEC. 15, T27S, R70W	SEC. 15, T27S, R70W	SEC. 15, T27S, R70W
OWNER	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.
COMPLETED	09/29/82	05/20/82	06/03/82
SAMPLED	07/25/83	07/25/83	07/25/83
FORMATION	CRET-DAKOTA	JURA-ENTRADA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	3250	3480	2750
WELLHEAD PRESSURE,PSIG	850	731	900
OPEN FLOW, MCFD	10600	11500	13000
COMPONENT, MOLE PCT			
METHANE	1.6	1.4	1.6
ETHANE	0.2	0.2	0.2
PROPANE	0.1	0.0	0.0
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	1.1	1.0	1.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	97.0	97.0	96.6
HELIUM	0.03	0.03	0.03
HEATING VALUE*	22	31	33
SPECIFIC GRAVITY	1.506	1.510	1.506

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 865 SAMPLE 16993	INDEX 866 SAMPLE 17047	INDEX 867 SAMPLE 9033
STATE	COLORADO	COLORADO	COLORADO
COUNTY	HUERFANO	HUERFANO	JACKSON
FIELD	SHEEP MOUNTAIN	SHEEP MOUNTAIN	CANADIAN RIVER
WELL NAME	NO. 2-10-0	NO. 6-15-I	GOVT. LANRON NO. 1-A
LOCATION	SEC. 15, T27S, R70W	SEC. 15, T27S, R70W	SEC. 7, T9N, R80W
OWNER	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.	TEXACO INC.
COMPLETED	07/12/82	11/19/82	05/12/63
SAMPLED	07/25/85	09/02/83	06/04/63
FORMATION	JURA-ENTRADA	CRET-DAKOTA	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	455	455	545
DEPTH, FEET	3975	NOT GIVEN	5717
WELLHEAD PRESSURE,PSIG	920	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	20700	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	1.4	1.5	0.3
ETHANE	0.2	0.2	0.5
PROPANE	0.0	0.1	0.2
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	1.0	1.2	2.5
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	96.7	96.9	96.3
HELIUM	0.03	TRACE	0.10
HEATING VALUE*	42	21	19
SPECIFIC GRAVITY	1.513	1.505	1.509

	INDEX 868 SAMPLE 1352	INDEX 869 SAMPLE 1863	INDEX 870 SAMPLE 1824
STATE	COLORADO	COLORADO	COLORADO
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MCCALLUM N	MCCALLUM N	MCCALLUM S
WELL NAME	GLENWOOD SPRINGS NO. 1	SHERMAN NO. 1	HOYE NO. 1
LOCATION	SEC. 12, T9N, R79W	SEC. 12, T9N, R79W	SEC. 34, T9N, R76S
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	12/--/26	--/--/80
SAMPLED	02/23/27	09/19/29	08/03/29
FORMATION	CRET-DAKOTA	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	545	545	545
DEPTH, FEET	5113	5113	4985
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1000	800
OPEN FLOW, MCFD	NOT GIVEN	20000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	2.7	0.5	0.0
ETHANE	1.9	4.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.9	3.3	2.6
OXYGEN	0.6	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	91.8	92.1	97.5
HELIUM	0.13	0.14	0.08
HEATING VALUE*	61	77	0
SPECIFIC GRAVITY	1.473	1.486	1.516

	INDEX 871 SAMPLE 2716	INDEX 872 SAMPLE 16262	INDEX 873 SAMPLE 17375
STATE	COLORADO	COLORADO	COLORADO
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MCCALLUM S	MCCALLUM S	MCCALLUM S
WELL NAME	HOYE NO. 3	CONOCO-FEDERAL NO. 21-6	CONOCO FED. 8-3 UNIT NO. 1
LOCATION	SEC. 34, T9N, R78W	SEC. 21, T9N, R78W	SEC. 8, T9N, R78W
OWNER	CONTINENTAL OIL CO.	CONOCO, INC.	CONOCO, INC.
COMPLETED	--/--/00	01/23/81	09/11/83
SAMPLED	11/12/35	05/21/81	08/09/84
FORMATION	CRET-DAKOTA	CRET-MUDDY & DAKOTA	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	545	545	545
DEPTH, FEET	5879	5538	5308
WELLHEAD PRESSURE,PSIG	600	710	760
OPEN FLOW, MCFD	6500	2000	8652
COMPONENT, MOLE PCT			
METHANE	4.9	3.6	13.1
ETHANE	1.6	0.2	0.3
PROPANE	---	0.1	TRACE
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	TRACE	0.0
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.9	3.7	14.0
OXYGEN	0.0	0.3	TRACE
ARGON	---	0.1	0.2
HYDROGEN	---	TRACE	0.8
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	91.3	91.8	70.2
HELIUM	0.32	0.17	1.01
HEATING VALUE*	78	55	153
SPECIFIC GRAVITY	1.459	1.475	1.297

	INDEX 874 SAMPLE 6857	INDEX 875 SAMPLE 10225	INDEX 876 SAMPLE 10279
STATE	COLORADO	COLORADO	COLORADO
COUNTY	JACKSON	KIOWA	KIOWA
FIELD	NOT GIVEN	BRANDON	BRANDON
WELL NAME	BALLINGER FED. NO. 1	HARRISON NO. 1	HARRISON NO. 1
LOCATION	SEC. 8, T9N, R78W	SEC. 9, T19S, R45W	SEC. 9, T19S, R45W
OWNER	GULF OIL CORP.	FREMONT PETROLEUM CO.	FREMONT PETROLEUM CO.
COMPLETED	10/25/58	09/01/65	09/01/65
SAMPLED	10/29/58	09/25/65	11/09/65
FORMATION	CRET-MUDDY,DAKOTA&LAKOTA	MISS-LIME	MISS-MARSAW
GEOLOGIC PROVINCE CODE	545	450	450
DEPTH, FEET	5111	4780	4774
WELLHEAD PRESSURE,PSIG	910	892	892
OPEN FLOW, MCFD	14650	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	4.1	16.7	16.0
ETHANE	0.3	3.7	2.6
PROPANE	0.6	7.9	3.5
N-BUTANE	0.1	3.8	2.2
ISOBUTANE	0.0	1.1	0.7
N-PENTANE	TRACE	3.1	1.2
ISOPENTANE	0.0	0.8	1.0
CYCLOPENTANE	TRACE	0.2	0.3
HEXANES PLUS	0.1	2.5	2.3
NITROGEN	4.1	42.7	56.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.6	0.7
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	90.4	14.2	7.1
HELIUM	0.20	2.94	4.63
HEATING VALUE*	71	898	664
SPECIFIC GRAVITY	1.462	1.169	1.058

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 877 SAMPLE 10623	INDEX 878 SAMPLE 10624	INDEX 879 SAMPLE 13187
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	BRANDON	BRANDON	CAVALRY
WELL NAME	DAWSON NO. 1	DAWSON NO. 1	WEAR-KITCH NO. 1
LOCATION	SEC. 4, T19S, R45W	SEC. 4, T19S, R45W	SEC. 34, T18S, R45W
OWNER	FREMONT PETROLEUM CO.	FREMONT PETROLEUM CO.	INEXCO OIL CO.
COMPLETED	--/--/03	--/--/08	04/08/72
SAMPLED	--/--/00	--/--/00	04/13/72
FORMATION	MISS-ST. LOUIS	MISS-	MISS---
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4552	4566	4663
WELLHEAD PRESSURE,PSIG	718	580	NOT GIVEN
OPEN FLOW, MCFD	1450	440	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	24.3	24.1	28.7
ETHANE	3.0	3.1	3.8
PROPANE	2.9	2.9	3.6
N-BUTANE	1.2	1.4	1.7
ISOBUTANE	1.1	0.9	0.9
N-PENTANE	0.4	0.7	0.7
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.4	0.4
NITROGEN	60.6	60.5	54.6
OXYGEN	0.0	0.0	0.5
ARGON	0.2	0.2	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.6	1.8
HELIUM	3.90	3.78	2.59
HEATING VALUE*	503	519	611
SPECIFIC GRAVITY	0.909	0.916	0.919

	INDEX 880 SAMPLE 13188	INDEX 881 SAMPLE 17386	INDEX 882 SAMPLE 17695
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	CAVALRY	HASWELL	HASWELL
WELL NAME	WEAR-KITCH NO. 1	FRAZEE NO. 2-31	LAS ANIMAS NO. 1-1
LOCATION	SEC. 34, T18S, R45W	SEC. 31, T18S, R50W	SEC. 1, T19S, R51W
OWNER	INEXCO OIL CO.	SAMSON OIL CO.	SAMSON OIL CO.
COMPLETED	04/08/72	01/--/83	05/19/84
SAMPLED	04/13/72	08/16/84	05/27/85
FORMATION	MISS-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4663	5151	5147
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1090	1010
OPEN FLOW, MCFD	NOT GIVEN	627	3749
COMPONENT, MOLE PCT			
METHANE	28.7	67.8	70.4
ETHANE	4.0	13.8	12.7
PROPANE	3.9	7.1	6.5
N-BUTANE	1.9	1.8	1.7
ISOBUTANE	1.0	0.8	0.8
N-PENTANE	0.7	0.4	0.0
ISOPENTANE	0.5	0.2	0.3
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	54.7	6.6	6.2
OXYGEN	0.0	TRACE	0.0
ARGON	0.2	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.6	0.5
HELIUM	2.00	0.57	0.51
HEATING VALUE*	646	1237	1221
SPECIFIC GRAVITY	0.939	0.780	0.761

	INDEX 883 SAMPLE 11846	INDEX 884 SAMPLE 16886	INDEX 885 SAMPLE 5287
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	LEFT HAND	LEFT HAND	MCCLAVE
WELL NAME	MERRICK E NO. 1	WEAR TRUST NO. 1-20	STATE MCCLAVE
LOCATION	SEC. 33, T18S, R47W	SEC. 20, T18S, R47W	SEC. 11, T20S, R49W
OWNER	CHAMPLIN PETROLEUM CO.	MURFIN DRILLING CO.	CONTINENTAL OIL CO.
COMPLETED	02/13/69	04/21/83	--/--/00
SAMPLED	04/30/69	04/21/83	10/07/52
FORMATION	PENN-KEYES	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4964	5025	4872
WELLHEAD PRESSURE,PSIG	837	180	1015
OPEN FLOW, MCFD	1850	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.7	58.4	72.0
ETHANE	9.7	8.5	11.2
PROPANE	4.3	4.2	4.4
N-BUTANE	1.3	1.6	0.8
ISOBUTANE	1.0	0.7	0.7
N-PENTANE	0.6	0.4	0.2
ISOPENTANE	0.2	0.8	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	12.4	19.7	9.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	2.8	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	10.7	0.4
HELIUM	0.78	0.72	0.39
HEATING VALUE*	1117	1005	1126
SPECIFIC GRAVITY	0.762	0.834	0.732

	INDEX 886 SAMPLE 6161	INDEX 887 SAMPLE 6276	INDEX 888 SAMPLE 6297
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	MCCLAVE	MCCLAVE	MCCLAVE
WELL NAME	LYNN A NO. 1	M. H. MORSE A-1	STATE A-1
LOCATION	SEC. 13, T20S, R49W	SEC. 28, T20S, R48W	SEC. 34, T19S, R48W
OWNER	D. D. HARRINGTON	D. D. HARRINGTON	D. D. HARRINGTON
COMPLETED	--/--/00	02/28/57	03/30/57
SAMPLED	10/12/56	03/03/57	03/29/57
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4834	4728	4711
WELLHEAD PRESSURE,PSIG	880	890	970
OPEN FLOW, MCFD	5000	5010	887
COMPONENT, MOLE PCT			
METHANE	73.2	73.8	78.5
ETHANE	10.7	12.1	11.5
PROPANE	5.8	4.1	5.3
N-BUTANE	1.0	0.8	1.2
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	7.6	7.5	0.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	0.2
HELIUM	0.39	0.25	0.08
HEATING VALUE*	1178	1140	1163
SPECIFIC GRAVITY	0.735	0.723	0.747

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 889 SAMPLE 7468	INDEX 890 SAMPLE 7469	INDEX 891 SAMPLE 7645
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	MCCLAVE	MCCLAVE	MCCLAVE
WELL NAME	STATE NO. 1-16	NEGLEY NO. 1	STATE-PYLES NO. 1
LOCATION	SEC. 16, T20S, R48W	SEC. 30, T20S, R48W	SEC. 12, T20S, R49W
OWNER	FRANKFORT OIL CO.	FRANKFORT OIL CO.	FRANKFORT OIL CO.
COMPLETED	07/01/59	12/18/59	05/19/60
SAMPLED	06/--/60	03/29/60	08/14/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4725	4835	4835
WELLHEAD PRESSURE,PSIG	NOT GIVEN	873	980
OPEN FLOW, MCFD	5450	1590	20000
COMPONENT, MOLE PCT			
METHANE	74.2	74.2	72.5
ETHANE	11.2	11.4	11.7
PROPANE	4.0	3.9	4.6
N-BUTANE	0.8	0.7	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	8.8	8.2	8.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.4
HELIUM	0.30	0.40	0.40
HEATING VALUE*	1121	1119	1145
SPECIFIC GRAVITY	0.713	0.712	0.730

	INDEX 892 SAMPLE 7646	INDEX 893 SAMPLE 11128	INDEX 894 SAMPLE 17920
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	MCCLAVE	MCCLAVE	SALT LAKE
WELL NAME	GOFF UNIT NO. 1	WEISENBERGER A NO. 1	FRAZEE-G NO. 1
LOCATION	SEC. 21, T20S, R48W	SEC. 29, T19S, R48W	SEC. 10, T19S, R50W
OWNER	FRANKFORT OIL CO.	CABOT CORP.	TXO PRODUCTION CORP.
COMPLETED	12/21/59	05/18/67	10/20/84
SAMPLED	08/16/60	09/22/67	11/26/85
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	4745	4629	5258
WELLHEAD PRESSURE,PSIG	900	991	820
OPEN FLOW, MCFD	1700	1050	2816
COMPONENT, MOLE PCT			
METHANE	72.6	65.7	60.7
ETHANE	11.7	10.5	9.3
PROPANE	4.6	6.5	4.4
N-BUTANE	1.1	2.0	1.3
ISOBUTANE	0.5	1.1	0.3
N-PENTANE	0.2	0.5	0.4
ISOPENTANE	0.2	1.1	0.2
CYCLOPENTANE	TRACE	0.4	TRACE
HEXANES PLUS	0.2	0.7	0.1
NITROGEN	8.0	10.8	20.6
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.7
HELIUM	0.40	0.37	1.60
HEATING VALUE*	1146	1246	980
SPECIFIC GRAVITY	0.730	0.821	0.768

	INDEX 895 SAMPLE 6219	INDEX 896 SAMPLE 6514	INDEX 897 SAMPLE 16911
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIOWA	KIOWA	KIT CARSON
FIELD	WILDCAT	WILDCAT	LOOKOUT
WELL NAME	WAGNER NO. 1	ERRAMUSPE NO. A-1	NICKS NO. 8-1
LOCATION	SEC. 31, T23S, R49W	SEC. 34, T20S, R48W	SEC. 24, T11S, R45W
OWNER	D. D. HARRINGTON	D. D. HARRINGTON	TXO PRODUCTION CORP.
COMPLETED	--/--/00	--/--/00	08/04/77
SAMPLED	09/05/56	02/23/58	05/03/83
FORMATION	PENN-MARMATON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	450	450	540
DEPTH, FEET	4990	4761	5360
WELLHEAD PRESSURE,PSIG	NOT GIVEN	871	816
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5662
COMPONENT, MOLE PCT			
METHANE	69.5	73.8	24.2
ETHANE	4.3	11.3	1.9
PROPANE	1.3	4.3	1.3
N-BUTANE	0.3	0.9	0.7
ISOBUTANE	0.0	0.7	0.2
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.4	0.2	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	23.8	7.7	65.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.3
HYDROGEN	0.3	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	1.0
HELIUM	0.52	0.20	3.49
HEATING VALUE*	845	1147	383
SPECIFIC GRAVITY	0.694	0.729	0.878

	INDEX 898 SAMPLE 16914	INDEX 899 SAMPLE 16918	INDEX 900 SAMPLE 16940
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIT CARSON	KIT CARSON	KIT CARSON
FIELD	LOOKOUT	LOOKOUT	LOOKOUT
WELL NAME	PIERSON NO. J-3	CHAMPLIN PIERSON NO. 1	CHAMPLIN KIRSCHNER NO. 1
LOCATION	SEC. 20, T11S, R44W	SEC. 19, T11S, R44W	SEC. 21, T11S, R44W
OWNER	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED	05/20/78	02/01/78	--/--/83
SAMPLED	05/02/83	05/03/83	05/02/83
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5348	5374	NOT GIVEN
WELLHEAD PRESSURE,PSIG	588	796	NOT GIVEN
OPEN FLOW, MCFD	1388	3821	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	21.4	23.9	20.9
ETHANE	1.7	1.9	1.6
PROPANE	1.3	1.5	1.3
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.5	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	68.4	65.7	68.7
OXYGEN	0.1	0.0	TRACE
ARGON	0.3	0.3	0.3
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.8
HELIUM	4.01	3.51	4.16
HEATING VALUE*	359	406	352
SPECIFIC GRAVITY	0.886	0.887	0.886

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 901 SAMPLE 9707	INDEX 902 SAMPLE 6354	INDEX 903 SAMPLE 6464
STATE	COLORADO	COLORADO	COLORADO
COUNTY	KIT CARSON	LA PLATA	LA PLATA
FIELD	SMOKY HILL	ALKALI GULCH	ALKALI GULCH
WELL NAME	LOWE NO. 2	CATER F NO. II-32	BUTLER NO. 44-28
LOCATION	SEC. 1, T11S, R46W	SEC. 32, T34N, R12W	SEC. 28, T34N, R12W
OWNER	CONTINENTAL OIL CO.	GENERAL PETROLEUM CORP.	GENERAL PETROLEUM CORP.
COMPLETED	01/16/65	05/17/57	11/13/57
SAMPLED	01/18/65	07/20/57	12/23/57
FORMATION	PENN-MORROW	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	540	580	580
DEPTH, FEET	5477	9420	9526
WELLHEAD PRESSURE,PSIG	780	NOT GIVEN	3187
OPEN FLOW, MCFD	3000	36000	23000
COMPONENT, MOLE PCT			
METHANE	19.6	94.3	93.4
ETHANE	1.9	0.1	0.1
PROPANE	1.1	0.0	0.0
N-BUTANE	0.6	0.0	0.1
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.0	TRACE
NITROGEN	70.6	0.0	0.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.3	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	5.0	5.5
HELIUM	4.28	0.17	0.20
HEATING VALUE*	315	957	952
SPECIFIC GRAVITY	0.883	0.601	0.609

	INDEX 904 SAMPLE 4660	INDEX 905 SAMPLE 4785	INDEX 906 SAMPLE 3635
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	BARKER CREEK	BARKER DOME	BONDAD
WELL NAME	DELHI NO. 2	DELHI NO. 3	SPATTER BONDAD NO. 1
LOCATION	SEC. 3, T32N, R13W	SEC. 2, T32N, R14W	SEC. 31, T33N, R9W
OWNER	DELHI OIL CORP.	DELHI OIL CORP.	NICK SPATTER
COMPLETED	--/--/00	08/30/49	--/--/00
SAMPLED	04/05/49	09/10/49	04/09/53
FORMATION	PENN-PARADOX	PENN-PARADOX	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	9654	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2700	NOT GIVEN
OPEN FLOW, MCFD	125000	172	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.1	84.0	95.7
ETHANE	1.1	1.2	0.5
PROPANE	0.9	0.4	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.6	1.4	0.0
OXYGEN	0.1	0.1	0.3
ARGON	0.1	TRACE	---
HYDROGEN	0.5	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	11.6	12.1	3.5
HELIUM	0.22	0.21	TRACE
HEATING VALUE*	894	903	978
SPECIFIC GRAVITY	0.686	0.694	0.593

	INDEX 907 SAMPLE 6254	INDEX 908 SAMPLE 5792	INDEX 909 SAMPLE 5063
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	BONDAD E	FRUITLAND	IGNACIO
WELL NAME	SOUTHERN UTE 33-10 NO. 2-35	PUBCO UTE NO. 1	UTE INDIANS B NO. 2
LOCATION	SEC. 35, T33N, R10W	SEC. 9, T33N, R9W	SEC. 21, T33N, R7W
OWNER	U.S. SMELTING, REFINING & MI	PUBCO DEVELOPMENT, INC.	STANOLIND OIL & GAS CO.
COMPLETED	10/05/56	11/18/54	02/28/51
SAMPLED	02/15/57	03/16/55	06/27/51
FORMATION	CRET-MESAVERDE	CRET-FRUITLAND	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5092	2540	2465
WELLHEAD PRESSURE,PSIG	796	1294	1494
OPEN FLOW, MCFD	8724	2438	2350
COMPONENT, MOLE PCT			
METHANE	95.3	98.2	98.0
ETHANE	2.2	0.1	0.4
PROPANE	0.5	0.0	0.1
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.2	0.5	0.9
OXYGEN	0.1	TRACE	0.3
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.6	1.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1019	997	1008
SPECIFIC GRAVITY	0.587	0.565	0.566

	INDEX 910 SAMPLE 5257	INDEX 911 SAMPLE 5440	INDEX 912 SAMPLE 7218
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO	IGNACIO	IGNACIO
WELL NAME	MELTON NO. 1	TIFFANY G-U, B-1	ADA NO. 1
LOCATION	SEC. 18, T33N, R8W	SEC. 35, T33N, R7W	SEC. 25, T33N, R11W
OWNER	EL PASO NATURAL GAS CO.	STANOLIND OIL & GAS CO.	MONSANTO CHEMICAL CO.
COMPLETED	08/29/51	12/23/52	01/07/59
SAMPLED	06/27/52	04/02/53	09/11/59
FORMATION	CRET-DAKOTA BASAL	CRET-FRUITLAND	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7830	2346	4740
WELLHEAD PRESSURE,PSIG	2736	1450	1172
OPEN FLOW, MCFD	17000	2350	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.9	95.9	89.7
ETHANE	0.2	0.3	3.9
PROPANE	0.1	0.0	0.5
N-BUTANE	0.1	TRACE	0.1
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.1	0.9
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.6	0.4	2.8
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	1.9
CARBON DIOXIDE	0.0	3.1	TRACE
HELIUM	0.01	TRACE	0.28
HEATING VALUE*	971	986	1042
SPECIFIC GRAVITY	0.600	0.595	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 913 SAMPLE 16508	INDEX 914 SAMPLE 7737	INDEX 915 SAMPLE 8067
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO	IGNACIO-BLANCO	IGNACIO-BLANCO
WELL NAME	GEARHART NO. 1-31	SOUTHERN UTE NO. 2	COLORADO 32-7 NO. 2
LOCATION	SEC. 31, T35N, R7W	SEC. 16, T32N, R7W	SEC. 19, T32N, R7W
OWNER	NATOMAS NORTH AMERICA, INC.	W. E. BAKKE	EL PASO NATURAL GAS CO.
COMPLETED	--/--/00	10/03/60	05/02/61
SAMPLED	04/30/82	10/23/60	07/11/61
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7396	7718	5452
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2800	1184
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3645
COMPONENT, MOLE PCT			
METHANE	94.2	93.6	94.5
ETHANE	TRACE	0.1	2.8
PROPANE	TRACE	0.0	0.5
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.4	0.8	0.0
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.3	5.1	2.0
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	951	951	1027
SPECIFIC GRAVITY	0.608	0.607	0.596

	INDEX 916 SAMPLE 8729	INDEX 917 SAMPLE 15928	INDEX 918 SAMPLE 15929
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO-BLANCO	IGNACIO-BLANCO	IGNACIO-BLANCO
WELL NAME	NO. 32-7 1-11	SOUTHERN UTE NO. 30-1	SOUTHERN UTE NO. 30-1
LOCATION	SEC. 11, T32N, R7W	SEC. 30, T33N, R9W	SEC. 30, T33N, R9W
OWNER	ASPEN CRUDE PURCHASING CO.	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.
COMPLETED	11/06/59	08/23/78	08/23/78
SAMPLED	10/18/62	03/31/80	03/31/80
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5430	5109	2868
WELLHEAD PRESSURE,PSIG	800	1106	1333
OPEN FLOW, MCFD	2758	2140	269
COMPONENT, MOLE PCT			
METHANE	95.0	95.2	90.6
ETHANE	2.5	1.8	4.5
PROPANE	0.4	0.8	1.2
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	TRACE	TRACE	0.4
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.1	0.1	0.2
OXYGEN	TRACE	0.0	0.8
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	2.5	2.5
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1021	1010	1071
SPECIFIC GRAVITY	0.588	0.594	0.634

	INDEX 919 SAMPLE 5291	INDEX 920 SAMPLE 17484	INDEX 921 SAMPLE 5721
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	LA PLATA	NIOBRARA	NOT GIVEN
WELL NAME	UTE NO. 1	UTE INDIAN NO. 1-11	VIRBETH LAND NO. 1
LOCATION	SEC. 15, T32N, R11W	SEC. 11, T33N, R11W	SEC. 22, T32N, R11W
OWNER	SOUTHERN UNION GAS CO.	MOBIL OIL CORP.	SOUTHERN UNION GAS CO.
COMPLETED	05/08/52	--/--/00	09/03/54
SAMPLED	08/29/52	10/10/84	10/--/54
FORMATION	CRET-POINT LOOKOUT	CRET-NIOBRARA	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4530	NOT GIVEN	5295
WELLHEAD PRESSURE,PSIG	972	400	NOT GIVEN
OPEN FLOW, MCFD	1710	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	85.8	87.1	87.7
ETHANE	7.8	5.5	7.0
PROPANE	2.9	2.7	2.0
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.5	0.4	0.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	2.7	1.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1152	1106	1123
SPECIFIC GRAVITY	0.667	0.662	0.648

	INDEX 922 SAMPLE 8801	INDEX 923 SAMPLE 16682	INDEX 924 SAMPLE 5310
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	RED MESA	RED MESA	WILDCAT
WELL NAME	DUDLEY NO. 1	WEST ALKALI GULCH NO. 1	MARMON NO. 1
LOCATION	SEC. 23, T33N, R12W	SEC. 2, T33N, R13W	SEC. 17, T33N, R8W
OWNER	HATHAWAY CO.	DAVIS OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	03/01/61	09/21/82	05/28/52
SAMPLED	12/03/62	04/16/83	11/07/52
FORMATION	CRET-MESAVERDE	PENN-DESERT CREEK	CRET-U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	900	8470	2685
WELLHEAD PRESSURE,PSIG	500	2600	1390
OPEN FLOW, MCFD	200	210	100
COMPONENT, MOLE PCT			
METHANE	98.3	95.8	96.4
ETHANE	0.1	1.3	0.2
PROPANE	TRACE	0.3	0.6
N-BUTANE	TRACE	0.2	TRACE
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	0.3	1.1	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	3.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	998	1026	980
SPECIFIC GRAVITY	0.566	0.584	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 925 SAMPLE 8678	INDEX 926 SAMPLE 13227	INDEX 927 SAMPLE 2143
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LARIMER
FIELD	WILDCAT	WILDCAT	BERTHOUD
WELL NAME	ANIMAS NO. 2-11	UTE NO. 1	STATE NO. 2
LOCATION	SEC. 11, T33N, R10W	SEC. 24, T33N, R14W	SEC. 16, T4N, R69W
OWNER	COMPASS EXPLORATION, INC.	NORRIS OIL CO.	FIVE SQUARE OIL & GAS CO.
COMPLETED	03/09/62	03/01/72	07/01/29
SAMPLED	09/27/62	08/04/72	09/15/30
FORMATION	CRET-FRUITLAND	PENN-HERMOSA	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	540
DEPTH, FEET	2133	9766	3750
WELLHEAD PRESSURE,PSIG	1248	2565	125
OPEN FLOW, MCFD	399	3500	450
COMPONENT, MOLE PCT			
METHANE	96.6	82.7	63.7
ETHANE	0.6	0.4	31.5
PROPANE	0.1	0.2	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	TRACE	0.2	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.2	---
NITROGEN	0.1	0.7	4.2
OXYGEN	TRACE	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.2	0.1	---
HYDROGEN SULFIDE**	0.0	5.9	---
CARBON DIOXIDE	2.3	9.2	0.2
HELIUM	TRACE	0.17	0.03
HEATING VALUE*	996	913	1210
SPECIFIC GRAVITY	0.582	0.698	0.731

	INDEX 928 SAMPLE 2192	INDEX 929 SAMPLE 855	INDEX 930 SAMPLE 1783
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LARIMER	LARIMER	LARIMER
FIELD	BERTHOUD	WELLINGTON	WELLINGTON
WELL NAME	FAGAN NO. 1	DISCOVERY	MITCHELL NO. 1
LOCATION	SEC. 17, T4N, R69W	SEC. 31, T10N, R68W	SEC. 6, T9N, R68W
OWNER	FIVE SQUARE OIL & GAS CO.	UNION OIL CO. OF CALIF.	CONTINENTAL OIL CO.
COMPLETED	07/04/26	--/--/00	07/19/24
SAMPLED	09/06/30	03/20/24	05/20/29
FORMATION	CRET-FRONTIER	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	2910	4275	4216
WELLHEAD PRESSURE,PSIG	1300	165	975
OPEN FLOW, MCFD	850	85000	67000
COMPONENT, MOLE PCT			
METHANE	76.7	86.1	84.3
ETHANE	21.9	9.8	14.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	2.0	0.4
OXYGEN	0.2	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	1.7	0.9
HELIUM	0.04	0.01	TRACE
HEATING VALUE*	1169	1048	1110
SPECIFIC GRAVITY	0.671	0.628	0.636

	INDEX 931 SAMPLE 1093	INDEX 932 SAMPLE 1094	INDEX 933 SAMPLE 1869
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	GARCIA	GARCIA	MODEL
WELL NAME	SANDOVAL RANCH	SANDOVAL RANCH	COWDREY NOS. 1 & 2
LOCATION	SEC. 9, T34S, R62W	SEC. --, T34S, R62W	SEC. 35, T29S, R60W
OWNER	CARLOS SANDOVAL	MOUNTAIN STATES OIL CORP.	HELIUM CO.
COMPLETED	--/--/96	--/--/00	09/--/29
SAMPLED	07/03/25	07/03/25	11/02/29
FORMATION	CRET-APISHAPA	CRET-APISHAPA	PERM-RED BEDS
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	NOT GIVEN	850	900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	13
OPEN FLOW, MCFD	50	100000	1000
COMPONENT, MOLE PCT			
METHANE	53.5	28.6	0.0
ETHANE	37.2	68.5	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.7	---	79.7
OXYGEN	0.3	0.3	0.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.3	2.6	12.2
HELIUM	TRACE	TRACE	7.18
HEATING VALUE*	1209	1517	0
SPECIFIC GRAVITY	0.790	0.920	0.977

	INDEX 934 SAMPLE 1914	INDEX 935 SAMPLE 3108	INDEX 936 SAMPLE 3109
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	MODEL	MODEL	MODEL
WELL NAME	MUFF NO. 1	VAN VLIET NO. 1	COWDREY NO. 1
LOCATION	SEC. 35, T29S, R60W	SEC. 1, T30S, R60W	SEC. 35, T29S, R60W
OWNER	HELIUM CO.	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	09/--/29	--/--/00	--/--/00
SAMPLED	12/21/29	03/06/42	03/06/42
FORMATION	PERM-LYONS	JURA-	JURA-
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	1004	950	895
WELLHEAD PRESSURE,PSIG	10	11	11
OPEN FLOW, MCFD	1000	75	270
COMPONENT, MOLE PCT			
METHANE	0.0	0.1	0.1
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	77.4	77.9	75.7
OXYGEN	0.2	0.3	2.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	14.2	13.9	13.9
HELIUM	8.34	7.83	7.59
HEATING VALUE*	0	1	1
SPECIFIC GRAVITY	0.979	0.981	0.986

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 937 SAMPLE 3110	INDEX 938 SAMPLE 3111	INDEX 939 SAMPLE 8676
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	MODEL	MODEL	MODEL
WELL NAME	COWDREY NO. 2	COWDREY NO. 3	HOFF HEIRS NO. 2
LOCATION	SEC. 35, T29S, R60W	SEC. 35, T29S, R60W	SEC. 35, T29S, R60W
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	ROBERT E. THORPE, SR.
COMPLETED	--/--/00	--/--/00	05/15/62
SAMPLED	03/05/42	03/05/42	09/27/62
FORMATION	JURA-	JURA-	PERM-LYONS
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	941	1091	980
WELLHEAD PRESSURE,PSIG	11	11	10
OPEN FLOW, MCFD	183	480	50
COMPONENT, MOLE PCT			
METHANE	0.1	0.2	TRACE
ETHANE	0.0	0.0	TRACE
PROPANE	---	---	0.2
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	72.1	76.6	75.8
OXYGEN	1.6	1.7	0.6
ARGON	---	---	0.7
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	14.3	14.8	15.4
HELIUM	7.93	6.70	7.19
HEATING VALUE*	1	2	5
SPECIFIC GRAVITY	0.945	0.996	0.998

	INDEX 940 SAMPLE 5488	INDEX 941 SAMPLE 5489	INDEX 942 SAMPLE 5490
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	NINA VIEW	NINA VIEW	NINA VIEW
WELL NAME	WELL NO. 2	WELL NO. 3	WELL NO. 4
LOCATION	SEC. 7, T28S, R52W	SEC. 7, T28S, R52W	SEC. 7, T28S, R52W
OWNER	NELSON-MOORE DEVELOPMENT CO.	NELSON-MOORE DEVELOPMENT CO.	NELSON-MOORE DEVELOPMENT CO.
COMPLETED	--/--/00	09/--/52	09/--/52
SAMPLED	03/30/53	03/30/53	03/30/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	486	880	819
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3500	627	768
COMPONENT, MOLE PCT			
METHANE	0.2	0.0	0.0
ETHANE	0.1	TRACE	TRACE
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	3.0	3.0	2.2
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	96.6	96.7	97.6
HELIUM	0.11	0.13	0.06
HEATING VALUE*	4	0	0
SPECIFIC GRAVITY	1.508	1.509	1.515

	INDEX 943 SAMPLE 2449	INDEX 944 SAMPLE 2450	INDEX 945 SAMPLE 15817
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	BRUMLEY NO. 1	KINS NO. 1	MOBIL CT-79-8-9C
LOCATION	SEC. 6, T29S, R51W	SEC. 1, T28S, R53W	SEC. 9, T33S, R65W
OWNER	C. W. BRUMLEY	NOT GIVEN	MOBIL OIL CORP.
COMPLETED	--/--/14	--/--/16	--/--/00
SAMPLED	04/24/31	04/23/31	10/--/79
FORMATION	PERM-GLORIETA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	425	125	1192
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	93.7
ETHANE	0.0	0.0	TRACE
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	1.1	3.8	4.6
OXYGEN	0.1	0.2	0.4
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	98.8	95.9	1.1
HELIUM	TRACE	0.08	TRACE
HEATING VALUE*	0	0	949
SPECIFIC GRAVITY	1.522	1.505	0.587

	INDEX 946 SAMPLE 1160	INDEX 947 SAMPLE 1735	INDEX 948 SAMPLE 8950
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LAS ANIMAS	LAS ANIMAS
FIELD	SAN FRANCISCO CREEK	SAN FRANCISCO CREEK	STRATIGRAPHIC TEST
WELL NAME	NO. 1	SANDOVAL NO. 2	GOVT. TRUE NO. 1
LOCATION	SEC. 4, T34S, R62W	SEC. 4, T34S, R62W	SEC. 30, T28S, R56W
OWNER	MOUNTAIN STATES OIL CORP.	MOUNTAIN STATES OIL CORP.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/26/25	08/06/29	04/29/63
FORMATION	NOT GIVEN	NOT GIVEN	PERM-LYONS
GEOLOGIC PROVINCE CODE	455	455	455
DEPTH, FEET	1300	NOT GIVEN	1015
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3
COMPONENT, MOLE PCT			
METHANE	44.5	15.1	0.0
ETHANE	38.5	75.5	0.0
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	12.7	3.7	75.7
OXYGEN	1.5	0.6	0.0
ARGON	---	---	0.9
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.8	3.1	14.6
HELIUM	TRACE	TRACE	8.80
HEATING VALUE*	1191	1506	0
SPECIFIC GRAVITY	0.833	0.966	0.980

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 949 SAMPLE 5566	INDEX 950 SAMPLE 11542	INDEX 951 SAMPLE 5016
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LAS ANIMAS	LOGAN	LOGAN
FIELD	WILDCAT	AMBER	ARMSTRONG
WELL NAME	MOCK NO. 1	ROBERTS NO. 1	T. P. LINDE NO. 1
LOCATION	SEC. 29, T34S, R59W	SEC. 30, T11N, R53W	SEC. 23, T11N, R53W
OWNER	BAKER & TAYLOR DRILLING CO.	FRANK E WALSH	BRITISH AMERICAN OIL PROD. C
COMPLETED	--/--/00	01/15/68	12/15/50
SAMPLED	11/20/53	06/14/68	02/14/51
FORMATION	NOT GIVEN	CRET-DAKOTA D	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	455	540	540
DEPTH, FEET	2390	5060	5256
WELLHEAD PRESSURE,PSIG	200	950	1242
OPEN FLOW, MCFD	50	2600	4500
COMPONENT, MOLE PCT			
METHANE	0.1	78.2	79.9
ETHANE	1.5	5.4	7.3
PROPANE	---	6.4	5.0
N-BUTANE	---	1.9	1.4
ISOBUTANE	---	1.0	0.5
N-PENTANE	---	0.5	0.2
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.3	0.2
NITROGEN	88.3	5.0	4.2
OXYGEN	0.2	0.2	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	7.7	1.1	0.9
HELIUM	2.20	0.08	0.08
HEATING VALUE*	28	1202	1160
SPECIFIC GRAVITY	0.993	0.744	0.706

	INDEX 952 SAMPLE 6243	INDEX 953 SAMPLE 6244	INDEX 954 SAMPLE 16215
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	ARMSTRONG	ARMSTRONG	BIG SANDY
WELL NAME	LINDE NO. 1	EDMOND STRANGE NO. 1	BUDIN NO. 1S
LOCATION	SEC. 23, T11N, R53W	SEC. 24, T11N, R53W	SEC. 2, T8N, R55W
OWNER	BRITISH AMERICAN OIL PROD. C	BRITISH AMERICAN OIL PROD. C	OKRAR OIL CO.
COMPLETED	09/19/50	08/26/51	01/24/79
SAMPLED	01/25/57	01/25/57	03/--/81
FORMATION	CRET-DAKOTA J	CRET-DAKOTA D	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5256	5221	5312
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1003
OPEN FLOW, MCFD	2882	1550	2341
COMPONENT, MOLE PCT			
METHANE	79.1	78.7	77.2
ETHANE	7.5	7.6	9.3
PROPANE	4.9	4.6	5.2
N-BUTANE	1.5	1.6	1.5
ISOBUTANE	0.8	0.9	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.4	0.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	4.2	4.4	3.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	1.5
HELIUM	0.08	0.08	0.06
HEATING VALUE*	1176	1181	1215
SPECIFIC GRAVITY	0.720	0.725	0.741

	INDEX 955 SAMPLE 5789	INDEX 956 SAMPLE 17420	INDEX 957 SAMPLE 5455
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	COYOTE	DAILEY	DALE
WELL NAME	STATE 694 A-1	FINNIGSMIER NO. 4-1	BREWER A NO. 1
LOCATION	SEC. 12, T8N, R53W	SEC. 4, T8N, R48W	SEC. 15, T8N, R53W
OWNER	SHELL OIL CO.	REE EXPLORATION INC.	SHELL OIL CO.
COMPLETED	01/01/55	10/01/82	--/--/00
SAMPLED	03/07/55	09/--/84	04/14/53
FORMATION	CRET-MUDDY	CRET-DAKOTA J	CRET-MUDDY
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4525	4111	4656
WELLHEAD PRESSURE,PSIG	1070	180	NOT GIVEN
OPEN FLOW, MCFD	2250	2500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.8	89.5	79.1
ETHANE	2.5	3.5	6.6
PROPANE	1.5	0.2	4.8
N-BUTANE	0.6	TRACE	2.0
ISOBUTANE	0.6	0.6	0.7
N-PENTANE	0.2	TRACE	0.5
ISOPENTANE	0.3	0.4	0.6
CYCLOPENTANE	0.1	0.3	0.2
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	2.2	3.5	4.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.4	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.3	0.6
HELIUM	0.03	0.04	0.07
HEATING VALUE*	1070	1037	1210
SPECIFIC GRAVITY	0.639	0.633	0.733

	INDEX 958 SAMPLE 5460	INDEX 959 SAMPLE 17503	INDEX 960 SAMPLE 7491
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	DALE	FRENCHMAN CREEK	HADFIELD
WELL NAME	J. KNIFTON A NO. 1	HONNEGRENQUILLE NO. 1	EISENACH NO. 1
LOCATION	SEC. 23, T8N, R53W	SEC. 1, T7N, R51W	SEC. 7, T7N, R52W
OWNER	SHELL OIL CO.	ARCO OIL & GAS CO.	PETROLEUM, INC.
COMPLETED	--/--/00	01/25/84	05/09/59
SAMPLED	04/15/53	10/11/84	04/07/60
FORMATION	CRET-DAKOTA	CRET-DAKOTA J	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4756	4712	4378
WELLHEAD PRESSURE,PSIG	NOT GIVEN	860	900
OPEN FLOW, MCFD	NOT GIVEN	1750	350
COMPONENT, MOLE PCT			
METHANE	77.3	92.3	86.5
ETHANE	9.3	1.8	4.0
PROPANE	5.4	0.3	3.9
N-BUTANE	1.6	0.1	1.6
ISOBUTANE	0.7	0.7	0.6
N-PENTANE	0.5	0.0	0.1
ISOPENTANE	0.5	0.7	1.1
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.3	0.2	0.4
NITROGEN	3.9	2.6	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.9	1.2
HELIUM	0.06	0.04	0.03
HEATING VALUE*	1221	1050	1206
SPECIFIC GRAVITY	0.736	0.619	0.699

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 961 SAMPLE 17680	INDEX 962 SAMPLE 5456	INDEX 963 SAMPLE 5152
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	HORSETAIL N	LUFT	MOUNT HOPE
WELL NAME	SANDERS NO. 1-35	C. LUFT, JR. NO. 1-6	GREEN A NO. 5
LOCATION	SEC. 35, T10N, R54W	SEC. 17, T8N, R53W	SEC. 30, T9N, R53W
OWNER	INDUSTRIAL GAS SERVICES, INC	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	12/16/83	--/--/00	03/01/51
SAMPLED	05/17/85	04/15/53	08/10/51
FORMATION	CRET-D SAND	CRET-MUDDY	CRET---
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4947	NOT GIVEN	4863
WELLHEAD PRESSURE,PSIG	150	NOT GIVEN	298
OPEN FLOW, MCFD	200	NOT GIVEN	173
COMPONENT, MOLE PCT			
METHANE	75.4	73.5	75.5
ETHANE	6.0	7.8	6.7
PROPANE	7.0	7.4	8.0
N-BUTANE	2.9	3.6	3.0
ISOBUTANE	0.7	1.1	0.9
N-PENTANE	0.6	0.8	0.4
ISOPENTANE	1.1	0.9	0.6
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.4	0.4	0.2
NITROGEN	4.0	3.7	4.1
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.6	0.7	0.4
HELIUM	0.07	0.05	0.06
HEATING VALUE*	1271	1332	1281
SPECIFIC GRAVITY	0.785	0.806	0.775

	INDEX 964 SAMPLE 5458	INDEX 965 SAMPLE 5459	INDEX 966 SAMPLE 5145
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	MOUNT HOPE	MOUNT HOPE	PADRONI
WELL NAME	GREEN A NO. 8	GREEN A, NO. 20	GOULD NO. 1
LOCATION	SEC. 30, T9N, R53W	SEC. 30, T9N, R53W	SEC. 20, T9N, R52W
OWNER	SHELL OIL CO.	SHELL OIL CO.	TEXAS CO.
COMPLETED	--/--/00	--/--/00	07/08/51
SAMPLED	04/07/53	04/07/53	08/08/51
FORMATION	CRET-MUDDY	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4865	4935	4625
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1125
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	74.9	73.2	78.4
ETHANE	7.7	7.9	7.7
PROPANE	8.3	7.4	5.2
N-BUTANE	2.7	3.0	1.3
ISOBUTANE	0.9	1.4	0.6
N-PENTANE	0.7	0.5	0.5
ISOPENTANE	0.3	0.8	TRACE
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.5	0.6	TRACE
NITROGEN	3.1	3.9	5.8
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.2
HELIUM	0.03	0.04	0.07
HEATING VALUE*	1306	1331	1159
SPECIFIC GRAVITY	0.783	0.806	0.708

	INDEX 967 SAMPLE 5871	INDEX 968 SAMPLE 13210	INDEX 969 SAMPLE 17718
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	PAWNEE CREEK N	PEAVY	RAYMER CREEK
WELL NAME	BRACHTENBACH NO. 1	PEAVY NO. 1	RAYMER CREEK NO. 1-22
LOCATION	SEC. 26, T8N, R54W	SEC. 30, T12N, R55W	SEC. 22, T8N, R55W
OWNER	J. S. BRADEN OIL CO.	RAYMOND OIL CO., INC.	POWER RESOURCES CORP.
COMPLETED	05/13/55	--/--/00	--/--/00
SAMPLED	07/09/55	05/10/72	06/10/85
FORMATION	CRET-DAKOTA J	CRET-DAKOTA D	CRET-D SAND
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5110	5958	5239
WELLHEAD PRESSURE,PSIG	1170	830	630
OPEN FLOW, MCFD	7850	3500	250
COMPONENT, MOLE PCT			
METHANE	78.6	77.8	72.5
ETHANE	7.8	5.9	7.0
PROPANE	4.9	6.8	7.4
N-BUTANE	1.3	1.9	3.1
ISOBUTANE	0.6	0.6	1.1
N-PENTANE	0.3	0.3	0.7
ISOPENTANE	0.3	0.2	0.8
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	5.1	4.7	5.4
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.7	1.1
HELIUM	0.08	0.11	TRACE
HEATING VALUE*	1168	1181	1286
SPECIFIC GRAVITY	0.715	0.738	0.802

	INDEX 970 SAMPLE 5454	INDEX 971 SAMPLE 5461	INDEX 972 SAMPLE 5950
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	SPRINGDALE	SPRINGDALE	STERLING
WELL NAME	L. G. CHRISTNER NO. 1	H. HAAS JR. NO. 1	STATE NO. 1
LOCATION	SEC. 15, T8N, R53W	SEC. 10, T8N, R53W	SEC. 2, T7N, R52W
OWNER	SHELL OIL CO.	SHELL OIL CO.	DIEHLER & OLESON
COMPLETED	--/--/00	--/--/00	05/26/55
SAMPLED	04/22/53	04/15/53	10/17/55
FORMATION	CRET-DAKOTA	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4830	4768	4504
WELLHEAD PRESSURE,PSIG	94	NOT GIVEN	1068
OPEN FLOW, MCFD	2902	NOT GIVEN	1921
COMPONENT, MOLE PCT			
METHANE	79.7	78.4	91.3
ETHANE	8.7	7.0	3.0
PROPANE	4.3	5.9	0.3
N-BUTANE	1.1	2.2	0.1
ISOBUTANE	0.4	0.7	0.3
N-PENTANE	0.3	0.5	0.0
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	4.4	3.9	3.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	1.3
HELIUM	0.10	0.07	0.05
HEATING VALUE*	1156	1228	1009
SPECIFIC GRAVITY	0.701	0.741	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 973 SAMPLE 13599	INDEX 974 SAMPLE 13362	INDEX 975 SAMPLE 5149
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	TWIN MILLS	VAQUERO	WALKER
WELL NAME	STATE-LUFT NO. 1	POSPICIL NO. 1	C. F. GREEN NO. 1
LOCATION	SEC. 19, T7N, R51W	SEC. 4, T7N, R52W	SEC. 20, T9N, R53W
OWNER	SOTEXCO, INC.	PATRICK A. DOHENY	BRITISH AMERICAN OIL PROD. C
COMPLETED	09/08/71	08/20/72	01/--/51
SAMPLED	05/21/73	08/24/72	08/29/51
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4591	4432	4949
WELLHEAD PRESSURE, PSIG	910	750	NOT GIVEN
OPEN FLOW, MCFD	5000	1940	3670
COMPONENT, MOLE PCT			
METHANE	91.8	90.4	79.9
ETHANE	2.2	4.2	8.2
PROPANE	0.2	0.3	4.4
N-BUTANE	TRACE	TRACE	1.1
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	5.3	3.5	4.3
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.9	0.6
HELIUM	0.05	0.05	0.07
HEATING VALUE*	985	1022	1159
SPECIFIC GRAVITY	0.605	0.611	0.702

	INDEX 976 SAMPLE 7076	INDEX 977 SAMPLE 8921	INDEX 978 SAMPLE 13643
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	AMEN-DERMER NO. 1	FED. NO. 1	SHERMAN NO. 1
LOCATION	SEC. 7, T7N, R52W	SEC. 4, T6N, R52W	SEC. 8, T7N, R51W
OWNER	PETROLEUM, INC.	PATRICK A. DOHENY	THOMAS B. BURNS
COMPLETED	03/16/59	12/27/62	05/01/73
SAMPLED	05/19/59	04/08/63	07/--/73
FORMATION	CRET-DAKOTA	CRET-DAKOTA D	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4398	4468	4560
WELLHEAD PRESSURE, PSIG	850	960	1094
OPEN FLOW, MCFD	500	1350	4800
COMPONENT, MOLE PCT			
METHANE	86.1	85.5	93.1
ETHANE	3.3	3.4	2.1
PROPANE	3.4	3.1	0.2
N-BUTANE	1.7	1.6	0.0
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.4	0.3	0.0
ISOPENTANE	0.6	0.7	0.3
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.5	4.0	2.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.3	1.5
HELIUM	0.03	TRACE	0.04
HEATING VALUE*	1180	1140	1021
SPECIFIC GRAVITY	0.694	0.681	0.605

	INDEX 979 SAMPLE 4817	INDEX 980 SAMPLE 16711	INDEX 981 SAMPLE 16744
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	ASBURY CREEK	BRONCO FLATS	BRONCO FLATS
WELL NAME	ASBURY CREEK UNIT WELL NO. 1	U.S.A. NO. 1-14 HC	U.S.A. NO. 1-18 JC
LOCATION	SEC. 14, T9S, R101W	SEC. 14, T9S, R98W	SEC. 18, T9S, R98W
OWNER	AMERADA PETROLEUM CORP.	COORS ENERGY CO.	COORS ENERGY CO.
COMPLETED	12/13/49	04/23/82	01/05/83
SAMPLED	11/18/49	11/22/82	01/05/83
FORMATION	CRET-BURRO CANYON	CRET-DAKOTA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2915	7156	6631
WELLHEAD PRESSURE, PSIG	NOT GIVEN	1750	2750
OPEN FLOW, MCFD	31	840	507
COMPONENT, MOLE PCT			
METHANE	85.2	43.4	82.8
ETHANE	1.1	8.2	9.7
PROPANE	0.3	TRACE	2.8
N-BUTANE	TRACE	0.9	0.6
ISOBUTANE	0.1	0.0	0.6
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	6.8	2.3	0.4
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	6.7	53.7	2.1
HELIUM	0.36	0.27	0.02
HEATING VALUE*	894	444	1154
SPECIFIC GRAVITY	0.654	1.087	0.681

	INDEX 982 SAMPLE 8210	INDEX 983 SAMPLE 8211	INDEX 984 SAMPLE 8212
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	CAMEO	CAMEO	CAMEO
WELL NAME	FED. C NO. 1	FED. C NO. 1	FED. C NO. 1
LOCATION	SEC. 35, T9S, R99W	SEC. 35, T9S, R99W	SEC. 35, T9S, R99W
OWNER	AMBASSADOR OIL CORP.	AMBASSADOR OIL CORP.	AMBASSADOR OIL CORP.
COMPLETED	09/17/61	09/18/61	09/22/61
SAMPLED	09/17/61	09/18/61	09/22/61
FORMATION	JURA-MORRISON U	CRET-DAKOTA L	CRET-DAKOTA U
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6399	6320	6222
WELLHEAD PRESSURE, PSIG	NOT GIVEN	1500	1500
OPEN FLOW, MCFD	NOT GIVEN	8900	800
COMPONENT, MOLE PCT			
METHANE	93.6	93.7	89.9
ETHANE	1.2	1.5	2.0
PROPANE	0.2	0.3	0.6
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	2.8	2.2	3.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.0	3.4
HELIUM	0.21	0.18	0.21
HEATING VALUE*	975	987	977
SPECIFIC GRAVITY	0.591	0.594	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 985 SAMPLE 16745	INDEX 986 SAMPLE 15818	INDEX 987 SAMPLE 15820
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	CAMEO	CORE NO. 2	CORE NO. 3
WELL NAME	U.S.A. NO. 1-S MR	VEGA UNIT NO. 3	VEGA UNIT NO. 3
LOCATION	SEC. 5, T11S, R98W	SEC. 10, T10S, R93W	SEC. 10, T10S, R93W
OWNER	COORS ENERGY CO.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	01/06/83	--/--/00	--/--/00
SAMPLED	01/06/83	08/--/79	08/--/79
FORMATION	CRET-DAKOTA L	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4871	7587	7592
WELLHEAD PRESSURE,PSIG	1580	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.6	82.1	85.9
ETHANE	5.1	5.3	4.6
PROPANE	1.9	0.3	0.3
N-BUTANE	0.3	0.1	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	TRACE	0.0
NITROGEN	10.6	4.6	2.3
OXYGEN	TRACE	0.2	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	7.3	6.8
HELIUM	0.10	TRACE	TRACE
HEATING VALUE*	982	942	960
SPECIFIC GRAVITY	0.652	0.680	0.635

	INDEX 988 SAMPLE 17177	INDEX 989 SAMPLE 7596	INDEX 990 SAMPLE 8315
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	COYOTE WASH	DIVIDE CREEK	FRUITA
WELL NAME	CAMP GULCH NO. 1-24	DIVIDE CREEK NO. 9	CHRISTIANA NO. 1
LOCATION	SEC. 24, T8S, R103W	SEC. 22, T8, R91W	SEC. 9, T9S, R101W
OWNER	AMBRA OIL & GAS CO.	SUN OIL CO.	FRONTIER REFINING CO.
COMPLETED	09/--/83	07/01/59	03/08/61
SAMPLED	02/10/84	07/08/60	12/07/61
FORMATION	CRET-DAKOTA	CRET-MESAVERDE	CRET-BUCKHORN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2900	4622	2599
WELLHEAD PRESSURE,PSIG	1040	1550	825
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.9	95.1	83.3
ETHANE	4.0	0.9	0.9
PROPANE	1.8	0.5	0.8
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	0.3	0.1	0.0
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	10.5	0.0	1.1
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	3.0	13.4
HELIUM	0.26	0.01	0.25
HEATING VALUE*	989	1005	884
SPECIFIC GRAVITY	0.660	0.598	0.704

	INDEX 991 SAMPLE 5504	INDEX 992 SAMPLE 16404	INDEX 993 SAMPLE 13665
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	GARMESA	HUNTERS CANYON	MITCHELL ENERGY AREA
WELL NAME	GARMESA NO. 1	HUNTERS CANYON UNIT NO. 6	FED. NO. 1-1
LOCATION	SEC. 8, T8S, R102W	SEC. 30, T8S, R100W	SEC. 1, T1N, R1W
OWNER	KERR-MCGEE OIL IND., INC.	WALTER S. FEES, JR.	MITCHELL ENERGY & DEV. CORP.
COMPLETED	11/--/49	10/03/80	07/07/73
SAMPLED	02/01/53	02/17/81	07/29/73
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2870	6208	2565
WELLHEAD PRESSURE,PSIG	526	1500	710
OPEN FLOW, MCFD	1000	2800	3244
COMPONENT, MOLE PCT			
METHANE	70.0	95.3	92.5
ETHANE	1.0	0.8	2.3
PROPANE	0.4	0.2	1.5
N-BUTANE	0.1	0.0	0.3
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	7.6	0.9	2.5
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	20.4	2.6	0.2
HELIUM	0.20	0.06	0.25
HEATING VALUE*	742	985	1042
SPECIFIC GRAVITY	0.795	0.590	0.603

	INDEX 994 SAMPLE 13666	INDEX 995 SAMPLE 13667	INDEX 996 SAMPLE 14314
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	MITCHELL ENERGY AREA	MITCHELL ENERGY AREA	MITCHELL ENERGY AREA
WELL NAME	FED. NO. 15-1	FED. NO. 9-1	FED. NO. 15-1
LOCATION	SEC. 15, T2N, R2W	SEC. 9, T10S, R100W	SEC. 15, T2N, R2W
OWNER	MITCHELL ENERGY & DEV. CORP.	MITCHELL ENERGY & DEV. CORP.	MITCHELL ENERGY CORP.
COMPLETED	06/18/73	12/02/72	08/--/73
SAMPLED	07/26/73	08/02/73	04/02/75
FORMATION	CRET-DAKOTA	JURA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2072	2796	2078
WELLHEAD PRESSURE,PSIG	620	950	611
OPEN FLOW, MCFD	286	3250	3856
COMPONENT, MOLE PCT			
METHANE	79.4	91.1	86.6
ETHANE	0.8	1.4	0.7
PROPANE	0.2	0.3	0.2
N-BUTANE	TRACE	0.1	TRACE
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	9.4	5.9	3.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.7	0.3	9.0
HELIUM	0.18	0.59	0.19
HEATING VALUE*	827	967	895
SPECIFIC GRAVITY	0.695	0.595	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 997 SAMPLE 8409	INDEX 998 SAMPLE 4816	INDEX 999 SAMPLE 15819
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	MOLINA	NOT GIVEN	NOT GIVEN
WELL NAME	NICHOLS B NO. 1	ASBURY CREEK UNIT NO. 1	VEGA UNIT NO. 3
LOCATION	SEC. 13, T10S, R96W	SEC. 14, T9S, R101W	SEC. 10, T10S, R93W
OWNER	APACHE CORP.	AMERADA PETROLEUM CORP.	EXXON CO., U.S.A.
COMPLETED	12/17/61	12/13/49	--/--/00
SAMPLED	02/14/62	11/05/49	08/--/79
FORMATION	CRET-CORCORAN	CRET-U	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3760	2836	7592
WELLHEAD PRESSURE,PSIG	1200	25	NOT GIVEN
OPEN FLOW, MCFD	1500	2429	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.5	82.4	78.3
ETHANE	3.9	1.4	3.1
PROPANE	0.9	0.4	0.2
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.5	0.8	9.9
OXYGEN	0.1	0.1	1.8
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.8	14.5	6.6
HELIUM	0.01	0.06	TRACE
HEATING VALUE*	1050	877	854
SPECIFIC GRAVITY	0.619	0.713	0.688

	INDEX 1000 SAMPLE 7091	INDEX 1001 SAMPLE 16219	INDEX 1002 SAMPLE 9208
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	PLATEAU	PLATEAU	ROBERTS CANYON
WELL NAME	GEORGE B. CURRIER NO. 1	WILSON NO. 2	ROBERTS CANYON NO. 1
LOCATION	SEC. 19, T10S, R95W	SEC. 29, T10S, R96W	SEC. 5, T10S, R97W
OWNER	TENNESSEE GAS & OIL CO.	COORS ENERGY CO.	TEXACO INC.
COMPLETED	02/13/59	10/16/80	10/11/63
SAMPLED	06/01/59	04/01/81	12/17/63
FORMATION	CRET-COZZETTE	CRET-CORCORAN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4225	3049	6704
WELLHEAD PRESSURE,PSIG	1200	950	2090
OPEN FLOW, MCFD	500	2400	5200
COMPONENT, MOLE PCT			
METHANE	93.0	91.9	91.0
ETHANE	3.4	3.6	1.4
PROPANE	1.3	1.2	0.8
N-BUTANE	0.4	0.5	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	TRACE	0.3	4.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	2.0	1.7
HELIUM	0.01	0.01	0.30
HEATING VALUE*	1068	1062	968
SPECIFIC GRAVITY	0.619	0.620	0.605

	INDEX 1003 SAMPLE 5241	INDEX 1004 SAMPLE 9715	INDEX 1005 SAMPLE 16731
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	SALT WASH W	SHIRE GULCH	SHIRE GULCH
WELL NAME	HIGHLINE CANAL UNIT NO. 1	31-2	HORSESHOE CANYON NO. 1-29-97
LOCATION	SEC. 2, T9S, R103W	SEC. 2, T10S, R97W	SEC. 29, T9S, R97W
OWNER	AMERADA PETROLEUM CORP.	PACIFIC NATURAL GAS EXPL. CO	KOCH EXPLORATION CO.
COMPLETED	12/12/51	05/23/64	04/10/82
SAMPLED	04/29/52	02/01/65	12/10/82
FORMATION	CRET-DAKOTA	PENN-CHEROKEE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2008	7456	7000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1750	1900
OPEN FLOW, MCFD	1329	221	2500
COMPONENT, MOLE PCT			
METHANE	87.1	92.6	92.7
ETHANE	1.0	0.6	1.3
PROPANE	0.1	0.3	0.2
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.4
HEXANES PLUS	TRACE	0.0	0.4
NITROGEN	6.6	0.5	0.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.0	0.0
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	4.6	5.9	3.9
HELIUM	0.22	0.07	0.05
HEATING VALUE*	913	957	1017
SPECIFIC GRAVITY	0.637	0.619	0.624

	INDEX 1006 SAMPLE 16173	INDEX 1007 SAMPLE 5136	INDEX 1008 SAMPLE 5965
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	SOUTH CANYON	WILDCAT	WILDCAT
WELL NAME	FEES USA NO. 29-8	GEORGE UNFRED NO. 1	GUNDERSON NO. 1
LOCATION	SEC. 29, T8S, R104W	SEC. 2, T1N, R3W	SEC. 17, T9S, R93W
OWNER	TENNECO OIL CO.	SAM KUBETZ	VICTOR DRLG. CO. & UNION OIL
COMPLETED	08/25/80	--/--/00	--/--/00
SAMPLED	01/13/81	01/25/52	11/03/55
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3312	669	6560
WELLHEAD PRESSURE,PSIG	800	NOT GIVEN	2175
OPEN FLOW, MCFD	3821	NOT GIVEN	300
COMPONENT, MOLE PCT			
METHANE	71.3	96.0	87.9
ETHANE	2.4	0.5	5.5
PROPANE	0.4	0.2	1.8
N-BUTANE	0.2	0.1	0.4
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	24.1	2.4	0.0
OXYGEN	0.0	0.1	3.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.6	3.6
HELIUM	0.74	0.08	0.08
HEATING VALUE*	795	991	1080
SPECIFIC GRAVITY	0.678	0.577	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1009 SAMPLE 7193	INDEX 1010 SAMPLE 7337	INDEX 1011 SAMPLE 7546
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MICHELSON GOVT. NO. 1	SKYLINE MITTLE NO. 1	BUZZARD CREEK UNIT NO. 1
LOCATION	SEC. 15, T11S, R94W	SEC. 12, T10S, R96W	SEC. 12, T9S, R93W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	UNION OIL CO. OF CALIF.
COMPLETED	01/31/58	05/30/58	10/20/59
SAMPLED	08/25/59	01/09/60	06/19/60
FORMATION	CRET-MESAVERDE	CRET-MORAPOS	CRET-COZZETTE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4482	4400	8594
WELLHEAD PRESSURE,PSIG	425	1300	3850
OPEN FLOW, MCFD	1420	3982	4200
COMPONENT, MOLE PCT			
METHANE	88.8	94.0	95.7
ETHANE	6.2	2.8	0.7
PROPANE	2.9	1.0	0.4
N-BUTANE	0.6	0.3	0.8
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.4	TRACE	0.0
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.2	0.2	0.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.2	2.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.0	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1134	1097	1035
SPECIFIC GRAVITY	0.641	0.600	0.568

	INDEX 1012 SAMPLE 8562	INDEX 1013 SAMPLE 9318	INDEX 1014 SAMPLE 16244
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MESA	MESA	MESA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	GOVT. WILLIAMS NO. 1	KENNON NO. 1	HORSESHOE CANYON NO. 1
LOCATION	SEC. 1, T10S, R97W	SEC. 15, T8S, R96W	SEC. 29, T9S, R97W
OWNER	MCCULLOCH OIL CORP.	DON M. ROUNDS CO.	ROCH EXPLORATION CO.
COMPLETED	11/21/61	02/11/64	10/27/78
SAMPLED	05/18/62	04/22/64	04/22/81
FORMATION	CRET-COZZETTE CORCORAN	EOCE-WASATCH	CRET-CEDAR MOUNTAIN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2944	1908	7134
WELLHEAD PRESSURE,PSIG	900	520	2150
OPEN FLOW, MCFD	1500	5750	695
COMPONENT, MOLE PCT			
METHANE	90.4	73.0	93.0
ETHANE	4.9	4.4	0.7
PROPANE	1.7	0.9	0.1
N-BUTANE	0.4	0.2	0.1
ISOBUTANE	0.2	0.2	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	TRACE	0.8	0.5
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	0.1	5.3
HELIUM	0.01	0.01	0.04
HEATING VALUE*	1082	1066	966
SPECIFIC GRAVITY	0.632	0.599	0.615

	INDEX 1015 SAMPLE 8822	INDEX 1016 SAMPLE 8823	INDEX 1017 SAMPLE 8825
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	ACE	ACE	ACE
WELL NAME	UNIT NO. 5	UNIT NO. 2	UNIT NO. 1
LOCATION	SEC. 28, T12N, R97W	SEC. 3, T11N, R97W	SEC. 34, T12N, R97W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	05/08/55	03/30/54	01/26/54
SAMPLED	01/07/63	01/07/63	01/07/63
FORMATION	EOCE-WASATCH	EOCE-FORT UNION	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2802	8188	8133
WELLHEAD PRESSURE,PSIG	880	575	570
OPEN FLOW, MCFD	1040	594	458
COMPONENT, MOLE PCT			
METHANE	91.1	88.5	88.7
ETHANE	3.8	5.1	5.9
PROPANE	2.4	2.5	2.4
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	0.2	0.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.9	1.3	1.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1099	1119	1112
SPECIFIC GRAVITY	0.627	0.645	0.638

	INDEX 1018 SAMPLE 2130	INDEX 1019 SAMPLE 3848	INDEX 1020 SAMPLE 14397
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	BELL ROCK	BELL ROCK	BELL ROCK
WELL NAME	NO. 1	MANAWALT NO. 1	FED.-DOLEZAL NO. 4-1
LOCATION	SEC. 4, T6N, R92W	SEC. 4, T6N, R92W	SEC. 4, T6N, R92W
OWNER	MIDWEST REFINING CO.	STANOLIND OIL & GAS CO.	FUEL RESOURCES DEV. CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/16/30	04/28/44	06/18/75
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2855	3202	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	92.2	98.0
ETHANE	0.0	2.8	0.3
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	6.3	2.4	1.2
OXYGEN	1.3	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.4	2.1	0.4
HELIUM	0.08	0.09	0.04
HEATING VALUE*	922	984	1001
SPECIFIC GRAVITY	0.601	0.600	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1021 SAMPLE 8683	INDEX 1022 SAMPLE 8684	INDEX 1023 SAMPLE 8685
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	BIG GULCH	BIG GULCH	BIG GULCH
WELL NAME	ALPHA STATE NO. 1-16	ALPHA STATE NO. 1-15	BETA STATE NO. 1-22
LOCATION	SEC. 16, T7N, R93W	SEC. 16, T7N, R93W	SEC. 22, T7N, R93W
OWNER	INTEX OIL CO.	INTEX OIL CO.	INTEX OIL CO.
COMPLETED	07/01/60	07/01/60	09/01/60
SAMPLED	09/28/62	09/28/62	09/28/62
FORMATION	CRET-MESAVERDE	CRET-FRONTIER	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3695	8598	642
WELLHEAD PRESSURE,PSIG	1510	3450	300
OPEN FLOW, MCFD	8400	2800	5200
COMPONENT, MOLE PCT			
METHANE	96.9	92.8	97.0
ETHANE	0.6	2.9	0.2
PROPANE	0.1	0.8	TRACE
N-BUTANE	TRACE	0.2	TRACE
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.6	1.1	2.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	0.1
HELIUM	0.03	0.08	0.02
HEATING VALUE*	1000	1052	987
SPECIFIC GRAVITY	0.575	0.612	0.566

	INDEX 1024 SAMPLE 13378	INDEX 1025 SAMPLE 15723	INDEX 1026 SAMPLE 17823
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	BIG HOLE	BLUE GRAVEL	BLUE GRAVEL
WELL NAME	GOVT. NO. 15-1	FED. NO. 1	SPETTER NO. 5-8
LOCATION	SEC. 15, T10N, R94W	SEC. 23, T9N, R91W	SEC. 8, T8N, R90W
OWNER	KEMMERER COAL CO.	C & K PETROLEUM, INC.	UNION TEXAS PETROLEUM CORP.
COMPLETED	12/15/71	01/24/75	07/21/83
SAMPLED	09/09/72	08/07/79	08/29/85
FORMATION	CRET-LEWIS	CRET-LEWIS	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7760	3855	3642
WELLHEAD PRESSURE,PSIG	2650	1480	500
OPEN FLOW, MCFD	1000	3000	835
COMPONENT, MOLE PCT			
METHANE	75.0	88.2	60.1
ETHANE	9.7	6.0	3.5
PROPANE	8.0	2.7	1.4
N-BUTANE	2.8	0.7	0.4
ISOBUTANE	2.3	0.6	0.3
N-PENTANE	0.8	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.6	0.6	31.5
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1384	1146	751
SPECIFIC GRAVITY	0.798	0.650	0.744

	INDEX 1027 SAMPLE 8677	INDEX 1028 SAMPLE 10015	INDEX 1029 SAMPLE 15695
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	BUCK PEAK	BUCK PEAK	COTTONWOOD GULCH
WELL NAME	VOLOSHIN NO. 1	VOLOSHIN NO. 2	FED. NO. A-1
LOCATION	SEC. 25, T6N, R90W	SEC. 25, T6N, R90W	SEC. 25, T8N, R91W
OWNER	HONDO OIL & GAS CO.	ATLANTIC REFINING CO.	ANADARKO PRODUCTION CO.
COMPLETED	08/03/58	01/27/65	02/14/79
SAMPLED	09/25/62	07/27/65	07/10/79
FORMATION	CRET-MANCOS	CRET-MESAVERDE	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6275	1805	3533
WELLHEAD PRESSURE,PSIG	50	NOT GIVEN	1200
OPEN FLOW, MCFD	220	NOT GIVEN	6700
COMPONENT, MOLE PCT			
METHANE	79.0	95.0	89.9
ETHANE	9.3	0.6	5.2
PROPANE	5.8	0.1	1.5
N-BUTANE	2.1	0.0	0.5
ISOBUTANE	1.0	0.0	0.3
N-PENTANE	0.5	0.0	0.2
ISOPENTANE	0.7	0.0	0.2
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.3	3.9	1.7
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.2
HELIUM	0.02	0.06	0.01
HEATING VALUE*	1288	976	1101
SPECIFIC GRAVITY	0.744	0.576	0.632

	INDEX 1030 SAMPLE 10700	INDEX 1031 SAMPLE 6860	INDEX 1032 SAMPLE 16280
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	CRAIG DOME	CRAIG N	COTTON SULCH FEDERAL C NO. 1
WELL NAME	CRAIG DOME NO. 1	FED. WINDER NO. 1	SEC. 35, T8N, R91W
LOCATION	SEC. 9, T6N, R91W	SEC. 33, T8N, R90W	ANADARKO PRODUCTION CO.
OWNER	VAUGHN PETROLEUM, INC.	U.S. SMELTING, REFINING & MI	06/09/81
COMPLETED	06/16/66	10/23/56	06/09/81
SAMPLED	08/24/66	11/02/58	CRET-LEWIS
FORMATION	CRET-FRONTIER	CRET-LANCE BASAL	535
GEOLOGIC PROVINCE CODE	535	535	3540
DEPTH, FEET	7466	2840	1000
WELLHEAD PRESSURE,PSIG	2890	1198	8430
OPEN FLOW, MCFD	1148	14	
COMPONENT, MOLE PCT			
METHANE	91.6	91.3	93.5
ETHANE	2.6	5.0	3.0
PROPANE	0.8	1.5	1.0
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	0.1	0.5	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.8	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	3.4	0.4	1.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.1	TRACE
HELIUM	0.07	0.02	0.01
HEATING VALUE*	1028	1109	1057
SPECIFIC GRAVITY	0.610	0.621	0.599

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1033 SAMPLE 363	INDEX 1034 SAMPLE 7381	INDEX 1035 SAMPLE 15483
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	DEVIL HOLE	FOUR MILE CREEK	GREAT DIVIDE
WELL NAME	OREGON NO. 1	UNIT NO. 2	BRUDER NO. 1
LOCATION	W OF AXIAL	SEC. 33, T12N, R91W	SEC. 4, T5N, R93W
OWNER	RICHMOND PETROLEUM CO.	PAN AMERICAN PETROLEUM CORP.	NORTHWEST EXPLORATION CO.
COMPLETED	06/--/19	01/05/60	09/20/78
SAMPLED	06/17/20	02/03/60	11/06/78
FORMATION	CRET-MANCOS	CRET-LANCE BASAL	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2380	3573	7526
WELLHEAD PRESSURE,PSIG	20	1210	1658
OPEN FLOW, MCFD	NOT GIVEN	11000	1600
COMPONENT, MOLE PCT			
METHANE	86.5	98.6	68.6
ETHANE	11.1	0.1	11.8
PROPANE	---	0.2	10.0
N-BUTANE	---	TRACE	2.7
ISOBUTANE	---	TRACE	2.7
N-PENTANE	---	0.0	0.8
ISOPENTANE	---	0.0	1.3
CYCLOPENTANE	---	0.0	0.3
HEXANES PLUS	---	0.0	0.8
NITROGEN	1.9	0.8	0.4
OXYGEN	0.2	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1075	1006	1490
SPECIFIC GRAVITY	0.620	0.562	0.868

	INDEX 1036 SAMPLE 1829	INDEX 1037 SAMPLE 1893	INDEX 1038 SAMPLE 2131
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	HIAWATHA	HIAWATHA	HIAWATHA
WELL NAME	STATE-REITER-FOSTER NO. 1	BERLIN NO. 1	NO. 1
LOCATION	SEC. 16, T12N, R99W	SEC. 19, T12N, R100W	SEC. 19, T12N, R100W
OWNER	MOUNTAIN FUEL SUPPLY CO.	TEXAS PRODUCTION CO.	TEXAS PRODUCTION CO.
COMPLETED	05/25/29	--/--/00	07/01/30
SAMPLED	08/04/29	11/13/29	09/17/30
FORMATION	EOCE-FORT UNION	TERT-	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3550	1520	2002
WELLHEAD PRESSURE,PSIG	1250	600	NOT GIVEN
OPEN FLOW, MCFD	3145	36000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.8	86.7	65.8
ETHANE	18.2	7.0	9.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	5.7	19.2
OXYGEN	1.1	0.5	4.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.2	0.5
HELIUM	0.02	0.03	0.00
HEATING VALUE*	1114	1004	837
SPECIFIC GRAVITY	0.668	0.618	0.712

	INDEX 1039 SAMPLE 2132	INDEX 1040 SAMPLE 5249	INDEX 1041 SAMPLE 8794
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	HIAWATHA	HIAWATHA	HIAWATHA E
WELL NAME	NO. 1	HIAWATHA UNIT NO. 1	UNIT NO. 1
LOCATION	SEC. 19, T12N, R100W	SEC. 14, T12N, R100W	SEC. 19, T12N, R100W
OWNER	TEXAS PRODUCTION CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	07/01/30	02/--/52	02/27/52
SAMPLED	09/17/30	06/17/52	11/20/63
FORMATION	TERT-	EOCE-FORT UNION	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2570	4885	4885
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1750	682
OPEN FLOW, MCFD	3000	21000	11000
COMPONENT, MOLE PCT			
METHANE	84.3	91.9	92.8
ETHANE	13.7	2.7	3.0
PROPANE	---	1.0	1.1
N-BUTANE	---	0.2	0.3
ISOBUTANE	---	0.1	0.3
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.6	2.1	0.3
OXYGEN	0.1	0.1	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	1.5	1.7
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1099	1029	1060
SPECIFIC GRAVITY	0.632	0.612	0.615

	INDEX 1042 SAMPLE 8797	INDEX 1043 SAMPLE 16353	INDEX 1044 SAMPLE 16765
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	HIAWATHA E	HIAWATHA E	HIAWATHA E
WELL NAME	K. S. WHITFORD NO. 1	HIAWATHA UNIT NO. 1	HIAWATHA DEEP NO. 2
LOCATION	SEC. 15, T12N, R100W	SEC. 22, T12N, R100W	SEC. 22, T12N, R100W
OWNER	MOUNTAIN FUEL SUPPLY CO.	WEXPRO CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	05/19/48	04/08/80	09/20/82
SAMPLED	11/28/62	10/14/81	02/04/83
FORMATION	EOCE-WASATCH	JURA-NUGGET	JURA-NUGGET
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3192	14376	14478
WELLHEAD PRESSURE,PSIG	740	4200	5559
OPEN FLOW, MCFD	3310	10935	2498
COMPONENT, MOLE PCT			
METHANE	88.7	93.2	92.9
ETHANE	5.5	0.4	0.2
PROPANE	2.5	0.2	TRACE
N-BUTANE	0.6	0.0	0.0
ISOBUTANE	0.8	0.0	TRACE
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.3	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.7	1.0	1.0
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	5.3	5.1
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1136	956	955
SPECIFIC GRAVITY	0.644	0.616	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1045 SAMPLE 8795	INDEX 1046 SAMPLE 8796	INDEX 1047 SAMPLE 15330
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	HIAWATHA W	HIAWATHA W	LITTLE BUCK MOUNTAIN
WELL NAME	OTER E NO. 1	M. W. OBERNE NO. 1	VILLARD NO. 1
LOCATION	SEC. 35, T12N, R101W	SEC. 24, T12N, R101W	SEC. 27, T10N, R90W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	01/20/59	08/12/57	02/22/78
SAMPLED	11/28/62	11/28/62	07/25/78
FORMATION	CRET-LANCE	CRET-LEWIS	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4140	4665	4657
WELLHEAD PRESSURE,PSIG	1400	1595	1100
OPEN FLOW, MCFD	300	4730	2087
COMPONENT, MOLE PCT			
METHANE	89.4	91.4	84.1
ETHANE	5.5	3.9	4.9
PROPANE	2.5	0.9	3.4
N-BUTANE	0.6	0.1	0.9
ISOBUTANE	0.5	0.6	1.0
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.5	0.5	0.4
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.1	1.0	0.3
NITROGEN	0.1	0.2	4.3
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	TRACE
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1132	1139	1141
SPECIFIC GRAVITY	0.642	0.647	0.681

	INDEX 1048 SAMPLE 6794	INDEX 1049 SAMPLE 9015	INDEX 1050 SAMPLE 7057
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	LITTLE SNAKE	MOFFAT	MUD SPRING
WELL NAME	WISDOM GOVT. NO. 1	WICK NO. 13	KIRBY NO. 1
LOCATION	SEC. 14, T12N, R95W	SEC. 10, T4N, R91W	SEC. 34, T11N, R91W
OWNER	UNION OIL CO. OF CALIF.	TEXACO INC.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/04/59	--/--/00	11/19/58
SAMPLED	08/13/58	06/07/63	05/01/59
FORMATION	EOCE-WASATCH	NOT GIVEN	CRET-LANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4124	9482	3685
WELLHEAD PRESSURE,PSIG	1500	NOT GIVEN	1475
OPEN FLOW, MCFD	3700	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	93.2	0.1	98.4
ETHANE	3.6	0.1	0.2
PROPANE	1.1	TRACE	0.1
N-BUTANE	0.4	TRACE	0.1
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.3	0.9	0.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	98.4	0.5
HELIUM	0.01	0.10	0.01
HEATING VALUE*	1094	3	1021
SPECIFIC GRAVITY	0.612	1.515	0.570

	INDEX 1051 SAMPLE 10822	INDEX 1052 SAMPLE 3051	INDEX 1053 SAMPLE 5227
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	POLE GULCH	POWDER WASH	POWDER WASH
WELL NAME	POLE GULCH UNIT NO. 2	MUSSER NO. 2	HAL W. STEWART NO. 1
LOCATION	SEC. 16, T12N, R92W	SEC. 4, T11N, R97W	SEC. 32, T12N, R97W
OWNER	DEVELOPMENT SERVICE CORP.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	06/01/65	02/--/41	04/--/52
SAMPLED	12/04/66	11/27/41	06/17/52
FORMATION	CRET-LEWIS	EOCE-WASATCH	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4640	2161	6312
WELLHEAD PRESSURE,PSIG	1800	625	2020
OPEN FLOW, MCFD	1000	9000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.6	97.3	84.2
ETHANE	6.5	0.1	6.8
PROPANE	7.7	---	4.2
N-BUTANE	1.3	---	1.4
ISOBUTANE	2.0	---	1.2
N-PENTANE	0.5	---	0.3
ISOPENTANE	0.8	---	0.6
CYCLOPENTANE	0.3	---	0.1
HEXANES PLUS	0.6	---	0.2
NITROGEN	1.4	1.8	0.7
OXYGEN	0.2	0.4	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	1321	987	1224
SPECIFIC GRAVITY	0.767	0.568	0.700

	INDEX 1054 SAMPLE 13478	INDEX 1055 SAMPLE 16483	INDEX 1056 SAMPLE 5838
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	POWDER WASH	POWDER WASH	SHELL CREEK
WELL NAME	INEXCO STATE NO. 1	MOUNTAIN FUEL FED. NO. 1-12	GOVT. NO. 1
LOCATION	SEC. 16, T12N, R97W	SEC. 12, T11N, R98W	SEC. 1, T11N, R100W
OWNER	KENNETH D. LUFF	IMPERIAL OIL CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	--/--/00	01/04/82	03/09/55
SAMPLED	11/28/72	04/07/82	05/11/55
FORMATION	NOT GIVEN	EOCE-FORT UNION	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	6824	5349
WELLHEAD PRESSURE,PSIG	1225	2100	1845
OPEN FLOW, MCFD	1500	1800	7
COMPONENT, MOLE PCT			
METHANE	81.6	91.3	84.6
ETHANE	9.0	4.3	8.1
PROPANE	5.8	1.9	3.3
N-BUTANE	1.1	0.6	0.8
ISOBUTANE	0.9	0.4	1.1
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	0.8	0.7	1.0
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.0	0.3
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1214	1112	1192
SPECIFIC GRAVITY	0.697	0.625	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1057 SAMPLE 16211	INDEX 1058 SAMPLE 5595	INDEX 1059 SAMPLE 12144
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	SHELL CREEK	SUGAR LOAF	SUGAR LOAF
WELL NAME	SHELL CREEK NO. 2	SUGAR LOAF GOVT. NO. 1	GOVT. NO. 12
LOCATION	SEC. 27, T12N, R99W	SEC. 9, T11N, R101W	SEC. 10, T11N, R101W
OWNER	CHAMPLIN PETROLEUM CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	01/--/77	10/16/53	09/29/69
SAMPLED	03/18/81	02/13/54	12/12/69
FORMATION	JURA-NUGGET	CRET-MESAVERDE	EOCE-FORT UNION & CRET- MSVD
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	17411	5146	4886
WELLHEAD PRESSURE,PSIG	5300	1800	1525
OPEN FLOW, MCFD	11000	2800	5800
COMPONENT, MOLE PCT			
METHANE	96.9	88.1	93.4
ETHANE	0.1	6.3	2.8
PROPANE	TRACE	2.5	0.8
N-BUTANE	0.0	0.5	0.3
ISOBUTANE	0.0	0.6	0.3
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	TRACE	0.2
HEXANES PLUS	0.0	0.2	0.4
NITROGEN	0.7	0.3	1.3
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	1.1	0.3
HELIUM	0.02	0.01	0.02
HEATING VALUE*	974	1135	1073
SPECIFIC GRAVITY	0.589	0.652	0.611

	INDEX 1060 SAMPLE 1035	INDEX 1061 SAMPLE 1361	INDEX 1062 SAMPLE 2733
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	THORNBERG	THORNBERG	THORNBERG
WELL NAME	WYMORE NO. 1	NO. 1	HENDERSON NO. 1
LOCATION	SEC. 16, T3N, R91W	SEC. 16, T 3N, R91W	SEC. 16, T3N, R91W
OWNER	MARLAND OIL CO.	MARLAND OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/20/25	02/08/27	09/25/56
FORMATION	CRET-DAKOTA	CRET-DAKOTA	JURA-NUGGET
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2050	1983	2550
WELLHEAD PRESSURE,PSIG	800	725	900
OPEN FLOW, MCFD	45000	23000	2571
COMPONENT, MOLE PCT			
METHANE	96.5	93.1	99.5
ETHANE	1.7	2.7	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	1.3	0.0
OXYGEN	0.4	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.0	0.3	0.2
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1008	991	1008
SPECIFIC GRAVITY	0.577	0.599	0.558

	INDEX 1063 SAMPLE 5869	INDEX 1064 SAMPLE 8715	INDEX 1065 SAMPLE 8717
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	THORNBERG	THORNBERG	THORNBERG
WELL NAME	LEWIN NO. 1	MENDERSON NO. 1	THORNBERG NO. 1
LOCATION	SEC. 17, T3N, R91W	SEC. 16, T3N, R91W	SEC. 17, T3N, R91W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	03/17/51	02/16/27	03/10/51
SAMPLED	06/11/51	10/15/62	10/15/62
FORMATION	PENN-WEBER	JURA-SUNDANCE	PENN-WEBER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4005	2605	4005
WELLHEAD PRESSURE,PSIG	1800	725	1575
OPEN FLOW, MCFD	12800	2400	11800
COMPONENT, MOLE PCT			
METHANE	93.4	94.9	92.5
ETHANE	0.2	0.1	0.1
PROPANE	0.2	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.2	TRACE	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	0.6	0.8	0.3
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	4.9	4.8	6.7
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	980	979	953
SPECIFIC GRAVITY	0.622	0.601	0.627

	INDEX 1066 SAMPLE 13604	INDEX 1067 SAMPLE 11610	INDEX 1068 SAMPLE 8808
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	THORNBERG	UNNAMED	WILLIAMS FORK
WELL NAME	THORNBERG NO. 19	COLORADO FED. C NO. 1	GOVT. HELMKE NO. 2
LOCATION	SEC. 17, T3N, R91W	SEC. 22, T10N, R94W	SEC. 16, T5N, R91W
OWNER	FUEL RESOURCES DEV. CO.	SKELLY OIL CO.	TEXACO INC.
COMPLETED	07/27/72	02/24/68	--/--/00
SAMPLED	05/23/73	07/31/68	12/14/62
FORMATION	TRIA-SHINARUMP	CRET-LEWIS	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3340	7536	5365
WELLHEAD PRESSURE,PSIG	1065	2325	NOT GIVEN
OPEN FLOW, MCFD	3700	1100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.4	86.8	97.3
ETHANE	0.1	6.8	5.7
PROPANE	0.1	3.5	1.5
N-BUTANE	0.1	0.9	0.3
ISOBUTANE	0.1	0.5	1.0
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	0.3	0.8
CYCLOPENTANE	TRACE	0.1	0.9
HEXANES PLUS	0.1	0.2	0.9
NITROGEN	12.8	0.7	1.3
OXYGEN	3.2	0.0	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.2
HELIUM	TRACE	0.01	0.05
HEATING VALUE*	851	1166	1184
SPECIFIC GRAVITY	0.641	0.662	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1069 SAMPLE 8832	INDEX 1070 SAMPLE 9253	INDEX 1071 SAMPLE 9586
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MOFFAT
FIELD	WILLIAMS FORK	WILLIAMS FORK	WILLIAMS FORK
WELL NAME	GOVT. HELMKE NO. 2	WINN NO. 1	WINN NO. 1
LOCATION	SEC. 18, T5N, R91W	SEC. 17, T5N, R91W	SEC. 17, T5N, R91W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	07/01/64
SAMPLED	12/16/62	03/06/64	09/17/64
FORMATION	PENN-WEBER	CRET-FRONTIER	JURA-MORRISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7834	5514	6830
WELLHEAD PRESSURE,PSIG	3005	NOT GIVEN	2210
OPEN FLOW, MCFD	17	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	53.9	87.6	86.8
ETHANE	15.5	6.2	4.0
PROPANE	10.2	2.5	1.4
N-BUTANE	3.4	0.8	0.4
ISOBUTANE	3.5	0.9	0.3
N-PENTANE	1.0	0.1	0.1
ISOPENTANE	1.0	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.8	0.1	0.1
NITROGEN	10.0	1.5	6.4
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.13	0.05	0.14
HEATING VALUE*	1451	1133	1028
SPECIFIC GRAVITY	0.940	0.650	0.635

	INDEX 1072 SAMPLE 7241	INDEX 1073 SAMPLE 8800	INDEX 1074 SAMPLE 10969
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MONTEZUMA	MONTEZUMA
FIELD	WINTER VALLEY	FLODINE PARK	GOODMAN POINT
WELL NAME	GOVT. 7-2	OHIO GOVT. NO. 3	BRINKERHOFF FED. NO. 1
LOCATION	SEC. 7, T4N, R93W	SEC. 15, T35N, R20W	SEC. 6, T36N, R18W
OWNER	CONTINENTAL OIL CO.	MARATHON OIL CO.	BRINKERHOFF DRILLING CO.
COMPLETED	09/10/59	08/--/61	05/26/67
SAMPLED	09/19/59	11/20/62	09/23/67
FORMATION	CRET-DAKOTA	PENN-PARADOX	PENN-
GEOLOGIC PROVINCE CODE	535	585	585
DEPTH, FEET	5500	5702	5289
WELLHEAD PRESSURE,PSIG	1900	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	39000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.1	74.6	78.6
ETHANE	3.3	12.6	10.8
PROPANE	0.3	5.2	4.1
N-BUTANE	0.1	2.8	1.8
ISOBUTANE	0.1	0.9	0.8
N-PENTANE	0.0	0.5	0.5
ISOPENTANE	0.6	0.5	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.5
NITROGEN	2.7	2.0	3.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.1
HELIUM	0.10	0.05	0.05
HEATING VALUE*	1047	1297	1228
SPECIFIC GRAVITY	0.602	0.763	0.718

	INDEX 1075 SAMPLE 6550	INDEX 1076 SAMPLE 2094	INDEX 1077 SAMPLE 2216
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	HOVENWEEP	MANCOS DIVIDE	MANCOS DIVIDE
WELL NAME	MATHAWAY-816 HORN USC NO. 3	HALLER NO. 1	HALLAR NO. 1
LOCATION	SEC. 11, T37N, R20W	SEC. 29, T36N, R14W	SEC. 29, T36N, R14W
OWNER	816 HORN-POWDER RIVER CORP.	F. C. HALLER	F. C. HALLER
COMPLETED	--/--/00	07/01/30	07/02/30
SAMPLED	03/29/56	08/21/30	10/08/30
FORMATION	PENN-PARADOX	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5467	702	700
WELLHEAD PRESSURE,PSIG	3429	NOT GIVEN	40
OPEN FLOW, MCFD	578	160	160
COMPONENT, MOLE PCT			
METHANE	70.8	91.8	98.5
ETHANE	16.5	2.8	0.7
PROPANE	7.9	---	---
N-BUTANE	2.1	---	---
ISOBUTANE	1.1	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	0.0	4.1	0.2
OXYGEN	TRACE	0.7	0.0
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.7	0.6
HELIUM	0.02	0.00	0.01
HEATING VALUE*	1388	980	1010
SPECIFIC GRAVITY	0.793	0.596	0.565

	INDEX 1078 SAMPLE 4492	INDEX 1079 SAMPLE 4865	INDEX 1080 SAMPLE 3855
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	MCELMO	MCELMO	MCELMO CANYON
WELL NAME	SCHMIDT NO. 1	MACINTOSH NO. 1	SCHMIDT NO. 1
LOCATION	SEC. 24, T36N, R18W	SEC. 25, T36N, R18W	SEC. 24, T36N, R18W
OWNER	BYRD-FROST, INC.	BYRD-FROST, INC.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	08/28/48	--/--/00
SAMPLED	05/27/48	03/25/50	07/07/44
FORMATION	MISS-DEVO	TRIA-SHINARUMP	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6745	1515	4755
WELLHEAD PRESSURE,PSIG	750	600	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.3	57.9	64.1
ETHANE	0.8	5.0	31.0
PROPANE	---	1.5	---
N-BUTANE	---	0.4	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.4	---
NITROGEN	15.4	32.2	3.9
OXYGEN	1.0	0.1	0.5
ARGON	---	0.1	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	81.9	0.4	0.8
HELIUM	0.55	1.12	TRACE
HEATING VALUE*	17	781	1205
SPECIFIC GRAVITY	1.423	0.769	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1081 SAMPLE 5754	INDEX 1082 SAMPLE 5755	INDEX 1083 SAMPLE 5756
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	MCELMO DOME UNIT	MCELMO DOME UNIT	MCELMO DOME UNIT
WELL NAME	J. A. FULKS NO. 1	J. A. FULKS NO. 1	J. A. FULKS NO. 1
LOCATION	SEC. 27, T37N, R17W	SEC. 27, T37N, R17W	SEC. 27, T37N, R17W
OWNER	GULF OIL CORP.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	01/02/55	12/31/54	01/07/55
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7768	7690	7797
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1300	6520	72
COMPONENT, MOLE PCT			
METHANE	0.1	0.1	0.1
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.9	2.1	1.8
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	97.7	97.5	97.8
HELIUM	0.10	0.10	0.09
HEATING VALUE*	3	3	3
SPECIFIC GRAVITY	1.515	1.519	1.514

	INDEX 1084 SAMPLE 5779	INDEX 1085 SAMPLE 9387	INDEX 1086 SAMPLE 10204
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	MCELMO DOME UNIT	MCELMO DOME UNIT	MCELMO DOME UNIT
WELL NAME	J. A. FULKS NO. 1	DEAN DUPLET NO. 2	DUPLET NO. 2
LOCATION	SEC. 27, T37N, R17W	SEC. 13, T36N, R18W	SEC. 13, T36N, R18W
OWNER	GULF OIL CORP.	DELHI-TAYLOR OIL CORP.	TENNECO OIL CO.
COMPLETED	--/--/00	03/07/64	03/07/64
SAMPLED	02/08/55	06/04/64	10/12/65
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	MISS-LEADVILLE D
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8364	6608	6940
WELLHEAD PRESSURE,PSIG	2570	NOT GIVEN	815
OPEN FLOW, MCFD	627	5120	6000
COMPONENT, MOLE PCT			
METHANE	0.2	0.2	0.3
ETHANE	0.0	0.3	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.1	3.2	3.3
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	97.5	96.2	96.0
HELIUM	0.10	0.10	0.28
HEATING VALUE*	2	7	3
SPECIFIC GRAVITY	1.513	1.506	1.503

	INDEX 1087 SAMPLE 15123	INDEX 1088 SAMPLE 15126	INDEX 1089 SAMPLE 15744
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	MCELMO DOME UNIT	MCELMO DOME UNIT	MCELMO DOME UNIT
WELL NAME	HOVENWEEP FED. NO. 1	HOVENWEEP FED. NO. 1	ROQUI UNIT NO. 2
LOCATION	SEC. 19, T38N, R18W	SEC. 19, T38N, R18W	SEC. 12, T37N, R19W
OWNER	MOBIL OIL CORP.	MOBIL RSEARCH & DEVELOPMENT	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	04/18/79
SAMPLED	09/25/77	10/14/77	06/27/79
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8357	8284	8080
WELLHEAD PRESSURE,PSIG	NOT GIVEN	290	685
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	300000
COMPONENT, MOLE PCT			
METHANE	0.2	0.2	0.2
ETHANE	TRACE	0.1	TRACE
PROPANE	0.0	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	1.0	1.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	98.5	98.6	97.9
HELIUM	0.09	0.08	0.09
HEATING VALUE*	2	4	2
SPECIFIC GRAVITY	1.519	1.520	1.515

	INDEX 1090 SAMPLE 4638	INDEX 1091 SAMPLE 8722	INDEX 1092 SAMPLE 17343
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTEZUMA	MONTEZUMA	MONTEZUMA
FIELD	NOT GIVEN	TOWAOC	WILDCAT
WELL NAME	DRISKOLL NO. 1	UTE MOUNTAIN TRIBE NO. 1	MARY AKIN UNIT NO. 2
LOCATION	SEC. 3, T38, R19W	SEC. 21, T33N, R20W	SEC. 27, T38N, R14W
OWNER	WESTERN NATURAL GAS CO., ET	TEXACO INC.	ARCO OIL & GAS CO.
COMPLETED	--/--/00	02/01/59	07/12/83
SAMPLED	12/02/48	10/23/62	06/28/84
FORMATION	PENN-NOT GIVEN	PENN-HERMOSA	PENN-DESERT CREEK
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5910	5850	4756
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	268
OPEN FLOW, MCFD	10000	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	66.3	56.4	88.3
ETHANE	32.2	18.8	7.2
PROPANE	---	12.9	1.6
N-BUTANE	---	4.7	0.3
ISOBUTANE	---	2.2	0.4
N-PENTANE	---	1.0	0.2
ISOPENTANE	---	1.3	TRACE
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.5	0.5
NITROGEN	0.8	1.7	1.2
OXYGEN	0.5	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	1249	1607	1136
SPECIFIC GRAVITY	0.722	0.949	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1093 SAMPLE 6571	INDEX 1094 SAMPLE 1806	INDEX 1095 SAMPLE 9087
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTROSE	MONTROSE	MONTROSE
FIELD	MONTROSE DOME	PARADOX ANTICLINE	WILDCAT
WELL NAME	KIRBY GOVT. NO. 1	WILCOX NO. 1 - ABANDONED	PURE OIL CO. NO. 3
LOCATION	SEC. 9, T45N, R16W	SEC. 35, T48N, R19W	SEC. 6, T46N, R19W
OWNER	KIRBY PETROLEUM CO.	GENERAL PETROLEUM CORP.	PURE OIL CO.
COMPLETED	01/12/58	--/--/00	--/--/00
SAMPLED	04/23/58	07/06/29	09/23/63
FORMATION	PEAR-RICO	NOT GIVEN	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	8166
WELLHEAD PRESSURE,PSIG	133	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	75	NOT GIVEN	228
COMPONENT, MOLE PCT			
METHANE	85.2	81.5	83.9
ETHANE	2.8	16.8	7.9
PROPANE	0.2	---	2.0
N-BUTANE	0.1	---	0.5
ISOBUTANE	TRACE	---	0.6
N-PENTANE	TRACE	---	0.1
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.3
NITROGEN	11.2	0.9	4.5
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.10	0.03	0.05
HEATING VALUE*	927	1127	1105
SPECIFIC GRAVITY	0.618	0.641	0.662

	INDEX 1096 SAMPLE 7719	INDEX 1097 SAMPLE 11179	INDEX 1098 SAMPLE 8894
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MONTROSE	MORGAN	MORGAN
FIELD	WRAY MESA	ADENA	BIJOU S
WELL NAME	WRAY MESA NO. 1	CRONE NO. 3	REID NO. 1
LOCATION	SEC. 21, T37N, R19W	SEC. 13, T1N, R58W	SEC. 20, T4N, R59W
OWNER	SHELL OIL CO.	MONSANTO CO.	MONSANTO CHEMICAL CO.
COMPLETED	--/--/00	--/--/00	04/24/62
SAMPLED	09/23/60	10/20/67	03/19/63
FORMATION	PERM-CUTLER	CRET-DAKOTA D	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	585	540	540
DEPTH, FEET	4650	5685	6056
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	1431
OPEN FLOW, MCFD	1500	NOT GIVEN	3100
COMPONENT, MOLE PCT			
METHANE	32.1	74.9	81.0
ETHANE	0.9	5.5	8.2
PROPANE	0.2	5.9	5.0
N-BUTANE	0.2	2.4	1.6
ISOBUTANE	0.1	0.8	0.6
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	TRACE	1.1	0.5
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	63.9	6.1	1.1
OXYGEN	0.8	0.3	0.0
ARGON	0.2	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	1.5
HELIUM	1.50	0.07	0.04
HEATING VALUE*	371	1228	1210
SPECIFIC GRAVITY	0.838	0.772	0.715

	INDEX 1099 SAMPLE 5887	INDEX 1100 SAMPLE 8736	INDEX 1101 SAMPLE 16595
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	BRUSH S	FORT MORGAN	MAPPY DOG
WELL NAME	TOMKY NO. 84-20	FORT MORGAN UNIT NO. 1	STATE DZ
LOCATION	SEC. 20, T2N, R55W	SEC. 19, T3N, R57W	SEC. 12, T5N, R59W
OWNER	SUPERIOR OIL CO.	NATURAL GAS PRODUCERS, INC.	REGAL PETROLEUM, LTD.
COMPLETED	07/10/55	05/20/54	06/12/81
SAMPLED	07/29/55	10/23/62	07/--/82
FORMATION	CRET-DAKOTA D	CRET-DAKOTA D	CRET-D SAND
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4948	5610	6270
WELLHEAD PRESSURE,PSIG	1050	791	600
OPEN FLOW, MCFD	NOT GIVEN	4900	2085
COMPONENT, MOLE PCT			
METHANE	56.7	80.0	74.1
ETHANE	15.4	8.4	9.5
PROPANE	14.6	5.5	7.6
N-BUTANE	4.6	1.8	2.5
ISOBUTANE	1.9	0.7	0.9
N-PENTANE	0.6	0.4	0.6
ISOPENTANE	2.5	0.3	0.7
CYCLOPENTANE	0.5	0.1	0.3
HEXANES PLUS	0.9	0.1	0.4
NITROGEN	1.9	1.8	1.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	1.7
HELIUM	0.05	0.05	0.04
HEATING VALUE*	1638	1227	1318
SPECIFIC GRAVITY	0.976	0.720	0.792

	INDEX 1102 SAMPLE 7313	INDEX 1103 SAMPLE 4918	INDEX 1104 SAMPLE 13176
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	LAND	LEE	NOT GIVEN
WELL NAME	EISENACH NO. 1	GOUT SMITH NO. 1	STARK NO. 1
LOCATION	SEC. 21, T3N, R58W	SEC. 1, T2N, R57W	SEC. 11, T3N, R58W
OWNER	DUNN & BOREING	J. M. HUBER CORP.	MOUNTAIN PETROLEUM, LTD.
COMPLETED	06/16/59	--/--/00	12/17/71
SAMPLED	12/15/59	09/01/50	03/30/72
FORMATION	CRET-DAKOTA D	CRET-DAKOTA	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5681	5536	5652
WELLHEAD PRESSURE,PSIG	1350	NOT GIVEN	960
OPEN FLOW, MCFD	1310	NOT GIVEN	1700
COMPONENT, MOLE PCT			
METHANE	80.8	81.3	76.6
ETHANE	8.1	7.5	8.8
PROPANE	6.0	1.7	6.0
N-BUTANE	1.6	0.5	2.1
ISOBUTANE	0.4	0.3	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	TRACE
NITROGEN	1.5	6.1	3.8
OXYGEN	TRACE	1.2	0.5
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.6	1.0
HELIUM	0.05	0.05	0.04
HEATING VALUE*	1209	1065	1202
SPECIFIC GRAVITY	0.709	0.677	0.736

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1105 SAMPLE 11970	INDEX 1106 SAMPLE 13624	INDEX 1107 SAMPLE 8404
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	PARK	RENEGADE	RIVERSIDE
WELL NAME	CASPER NO. 1	DILL NO. 1	QUIRK-PEALE NO. 1
LOCATION	SEC. 19, T1N, R58W	SEC. 14, T3N, R58W	SEC. 20, T5N, R61W
OWNER	STATES OIL CO.	MOUNTAIN PETROLEUM, LTD.	PLAINS EXPLORATION CO.
COMPLETED	--/--/--	10/10/72	01/29/62
SAMPLED	07/10/69	06/05/73	02/08/62
FORMATION	CRET-DAKOTA D	CRET-DAKOTA D	CRET-GRANEROS J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6000	5625	6701
WELLHEAD PRESSURE,PSIG	640	1218	1572
OPEN FLOW, MCFD	1500	4400	3910
COMPONENT, MOLE PCT			
METHANE	75.9	73.1	86.1
ETHANE	5.4	7.7	8.1
PROPANE	7.7	6.6	1.5
N-BUTANE	2.5	2.6	0.2
ISOBUTANE	0.9	1.1	0.2
N-PENTANE	0.6	0.7	TRACE
ISOPENTANE	0.5	1.2	0.1
CYCLOPENTANE	0.1	0.5	TRACE
HEXANES PLUS	0.4	0.8	TRACE
NITROGEN	5.1	4.3	0.7
OXYGEN	0.1	0.4	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	2.9
HELIUM	0.08	0.04	0.11
HEATING VALUE*	1252	1315	1074
SPECIFIC GRAVITY	0.771	0.809	0.648

	INDEX 1108 SAMPLE 11142	INDEX 1109 SAMPLE 17804	INDEX 1110 SAMPLE 5714
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	ROUNDUP	TOMSIE	VALLERY
WELL NAME	JAMES O. LAYNE NO. 1	LUNDOCK NO. 1	COLORADO STATE NO. 1
LOCATION	SEC. 27, T2N, R60W	SEC. 14, T3N, R57W	SEC. 16, T3N, R59W
OWNER	PAN AMERICAN PETROLEUM CORP.	SKAER ENTERPRISES, INC.	STANOLIND OIL & GAS CO.
COMPLETED	08/06/67	08/19/83	08/14/54
SAMPLED	09/27/67	08/02/85	09/16/54
FORMATION	CRET-MUDDY J	CRET-DAKOTA J	CRET-MUDDY U
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6426	5420	5971
WELLHEAD PRESSURE,PSIG	1495	1150	1360
OPEN FLOW, MCFD	5621	3190	2600
COMPONENT, MOLE PCT			
METHANE	79.9	81.9	72.7
ETHANE	7.1	9.1	9.9
PROPANE	4.3	3.4	7.5
N-BUTANE	1.2	1.0	3.2
ISOBUTANE	0.5	0.5	1.3
N-PENTANE	0.3	0.3	0.6
ISOPENTANE	0.4	0.5	1.4
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.2	0.5	0.6
NITROGEN	5.0	1.9	1.4
OXYGEN	0.2	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	1.1
HELIUM	0.08	0.04	0.01
HEATING VALUE*	1150	1199	1388
SPECIFIC GRAVITY	0.705	0.702	0.820

	INDEX 1111 SAMPLE 5996	INDEX 1112 SAMPLE 7232	INDEX 1113 SAMPLE 8307
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SAN NO. 1	CHALLIS NO. 1	PRICE STATE NO. 1
LOCATION	SEC. 7, T1N, R56W	SEC. 34, T4N, R59W	SEC. 18, T4N, R53W
OWNER	MONSANTO CHEMICAL CO.	SKELLY OIL CO.	KIMBARK EXPLORATION CO.
COMPLETED	08/21/55	07/31/59	09/21/61
SAMPLED	12/12/55	10/03/59	11/28/61
FORMATION	CRET-DAKOTA J	CRET-DAKOTA	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5313	5954	6120
WELLHEAD PRESSURE,PSIG	1150	1410	810
OPEN FLOW, MCFD	NOT GIVEN	4380	450
COMPONENT, MOLE PCT			
METHANE	88.2	78.6	76.3
ETHANE	5.8	8.2	8.5
PROPANE	0.9	4.0	6.6
N-BUTANE	0.1	2.1	2.6
ISOBUTANE	0.5	1.2	1.1
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.3	1.2	0.7
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	3.3	3.6	1.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.9	2.0
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1060	1219	1292
SPECIFIC GRAVITY	0.630	0.742	0.777

	INDEX 1114 SAMPLE 13581	INDEX 1115 SAMPLE 5951	INDEX 1116 SAMPLE 10327
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	PHILLIPS	PITKIN
FIELD	WILDCAT	HAXTUN	WOLF CREEK
WELL NAME	LARRICK ET AL. NO. 1	EARL W. SCOTT NO. 1	WOLF CREEK NO. 3
LOCATION	SEC. 32, T4N, R59W	SEC. 31, T9N, R47W	SEC. 34, T8S, R90W
OWNER	FERGUSON OIL CO., INC.	STANOLIND OIL & GAS CO.	SUNRAY DX OIL CO.
COMPLETED	10/20/72	05/17/55	09/17/65
SAMPLED	04/--/73	10/17/55	12/09/65
FORMATION	CRET-DAKOTA J	CRET-MUDDY	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	540	540	535
DEPTH, FEET	6114	3972	4550
WELLHEAD PRESSURE,PSIG	NOT GIVEN	670	1250
OPEN FLOW, MCFD	3502	506	1050
COMPONENT, MOLE PCT			
METHANE	83.8	93.8	86.1
ETHANE	8.9	1.9	0.7
PROPANE	2.8	TRACE	2.2
N-BUTANE	0.6	TRACE	0.2
ISOBUTANE	0.5	0.1	TRACE
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.3	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	1.1	3.7	0.0
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.3	10.4
HELIUM	0.03	0.05	0.05
HEATING VALUE*	1145	988	958
SPECIFIC GRAVITY	0.677	0.582	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1117 SAMPLE 10834	INDEX 1118 SAMPLE 10121	INDEX 1119 SAMPLE 16890
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PITKIN	PROWERS	PROWERS
FIELD	WOLF CREEK	BARREL SPRINGS	BERRY PATCH
WELL NAME	WOLF CREEK NO. 5	DUNCAN NO. 1	KENDALL NO. 2-32
LOCATION	SEC. 12, T9S, R90W	SEC. 28, T25S, R45W	SEC. 32, T22S, R45W
OWNER	SUNRAY DX OIL CO.	TOM BROWN DRILLING CO.	BIG FOUR PETROLEUM CO.
COMPLETED	08/26/66	--/--/00	04/10/82
SAMPLED	01/09/67	09/16/65	04/23/83
FORMATION	CRET-COZZETTE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	555	360	360
DEPTH, FEET	5002	4825	4650
WELLHEAD PRESSURE, PSIG	1200	1135	1010
OPEN FLOW, MCFD	4000	5684	1450
COMPONENT, MOLE PCT			
METHANE	91.4	52.2	62.5
ETHANE	1.0	7.5	10.7
PROPANE	0.3	5.5	5.6
N-BUTANE	TRACE	1.4	1.4
ISOBUTANE	0.1	0.7	0.5
N-PENTANE	TRACE	0.4	0.2
ISOPENTANE	TRACE	0.3	0.5
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.9	30.6	17.0
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.9	0.1	0.5
HELIUM	0.04	0.91	0.77
HEATING VALUE*	960	921	1070
SPECIFIC GRAVITY	0.628	0.823	0.780

	INDEX 1120 SAMPLE 7955	INDEX 1121 SAMPLE 14591	INDEX 1122 SAMPLE 16403
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PROWERS	PROWERS	PROWERS
FIELD	BETA	BETA	CLYDE
WELL NAME	KERNS NO. 1	IDLER B NO. 1	SCHMIDT NO. 1-15X
LOCATION	SEC. 5, T23S, R47W	SEC. 32, T22S, R47W	SEC. 15, T22S, R45W
OWNER	FRANKFORT OIL CO.	TEXAS OIL & GAS CORP.	MURFIN DRILLING CO.
COMPLETED	02/13/61	07/13/75	10/24/80
SAMPLED	05/08/61	02/26/76	12/16/81
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4558	4528	4711
WELLHEAD PRESSURE, PSIG	937	970	860
OPEN FLOW, MCFD	375	2000	6000
COMPONENT, MOLE PCT			
METHANE	71.6	71.7	63.7
ETHANE	9.8	9.9	12.2
PROPANE	3.5	3.9	6.2
N-BUTANE	0.6	0.8	1.4
ISOBUTANE	0.7	0.5	0.6
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	12.8	11.6	14.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.9	0.2
HELIUM	0.20	0.23	0.70
HEATING VALUE*	1049	1071	1128
SPECIFIC GRAVITY	0.718	0.728	0.782

	INDEX 1123 SAMPLE 16876	INDEX 1124 SAMPLE 5396	INDEX 1125 SAMPLE 6415
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PROWERS	PROWERS	PROWERS
FIELD	CLYDE	NOT GIVEN	WATER WELL
WELL NAME	CLARK NO. 1-15	JONES NO. 1	LAMSON FARM
LOCATION	SEC. 15, T22S, R45W	SEC. 14, T23S, R46W	SEC. 35, T21S, R47W
OWNER	MACLAS OIL CO.	LOTUS OIL CO.	LAMSON FARM
COMPLETED	01/28/81	02/13/53	--/--/47
SAMPLED	04/11/83	02/13/53	10/10/57
FORMATION	PENN-MORROW	NOT GIVEN	CRET-BENTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4694	4019	283
WELLHEAD PRESSURE, PSIG	NOT GIVEN	650	15
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.1	66.4	43.8
ETHANE	14.7	8.2	0.2
PROPANE	7.8	4.1	0.0
N-BUTANE	2.0	1.1	TRACE
ISOBUTANE	0.6	0.3	0.0
N-PENTANE	0.3	0.3	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	12.3	18.4	54.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	0.7
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	1.0
HELIUM	0.55	0.43	0.02
HEATING VALUE*	1206	1013	452
SPECIFIC GRAVITY	0.820	0.751	0.798

	INDEX 1126 SAMPLE 6416	INDEX 1127 SAMPLE 5392	INDEX 1128 SAMPLE 6913
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PROWERS	PROWERS	PROWERS
FIELD	WATER WELL	WILDCAT	WILDCAT
WELL NAME	SCHNEIDER FARM	JONES NO. 1	BAILEY NO. 1
LOCATION	SEC. 36, T21S, R47W	SEC. 14, T23S, R46W	SEC. 27, T25S, R45W
OWNER	SCHNEIDER FARM	LOTUS OIL CO.	EXCELSIOR OIL CORP., ET AL.
COMPLETED	--/--/47	02/09/53	11/17/58
SAMPLED	10/10/57	02/11/53	12/13/58
FORMATION	NOT GIVEN	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	200	4019	4910
WELLHEAD PRESSURE, PSIG	15	650	910
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6200
COMPONENT, MOLE PCT			
METHANE	68.8	66.5	49.8
ETHANE	0.2	9.0	7.2
PROPANE	0.0	6.6	9.0
N-BUTANE	0.0	1.0	1.2
ISOBUTANE	0.0	0.4	0.7
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	28.5	17.6	33.2
OXYGEN	1.8	TRACE	1.1
ARGON	0.4	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.3
HELIUM	0.03	0.42	0.80
HEATING VALUE*	701	1024	849
SPECIFIC GRAVITY	0.689	0.747	0.822

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1129 SAMPLE 7024	INDEX 1130 SAMPLE 6888	INDEX 1131 SAMPLE 15957
STATE	COLORADO	COLORADO	COLORADO
COUNTY	PUEBLO	RIO BLANCO	RIO BLANCO
FIELD	WILDCAT	BAXTER PASS	BAXTER PASS
WELL NAME	PRICE LEASE NO. 1	GOVT.- SLOANE NO. 1	GOVT.- SLOANE NO. 2
LOCATION	SEC. 15, T21S, R68W	SEC. 27, T4S, R103W	SEC. 27, T4S, R103W
OWNER	J. M. SPANGLER, ET AL.	ARGO OIL CORP.	ARCO OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	07/03/77
SAMPLED	04/18/59	12/02/58	04/27/80
FORMATION	NOT GIVEN	CRET-DAKOTA & JURA-MORRISON	CRET-DAKOTA & JURA-MORRISON
GEOLOGIC PROVINCE CODE	540	595	595
DEPTH, FEET	491	6000	6820
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1611	1050
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	142
COMPONENT, MOLE PCT			
METHANE	95.7	74.2	74.9
ETHANE	0.1	3.9	4.3
PROPANE	0.1	1.6	1.8
N-BUTANE	0.0	0.4	0.6
ISOBUTANE	0.0	0.3	0.5
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	3.8	16.0	16.9
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.7	1.1
HELIUM	0.10	0.70	0.77
HEATING VALUE*	974	901	960
SPECIFIC GRAVITY	0.574	0.698	0.698

	INDEX 1132 SAMPLE 17392	INDEX 1133 SAMPLE 17311	INDEX 1134 SAMPLE 15868
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	BLUE CLOUD	BLUE CLOUD-THUNDER	CATHEDRAL
WELL NAME	EVACUATION CREEK NO. 32-1	KIRBY-EIDSON NO. 28-4	FED. 0-31
LOCATION	SEC. 32, T4S, R102W	SEC. 28, T4S, R102W	SEC. 31, T3S, R101W
OWNER	TENNECO OIL CO.	WALTER S. FEES, JR.	FUEL RESOURCES DEV. CO.
COMPLETED	11/06/82	08/20/82	--/--/00
SAMPLED	08/28/84	06/01/84	12/10/79
FORMATION	CRET-MANCOS	CRET-MANCOS B	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3749	3363	5698
WELLHEAD PRESSURE,PSIG	275	350	1355
OPEN FLOW, MCFD	200	800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.6	79.8	57.8
ETHANE	6.7	6.7	2.8
PROPANE	5.3	5.1	1.0
N-BUTANE	1.7	1.5	0.3
ISOBUTANE	0.9	0.9	0.3
N-PENTANE	0.3	0.4	0.1
ISOPENTANE	0.5	0.4	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	2.9	3.7	34.0
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	2.9
HELIUM	0.17	0.20	0.38
HEATING VALUE*	1210	1199	704
SPECIFIC GRAVITY	0.715	0.725	0.766

	INDEX 1135 SAMPLE 3649	INDEX 1136 SAMPLE 17317	INDEX 1137 SAMPLE 8705
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DOUGLAS CREEK	DOUGLAS CREEK	DOUGLAS CREEK S
WELL NAME	UNIT NO. 1	DOUGLAS CREEK NO. 8	GOVT. STRAT NO. 1
LOCATION	SEC. 3, T3S, R101W	SEC. 36, T2S, R102W	SEC. 1, T4S, R102W
OWNER	SUPERIOR OIL CO.	CONOCO, INC.	CITIES SERVICE OIL CO.
COMPLETED	07/01/43	--/--/00	10/22/62
SAMPLED	06/12/63	06/06/84	10/--/62
FORMATION	JURA-MORRISON	CRET-MANCOS B	CRET-MORAPOS
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4800	NOT GIVEN	1169
WELLHEAD PRESSURE,PSIG	350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.2	84.1	81.1
ETHANE	16.4	6.8	5.3
PROPANE	---	3.0	3.1
N-BUTANE	---	0.8	1.0
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	11.2	3.2	7.6
OXYGEN	0.3	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	8.2	0.6	0.3
HELIUM	0.70	0.15	0.34
HEATING VALUE*	934	1130	1077
SPECIFIC GRAVITY	0.760	0.673	0.682

	INDEX 1138 SAMPLE 9551	INDEX 1139 SAMPLE 9552	INDEX 1140 SAMPLE 9742
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DOUGLAS CREEK S	DOUGLAS CREEK S	DOUGLAS CREEK S
WELL NAME	DOUGLAS CREEK UNIT NO. 6	S. DOUGLAS CREEK UNIT NO. 6	UNIT NO. 7
LOCATION	SEC. 1, T4S, R102W	SEC. 1, T4S, R102W	SEC. 6, T4S, R101W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	--/--/00	02/05/65
SAMPLED	08/21/64	08/18/64	02/08/65
FORMATION	CRET-BUCKHORN	JURA-MORRISON C	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5150	5340	5776
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1150
OPEN FLOW, MCFD	4250	2500	400
COMPONENT, MOLE PCT			
METHANE	57.7	56.9	61.9
ETHANE	2.8	2.8	2.6
PROPANE	1.5	1.5	1.2
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	16.5	19.3	13.6
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	19.6	18.6	18.9
HELIUM	0.75	0.80	0.70
HEATING VALUE*	709	705	732
SPECIFIC GRAVITY	0.858	0.856	0.831

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1141 SAMPLE 9751	INDEX 1142 SAMPLE 14679	INDEX 1143 SAMPLE 15698
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	DOUGLAS CREEK S	FOUNDATION CREEK	FOUNDATION CREEK
WELL NAME	UNIT NO. 7	STEELE NO. 1-35	TA16A FED. NO. 1-36
LOCATION	SEC. 6, T4S, R101W	SEC. 35, T4S, R102W	SEC. 36, T4S, R102W
OWNER	CITIES SERVICE OIL CO.	SWEET PEA OIL & GAS CO.	COSEKA RESOURCES (USA), LTD.
COMPLETED	--/--/00	09/13/73	08/04/75
SAMPLED	12/06/54	05/19/76	05/14/79
FORMATION	CRET-BUCKHORN	CRET-CEDAR MOUNTAIN	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5887	6161	5254
WELLHEAD PRESSURE,PSIG	1540	1650	NOT GIVEN
OPEN FLOW, MCFD	108	890	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.1	49.2	80.4
ETHANE	2.5	1.9	7.5
PROPANE	1.2	0.6	6.3
N-BUTANE	0.2	0.3	1.9
ISOBUTANE	0.2	0.1	1.0
N-PENTANE	TRACE	0.1	0.4
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	12.5	9.4	1.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	21.4	37.5	0.3
HELIUM	0.70	0.49	0.14
HEATING VALUE*	715	575	1265
SPECIFIC GRAVITY	0.845	0.985	0.732

	INDEX 1144 SAMPLE 7659	INDEX 1145 SAMPLE 7665	INDEX 1146 SAMPLE 7724
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH
WELL NAME	DRAGON TRAIL NO. 1	CATHEDRAL NO. 1-A	DOUGLAS CREEK U NO. 18-3
LOCATION	SEC. 16, T2S, R102W	SEC. 20, T3S, R100W	SEC. 18, T2S, R102W
OWNER	GULF OIL CORP.	UTEX EXPLORATION CO.	BEARDMORE DRILLING CO., ET A
COMPLETED	05/13/60	05/--/60	06/16/60
SAMPLED	08/08/60	09/06/60	10/13/60
FORMATION	CRET-MANCOS B	CRET-MANCOS B	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2568	3500	2630
WELLHEAD PRESSURE,PSIG	425	TSD	468
OPEN FLOW, MCFD	1180	1912	2150
COMPONENT, MOLE PCT			
METHANE	87.7	90.0	87.3
ETHANE	5.4	5.7	6.4
PROPANE	2.7	2.1	3.0
N-BUTANE	0.6	0.6	0.8
ISOBUTANE	0.6	0.3	0.7
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	2.5	0.3	1.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	TRACE
HELIUM	0.20	0.01	0.10
HEATING VALUE*	1104	1117	1137
SPECIFIC GRAVITY	0.641	0.651	0.648

	INDEX 1147 SAMPLE 8261	INDEX 1148 SAMPLE 8707	INDEX 1149 SAMPLE 9543
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH
WELL NAME	DRAGON TRAIL NO. 8	LOWER HORSE DRAW NO. 4	GOVT. NO. 1-8
LOCATION	SEC. 36, T2S, R102W	SEC. 22, T2S, R103W	SEC. 29, T2S, R101W
OWNER	CONTINENTAL OIL CO.	ALAMO CORP.	CITIES SERVICE OIL CO.
COMPLETED	08/18/61	09/29/60	05/16/62
SAMPLED	10/27/61	10/11/62	08/16/64
FORMATION	CRET-MANCOS B	CRET-MANCOS B	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2020	2722	1859
WELLHEAD PRESSURE,PSIG	400	476	411
OPEN FLOW, MCFD	NOT GIVEN	3520	175
COMPONENT, MOLE PCT			
METHANE	87.5	86.8	91.6
ETHANE	6.0	7.2	3.5
PROPANE	2.3	3.0	1.7
N-BUTANE	0.6	0.8	0.3
ISOBUTANE	0.5	0.6	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	2.0	0.9	1.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.11	0.04	0.11
HEATING VALUE*	1117	1151	1080
SPECIFIC GRAVITY	0.647	0.653	0.617

	INDEX 1150 SAMPLE 12178	INDEX 1151 SAMPLE 16961	INDEX 1152 SAMPLE 17006
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH
WELL NAME	DOUGLAS CREEK W NO. 8	FORK UNIT NO. 12-22-1-2	PHIL. CREEK FED. NO. 35
LOCATION	SEC. 19, T2S, R102W	SEC. 22, T1S, R102W	SEC. 1, T2S, R101W
OWNER	CONTINENTAL OIL CO.	CHANDLER ASSOCIATES, INC.	NORTHWEST EXPLORATION CO.
COMPLETED	08/07/69	06/01/83	01/24/83
SAMPLED	01/26/70	06/01/83	08/--/83
FORMATION	CRET-MANCOS B	CRET-MANCOS B	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2263	2564	3242
WELLHEAD PRESSURE,PSIG	394	200	206
OPEN FLOW, MCFD	1089	491	960
COMPONENT, MOLE PCT			
METHANE	86.1	81.7	91.1
ETHANE	6.4	7.7	3.2
PROPANE	3.3	4.4	1.8
N-BUTANE	0.8	1.6	0.9
ISOBUTANE	0.6	0.8	0.5
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.4	0.8	0.5
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	1.8	1.0	0.6
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.9	0.8
HELIUM	0.09	0.06	0.01
HEATING VALUE*	1146	1231	1107
SPECIFIC GRAVITY	0.659	0.717	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1153 SAMPLE 17028	INDEX 1154 SAMPLE 17205	INDEX 1155 SAMPLE 17318
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH	GREATER DOUGLAS CREEK ARCH
WELL NAME	SHAMROCK FED. NO. 1-5	CONTINENTAL NO. 2-21	DRAGON TRAIL UNIT NO. 6
LOCATION	SEC. 5, T3S, R100W	SEC. 21, T3S, R100W	SEC. 20, T2S, R102W
OWNER	SOUTHLAND ROYALTY CO.	TWIN ARROW, INC.	CONOCO, INC.
COMPLETED	06/01/83	--/--/00	--/--/00
SAMPLED	08/25/83	03/01/84	06/01/84
FORMATION	CRET-MANCOS B	CRET-MANCOS B	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3900	4509	NOT GIVEN
WELLHEAD PRESSURE,PSIG	327	450	NOT GIVEN
OPEN FLOW, MCFD	529	140	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.1	85.1	86.0
ETHANE	4.5	7.1	6.2
PROPANE	2.0	3.2	3.2
N-BUTANE	0.7	1.1	0.8
ISOBUTANE	0.3	0.5	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.5	0.5	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.3	0.6	2.2
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	1.1	0.1
HELIUM	0.01	0.02	0.14
HEATING VALUE*	1099	1175	1144
SPECIFIC GRAVITY	0.658	0.682	0.662

	INDEX 1156 SAMPLE 6793	INDEX 1157 SAMPLE 13350	INDEX 1158 SAMPLE 13353
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	NOT GIVEN	PARKER	PARKER
WELL NAME	MANNEL NO. 1	BLOLAND NO. 2	FRITZLAN ET AL. NO. 1
LOCATION	SEC. 27, T1N, R95W	SEC. 28, T2N, R97W	SEC. 35, T2N, R97W
OWNER	PHILLIPS PETROLEUM CO.	AMERICAN RESOURCES MGMT. COR	AMERICAN RESOURCES MGMT. COR
COMPLETED	10/22/57	02/15/72	02/19/72
SAMPLED	07/13/58	07/12/72	07/01/72
FORMATION	EOCE-FORT UNION	EOCE-WASATCH	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4043	1259	1185
WELLHEAD PRESSURE,PSIG	1412	505	535
OPEN FLOW, MCFD	7800	4500	2700
COMPONENT, MOLE PCT			
METHANE	92.2	97.6	94.2
ETHANE	5.0	1.0	2.8
PROPANE	0.5	0.1	0.6
N-BUTANE	0.4	0.0	0.1
ISOBUTANE	0.4	0.0	0.3
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.2	0.0	TRACE
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	0.4	1.2	1.8
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1099	1009	1033
SPECIFIC GRAVITY	0.615	0.566	0.588

	INDEX 1159 SAMPLE 1864	INDEX 1160 SAMPLE 8687	INDEX 1161 SAMPLE 8746
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	PICEANCE CREEK	PICEANCE CREEK
WELL NAME	NO. 1	ERIC UBINE NO. 2	SO. SULPHUR NO. 2
LOCATION	SEC. 9, T2S, R96W	SEC. 13, T96N, R3S	SEC. 7, T3S, R98W
OWNER	WHITE EAGLE OIL CO.	EQUITY OIL CO.	EQUITY OIL CO.
COMPLETED	--/--/00	05/--/55	--/--/00
SAMPLED	09/18/29	09/21/62	11/04/62
FORMATION	EOCE-GREEN RIVER	EOCE-GREEN RIVER	EOCE-WASATCH & FORT UNION
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2661	2355	5596
WELLHEAD PRESSURE,PSIG	NOT GIVEN	540	1400
OPEN FLOW, MCFD	2000	600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.3	92.3	92.8
ETHANE	3.2	0.5	3.7
PROPANE	---	0.4	1.5
N-BUTANE	---	0.2	0.6
ISOBUTANE	---	0.1	0.4
N-PENTANE	---	TRACE	0.2
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	TRACE	0.3
NITROGEN	1.5	0.7	0.5
OXYGEN	1.0	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	5.5	0.3
HELIUM	0.04	0.02	0.02
HEATING VALUE*	972	973	1112
SPECIFIC GRAVITY	0.623	0.625	0.626

	INDEX 1162 SAMPLE 8747	INDEX 1163 SAMPLE 8751	INDEX 1164 SAMPLE 8752
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	PICEANCE CREEK	PICEANCE CREEK
WELL NAME	SULPHUR CREEK NO. 5	SO. PICEANCE NO. 2	FAWN CREEK GOVT. NO. 1
LOCATION	SEC. 19, T2S, R97W	SEC. 13, T3S, R96W	SEC. 14, T3S, R98W
OWNER	EQUITY OIL CO.	EQUITY OIL CO.	EQUITY OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/04/62	11/04/62	11/04/62
FORMATION	CRET-MESAVERDE	EOCE-GREEN RIVER	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	8724	2360	6480
WELLHEAD PRESSURE,PSIG	2900	580	2500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.2	90.8	85.9
ETHANE	7.9	0.5	7.6
PROPANE	2.9	0.4	2.8
N-BUTANE	0.7	0.3	0.5
ISOBUTANE	0.8	0.2	0.5
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	0.1	0.8	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.0	6.5	1.8
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1155	974	1131
SPECIFIC GRAVITY	0.709	0.644	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1165 SAMPLE 8753	INDEX 1166 SAMPLE 8758	INDEX 1167 SAMPLE 10946
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	PICEANCE CREEK	PICEANCE CREEK
WELL NAME	SCANDARD DRAW NO. 1	SHANNON NO. 1	TS2-19G
LOCATION	SEC. 22, T3S, R97W	SEC. 13, T4S, R98W	SEC. 19, T2S, R96W
OWNER	EQUITY OIL CO.	EQUITY OIL CO.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/04/62	11/04/62	04/18/67
FORMATION	CRET-MESAVERDE	EOCE-FORT UNION	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	9524	5660	9423
WELLHEAD PRESSURE,PSIG	3800	1325	3829
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	749
COMPONENT, MOLE PCT			
METHANE	83.6	93.4	89.9
ETHANE	8.6	4.0	6.8
PROPANE	3.0	1.0	1.6
N-BUTANE	0.6	0.2	0.3
ISOBUTANE	0.9	0.2	0.4
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.0	0.3	0.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	0.3	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1170	1080	1107
SPECIFIC GRAVITY	0.690	0.605	0.625

	INDEX 1168 SAMPLE 11537	INDEX 1169 SAMPLE 11538	INDEX 1170 SAMPLE 2213
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	PICEANCE CREEK	RANGELY
WELL NAME	T44-20G	T44-20G	EMERALD NO. 2
LOCATION	SEC. 20, T2S, R96W	SEC. 20, T2S, R96W	SEC. 31, T2N, R102W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	TEXAS PRODUCTION CO.
COMPLETED	09/16/67	09/18/67	01/01/28
SAMPLED	06/05/68	06/05/68	10/08/30
FORMATION	EOCE-WASATCH G	EOCE-WASATCH A & D	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5696	2626	3001
WELLHEAD PRESSURE,PSIG	1424	706	1300
OPEN FLOW, MCFD	16200	10900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	92.3	83.8
ETHANE	4.2	4.1	12.4
PROPANE	1.3	1.4	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.2	0.4	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.5	0.4	3.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.04	0.01	0.15
HEATING VALUE*	1101	1103	1071
SPECIFIC GRAVITY	0.621	0.620	0.633

	INDEX 1171 SAMPLE 4393	INDEX 1172 SAMPLE 4394	INDEX 1173 SAMPLE 4395
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	MCLAUGHLIN NO. 1	FEE NO. 12	M. C. HAGOOD NO. 2
LOCATION	SEC. 32, T2N, R102W	SEC. 28, T2N, R102W	SEC. 15, T2N, R103W
OWNER	SHARPLES OIL CORP.	CALIFORNIA CO.	STANOLIND OIL & GAS CO.
COMPLETED	09/25/44	02/28/46	10/14/46
SAMPLED	07/29/47	07/31/47	07/29/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5520	5845	6527
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	50.4	21.6	15.7
ETHANE	24.5	59.6	59.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	24.1	17.5	21.7
OXYGEN	0.1	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.45	2.0
HELIUM	0.80	0.29	0.28
HEATING VALUE*	950	1287	1232
SPECIFIC GRAVITY	0.773	0.928	0.961

	INDEX 1174 SAMPLE 4396	INDEX 1175 SAMPLE 4397	INDEX 1176 SAMPLE 4398
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	GRAY B-2	EMERALD NO. 3	EMERALD NO. 4
LOCATION	SEC. 18, T2N, R102W	SEC. 30, T2N, R102W	SEC. 36, T2N, R103W
OWNER	CALIFORNIA CO.	CALIFORNIA CO.	CALIFORNIA CO.
COMPLETED	06/13/45	04/22/46	04/22/46
SAMPLED	07/29/47	07/28/47	07/28/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6155	5552	5640
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.5	24.1	27.3
ETHANE	55.5	63.9	50.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.4	10.9	20.5
OXYGEN	0.4	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.8	0.7
HELIUM	0.33	0.10	0.55
HEATING VALUE*	1233	1389	1182
SPECIFIC GRAVITY	0.919	0.924	0.895

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1177 SAMPLE 4399	INDEX 1178 SAMPLE 4400	INDEX 1179 SAMPLE 4401
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	EMERALD NO. 8	MCLAUGHLIN NO. 2	CARNEY NO. 4-34
LOCATION	SEC. 26, T2N, R103W	SEC. 23, T2N, R103W	SEC. 34, T2N, R102W
OWNER	CALIFORNIA CO.	CALIFORNIA CO.	TEXAS CO.
COMPLETED	08/06/46	09/03/45	06/24/46
SAMPLED	07/28/47	07/28/47	07/30/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5979	6105	5691
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	26.4	25.4	30.4
ETHANE	53.2	52.7	49.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	18.7	19.6	18.5
OXYGEN	0.6	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	1.7	0.7
HELIUM	0.22	0.27	0.25
HEATING VALUE*	1221	1202	1200
SPECIFIC GRAVITY	0.906	0.913	0.884

	INDEX 1180 SAMPLE 4402	INDEX 1181 SAMPLE 4403	INDEX 1182 SAMPLE 4404
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	U P NO. 29-32	FEE NO. 22	FEE NO. 1
LOCATION	SEC. 32, T2N, R102W	SEC. 22, T2N, R102W	SEC. 30, T2N, R102W
OWNER	TEXAS CO.	CALIFORNIA CO.	CALIFORNIA CO.
COMPLETED	04/20/47	09/03/46	01/19/45
SAMPLED	07/30/47	07/29/47	07/28/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5570	6228	5557
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	34.7	16.2	23.5
ETHANE	47.5	62.6	60.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	16.4	20.4	15.1
OXYGEN	0.7	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.4
HELIUM	0.20	0.32	0.24
HEATING VALUE*	1203	1286	1322
SPECIFIC GRAVITY	0.865	0.951	0.921

	INDEX 1183 SAMPLE 4405	INDEX 1184 SAMPLE 4406	INDEX 1185 SAMPLE 4407
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	GRAY A NO. 12	U.P. 12-27	FEE NO. 21
LOCATION	SEC. 19, T2N, R102W	SEC. 27, T2N, R102W	SEC. 27, T2N, R102W
OWNER	CALIFORNIA CO.	TEXAS CO.	CALIFORNIA CO.
COMPLETED	07/21/47	07/10/46	09/19/46
SAMPLED	07/28/47	07/30/47	07/30/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5933	5906	6066
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	18.3	32.2	20.3
ETHANE	61.3	45.8	59.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.0	21.4	19.4
OXYGEN	0.5	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.1	0.6
HELIUM	0.27	0.34	0.26
HEATING VALUE*	1284	1147	1265
SPECIFIC GRAVITY	0.944	0.870	0.933

	INDEX 1186 SAMPLE 4408	INDEX 1187 SAMPLE 4409	INDEX 1188 SAMPLE 4410
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	COLTHORP A NO. 1	MAGOR NO. 1	EMERALD NO. 14
LOCATION	SEC. 35, T2N, R102W	SEC. 14, T2N, R103W	SEC. 36, T2N, R103W
OWNER	STANOLIND OIL & GAS CO.	PHILLIPS PETROLEUM CO.	CALIFORNIA CO.
COMPLETED	08/10/46	04/08/46	06/16/47
SAMPLED	07/30/47	07/31/47	07/25/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5624	6422	5893
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	13.1	14.7	20.9
ETHANE	72.1	62.7	61.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	13.6	20.9	15.8
OXYGEN	0.3	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	1.2	0.8
HELIUM	0.15	0.26	0.20
HEATING VALUE*	1425	1272	1321
SPECIFIC GRAVITY	0.975	0.962	0.935

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1189 SAMPLE 4411	INDEX 1190 SAMPLE 4412	INDEX 1191 SAMPLE 4413
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	FEE NO. 11	ROOTH NO. 1	L. N. HAGOOD NO. 1
LOCATION	SEC. 28, T2N, R102W	SEC. 15, T2N, R103W	SEC. 23, T2N, R103W
OWNER	CALIFORNIA CO.	CONTINENTAL OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	09/19/45	05/28/46	04/02/45
SAMPLED	07/29/47	07/31/47	07/29/47
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5642	6580	5955
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	44.4	27.4	20.9
ETHANE	32.7	47.3	60.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.6	23.0	16.5
OXYGEN	0.3	0.3	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	1.7	1.2
HELIUM	0.79	0.28	0.18
HEATING VALUE*	1031	1125	1298
SPECIFIC GRAVITY	0.806	0.900	0.937

	INDEX 1192 SAMPLE 4414	INDEX 1193 SAMPLE 8700	INDEX 1194 SAMPLE 4008
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	RANGELY	RANGELY	RANGELY
WELL NAME	U.P. NO. 6-21	EMERALD NO. 32	MCLAUGHLIN NO. 1
LOCATION	SEC. 21, T2N, R102W	SEC. 30, T2N, R102W	SEC. 32, T2N, R102W
OWNER	TEXAS CO.	CALIFORNIA OIL CO.	WASATCH OIL REFINING CO.
COMPLETED	05/23/46	05/04/48	--/--/00
SAMPLED	07/30/47	10/10/62	--/--/00
FORMATION	PENN-	PENN-WEBER	NOT GIVEN
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	6088	5719	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	22.3	63.2	57.6
ETHANE	57.7	7.0	16.3
PROPANE	---	2.7	---
N-BUTANE	---	0.8	---
ISOBUTANE	---	0.7	---
N-PENTANE	---	0.4	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.4	---
NITROGEN	18.6	23.2	24.6
OXYGEN	0.2	TRACE	0.5
ARGON	---	0.1	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.9	0.8	0.2
HELIUM	0.32	0.42	0.78
HEATING VALUE*	1260	936	876
SPECIFIC GRAVITY	0.925	0.765	0.738

	INDEX 1195 SAMPLE 14323	INDEX 1196 SAMPLE 14671	INDEX 1197 SAMPLE 17709
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	ROCK CANYON	SOLDIER CANYON	SOLDIER CANYON
WELL NAME	GOVT. NO. 2-25	U.S.A. 25-C-1	SOLDIER CANYON NO. 26-4
LOCATION	SEC. 25, T4S, R102W	SEC. 25, T4S, R101W	SEC. 26, T4S, R101W
OWNER	NORRIS OIL CO.	TIPPERARY OIL & GAS CORP.	AMERICAN RESOURCES MGMT. COR
COMPLETED	03/06/75	09/19/75	11/21/83
SAMPLED	04/28/75	05/14/76	06/03/85
FORMATION	CRET-MANCOS B	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3040	6896	6238
WELLHEAD PRESSURE,PSIG	470	2100	1400
OPEN FLOW, MCFD	2050	1400	480
COMPONENT, MOLE PCT			
METHANE	82.0	93.8	72.4
ETHANE	7.3	0.9	0.8
PROPANE	5.7	0.1	0.1
N-BUTANE	1.6	TRACE	0.1
ISOBUTANE	0.7	0.1	0.0
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.5	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.3	1.9	19.2
OXYGEN	0.0	0.3	4.4
ARGON	TRACE	TRACE	1.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	2.6	1.8
HELIUM	0.15	0.04	0.05
HEATING VALUE*	1218	977	763
SPECIFIC GRAVITY	0.703	0.597	0.696

	INDEX 1198 SAMPLE 13078	INDEX 1199 SAMPLE 17290	INDEX 1200 SAMPLE 17293
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	SULPHUR CREEK	TAIGA MOUNTAIN	TAIGA MOUNTAIN
WELL NAME	GOVT. NO. 23-1	FED. NO. 13-1S-1S-103W	FED. NO. 6-14-1N-103
LOCATION	SEC. 23, T2S, R98W	SEC. 15, T1S, R103W	SEC. 14, T1N, R103W
OWNER	J. M. HUBER CORP.	COSEKA RESOURCES (USA), LTD.	COSEKA RESOURCES (USA), LTD.
COMPLETED	07/22/71	05/06/84	05/06/84
SAMPLED	10/02/71	05/06/84	05/06/84
FORMATION	EOCE-WASATCH	CRET-DAKOTA	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4688	6464	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1228	2000	610
OPEN FLOW, MCFD	2310	NOT GIVEN	50
COMPONENT, MOLE PCT			
METHANE	88.9	82.1	88.5
ETHANE	3.4	6.7	5.5
PROPANE	1.0	2.8	3.0
N-BUTANE	0.2	1.0	0.8
ISOBUTANE	0.2	0.7	0.4
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	4.2	5.3	1.9
OXYGEN	1.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.1	0.1
HELIUM	TRACE	0.12	0.09
HEATING VALUE*	1015	1126	1131
SPECIFIC GRAVITY	0.624	0.683	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1201 SAMPLE 17294	INDEX 1202 SAMPLE 17024	INDEX 1203 SAMPLE 2212
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	TAIGA MOUNTAIN	TEXAS MOUNTAIN	THORNBERG
WELL NAME	FED. NO. 11-23-1N-103	TEXAS MOUNTAIN FED. NO. 1	CLARK NO. 1
LOCATION	SEC. 23, T1N, R103W	SEC. 17, T3S, R102W	SEC. 21, T3N, R91W
OWNER	COSEKA RESOURCES (USA), LTD.	TXO PRODUCTION CORP.	CONTINENTAL OIL CO.
COMPLETED	05/06/84	11/24/81	07/19/27
SAMPLED	05/06/84	08/25/83	10/04/30
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	NOT GIVEN	6665	1986
WELLHEAD PRESSURE,PSIG	1200	1400	800
OPEN FLOW, MCFD	150	721	20000
COMPONENT, MOLE PCT			
METHANE	77.6	81.5	97.6
ETHANE	7.7	6.0	0.0
PROPANE	7.0	2.2	---
N-BUTANE	2.4	0.6	---
ISOBUTANE	1.5	0.4	---
N-PENTANE	0.6	0.1	---
ISOPENTANE	0.7	0.2	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.5	0.2	---
NITROGEN	0.8	6.0	0.8
OXYGEN	TRACE	1.1	0.1
ARGON	0.0	0.1	---
HYDROGEN	0.0	0.3	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	1.0	1.5
HELIUM	0.03	0.16	0.02
HEATING VALUE*	1329	1060	989
SPECIFIC GRAVITY	0.777	0.678	0.573

	INDEX 1204 SAMPLE 6110	INDEX 1205 SAMPLE 11531	INDEX 1206 SAMPLE 15696
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THORNBERG	THORNBERG	THUNDER
WELL NAME	NO. 3	THORNBERG UNIT NO. 18	T-F-21
LOCATION	SEC. 21, T3N, R91W	SEC. 21, T3N, R91W	SEC. 21, T4S, R102W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	COSEKA RESOURCES (USA), LTD.
COMPLETED	03/21/56	08/26/67	11/02/77
SAMPLED	07/19/56	06/11/68	05/14/79
FORMATION	PENN-WEBER & MORGAN	PENN-WEBER	CRET-MANCOS
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4380	4027	3223
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1190	NOT GIVEN
OPEN FLOW, MCFD	1068	4275	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.0	92.6	81.7
ETHANE	TRACE	0.1	4.5
PROPANE	0.0	0.1	4.5
N-BUTANE	TRACE	0.0	1.5
ISOBUTANE	0.1	0.0	0.9
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.1	0.0	0.5
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.5	0.5	5.3
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.4	6.6	0.5
HELIUM	TRACE	0.01	0.21
HEATING VALUE*	950	942	1154
SPECIFIC GRAVITY	0.621	0.623	0.704

	INDEX 1207 SAMPLE 15697	INDEX 1208 SAMPLE 15699	INDEX 1209 SAMPLE 15700
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THUNDER	THUNDER	THUNDER
WELL NAME	4-RX-16	6-I-9	8-E-21
LOCATION	SEC. 16, T4S, R102W	SEC. 9, T4S, R102W	SEC. 21, T4S, R102W
OWNER	COSEKA RESOURCES (USA), LTD.	COSEKA RESOURCES (USA), LTD.	COSEKA RESOURCES (USA), LTD.
COMPLETED	05/31/78	03/02/79	01/11/78
SAMPLED	05/14/79	05/14/79	05/14/79
FORMATION	CRET-MANCOS	CRET-MANCOS	CRET-MANCOS
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	3082	3030	3098
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.1	77.3	81.7
ETHANE	4.6	6.1	5.0
PROPANE	4.1	4.6	4.0
N-BUTANE	1.2	1.4	1.3
ISOBUTANE	0.7	0.9	0.7
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.8	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	5.0	7.2	5.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.3	0.6
HELIUM	0.21	0.21	0.20
HEATING VALUE*	1129	1135	1132
SPECIFIC GRAVITY	0.684	0.727	0.696

	INDEX 1210 SAMPLE 15701	INDEX 1211 SAMPLE 15702	INDEX 1212 SAMPLE 15703
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THUNDER	THUNDER	THUNDER
WELL NAME	10-M-21	9-J-21	KIRBY-ROBERTSON NO. 3-21
LOCATION	SEC. 21, T4S, R102W	SEC. 21, T4S, R102W	SEC. 21, T4S, R102W
OWNER	COSEKA RESOURCES (USA), LTD.	COSEKA RESOURCES (USA), LTD.	COSEKA RESOURCES (USA), LTD.
COMPLETED	06/08/78	01/14/78	11/11/78
SAMPLED	05/14/79	05/14/79	05/14/79
FORMATION	CRET-MANCOS	CRET-MANCOS	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	2936	3037	5678
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.4	82.2	67.6
ETHANE	5.2	4.2	3.5
PROPANE	3.9	3.4	1.5
N-BUTANE	1.2	1.8	0.4
ISOBUTANE	0.7	0.6	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.1	7.1	17.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	8.0
HELIUM	0.20	0.32	0.79
HEATING VALUE*	1127	1085	836
SPECIFIC GRAVITY	0.697	0.682	0.759

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1213 SAMPLE 17303	INDEX 1214 SAMPLE 17304	INDEX 1215 SAMPLE 17305
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THUNDER	THUNDER	THUNDER
WELL NAME	GOVERNMENT NO. 13-31	GOVERNMENT NO. 4-31	GOVERNMENT C-561 NO. 2-31
LOCATION	SEC. 31, T4S, R102W	SEC. 31, T4S, R102W	SEC. 31, T4N, R102W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	07/16/81	07/13/80	06/04/77
SAMPLED	05/24/84	05/24/84	05/24/84
FORMATION	CRET-MANCOS B	CRET-MANCOS B	CRET-MANCOS B
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	4844	4995	4934
WELLHEAD PRESSURE,PSIG	300	340	300
OPEN FLOW, MCFD	50	30	33
COMPONENT, MOLE PCT			
METHANE	79.7	79.1	82.3
ETHANE	5.1	5.2	5.3
PROPANE	4.1	4.0	4.1
N-BUTANE	1.4	1.3	1.3
ISOBUTANE	0.8	0.8	0.8
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	7.5	7.9	4.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.23	0.23	0.20
HEATING VALUE*	1127	1122	1145
SPECIFIC GRAVITY	0.711	0.711	0.694

	INDEX 1216 SAMPLE 17306	INDEX 1217 SAMPLE 362	INDEX 1218 SAMPLE 807
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	THUNDER	WHITE RIVER DOME	WHITE RIVER DOME
WELL NAME	EVACUATION CREEK NO. 30-12	NO. 2	NO. 2
LOCATION	NOT GIVEN	SEC. 25, T2N, R97W	NOT GIVEN
OWNER	TENNECO OIL CO.	WHITE RIVER OIL CO.	WHITE RIVER OIL CO.
COMPLETED	--/--/00	--/--/20	--/--/00
SAMPLED	05/24/84	06/31/20	07/14/23
FORMATION	CRET-MANCOS B	EOCE-WASATCH	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	NOT GIVEN	530	528
WELLHEAD PRESSURE,PSIG	310	190	180
OPEN FLOW, MCFD	100	500	600000
COMPONENT, MOLE PCT			
METHANE	82.0	97.3	97.5
ETHANE	4.0	1.8	1.9
PROPANE	4.4	---	---
N-BUTANE	1.5	---	---
ISOBUTANE	1.1	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	5.2	0.6	0.8
OXYGEN	TRACE	0.2	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.22	TRACE	0.00
HEATING VALUE*	1157	1018	1022
SPECIFIC GRAVITY	0.705	0.569	0.566

	INDEX 1219 SAMPLE 2133	INDEX 1220 SAMPLE 6647	INDEX 1221 SAMPLE 13351
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	WHITE RIVER DOME	WHITE RIVER DOME	WHITE RIVER DOME
WELL NAME	NO. 1	UNIT-GOVT. NO. 3	GOVT. NO. 2
LOCATION	SEC. 30, T2N, R96W	SEC. 30, T2N, R96W	SEC. 34, T2N, R97W
OWNER	TEXAS PRODUCTION CO.	FRONTIER REFINING CO.	AMERICAN RESOURCES MGMT. COR
COMPLETED	06/01/30	06/16/58	02/19/72
SAMPLED	09/16/30	06/15/58	08/04/72
FORMATION	CRET-LARAMIE	CRET-MESAVERDE	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	5560	5598	966
WELLHEAD PRESSURE,PSIG	1400	1674	515
OPEN FLOW, MCFD	500	2350	4700
COMPONENT, MOLE PCT			
METHANE	46.8	66.7	96.2
ETHANE	28.3	6.1	2.5
PROPANE	---	4.5	0.7
N-BUTANE	---	0.7	0.2
ISOBUTANE	---	0.8	0.2
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	TRACE
NITROGEN	2.9	1.4	1.6
OXYGEN	0.2	0.9	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	21.8	18.3	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	981	979	1031
SPECIFIC GRAVITY	0.920	0.854	0.587

	INDEX 1222 SAMPLE 10972	INDEX 1223 SAMPLE 8756	INDEX 1224 SAMPLE 8759
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	WILDCAT	WILSON CREEK	WILSON CREEK
WELL NAME	GOVT. NO. 22X17	NO. 47	WILSON CREEK UNIT NO. 21
LOCATION	SEC. 17, T2N, R97W	SEC. 31, T2N, R94W	SEC. 35, T3N, R94W
OWNER	SHELL OIL CO.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	03/20/61	12/22/45
SAMPLED	--/--/00	11/06/62	11/06/62
FORMATION	PENN-WEBER	JURA-MORRISON	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	NOT GIVEN	6422	6757
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.6	69.8	21.9
ETHANE	9.7	9.7	7.8
PROPANE	3.8	8.1	18.8
N-BUTANE	0.9	2.9	16.0
ISOBUTANE	1.2	2.2	11.0
N-PENTANE	0.2	0.8	6.2
ISOPENTANE	0.8	0.8	7.4
CYCLOPENTANE	TRACE	0.1	0.6
HEXANES PLUS	0.2	0.6	3.9
NITROGEN	1.4	4.6	2.7
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.3	0.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1196	1366	2564
SPECIFIC GRAVITY	0.706	0.830	1.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1225 SAMPLE 4786	INDEX 1226 SAMPLE 992	INDEX 1227 SAMPLE 2209
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ROUTT	ROUTT	ROUTT
FIELD	PAGODA	TOW CREEK	TOW CREEK
WELL NAME	NO. 55-34-G	ADAIR NO. 1	H. DENNIS NO. 3
LOCATION	SEC. 34, T4N, R89W	SEC. 7, T6N, R85W	SEC. 18, T6N, R86W
OWNER	GENERAL PETROLEUM CORP.	TEXAS PRODUCTION CO.	TEXAS PRODUCTION CO.
COMPLETED	12/08/48	12/--/24	11/08/28
SAMPLED	05/07/49	01/27/25	10/06/30
FORMATION	TRIA-SHINARUMP	-SHALE	-SHALE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3957	2083	2680
WELLHEAD PRESSURE,PSIG	1300	308	14
OPEN FLOW, MCFD	7850	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.7	79.2	33.3
ETHANE	0.3	16.3	51.7
PROPANE	0.4	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	1.2	1.2	0.8
OXYGEN	0.2	0.4	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	3.1	14.1
HELIUM	0.05	0.10	0.07
HEATING VALUE*	1033	1034	1264
SPECIFIC GRAVITY	0.595	0.674	0.953

	INDEX 1228 SAMPLE 2210	INDEX 1229 SAMPLE 379	INDEX 1230 SAMPLE 10947
STATE	COLORADO	COLORADO	COLORADO
COUNTY	ROUTT	ROUTT	SAN MIGUEL
FIELD	TOW CREEK	WILLIAMS PARK ANTICLINE	ANDY'S MESA
WELL NAME	CARSTARPHEN-IRWIN NO. 3	NO. 2	ANDY'S MESA FED. NO. 1
LOCATION	SEC. 5, T7N, R86W	SEC. 36, T9N, R88W	SEC. 34, T44N, R16W
OWNER	TEXAS PRODUCTION CO.	TWENTY MILE OIL & GAS CO.	UNION OIL CO. OF CALIF.
COMPLETED	12/05/29	10/--/19	03/09/67
SAMPLED	10/08/30	06/19/20	04/25/67
FORMATION	NOT GIVEN	CRET-DAKOTA	PENN-HONAKER TRAIL
GEOLOGIC PROVINCE CODE	535	535	585
DEPTH, FEET	3580	453	8509
WELLHEAD PRESSURE,PSIG	60	55	1912
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5300
COMPONENT, MOLE PCT			
METHANE	79.1	78.4	84.9
ETHANE	13.7	0.0	2.1
PROPANE	---	---	0.5
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	3.6	19.8	11.7
OXYGEN	0.1	0.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	3.5	0.2	0.1
HELIUM	0.08	1.04	0.16
HEATING VALUE*	1047	794	935
SPECIFIC GRAVITY	0.672	0.636	0.630

	INDEX 1231 SAMPLE 15108	INDEX 1232 SAMPLE 17754	INDEX 1233 SAMPLE 7263
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	ANDY'S MESA	HAMILTON	MCINTYRE CANYON
WELL NAME	ANDY'S MESA UNIT NO. 10	U.S.A. NO. 1-35 H	S.E. LISBON NO. 1
LOCATION	SEC. 28, T44N, R16W	SEC. 35, T5N, R15W	SEC. 5, T44N, R19W
OWNER	UNION OIL CO. OF CALIF.	COORS ENERGY CO.	PURE OIL CO.
COMPLETED	07/26/77	05/20/85	--/--/00
SAMPLED	09/20/77	07/20/85	10/25/59
FORMATION	PENN-LA SAL	PERM-CUTLER	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7692	2574	8861
WELLHEAD PRESSURE,PSIG	1950	700	NOT GIVEN
OPEN FLOW, MCFD	2450	212	250
COMPONENT, MOLE PCT			
METHANE	91.8	80.7	74.7
ETHANE	1.8	1.3	2.5
PROPANE	0.4	0.3	0.8
N-BUTANE	0.2	0.2	0.3
ISOBUTANE	0.1	0.1	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.2	0.7
NITROGEN	5.0	16.2	5.5
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	9.5
HELIUM	0.07	0.35	0.80
HEATING VALUE*	996	878	913
SPECIFIC GRAVITY	0.600	0.642	0.745

	INDEX 1234 SAMPLE 7295	INDEX 1235 SAMPLE 7495	INDEX 1236 SAMPLE 7503
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	MCINTYRE CANYON	MCINTYRE CANYON	MCINTYRE CANYON
WELL NAME	SE LISBON USA NO. 1	SE LISBON NO. 2	SE LISBON NO. 2
LOCATION	SEC. 5, T44N, R19W	SEC. 8, T44N, R19W	SEC. 8, T44N, R19W
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/29/59	04/14/60	04/17/60
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8859	8887	8821
WELLHEAD PRESSURE,PSIG	800	150	160
OPEN FLOW, MCFD	2500	NOT GIVEN	2534
COMPONENT, MOLE PCT			
METHANE	74.8	71.7	71.7
ETHANE	2.1	3.7	3.9
PROPANE	0.9	4.1	0.7
N-BUTANE	0.2	0.7	0.6
ISOBUTANE	0.5	0.2	0.9
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	1.3	0.3	0.4
NITROGEN	9.2	10.5	12.0
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.7	7.5	8.2
HELIUM	0.80	0.90	1.00
HEATING VALUE*	929	962	911
SPECIFIC GRAVITY	0.755	0.755	0.751

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1237 SAMPLE 7528	INDEX 1238 SAMPLE 7763	INDEX 1239 SAMPLE 7785
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	MCINTYRE CANYON	MCINTYRE CANYON	MCINTYRE CANYON
WELL NAME	SE LISBON NO. 3	EGNAR NO. 1	EGNAR NO. 1
LOCATION	SEC. 16, T44N, R19W	SEC. 30, T44N, R19W	SEC. 30, T44N, R19W
OWNER	PURE OIL CO.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	11/28/60
SAMPLED	07/28/60	10/30/60	11/29/60
FORMATION	MISS-LIME	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8889	9030	9100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1000	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	167	12000
COMPONENT, MOLE PCT			
METHANE	68.0	69.6	69.2
ETHANE	5.1	3.8	4.1
PROPANE	3.1	1.7	1.8
N-BUTANE	1.1	1.1	0.6
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.6	0.3
NITROGEN	12.8	10.4	11.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.8	10.6	10.0
HELIUM	0.90	1.00	0.90
HEATING VALUE*	978	931	897
SPECIFIC GRAVITY	0.778	0.785	0.769

	INDEX 1240 SAMPLE 7997	INDEX 1241 SAMPLE 8703	INDEX 1242 SAMPLE 17657
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SAN MIGUEL
FIELD	MCINTYRE CANYON	MCINTYRE CANYON	NOT GIVEN
WELL NAME	NO. 2	EGNAR NO. 1	STATE WELL NO. 1-36M
LOCATION	SEC. 6, T44N, R19W	NOT GIVEN	SEC. 36, T45N, R15W
OWNER	PURE OIL CO.	BELCO PETROLEUM CORP.	COORS ENERGY CO.
COMPLETED	06/01/60	12/03/60	01/25/84
SAMPLED	06/09/61	10/05/62	04/29/85
FORMATION	MISS-DEVO	MISS-	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8822	9120	8438
WELLHEAD PRESSURE,PSIG	800	2202	3000
OPEN FLOW, MCFD	10000	11700	300
COMPONENT, MOLE PCT			
METHANE	71.3	69.2	98.5
ETHANE	3.7	3.7	0.5
PROPANE	1.5	1.7	0.1
N-BUTANE	0.6	0.7	0.0
ISOBUTANE	0.7	0.7	0.0
N-PENTANE	0.2	0.4	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.5	0.0
NITROGEN	11.5	11.9	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.3	10.1	0.2
HELIUM	1.00	0.94	0.02
HEATING VALUE*	894	909	1009
SPECIFIC GRAVITY	0.754	0.779	0.563

	INDEX 1243 SAMPLE 10764	INDEX 1244 SAMPLE 13199	INDEX 1245 SAMPLE 9320
STATE	COLORADO	COLORADO	COLORADO
COUNTY	SAN MIGUEL	SAN MIGUEL	SEDGWICK
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	GOVT. NO. 1	SLICKROCK NO. 1	SPRAGUE BROS. NO. 1
LOCATION	SEC. 14, T44N, R14W	SEC. 8, T43N, R17W	SEC. 18, T10N, R47W
OWNER	JACK GRYNBERG & ASSOC.	READ & STEVENS, INC.	CONTINENTAL OIL CO.
COMPLETED	12/20/66	12/15/71	03/02/64
SAMPLED	10/17/66	04/27/72	04/23/64
FORMATION	PENN-HERMOSA	PENN-ISMAY	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	585	585	540
DEPTH, FEET	6400	8398	3912
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2100	805
OPEN FLOW, MCFD	100	500	1550
COMPONENT, MOLE PCT			
METHANE	96.9	97.9	89.9
ETHANE	1.0	0.3	2.7
PROPANE	0.1	0.1	0.5
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	1.8	1.3	5.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.7
HELIUM	0.06	0.01	0.08
HEATING VALUE*	1002	1005	1000
SPECIFIC GRAVITY	0.570	0.566	0.613

	INDEX 1246 SAMPLE 5394	INDEX 1247 SAMPLE 8265	INDEX 1248 SAMPLE 14115
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	AKRON	ARROW	BULLSEYE
WELL NAME	P. J. MOTT NO. 1	M. R. MITCHELL NO. 1	DANIELS NO. 1
LOCATION	SEC. 23, T3N, R53W	SEC. 33, T3N, R54W	SEC. 28, T3N, R51W
OWNER	SOUTHERN PRODUCTION CO.	TEXACO INC.	PATRICK A. DOHENY
COMPLETED	11/02/52	01/18/61	06/26/73
SAMPLED	02/05/53	10/28/61	07/22/74
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4844	4777	4309
WELLHEAD PRESSURE,PSIG	1276	1200	700
OPEN FLOW, MCFD	6000	1854	750
COMPONENT, MOLE PCT			
METHANE	85.6	73.6	90.4
ETHANE	5.5	6.4	1.3
PROPANE	1.5	0.7	0.3
N-BUTANE	0.4	0.5	0.1
ISOBUTANE	1.0	0.9	1.5
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.3	0.7	0.6
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.3	0.5	0.1
NITROGEN	4.0	13.3	5.5
OXYGEN	0.0	2.4	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.6	0.3
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1092	997	1031
SPECIFIC GRAVITY	0.665	0.723	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1249 SAMPLE 13228	INDEX 1250 SAMPLE 17864	INDEX 1251 SAMPLE 16432
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	CHILENO	DAPPER	DE NOVA
WELL NAME	PIEPER NO. 1	YOUNG NO. 2-35	MATHIES NO. 2-19
LOCATION	SEC. 23, T2N, R52W	SEC. 35, T2SS, R50W	SEC. 19, T2S, R49W
OWNER	J. M. BANDER	SAND HILLS SOCIETY	STELBAR OIL CORP., INC.
COMPLETED	12/01/71	11/04/84	11/09/81
SAMPLED	06/06/72	10/13/85	02/19/82
FORMATION	CRET-DAKOTA D	CRET-NIOBRARA	CRET-NIOBRARA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4400	2979	2890
WELLHEAD PRESSURE,PSIG	985	550	690
OPEN FLOW, MCFD	7800	150	2056
COMPONENT, MOLE PCT			
METHANE	90.6	92.9	95.0
ETHANE	2.0	0.7	0.8
PROPANE	0.9	0.2	0.4
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	1.2	0.0	0.1
N-PENTANE	0.8	0.1	0.0
ISOPENTANE	0.5	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	3.8	3.9	3.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.6	0.4
HELIUM	0.02	0.04	0.04
HEATING VALUE*	1050	979	998
SPECIFIC GRAVITY	0.626	0.600	0.583

	INDEX 1252 SAMPLE 16880	INDEX 1253 SAMPLE 17016	INDEX 1254 SAMPLE 14116
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	DE NOVA	DE NOVA	NOT GIVEN
WELL NAME	MATHIES A NO. 2	PRICE NO. 4-18	STEPHENSON
LOCATION	SEC. 5, T2SS, R49W	SEC. 18, T2S, R49W	SEC. 13, T3N, R52W
OWNER	CITIES SERVICE CO.	STELBAR OIL CORP.	PATRICK A. DOHENY
COMPLETED	10/15/82	11/26/82	11/21/73
SAMPLED	04/18/83	08/15/83	07/22/74
FORMATION	CRET-NIOBRARA	CRET-NIOBRARA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	2961	3051	4509
WELLHEAD PRESSURE,PSIG	620	700	740
OPEN FLOW, MCFD	973	685	1000
COMPONENT, MOLE PCT			
METHANE	94.2	94.2	94.1
ETHANE	0.9	0.8	1.3
PROPANE	0.4	0.5	0.2
N-BUTANE	0.2	0.2	0.0
ISOBUTANE	TRACE	0.1	0.6
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	3.3	3.2	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	1.2
HELIUM	0.05	0.05	0.02
HEATING VALUE*	1006	997	1024
SPECIFIC GRAVITY	0.591	0.586	0.601

	INDEX 1255 SAMPLE 10809	INDEX 1256 SAMPLE 11570	INDEX 1257 SAMPLE 9271
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	OTIS	OTIS	PINTO
WELL NAME	STATE NO. 1	HEISERMAN ESTATE NO. 1	THEURER NO. 1
LOCATION	SEC. 36, T3N, R50W	SEC. 25, T3N, R50W	SEC. 28, T3N, R52W
OWNER	CLARK OIL & REFINING CO.	DONZOIL, INC.	UNION TEXAS PETROLEUM CORP.
COMPLETED	09/--/65	05/25/68	01/09/64
SAMPLED	12/07/66	07/11/68	03/27/64
FORMATION	CRET-DAKOTA D	CRET-DAKOTA D	CRET-
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	3980	3958	4668
WELLHEAD PRESSURE,PSIG	611	797	820
OPEN FLOW, MCFD	NOT GIVEN	2798	2020
COMPONENT, MOLE PCT			
METHANE	90.7	93.2	93.6
ETHANE	1.0	1.0	0.9
PROPANE	TRACE	0.1	0.6
N-BUTANE	TRACE	0.0	0.3
ISOBUTANE	TRACE	0.0	0.5
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.0	0.0	0.5
CYCLOPENTANE	0.1	0.0	0.2
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	7.3	5.4	1.7
OXYGEN	0.3	0.0	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	1.5
HELIUM	0.04	0.19	0.02
HEATING VALUE*	946	965	1046
SPECIFIC GRAVITY	0.599	0.583	0.617

	INDEX 1258 SAMPLE 7565	INDEX 1259 SAMPLE 16881	INDEX 1260 SAMPLE 17017
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	RUBY	WHITE EAGLE	WHITE EAGLE
WELL NAME	JESSE NO. 1	MAGGARD A NO. 1	MAGGARD NO. 9-11
LOCATION	SEC. 22, T2N, R54W	SEC. 2, T2S, R50W	SEC. 11, T2S, R50W
OWNER	PLAINS EXPLORATION CO.	CITIES SERVICE CO.	STELBAR OIL CORP.
COMPLETED	08/12/59	10/10/82	11/26/82
SAMPLED	04/18/60	04/18/83	08/15/83
FORMATION	CRET-DAKOTA D	CRET-NIOBRARA	CRET-NIOBRARA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4774	2956	3023
WELLHEAD PRESSURE,PSIG	500	610	690
OPEN FLOW, MCFD	5540	346	885
COMPONENT, MOLE PCT			
METHANE	92.9	93.0	92.8
ETHANE	2.3	1.1	1.0
PROPANE	1.5	0.7	0.7
N-BUTANE	TRACE	0.3	0.3
ISOBUTANE	0.4	TRACE	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	1.0	3.7	5.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.4	0.5
HELIUM	0.02	0.05	0.05
HEATING VALUE*	1056	1012	999
SPECIFIC GRAVITY	0.613	0.599	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1261 SAMPLE 13659	INDEX 1262 SAMPLE 13376	INDEX 1263 SAMPLE 17925
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WASHINGTON	WELD	WELD
FIELD	WILDCAT	CALICO	EATON
WELL NAME	SHOOK NO. 14	KING NO. 1	AVERY NO. 1
LOCATION	SEC. 13, T3N, R52W	SEC. 34, T1N, R61W	SEC. 10, T6N, R65W
OWNER	PATRICK A. COMENY	FRANK M. WALSH	CACHE EXPLORATION, INC.
COMPLETED	06/07/73	03/22/72	06/12/85
SAMPLED	07/24/73	05/31/72	12/04/85
FORMATION	CRET-DAKOTA	CRET-DAKOTA J	CRET-CODELL
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4534	6826	7120
WELLHEAD PRESSURE,PSIG	780	1000	1800
OPEN FLOW, MCFD	NOT GIVEN	1500	3600
COMPONENT, MOLE PCT			
METHANE	93.1	79.6	77.0
ETHANE	1.4	6.7	11.8
PROPANE	0.2	4.9	4.2
N-BUTANE	0.0	1.1	1.4
ISOBUTANE	0.5	0.6	0.3
N-PENTANE	0.3	0.3	1.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.6
HEXANES PLUS	0.1	0.1	1.4
NITROGEN	3.2	5.8	0.3
OXYGEN	0.4	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.8	2.9
HELIUM	0.02	0.08	0.01
HEATING VALUE*	1030	1133	1295
SPECIFIC GRAVITY	0.598	0.702	0.766

	INDEX 1264 SAMPLE 2254	INDEX 1265 SAMPLE 17542	INDEX 1266 SAMPLE 14635
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	GREASEWOOD LAKES	GREELEY	HAMBERT
WELL NAME	NO. 1	TIPTON NO. 7-26 E6	LOUIS DINNER NO. 1
LOCATION	SEC. 24, T6N, R61W	SEC. 26, T6N, R65W	SEC. 13, T4N, R66W
OWNER	PLATTE VALLEY PETROLEUM CO.	COORS ENERGY CO.	AMOCO PRODUCTION CO.
COMPLETED	12/14/30	08/10/84	01/06/76
SAMPLED	12/10/30	12/07/84	04/12/76
FORMATION	CRET-BENTON	CRET-NIOBRARA & CODELL	CRET-SUSSEX
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6638	6853	4569
WELLHEAD PRESSURE,PSIG	516	2000	NOT GIVEN
OPEN FLOW, MCFD	1000	254	3000
COMPONENT, MOLE PCT			
METHANE	21.4	72.2	82.7
ETHANE	58.3	13.7	9.6
PROPANE	---	6.3	4.0
N-BUTANE	---	2.2	1.2
ISOBUTANE	---	1.1	0.6
N-PENTANE	---	0.7	0.2
ISOPENTANE	---	0.7	0.4
CYCLOPENTANE	---	0.2	TRACE
HEXANES PLUS	---	0.5	0.2
NITROGEN	16.0	0.6	0.9
OXYGEN	2.5	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.8	1.7	0.2
HELIUM	0.00	0.01	0.02
HEATING VALUE*	1262	1345	1210
SPECIFIC GRAVITY	0.940	0.798	0.691

	INDEX 1267 SAMPLE 15329	INDEX 1268 SAMPLE 15478	INDEX 1269 SAMPLE 15314
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	HAMBERT	HAMBERT	KIOWA CREEK
WELL NAME	WARREN MCMILLEN NO. 1	WILLIAM EWING NO. 1	FRANSEN NO. 1
LOCATION	SEC. 19, T4N, R65W	SEC. 11, T4N, R66W	SEC. 31, T2N, R61W
OWNER	AMOCO PRODUCTION CO.	NIELSON ENTERPRISES, INC.	ENERGY MINERALS CORP.
COMPLETED	05/11/76	09/13/78	06/10/77
SAMPLED	08/02/78	11/01/78	07/11/78
FORMATION	CRET-SUSSEX	CRET-SUSSEX	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4389	4572	7112
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1420	1420
OPEN FLOW, MCFD	NOT GIVEN	3900	5100
COMPONENT, MOLE PCT			
METHANE	79.7	81.6	76.9
ETHANE	10.1	9.1	7.1
PROPANE	4.9	4.5	4.4
N-BUTANE	1.5	1.3	1.5
ISOBUTANE	1.1	0.9	1.1
N-PENTANE	0.5	0.4	0.5
ISOPENTANE	0.5	0.4	0.7
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.3	0.9
NITROGEN	0.8	1.1	4.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	2.0
HELIUM	0.02	0.05	0.05
HEATING VALUE*	1270	1234	1213
SPECIFIC GRAVITY	0.728	0.709	0.759

	INDEX 1270 SAMPLE 6362	INDEX 1271 SAMPLE 6395	INDEX 1272 SAMPLE 1938
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	MCKENZIE	MCKENZIE	NOT GIVEN
WELL NAME	MCKENZIE-ROSE NO. 1	MCKENZIE NO. 1	NOT GIVEN
LOCATION	SEC. 19, T9N, R56W	SEC. 13, T9N, R57W	SEC. 28, T 6N, R64W
OWNER	PLAINS EXPLORATION CO.	NORTHERN NATURAL GAS CO.	J. S. DANLEY
COMPLETED	11/28/55	--/--/00	--/--/00
SAMPLED	08/12/57	08/23/57	02/17/36
FORMATION	CRET-DAKOTA J	CRET-DAKOTA J	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5890	5882	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1510	1100	NOT GIVEN
OPEN FLOW, MCFD	2200	633	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.5	82.6	0.0
ETHANE	9.1	9.3	0.6
PROPANE	4.8	1.9	---
N-BUTANE	1.6	0.5	---
ISOBUTANE	0.7	1.0	---
N-PENTANE	0.6	0.2	---
ISOPENTANE	0.3	0.6	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.5	0.3	---
NITROGEN	2.6	3.6	94.9
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.1	0.7	4.3
HELIUM	0.06	0.06	0.00
HEATING VALUE*	1222	1133	11
SPECIFIC GRAVITY	0.747	0.679	0.992

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1273 SAMPLE 16652	INDEX 1274 SAMPLE 9619	INDEX 1275 SAMPLE 13225
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	NOT GIVEN	RIVERSIDE	ROGGEN SW
WELL NAME	JOHN FORD NO. 1	KUNSEMILLER NO. 1	ZIMBELMAN NO. 1-A
LOCATION	SEC. 28, T7N, R59W	SEC. 21, T5N, R61W	SEC. 23, T2N, R63W
OWNER	BELLWETHER EXPL. CO.	TEXACO INC.	REDHORSE OIL & GAS, LTD.
COMPLETED	09/12/81	--/--/00	10/29/71
SAMPLED	09/10/82	10/23/64	06/--/72
FORMATION	CRET-DAKOTA D	CRET-DAKOTA J	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6636	6740	7073
WELLHEAD PRESSURE,PSIG	825	NOT GIVEN	1585
OPEN FLOW, MCFD	500	2170	4000
COMPONENT, MOLE PCT			
METHANE	70.8	85.8	80.3
ETHANE	11.8	8.1	10.9
PROPANE	8.6	2.1	4.3
N-BUTANE	2.6	0.4	0.9
ISOBUTANE	1.6	0.1	0.5
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.9	0.3	2.4
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.8	0.1
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1318	1104	1186
SPECIFIC GRAVITY	0.800	0.660	0.699

	INDEX 1276 SAMPLE 12790	INDEX 1277 SAMPLE 11985	INDEX 1278 SAMPLE 14546
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	SLEEPER	SOONER	SPINDLE
WELL NAME	BUCZKOWSKYJ NO. 1X	GOVT. NO. 1	FOX NO. 1
LOCATION	SEC. 23, T12N, R56W	SEC. 21, T8N, R58W	SEC. 24, T2N, R68W
OWNER	EXETER DRILLING & EXPL. CO.	DAVIDOR & DAVIDOR, INC.	PANHANDLE WESTERN GAS CO.
COMPLETED	03/02/69	05/05/69	10/01/75
SAMPLED	04/24/71	07/24/69	12/15/75
FORMATION	CRET-DAKOTA J	CRET-DAKOTA D	CRET-SUSSEX
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	6183	6288	4427
WELLHEAD PRESSURE,PSIG	75	1746	1248
OPEN FLOW, MCFD	34	6400	6919
COMPONENT, MOLE PCT			
METHANE	57.3	74.4	83.0
ETHANE	7.1	9.6	6.1
PROPANE	15.1	7.5	5.1
N-BUTANE	7.6	1.6	1.4
ISOBUTANE	2.5	0.6	0.9
N-PENTANE	2.1	0.2	0.3
ISOPENTANE	1.8	0.5	0.3
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	0.9	0.2	0.1
NITROGEN	3.0	4.1	2.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.1	0.1
HELIUM	0.03	0.06	0.05
HEATING VALUE*	1668	1219	1101
SPECIFIC GRAVITY	1.033	0.758	0.694

	INDEX 1279 SAMPLE 5929	INDEX 1280 SAMPLE 14240	INDEX 1281 SAMPLE 13121
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	STONEHAM	SURREY	WATTENBURG
WELL NAME	GRABILL NO. 1	UPRR 43 PAN AM 6 NO. 3	MART NO. 1
LOCATION	SEC. 29, T9N, R58W	SEC. 29, T1N, R67W	SEC. 27, T2N, R67W
OWNER	UTAH SOUTHERN OIL CO.	AMOCO PRODUCTION CO.	ENERGY MINERALS CORP.
COMPLETED	06/18/55	10/09/74	09/15/71
SAMPLED	09/06/55	12/05/74	12/18/71
FORMATION	CRET-DAKOTA J	CRET-SUSSEX	CRET-MUDDY
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	NOT GIVEN	4880	8100
WELLHEAD PRESSURE,PSIG	1150	520	2300
OPEN FLOW, MCFD	1750	136	2500
COMPONENT, MOLE PCT			
METHANE	79.6	73.2	83.8
ETHANE	9.4	12.0	9.7
PROPANE	4.2	8.0	2.3
N-BUTANE	1.3	2.9	0.4
ISOBUTANE	0.5	1.2	0.5
N-PENTANE	0.3	0.5	0.1
ISOPENTANE	0.4	0.8	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	2.2	1.2	0.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.2	2.3
HELIUM	0.06	0.01	0.03
HEATING VALUE*	1188	1365	1131
SPECIFIC GRAVITY	0.713	0.793	0.673

	INDEX 1282 SAMPLE 13562	INDEX 1283 SAMPLE 9549	INDEX 1284 SAMPLE 17344
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	WELD	WELD
FIELD	WATTENBURG	WILDCAT	WILDHORSE
WELL NAME	BAILEY NO. 1	BUCHLER-CARROLL NO. 1	DOLL NO. 1A
LOCATION	SEC. 36, T3N, R68W	SEC. 30, T4N, R68W	SEC. 19, T7N, R58W
OWNER	JOHN M. HILL	TEXACO INC.	WEEKS ENERGY MINERALS CORP.
COMPLETED	02/05/72	--/--/00	06/28/84
SAMPLED	03/06/73	08/21/64	06/28/84
FORMATION	CRET-DAKOTA J	CRET-NIOBRARA	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	7685	5280	6603
WELLHEAD PRESSURE,PSIG	2425	553	371
OPEN FLOW, MCFD	3600	NOT GIVEN	356
COMPONENT, MOLE PCT			
METHANE	82.6	65.1	69.0
ETHANE	10.1	12.2	10.5
PROPANE	2.7	10.4	9.4
N-BUTANE	0.5	5.1	3.2
ISOBUTANE	0.5	1.2	1.2
N-PENTANE	0.1	1.5	0.9
ISOPENTANE	0.2	1.7	0.8
CYCLOPENTANE	TRACE	0.5	0.4
HEXANES PLUS	0.1	1.3	0.6
NITROGEN	0.5	1.0	2.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	TRACE	1.7
HELIUM	0.02	0.01	0.05
HEATING VALUE*	1139	1583	1398
SPECIFIC GRAVITY	0.682	0.922	0.848

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1285 SAMPLE 10785	INDEX 1286 SAMPLE 869	INDEX 1287 SAMPLE 870
STATE	COLORADO	COLORADO	COLORADO
COUNTY	WELD	YUMA	YUMA
FIELD	WRANGLER	ARICKAREE	ARICKAREE
WELL NAME	EULALIA CERVI NO. 1	NO. 3	NOT GIVEN
LOCATION	SEC. 26, T10N, R56W	SEC. 17, T2S, R43W	SEC. 20, T2S, R43W
OWNER	BRIGHT & SCHIFF	MIDFIELDS OIL CO.	MIDFIELDS OIL CO.
COMPLETED	09/21/65	--/--/00	--/--/00
SAMPLED	11/21/66	04/22/24	04/22/24
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5714	400	400
WELLHEAD PRESSURE,PSIG	1000	400	400
OPEN FLOW, MCFD	250	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.2	94.8	94.3
ETHANE	6.2	1.7	1.8
PROPANE	7.8	---	---
N-BUTANE	2.2	---	---
ISOBUTANE	1.9	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	1.1	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	0.5	---	---
NITROGEN	4.7	3.0	3.2
OXYGEN	0.0	0.3	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.5	0.1	0.3
HELIUM	0.07	0.09	0.08
HEATING VALUE*	1266	991	988
SPECIFIC GRAVITY	0.788	0.577	0.580

	INDEX 1288 SAMPLE 15547	INDEX 1289 SAMPLE 17044	INDEX 1290 SAMPLE 16623
STATE	COLORADO	COLORADO	COLORADO
COUNTY	YUMA	YUMA	YUMA
FIELD	BEECHER ISLAND	BEECHER ISLAND	BONNY
WELL NAME	BEECHER ISLAND NO. 2	SCHOBE NO. 2-8	GROSECLOSE NO. 32-30
LOCATION	SEC. 21, T2S, R43W	SEC. 8, T3S, R43W	SEC. 30, T4S, R43W
OWNER	MOUNTAIN PETROLEUM, LTD.	MOUNTAIN PETROLEUM CORP.	JOHN P. LOCKRIDGE
COMPLETED	--/--/00	07/24/82	08/24/82
SAMPLED	12/30/78	08/31/83	08/24/82
FORMATION	CRET-NIOBRARA	CRET-NIOBRARA	CRET-NIOBRARA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	NOT GIVEN	1799	1726
WELLHEAD PRESSURE,PSIG	NOT GIVEN	334	360
OPEN FLOW, MCFD	NOT GIVEN	1526	4230
COMPONENT, MOLE PCT			
METHANE	93.6	94.0	93.4
ETHANE	1.2	1.2	1.2
PROPANE	0.4	0.4	0.3
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	3.9	3.0	4.3
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.3	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.3
HELIUM	0.08	0.06	0.07
HEATING VALUE*	984	993	983
SPECIFIC GRAVITY	0.582	0.586	0.586

	INDEX 1291 SAMPLE 17848	INDEX 1292 SAMPLE 16873	INDEX 1293 SAMPLE 16542
STATE	COLORADO	COLORADO	COLORADO
COUNTY	YUMA	YUMA	YUMA
FIELD	BUCKBOARD	DUKE	ECKLEY
WELL NAME	PROBASCO NO. 1-10	QUICK-PETERS NO. 23-1	ECKLEY FEDERAL NO. 31-1
LOCATION	SEC. 10, T3N, R46W	SEC. 23, T1S, R45W	SEC. 31, T4N, R45W
OWNER	MIDLANDS GAS CORP.	UNIOIL	MESA PETROLEUM CO.
COMPLETED	08/01/84	05/20/82	06/24/81
SAMPLED	09/19/85	04/09/83	09/25/81
FORMATION	CRET-NIOBRARA	CRET-NIOBRARA	CRET-NIOBRARA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	2692	2278	2477
WELLHEAD PRESSURE,PSIG	465	600	520
OPEN FLOW, MCFD	90	1800	2300
COMPONENT, MOLE PCT			
METHANE	93.6	92.8	94.4
ETHANE	0.9	1.0	0.9
PROPANE	0.3	0.5	0.1
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	3.9	4.2	3.7
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	0.5
HELIUM	0.07	0.09	0.08
HEATING VALUE*	974	995	990
SPECIFIC GRAVITY	0.587	0.599	0.587

	INDEX 1294 SAMPLE 16378	INDEX 1295 SAMPLE 17045	INDEX 1296 SAMPLE 17847
STATE	COLORADO	COLORADO	COLORADO
COUNTY	YUMA	YUMA	YUMA
FIELD	NOT GIVEN	PHUMA	SCHRAMM
WELL NAME	LENGEL NO. 13-14	SALVADOR NO. 1-10	BEAUPREZ NO. 1-35
LOCATION	SEC. 24, T5S, R44W	SEC. 10, T5N, R46W	SEC. 35, T2N, R47W
OWNER	CABOT CORP.	MOUNTAIN PETROLEUM CORP.	MIDLANDS GAS CORP.
COMPLETED	07/29/81	11/06/82	08/24/84
SAMPLED	11/12/81	08/31/83	09/19/85
FORMATION	CRET-NIOBRARA	CRET-NIOBRARA	CRET-NIOBRARA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	1328	2665	2606
WELLHEAD PRESSURE,PSIG	331	520	430
OPEN FLOW, MCFD	2200	552	75
COMPONENT, MOLE PCT			
METHANE	91.5	92.3	94.6
ETHANE	1.4	1.1	0.8
PROPANE	0.5	0.4	0.2
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	4.6	3.5	3.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.8	1.0
HELIUM	0.07	0.08	0.06
HEATING VALUE*	975	981	991
SPECIFIC GRAVITY	0.605	0.600	0.588

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1297 SAMPLE 16440		INDEX 1298 SAMPLE 17018		INDEX 1299 SAMPLE 17364	
STATE	COLORADO		COLORADO		COLORADO	
COUNTY	YUMA		YUMA		YUMA	
FIELD	UNNAMED		WAGES		WHISPER	
WELL NAME	LENGEL NO. 1-18		CLARK JOSH NO. 1-3		BRAND NO. 1-15	
LOCATION	SEC. 18, T4S, R43W		SEC. 3, T9N, R46W		SEC. 15, T3N, R47W	
OWNER	J-W OPERATING CO.		STELBAR OIL CORP.		MIDLANDS GAS CORP.	
COMPLETED	11/12/81		06/11/80		04/11/84	
SAMPLED	03/--/82		08/22/83		06/01/84	
FORMATION	CRET-SMOKY HILL		CRET-NIOBRARA		CRET-NIOBRARA	
GEOLOGIC PROVINCE CODE	540		540		540	
DEPTH, FEET	1652		2654		2740	
WELLHEAD PRESSURE,PSIG	263		212		470	
OPEN FLOW, MCFD	597		708		700	
COMPONENT, MOLE PCT						
METHANE	91.4		94.3		92.9	
ETHANE	1.1		0.9		1.1	
PROPANE	0.4		0.2		0.3	
N-BUTANE	0.0		0.1		0.1	
ISOBUTANE	0.0		TRACE		TRACE	
N-PENTANE	0.0		TRACE		0.1	
ISOPENTANE	0.0		0.1		0.1	
CYCLOPENTANE	0.0		TRACE		TRACE	
HEXANES PLUS	0.0		TRACE		0.1	
NITROGEN	4.2		3.3		3.4	
OXYGEN	0.0		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.3		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.7		0.4		1.6	
HELIUM	0.07		0.08		0.06	
HEATING VALUE*	956		985		986	
SPECIFIC GRAVITY	0.607		0.579		0.600	

	INDEX 1300 SAMPLE 17846		INDEX 1301 SAMPLE 16879		INDEX 1302 SAMPLE 16597	
STATE	COLORADO		COLORADO		FLORIDA	
COUNTY	YUMA		YUMA		ESCAMBIA	
FIELD	WHISPER		WILDCAT		JAY/LITTLE ESCAMBIA CREEK	
WELL NAME	PAGEL NO. 3-3		ALLISON NO. 9-1		MCDAVID LANDS NO. 31-2A	
LOCATION	SEC. 3, T3N, R47W		SEC. 9, T1S, R45W		SEC. 31, T6N, R29W	
OWNER	MIDLANDS GAS CORP.		UNIOIL		EXXON CO., U.S.A.	
COMPLETED	07/25/85		08/21/82		04/12/82	
SAMPLED	09/29/85		04/09/83		07/30/82	
FORMATION	CRET-NIOBRARA		CRET-NIOBRARA		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	540		540		210	
DEPTH, FEET	2729		2340		15500	
WELLHEAD PRESSURE,PSIG	498		1050		1200	
OPEN FLOW, MCFD	78		171		4000	
COMPONENT, MOLE PCT						
METHANE	92.7		90.6		54.8	
ETHANE	1.0		0.9		13.0	
PROPANE	0.2		0.5		7.3	
N-BUTANE	0.2		0.2		2.9	
ISOBUTANE	0.0		0.1		1.8	
N-PENTANE	0.2		0.1		0.9	
ISOPENTANE	TRACE		0.1		1.1	
CYCLOPENTANE	0.1		TRACE		0.2	
HEXANES PLUS	0.1		0.1		0.7	
NITROGEN	3.6		4.0		3.8	
OXYGEN	0.1		TRACE		0.4	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.4		0.1	
HYDROGEN SULFIDE**	0.0		0.0		9.5	
CARBON DIOXIDE	1.6		2.9		3.5	
HELIUM	0.06		0.09		0.01	
HEATING VALUE*	987		972		1326	
SPECIFIC GRAVITY	0.603		0.617		0.935	

	INDEX 1303 SAMPLE 13150		INDEX 1304 SAMPLE 13193		INDEX 1305 SAMPLE 15718	
STATE	FLORIDA		FLORIDA		FLORIDA	
COUNTY	SANTA ROSA		SANTA ROSA		SANTA ROSA	
FIELD	BLACKJACK		BLACKJACK		JAY	
WELL NAME	ST. REGIS PAPER CO. NO. 13-3		ST. REGIS PAPER CO. NO. 13-3		ST. REGIS 18	
LOCATION	NOT GIVEN		SEC. 13, T4N, R29W		SEC. 43, T5N, R29W	
OWNER	HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.		EXXON CO., U.S.A.	
COMPLETED	--/--/00		02/14/72		06/12/70	
SAMPLED	01/03/72		01/26/72		07/30/79	
FORMATION	JURA-SMACKOVER		JURA-NORPHLET		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	210		210		210	
DEPTH, FEET	15790		16120		15500	
WELLHEAD PRESSURE,PSIG	3595		2994		1500	
OPEN FLOW, MCFD	1183		75		3774	
COMPONENT, MOLE PCT						
METHANE	62.1		77.4		53.9	
ETHANE	11.7		3.1		13.1	
PROPANE	3.4		0.6		8.0	
N-BUTANE	1.1		0.5		3.2	
ISOBUTANE	1.2		0.7		2.2	
N-PENTANE	0.3		0.7		1.2	
ISOPENTANE	0.4		0.1		1.1	
CYCLOPENTANE	0.1		0.1		0.3	
HEXANES PLUS	0.2		0.9		0.9	
NITROGEN	6.9		14.2		1.8	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.1		0.0		0.2	
HYDROGEN SULFIDE**	10.0		0.0		10.8	
CARBON DIOXIDE	2.8		1.6		3.2	
HELIUM	0.04		0.03		0.02	
HEATING VALUE*	1113		980		1396	
SPECIFIC GRAVITY	0.816		0.707		0.959	

	INDEX 1306 SAMPLE 12377		INDEX 1307 SAMPLE 5492		INDEX 1308 SAMPLE 9609	
STATE	FLORIDA		GEORGIA		IDAHO	
COUNTY	SANTA ROSA		DECATUR		BONNEVILLE	
FIELD	JAY AREA		NOT GIVEN		WILDCAT	
WELL NAME	ST. REGIS ET AL, NO. 1		J. R. SEALY NO. 1		T. J. WEBER NO. 1-A	
LOCATION	SEC. 9, T5N, R29W		LOT 247, LAND DIST. 21		SEC. 24, T2S, R44E	
OWNER	HUMBLE OIL & REFINING CO.		J. R. SEALY		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	06/15/70		--/--/00		--/--/00	
SAMPLED	06/13/70		06/10/53		10/22/69	
FORMATION	JURA-SMACKOVER		CRET-EUTAW		MISS-BRAZER	
GEOLOGIC PROVINCE CODE	210		130		615	
DEPTH, FEET	15470		3005		9085	
WELLHEAD PRESSURE,PSIG	3775		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	2145		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	69.2		74.2		0.4	
ETHANE	10.9		0.1		0.1	
PROPANE	4.3		0.0		0.0	
N-BUTANE	1.0		0.0		0.0	
ISOBUTANE	0.7		0.0		0.0	
N-PENTANE	0.4		0.0		0.0	
ISOPENTANE	TRACE		0.0		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.2		0.0		0.0	
NITROGEN	2.7		24.1		1.4	
OXYGEN	0.0		0.2		0.1	
ARGON	0.0		0.4		TRACE	
HYDROGEN	0.1		0.1		0.9	
HYDROGEN SULFIDE**	7.2		0.0		0.0	
CARBON DIOXIDE	3.3		0.6		97.1	
HELIUM	0.02		0.27		0.02	
HEATING VALUE*	1139		754		9	
SPECIFIC GRAVITY	0.778		0.663		1.503	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1309 SAMPLE 9610	INDEX 1310 SAMPLE 9617	INDEX 1311 SAMPLE 1630
STATE	IDAHO	IDAHO	IDAHO
COUNTY	BONNEVILLE	BONNEVILLE	CANYON
FIELD	WILDCAT	WILDCAT	NOT GIVEN
WELL NAME	T. J. WEBER NO. 1-A	T. J. WEBER NO. 1-A	NOT GIVEN
LOCATION	SEC. 24, T2S, R44E	SEC. 24, T2S, R44E	GREENLEAF
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	NOT GIVEN
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/23/64	10/22/64	05/30/28
FORMATION	MISS-BRAZER	MISS-BRAZER	NOT GIVEN
GEOLOGIC PROVINCE CODE	615	615	610
DEPTH, FEET	9085	9085	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.3	0.2	0.0
ETHANE	0.1	0.1	1.4
PROPANE	0.0	0.2	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.8	0.7	96.4
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	2.0	0.4	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	96.7	98.3	2.1
HELIUM	0.05	0.00	TRACE
HEATING VALUE*	11	10	25
SPECIFIC GRAVITY	1.492	1.516	0.981

	INDEX 1312 SAMPLE 2700	INDEX 1313 SAMPLE 1166	INDEX 1314 SAMPLE 1167
STATE	IDAHO	IDAHO	IDAHO
COUNTY	CANYON	CARIBOU	CARIBOU
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	WATER WELL	HOOPER SPRING	IRON SPRING, IDAHO
LOCATION	NOT GIVEN	SEC. 36, T 8S, R41E	SEC. 7, T 9S, R42E
OWNER	JOHN JANSSEN	NOT GIVEN	NOT GIVEN
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/01/35	10/14/25	10/14/25
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	610	630	630
DEPTH, FEET	278	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	96.1	3.8	4.3
OXYGEN	2.7	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	96.2	95.7
HELIUM	0.00	0.00	0.00
HEATING VALUE*	0	0	0
SPECIFIC GRAVITY	0.978	1.508	1.505

	INDEX 1315 SAMPLE 1168	INDEX 1316 SAMPLE 1169	INDEX 1317 SAMPLE 1170
STATE	IDAHO	IDAHO	IDAHO
COUNTY	CARIBOU	CARIBOU	CARIBOU
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	MOUND SPRING	IDANHA SPRING	SODA MOUND SPRING
LOCATION	SEC. 12, T 9S, R41E	SEC. 2, T 9S, R41E	SEC. 12, T 9S, R41E
OWNER	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/14/25	10/14/25	10/14/25
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	630	630	630
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.3	7.5	6.0
OXYGEN	0.0	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	98.7	92.5	94.0
HELIUM	0.00	0.00	0.00
HEATING VALUE*	0	0	0
SPECIFIC GRAVITY	1.522	1.487	1.495

	INDEX 1318 SAMPLE 1171	INDEX 1319 SAMPLE 1172	INDEX 1320 SAMPLE 2531
STATE	IDAHO	IDAHO	IDAHO
COUNTY	CARIBOU	CARIBOU	FRANKLIN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	SULPHUR SPRING	MAMMOTH SPRING	WATER WELL
LOCATION	SEC. 13, T 9S, R42E	SEC. 23, T8OS, R41E	SEC. 17, T14S, R39E
OWNER	NOT GIVEN	NOT GIVEN	J. M. LARSEN, ET AL.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/14/25	10/14/25	08/03/32
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	630	630	625
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	72.6
ETHANE	0.0	0.0	0.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.8	9.0	16.8
OXYGEN	0.0	0.0	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	84.2	91.0	9.4
HELIUM	0.00	0.00	0.04
HEATING VALUE*	0	0	746
SPECIFIC GRAVITY	1.448	1.478	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1321 SAMPLE 4420	INDEX 1322 SAMPLE 2748	INDEX 1323 SAMPLE 1356
STATE	IDAHO	IDAHO	IDAHO
COUNTY	OWYHEE	PAYETTE	PAYETTE
FIELD	NOT GIVEN	BEACON HILL	PAYETTE
WELL NAME	ARTESIAN WATER WELL	REINS NO. 2	NO. 1
LOCATION	SEC. 16, T6S, R7E	SEC. 13, T8N, R4W	NOT GIVEN
OWNER	DONALD PANCOAST	BOISE PETROLEUM CORP.	IDAHO PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/11/48	03/02/37	02/28/27
FORMATION	NOT GIVEN	MIOC-PAYETTE	NOT GIVEN
GEOLOGIC PROVINCE CODE	615	615	615
DEPTH, FEET	1300	1267	1400
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.2	99.5	72.9
ETHANE	1.1	0.0	25.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	13.4	0.1	0.0
OXYGEN	0.2	0.3	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.1	1.1
HELIUM	0.02	TRACE	0.00
HEATING VALUE*	873	1008	1190
SPECIFIC GRAVITY	0.627	0.557	0.694

	INDEX 1324 SAMPLE 1649	INDEX 1325 SAMPLE 2553	INDEX 1326 SAMPLE 2217
STATE	IDAHO	IDAHO	IDAHO
COUNTY	PAYETTE	PAYETTE	WASHINGTON
FIELD	PAYETTE	PAYETTE	CRYSTAL DOME
WELL NAME	NOT GIVEN	PATCH-SMITH ET AL, NO. 1	NO. 1-X
LOCATION	NOT GIVEN	SEC. 2, T8N, R5W	SEC. 32, T10N, R4W
OWNER	NOT GIVEN	IDAHO GAS & UTILITIES CORP.	CRYSTAL DOME OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/25/28	09/30/32	10/22/30
FORMATION	NOT GIVEN	MIOC-PAYETTE	TERT-
GEOLOGIC PROVINCE CODE	615	615	615
DEPTH, FEET	NOT GIVEN	1285	1865
WELLHEAD PRESSURE,PSIG	NOT GIVEN	40	135
OPEN FLOW, MCFD	NOT GIVEN	250	100
COMPONENT, MOLE PCT			
METHANE	67.6	99.3	98.7
ETHANE	26.7	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.8	0.0	0.4
OXYGEN	0.3	0.7	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.0	0.9
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1163	1006	1000
SPECIFIC GRAVITY	0.714	0.558	0.565

	INDEX 1327 SAMPLE 2220	INDEX 1328 SAMPLE 2255	INDEX 1329 SAMPLE 3392
STATE	IDAHO	IDAHO	ILLINOIS
COUNTY	WASHINGTON	WASHINGTON	BOND
FIELD	CRYSTAL DOME	WEISER	AYERS
WELL NAME	NO. 1-A	DANIEL NO. 2	ALICE PRICE NO. 1
LOCATION	SEC. 32, T10N, R4W	SEC. 32, T10N, R4W	SEC. 29, T6N, R3W
OWNER	CRYSTAL DOME OIL & GAS CO.	CRYSTAL DOME OIL & GAS CO.	BOND COUNTY GAS CO.
COMPLETED	--/--/00	--/--/00	07/05/40
SAMPLED	--/--/00	01/04/31	05/08/42
FORMATION	TERT-	-KRAMLICH	MISS-BENOIST
GEOLOGIC PROVINCE CODE	615	615	315
DEPTH, FEET	1865	1870	925
WELLHEAD PRESSURE,PSIG	135	300	185
OPEN FLOW, MCFD	100	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	98.8	97.4	92.7
ETHANE	0.0	0.0	0.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.3	1.3	6.3
OXYGEN	0.0	0.1	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	1.2	0.3
HELIUM	0.00	0.00	0.17
HEATING VALUE*	1001	987	943
SPECIFIC GRAVITY	0.564	0.572	0.585

	INDEX 1330 SAMPLE 3393	INDEX 1331 SAMPLE 5143	INDEX 1332 SAMPLE 17234
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	BOND	CLINTON	CLINTON
FIELD	AYERS	FROGTOWN	STOLLETOWN
WELL NAME	E. A. MARY NO. 2	WM. HOSTMEYER NO. 1	KOCH FAMILY FARMS NO. 2
LOCATION	SEC. 20, T6N, R3W	SEC. 36, T3N, R4W	SEC. 28, T3N, R3W
OWNER	BOND COUNTY GAS CO.	GULF REFINING CO.	DUNNILL, JOHN F., JR., INC.
COMPLETED	01/15/38	08/05/51	08/01/83
SAMPLED	05/08/42	12/05/51	04/02/84
FORMATION	MISS-BENOIST	SILU-REEF	MISS-GOLCONDA
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	940	2222	832
WELLHEAD PRESSURE,PSIG	185	840	310
OPEN FLOW, MCFD	250	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	91.5	93.1	95.2
ETHANE	1.1	0.6	TRACE
PROPANE	---	0.5	TRACE
N-BUTANE	---	0.3	0.0
ISOBUTANE	---	0.3	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.1	0.0
NITROGEN	6.6	4.1	4.4
OXYGEN	0.4	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.7	0.1
HELIUM	0.19	0.09	0.23
HEATING VALUE*	947	998	964
SPECIFIC GRAVITY	0.590	0.600	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1333 SAMPLE 17235	INDEX 1334 SAMPLE 5345	INDEX 1335 SAMPLE 9761
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	CLINTON	CRAWFORD	GALLATIN
FIELD	STOLLETOWN	ROBINSON S	FORK N
WELL NAME	EUGENE REMMERT NO. 1	HUDSON NO. P-1	EDWARDS
LOCATION	SEC. 33, T3N, R3W	SEC. 6, T5N, R12W	SEC. 3, T8S, R8E
OWNER	DUNNILL, JOHN F., JR., INC.	SKILES OIL CORP.	MT. CARMEL DRILLING CO.
COMPLETED	06/21/83	07/29/52	--/--/00
SAMPLED	04/02/84	11/25/52	02/23/65
FORMATION	MISS-CYPRESS	NOT GIVEN	MISS-PALESTINE
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	970	1074	1830
WELLHEAD PRESSURE,PSIG	345	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.1	88.7	93.1
ETHANE	TRACE	2.3	1.0
PROPANE	TRACE	0.3	0.1
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	TRACE	0.4
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	4.8	7.8	4.2
OXYGEN	TRACE	0.3	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.23	0.13	0.17
HEATING VALUE*	963	948	1021
SPECIFIC GRAVITY	0.573	0.604	0.605

	INDEX 1336 SAMPLE 3397	INDEX 1337 SAMPLE 3405	INDEX 1338 SAMPLE 3406
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	LAWRENCE	LAWRENCE	LAWRENCE
FIELD	RUSSELLVILLE	RUSSELLVILLE	RUSSELLVILLE
WELL NAME	SCOTT GREY NO. 1	CARPENTER & WHITE	BEIRMAUS NO. 5
LOCATION	SEC. 13, T4N, R11W	SEC. 7, T4N, R11W	SEC. 13, T4N, R11W
OWNER	R. R. WILLIS	KENTUCKY NATURAL GAS CO. & P	W. S. YOUNG, JR.
COMPLETED	07/14/38	12/03/38	12/17/41
SAMPLED	05/11/42	05/11/42	05/11/42
FORMATION	PENN-BUCHANAN	NOT GIVEN	PENN-BRIDGEPORT
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1061	1080	787
WELLHEAD PRESSURE,PSIG	196	204	213
OPEN FLOW, MCFD	27855	8476	3375
COMPONENT, MOLE PCT			
METHANE	83.0	87.1	83.2
ETHANE	6.2	6.5	6.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.2	5.6	9.4
OXYGEN	0.4	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.21	0.12	0.20
HEATING VALUE*	952	999	963
SPECIFIC GRAVITY	0.630	0.614	0.629

	INDEX 1339 SAMPLE 3409	INDEX 1340 SAMPLE 3744	INDEX 1341 SAMPLE 3395
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	LAWRENCE	LAWRENCE	MACOUPIN
FIELD	RUSSELLVILLE	RUSSELLVILLE	PLAINVIEW
WELL NAME	SCOTT GREY ACRES NO. 3	THOMPSON-GERHART NO. 1	STEPHEN NO. 2
LOCATION	SEC. 8, T4N, R11W	SEC. 18, T4N, R10W	SEC. 18, T8N, R8W
OWNER	R. R. WILLIS	KENTUCKY NATURAL GAS CO.	RAY HOLMES, ET AL.
COMPLETED	04/05/40	02/19/43	05/01/42
SAMPLED	05/11/42	03/31/44	05/09/42
FORMATION	MISS-KIRKWOOD	PENN-BRIDGEPORT	PENN-POTTSVILLE
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1326	796	397
WELLHEAD PRESSURE,PSIG	357	207	NOT GIVEN
OPEN FLOW, MCFD	119	2635	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	80.4	94.4
ETHANE	6.4	5.3	0.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.6	13.4	4.5
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.11	0.30	0.06
HEATING VALUE*	1019	909	963
SPECIFIC GRAVITY	0.608	0.639	0.579

	INDEX 1342 SAMPLE 3396	INDEX 1343 SAMPLE 4275	INDEX 1344 SAMPLE 16972
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	MACOUPIN	MORGAN	PIKE
FIELD	PLAINVIEW	WAVERLY	GRIGGSVILLE W
WELL NAME	T. S. SNEDEKER	G. S. MCMAHAN	SKINNER NO. 1
LOCATION	SEC. 15, T8N, R8W	SEC. 22, T13N, R8W	SEC. 17, T9S, R3W
OWNER	T. S. SNEDEKER	L. P. LADET	HOT TANKS, INC.
COMPLETED	--/0-/32	12/17/96	10/05/82
SAMPLED	05/09/42	12/14/96	05/17/83
FORMATION	PENN-POTTSVILLE	DEVO-LIMESTONE	SILU-EDGEWOOD
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	420	992	333
WELLHEAD PRESSURE,PSIG	120	390	103
OPEN FLOW, MCFD	1000	1270	1300
COMPONENT, MOLE PCT			
METHANE	89.7	94.9	95.4
ETHANE	0.0	0.0	0.1
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	9.4	3.6	3.0
OXYGEN	0.3	0.3	0.2
ARGON	---	---	0.1
HYDROGEN	---	---	0.6
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	1.2	0.6
HELIUM	0.19	0.01	0.03
HEATING VALUE*	909	963	973
SPECIFIC GRAVITY	0.599	0.583	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1345 SAMPLE 3407	INDEX 1346 SAMPLE 4415	INDEX 1347 SAMPLE 13106
STATE	ILLINOIS	ILLINOIS	ILLINOIS
COUNTY	WABASH	WASHINGTON	WILLIAMSON
FIELD	MOUNT CARMEL	DUBOIS N	CORINTH S
WELL NAME	RISLEY NO. 1	KASBAN NO. 1	BELLE GENT A NO. 1
LOCATION	SEC. 17, T 1S, R12W	SEC. 13, T3S, R2W	SEC. 33, T8S, R4E
OWNER	SHELL OIL CO.	W. O. ALLEN & MABEE PET. COR	C. E. BREHM DRILLING & PROD.
COMPLETED	--/--/40	09/18/47	11/12/70
SAMPLED	05/11/42	01/06/48	11/22/71
FORMATION	MISS-MCCLOSKY	NOT GIVEN	MISS-HARDINSBURG
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	2325	1184	2227
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	850
OPEN FLOW, MCFD	NOT GIVEN	15300	200
COMPONENT, MOLE PCT			
METHANE	28.0	88.3	96.1
ETHANE	65.6	4.1	0.6
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	4.9	6.8	2.9
OXYGEN	0.4	0.3	0.2
ARGON	---	---	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.0	0.1	TRACE
HELIUM	0.07	0.36	0.15
HEATING VALUE*	1459	968	984
SPECIFIC GRAVITY	0.911	0.604	0.569

	INDEX 1348 SAMPLE 11801	INDEX 1349 SAMPLE 13271	INDEX 1350 SAMPLE 3839
STATE	ILLINOIS	ILLINOIS	INDIANA
COUNTY	WILLIAMSON	WILLIAMSON	DAVIESS
FIELD	JOHNSON CITY E	STIRITZ	GLENDALE
WELL NAME	MADISON COAL CORP. G-3	NOVINSKY NO. 1	E. MCCRACKEN NO. 6-C
LOCATION	SEC. 15, T8S, R3E	SEC. 12, T8S, R2E	SEC. 16, T2N, R6W
OWNER	CIPS CO.	C. E. BREHM DRILLING & PROD.	R. D. BROWN, INC.
COMPLETED	12/20/68	09/14/71	06/18/42
SAMPLED	03/27/69	06/19/72	05/15/44
FORMATION	MISS-TAR SPRINGS	MISS-TAR SPRINGS	MISS-
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1928	1935	730
WELLHEAD PRESSURE,PSIG	625	NOT GIVEN	310
OPEN FLOW, MCFD	6400	4300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	96.4	82.0
ETHANE	0.7	0.8	6.9
PROPANE	TRACE	0.2	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.2	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	TRACE	---
NITROGEN	1.6	2.1	10.3
OXYGEN	0.0	TRACE	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.09	0.12	0.18
HEATING VALUE*	997	1003	954
SPECIFIC GRAVITY	0.566	0.572	0.634

	INDEX 1351 SAMPLE 3530	INDEX 1352 SAMPLE 9787	INDEX 1353 SAMPLE 4883
STATE	INDIANA	INDIANA	INDIANA
COUNTY	DAVIESS	DAVIESS	DAVIESS
FIELD	MUDSENVILLE	ODON E	PLAINVILLE
WELL NAME	GOSLIN NO. 2	JAMES SHAW NO. 1A	W. C. FOUST 4 NO. 1
LOCATION	SEC. 9, T1N, R6W	SEC. 22, T5N, R5W	SEC. 2, T4N, R7W
OWNER	JOE BAUER	HENRY GWALTNEY	NATIONAL ASSOC. PETROLEUM CO
COMPLETED	--/--/34	08/13/64	04/06/50
SAMPLED	05/15/42	03/03/65	04/08/50
FORMATION	MISS-BARKER	DEVO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	750	1620	1143
WELLHEAD PRESSURE,PSIG	100	701	525
OPEN FLOW, MCFD	10	5500	4186
COMPONENT, MOLE PCT			
METHANE	93.8	94.3	68.9
ETHANE	0.4	2.4	6.3
PROPANE	---	0.3	2.8
N-BUTANE	---	TRACE	0.6
ISOBUTANE	---	0.1	0.2
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.0
NITROGEN	5.0	2.4	19.4
OXYGEN	0.4	0.0	0.8
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.12	0.02	0.36
HEATING VALUE*	957	1015	923
SPECIFIC GRAVITY	0.582	0.584	0.719

	INDEX 1354 SAMPLE 5041	INDEX 1355 SAMPLE 5043	INDEX 1356 SAMPLE 512
STATE	INDIANA	INDIANA	INDIANA
COUNTY	DAVIESS	DAVIESS	DECATUR
FIELD	PLAINVILLE	PLAINVILLE	EASTERN
WELL NAME	LOCKIE MEURER NO. 1-A	W. C. FOUST NO. 1-A	DICK MEEK NO. 1
LOCATION	SEC. 2, T4N, R7W	SEC. 2, T4N, R7W	1 MI. S GREENBURG
OWNER	NATIONAL ASSOC. PETROLEUM CO	NATIONAL ASSOC. PETROLEUM CO	GREENBURG GAS & ELECTRIC CO.
COMPLETED	08/17/50	04/08/50	--/--/15
SAMPLED	05/01/51	--/--/00	10/21/20
FORMATION	MISS-SALEM	MISS-SALEM	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	315	315	300
DEPTH, FEET	1090	1144	898
WELLHEAD PRESSURE,PSIG	525	525	300
OPEN FLOW, MCFD	4000	4000	500
COMPONENT, MOLE PCT			
METHANE	73.0	71.8	78.2
ETHANE	6.5	6.7	2.8
PROPANE	2.7	3.0	---
N-BUTANE	0.6	0.7	---
ISOBUTANE	0.1	0.2	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	15.8	15.8	17.9
OXYGEN	0.2	TRACE	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.3	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.8	0.0
HELIUM	0.36	0.36	0.40
HEATING VALUE*	965	969	842
SPECIFIC GRAVITY	0.701	0.707	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1357 SAMPLE 513	INDEX 1358 SAMPLE 17008	INDEX 1359 SAMPLE 17007
STATE	INDIANA	INDIANA	INDIANA
COUNTY	DECATUR	DUBOIS	DUBOIS
FIELD	WESTPORT	BRETZVILLE	JOHNSBURG E
WELL NAME	MOLLIE MARTIN NO. 2	L. WITTE & M. SCHAFER NO.1	J. SEIDL NO. 2
LOCATION	4 MI. N WESTPORT	SEC. 6, T3S, R4W	SEC. 35, T3S, R5W
OWNER	GREENBURG GAS & ELECTRIC CO.	CITIZENS GAS & COKE UTILITY	CITIZENS GAS & COKE UTILITY
COMPLETED	--/--/15	11/09/81	10/05/81
SAMPLED	10/21/20	08/09/83	08/09/83
FORMATION	ORDO-TRENTON	MISS-SALEM	MISS-SALEM
GEOLOGIC PROVINCE CODE	300	315	315
DEPTH, FEET	898	1138	1508
WELLHEAD PRESSURE,PSIG	300	538	602
OPEN FLOW, MCFD	700	440	4600
COMPONENT, MOLE PCT			
METHANE	75.6	85.0	71.3
ETHANE	4.5	5.3	5.5
PROPANE	---	2.0	2.5
N-BUTANE	---	0.7	0.7
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	19.1	5.4	17.5
OXYGEN	0.2	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.3	0.2
HYDROGEN SULFIDE	---	TRACE	0.0
CARBON DIOXIDE	0.2	0.6	1.0
HELIUM	0.43	0.03	0.46
HEATING VALUE*	846	1057	939
SPECIFIC GRAVITY	0.657	0.649	0.709

	INDEX 1360 SAMPLE 5042	INDEX 1361 SAMPLE 17561	INDEX 1362 SAMPLE 1934
STATE	INDIANA	INDIANA	INDIANA
COUNTY	DUBOIS	DUBOIS	GIBSON
FIELD	NOT GIVEN	ST. HENRY	OAKLAND CITY
WELL NAME	ROMAN BEGLE NO. 1	LANGE FARMS INC. ETAL. NO.1	GEORGE ALLEN NO. 2
LOCATION	SEC. 28, T3S, R5W	SEC. 24, T3S, R5W	SEC. 22, T2S, R9W
OWNER	NATIONAL ASSOC. PETROLEUM CO	CITIZENS RESOURCES DEV. CORP	SHELL OIL CO.
COMPLETED	01/03/51	09/--/84	11/06/29
SAMPLED	05/01/51	01/08/85	02/11/30
FORMATION	MISS-JACKSON	MISS-TAR SPRINGS	MISS-CHESTER
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	589	458	1434
WELLHEAD PRESSURE,PSIG	265	158	630
OPEN FLOW, MCFD	476	238	8000
COMPONENT, MOLE PCT			
METHANE	86.2	96.2	80.4
ETHANE	4.4	0.1	5.5
PROPANE	0.9	0.1	---
N-BUTANE	0.2	0.0	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	7.2	3.4	13.4
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	---	0.0	---
CARBON DIOXIDE	0.6	0.1	0.3
HELIUM	0.12	0.06	0.23
HEATING VALUE*	993	979	913
SPECIFIC GRAVITY	0.629	0.570	0.641

	INDEX 1363 SAMPLE 2855	INDEX 1364 SAMPLE 17517	INDEX 1365 SAMPLE 17168
STATE	INDIANA	INDIANA	INDIANA
COUNTY	GIBSON	GIBSON	GREENE
FIELD	PRINCETON	WHEATONVILLE	SAMBORN N
WELL NAME	HALL NO. 1	HENRY MORGAN UNIT NO. 1	JAMES C. HARRIS NO. 1
LOCATION	SEC. 20, T1S, R11W	SEC. 3, T3S, R9W	SEC. 35, T6N, R7W
OWNER	PETROLEUM EXPLORATION, INC.	ROBINSON ENGINEERING	JAMES C. & OREDITH M. HARRIS
COMPLETED	09/--/40	--/--/00	10/05/81
SAMPLED	03/12/91	10/--/84	02/02/84
FORMATION	MISS-HARDINSBURG	PENN-	PENN-GAS SAND
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1760	1062	202
WELLHEAD PRESSURE,PSIG	795	NOT GIVEN	105
OPEN FLOW, MCFD	3000	400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.7	50.7	82.6
ETHANE	9.3	7.6	3.2
PROPANE	---	1.9	0.7
N-BUTANE	---	0.4	0.2
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	25.0	38.1	12.7
OXYGEN	0.3	TRACE	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.54	0.71	0.25
HEATING VALUE*	822	727	922
SPECIFIC GRAVITY	0.705	0.784	0.635

	INDEX 1366 SAMPLE 3519	INDEX 1367 SAMPLE 1083	INDEX 1368 SAMPLE 2609
STATE	INDIANA	INDIANA	INDIANA
COUNTY	GREENE	HARRISON	HENRY
FIELD	SHITZ CITY	TOBACCO LANDING	NOT GIVEN
WELL NAME	WALTER HOLMES NO. 1	LAFE CROSIER	MARY E. REED NO. 2
LOCATION	SEC. 22, T7N, R6W	BOONE TWP.	SEC. 12, T16N, R8E
OWNER	MIDWEST DEVELOPMENT CO.	RAILROADERS GAS CO.	KNIGHTSTOWN NATURAL GAS CO.
COMPLETED	12/--/40	12/--/22	09/24/29
SAMPLED	05/20/42	06/15/25	02/20/33
FORMATION	DEVO-	DEVO-BLACK SHALE	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	315	315	300
DEPTH, FEET	1648	405	959
WELLHEAD PRESSURE,PSIG	714	170	15
OPEN FLOW, MCFD	382	NOT GIVEN	20
COMPONENT, MOLE PCT			
METHANE	91.6	85.3	75.8
ETHANE	5.3	4.7	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.7	7.5	9.8
OXYGEN	0.5	1.1	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	1.0	1.4	0.4
HELIUM	0.08	0.17	0.30
HEATING VALUE*	1023	948	1004
SPECIFIC GRAVITY	0.601	0.629	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1369 SAMPLE 2325	INDEX 1370 SAMPLE 17138	INDEX 1371 SAMPLE 2298
STATE	INDIANA	INDIANA	INDIANA
COUNTY	HUNTINGTON	JAY	KNOX
FIELD	BUSSARD	TRENTON	OAKTOWN W
WELL NAME	NO. 1	RONALD & JANICE GILLUM NO. 1	NO. 1
LOCATION	SEC. 26, T28N, R9E	SEC. 23, T23N, R12E	SEC. 15, T5N, R10W
OWNER	TWO RIVERS CORP.	RONALD L. GILLUM	JAMES M. GARDNER, ET AL.
COMPLETED	06/01/30	07/29/83	12/11/30
SAMPLED	05/11/31	11/10/83	02/27/31
FORMATION	NOT GIVEN	ORDO-TRENTON	PENN-
GEOLOGIC PROVINCE CODE	300	300	315
DEPTH, FEET	1050	962	705
WELLHEAD PRESSURE, PSIG	240	9	350
OPEN FLOW, MCFD	50	NOT GIVEN	3900
COMPONENT, MOLE PCT			
METHANE	57.3	54.1	97.0
ETHANE	20.3	13.5	0.8
PROPANE	---	9.7	---
N-BUTANE	---	3.1	---
ISOBUTANE	---	1.5	---
N-PENTANE	---	1.0	---
ISOPENTANE	---	1.1	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.7	---
NITROGEN	21.2	5.5	1.8
OXYGEN	0.3	TRACE	0.1
ARGON	---	TRACE	---
HYDROGEN	---	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	0.38	0.12	0.06
HEATING VALUE*	941	1406	997
SPECIFIC GRAVITY	0.747	0.865	0.569

	INDEX 1372 SAMPLE 4831	INDEX 1373 SAMPLE 5045	INDEX 1374 SAMPLE 1995
STATE	INDIANA	INDIANA	INDIANA
COUNTY	MARSHALL	MARSHALL	MONROE
FIELD	LAKE OF THE WOODS	NORTHTOWN	UNIONVILLE
WELL NAME	NOAH ANDERSON NO. 2	NELSON SALTENRIGHT NO. 1	M. E. SHIRLEY NO. 1
LOCATION	SEC. 13, T34N, R2E	SEC. 11, T24N, R2E	SEC. 7, T9N, R1E
OWNER	MARSHAL PETROLEUM CO.	MARSHALL PETROLEUM CO.	OHIO OIL CO.
COMPLETED	10/27/49	10/24/50	11/01/29
SAMPLED	01/15/50	04/19/51	04/10/30
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	305	305	315
DEPTH, FEET	350	374	672
WELLHEAD PRESSURE, PSIG	90	100	230
OPEN FLOW, MCFD	10	500	1000
COMPONENT, MOLE PCT			
METHANE	91.8	88.1	94.8
ETHANE	0.9	1.2	1.9
PROPANE	0.1	0.2	---
N-BUTANE	TRACE	0.1	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	5.2	6.1	2.4
OXYGEN	0.1	0.7	0.3
ARGON	0.1	0.1	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.0	3.4	0.6
HELIUM	0.41	0.00	0.04
HEATING VALUE*	961	926	994
SPECIFIC GRAVITY	0.605	0.628	0.581

	INDEX 1375 SAMPLE 2364	INDEX 1376 SAMPLE 6059	INDEX 1377 SAMPLE 3529
STATE	INDIANA	INDIANA	INDIANA
COUNTY	MONROE	PIKE	PIKE
FIELD	UNIONVILLE	HAZELTON	IVA
WELL NAME	JACOB NEAL NO. 1	NO. 1	CARPENTER NO. 1
LOCATION	SEC. 7, BENTON TWP.	SEC. 20, T1N, R9W	SEC. 19, T1N, R6W
OWNER	OHIO OIL CO.	HERBERT GRUBB	LOUISVILLE LAND BANK
COMPLETED	04/10/31	02/15/56	06/04/41
SAMPLED	07/23/31	05/19/56	05/15/42
FORMATION	DEVO-CORNIFEROUS	MISS-CYPRESS	MISS-BARKER
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	799	1364	703
WELLHEAD PRESSURE, PSIG	225	442	225
OPEN FLOW, MCFD	1080	5000	500
COMPONENT, MOLE PCT			
METHANE	93.9	68.5	82.9
ETHANE	3.3	5.5	0.4
PROPANE	---	0.7	---
N-BUTANE	---	TRACE	---
ISOBUTANE	---	0.2	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	TRACE	---
NITROGEN	0.1	24.2	15.8
OXYGEN	0.1	TRACE	0.3
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.6	0.2	0.1
HELIUM	0.05	0.59	0.35
HEATING VALUE*	1010	817	847
SPECIFIC GRAVITY	0.586	0.688	0.625

	INDEX 1378 SAMPLE 3819	INDEX 1379 SAMPLE 17165	INDEX 1380 SAMPLE 17781
STATE	INDIANA	INDIANA	INDIANA
COUNTY	PIKE	RUSH	SPENCER
FIELD	IVA	TRENTON	PUEBLO
WELL NAME	STEEN NO. 1	R. STEVEN FROMAN NO. 1	BURGDORF NO. 1
LOCATION	SEC. 24, T1N, R7W	SEC. 16, T14N, R9E	SEC. 17, T8S, R6W
OWNER	INDIANA FARM BUREAU COOP. AS	R. STEVEN FROMAN	REYNOLDS RESOURCES, INC.
COMPLETED	12/22/42	04/16/83	06/25/82
SAMPLED	04/22/44	01/25/84	07/04/85
FORMATION	MISS-CHESTER L	ORDO-TRENTON	MISS-WALTERSBURG
GEOLOGIC PROVINCE CODE	315	300	315
DEPTH, FEET	840	875	990
WELLHEAD PRESSURE, PSIG	300	120	465
OPEN FLOW, MCFD	200	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	86.0	78.2	86.6
ETHANE	8.2	3.7	0.6
PROPANE	---	0.9	1.4
N-BUTANE	---	9.2	1.1
ISOBUTANE	---	0.1	0.2
N-PENTANE	---	0.1	0.3
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	TRACE	0.3
NITROGEN	3.5	16.1	7.7
OXYGEN	0.2	0.0	0.9
ARGON	---	0.1	0.1
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.9
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	0.37	0.06
HEATING VALUE*	1018	900	1017
SPECIFIC GRAVITY	0.620	0.657	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1381 SAMPLE 17762	INDEX 1382 SAMPLE 16455	INDEX 1383 SAMPLE 3535
STATE	INDIANA	INDIANA	INDIANA
COUNTY	SPENCER	SPENCER	SPENCER
FIELD	PUEBLO	RICHLAND CITY N	ROCKPORT
WELL NAME	MILLER NO. 1	B. SCHNACKE NO. 1	LEAH KOFF NO. 2
LOCATION	SEC. 20, T8S, R6W	SEC. 35, T6S, R7W	SEC. 19, T7S, R6W
OWNER	REYNOLDS RESOURCES, INC.	INDIANA FARM BUREAU COOP. AS	KENTUCKY NATURAL GAS CO.
COMPLETED	09/28/84	--/--/00	04/13/40
SAMPLED	07/04/85	03/17/82	05/18/42
FORMATION	MISS-MALTERSBURG	PENN-NOT GIVEN	MISS-PALESTINE
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	1070	972	871
WELLHEAD PRESSURE,PSIG	511	570	248
OPEN FLOW, MCFD	4000	1000	11946
COMPONENT, MOLE PCT			
METHANE	96.6	95.6	91.0
ETHANE	0.2	0.0	4.8
PROPANE	0.4	0.0	---
N-BUTANE	0.5	0.0	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.2	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.9	3.2	3.5
OXYGEN	0.0	0.4	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.8	0.1
HELIUM	0.03	0.07	0.14
HEATING VALUE*	1051	968	1008
SPECIFIC GRAVITY	0.591	0.578	0.596

	INDEX 1384 SAMPLE 3536	INDEX 1385 SAMPLE 3537	INDEX 1386 SAMPLE 3538
STATE	INDIANA	INDIANA	INDIANA
COUNTY	SPENCER	SPENCER	SPENCER
FIELD	ROCKPORT	ROCKPORT	ROCKPORT
WELL NAME	AXTON-RUMFUS NO. 1	R. HARVEY NO. 1	HENRY WERTHWEIR NO. 1
LOCATION	SEC. 30, T7S, R6W	SEC. 4, T8S, R6W	SEC. 29, T7S, R6W
OWNER	KENTUCKY NATURAL GAS CO.	KENTUCKY NATURAL GAS CO.	KENTUCKY NATURAL GAS CO.
COMPLETED	11/17/39	06/05/40	05/31/40
SAMPLED	05/18/42	05/18/42	05/18/42
FORMATION	MISS-PALESTINE	PENN-CASEYVILLE	PENN-CASEYVILLE
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	871	622	641
WELLHEAD PRESSURE,PSIG	248	146	265
OPEN FLOW, MCFD	3952	240	1931
COMPONENT, MOLE PCT			
METHANE	91.2	90.2	96.5
ETHANE	4.8	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.3	9.0	2.8
OXYGEN	0.5	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.13	0.26	0.12
HEATING VALUE*	1010	914	978
SPECIFIC GRAVITY	0.595	0.593	0.570

	INDEX 1387 SAMPLE 3527	INDEX 1388 SAMPLE 2483	INDEX 1389 SAMPLE 17732
STATE	INDIANA	INDIANA	INDIANA
COUNTY	SULLIVAN	SWITZERLAND	WARRICK
FIELD	MARTS	LONG RUN	FOLSOMVILLE
WELL NAME	SARAH MAUGER	IRA & DAVID WISEMAN NO. 1	JOHN KING NO. 1
LOCATION	SEC. 19, T9N, R9W	SEC. 16, T2W, R3W	SEC. 5, T5S, R7W
OWNER	DOME GAS CO.	F. C. BAKES	MWC OIL CO.
COMPLETED	03/01/38	12/16/31	10/20/84
SAMPLED	05/14/42	03/17/32	06/30/85
FORMATION	-SANDSTONE	ORDO-TRENTON U	MISS-WARSAW M
GEOLOGIC PROVINCE CODE	315	300	315
DEPTH, FEET	259	280	2234
WELLHEAD PRESSURE,PSIG	30	120	825
OPEN FLOW, MCFD	50	1500	150
COMPONENT, MOLE PCT			
METHANE	97.0	80.2	72.8
ETHANE	0.0	8.5	5.2
PROPANE	---	---	2.7
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	1.6	9.4	17.1
OXYGEN	0.4	1.4	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.0	0.4	0.1
HELIUM	0.04	0.10	0.43
HEATING VALUE*	983	965	958
SPECIFIC GRAVITY	0.573	0.696	0.703

	INDEX 1390 SAMPLE 12017	INDEX 1391 SAMPLE 12018	INDEX 1392 SAMPLE 12020
STATE	IOWA	IOWA	IOWA
COUNTY	WEBSTER	WEBSTER	WEBSTER
FIELD	VINCENT	VINCENT	VINCENT
WELL NAME	SHARP NO. 2	WILLEY NO. 1	ANDERSON NO. 1
LOCATION	SEC. 9, T90N, R27W	SEC. 11, T90N, R27W	SEC. 3, T90N, R27W
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
COMPLETED	10/26/63	04/25/66	09/03/65
SAMPLED	08/29/69	08/29/69	08/29/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	325	325	325
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.4	TRACE	77.9
ETHANE	5.3	0.0	5.5
PROPANE	1.1	TRACE	1.3
N-BUTANE	0.2	0.0	0.2
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	8.1	65.3	13.4
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	0.8	0.1
HYDROGEN	0.5	33.7	0.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.09	0.89	0.12
HEATING VALUE*	996	109	944
SPECIFIC GRAVITY	0.629	0.671	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1393 SAMPLE 12021	INDEX 1394 SAMPLE 1875	INDEX 1395 SAMPLE 7250
STATE	IOWA	KANSAS	KANSAS
COUNTY	WEBSTER	ANDERSON	BARBER
FIELD	VINCENT	COLONY	AETNA GAS AREA
WELL NAME	HOFMANN NO. 3	VIETJE NO. 10	DAVIS RANCH UNIT NO. 1
LOCATION	SEC. 4, T90N, R27W	SEC. 28, T22S, R19E	SEC. 32, T33S, R14W
OWNER	NORTHERN NATURAL GAS CO.	ARKANSAS FUEL OIL CO.	CHAMPLIN OIL & REFINING CO.
COMPLETED	05/03/64	12/22/22	04/29/59
SAMPLED	08/29/69	09/24/29	10/14/59
FORMATION	NOT GIVEN	NOT GIVEN	MISS-NOT GIVEN
GEOLOGIC PROVINCE CODE	325	335	375
DEPTH, FEET	NOT GIVEN	900	4656
WELLHEAD PRESSURE,PSIG	NOT GIVEN	15	1550
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	13810
COMPONENT, MOLE PCT			
METHANE	0.1	94.4	92.7
ETHANE	0.0	2.7	3.5
PROPANE	TRACE	---	1.2
N-BUTANE	0.0	---	0.4
ISOBUTANE	0.0	---	0.2
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	0.3
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.2
NITROGEN	3.5	1.8	1.2
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	---	0.0
HYDROGEN	96.3	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	1.0	0.1
HELIUM	0.00	0.20	0.10
HEATING VALUE*	313	1005	1080
SPECIFIC GRAVITY	0.101	0.587	0.611

	INDEX 1396 SAMPLE 9573	INDEX 1397 SAMPLE 9578	INDEX 1398 SAMPLE 9720
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	AETNA GAS AREA	AETNA GAS AREA	AETNA GAS AREA
WELL NAME	DAVIS RANCH E NO. 1	BIROJE CLARK NO. 1	NO. 1
LOCATION	SEC. 35, T34S, R15W	SEC. 7, T34S, R13W	SEC. 29, T34S, R13W
OWNER	K & E DRILLING, INC.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	07/17/64	05/02/64	12/16/64
SAMPLED	09/23/64	09/23/64	02/05/65
FORMATION	MISS---	MISS---	MISS---
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4834	4846	4821
WELLHEAD PRESSURE,PSIG	1633	1440	1590
OPEN FLOW, MCFD	12000	9240	2090
COMPONENT, MOLE PCT			
METHANE	92.0	84.3	84.7
ETHANE	3.8	6.7	6.6
PROPANE	1.2	2.6	2.3
N-BUTANE	0.5	0.7	0.7
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.6	4.4	4.8
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.21	0.13
HEATING VALUE*	1078	1102	1088
SPECIFIC GRAVITY	0.614	0.660	0.654

	INDEX 1399 SAMPLE 12152	INDEX 1400 SAMPLE 12716	INDEX 1401 SAMPLE 11949
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	AETNA GAS AREA	AETNA GAS AREA	AMTRIM
WELL NAME	MCGRATH B NO. 1	BLUNK NO. 1	AMTRIM NO. 1
LOCATION	SEC. 9, T33S, R14W	SEC. 25, T34S, R14W	SEC. 30, T32S, R10W
OWNER	SAGE DRILLING CO., INC.	IMPERIAL OIL CO.	O. R. LAUCK OIL CO., INC.
COMPLETED	04/30/69	12/07/71	--/--/00
SAMPLED	12/16/69	03/08/71	--/--/00
FORMATION	MISS---	MISS-NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4652	4695	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1332	1200	NOT GIVEN
OPEN FLOW, MCFD	1718	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.6	87.6	79.6
ETHANE	3.7	5.8	5.0
PROPANE	1.1	2.8	2.9
N-BUTANE	0.3	0.7	0.9
ISOBUTANE	0.0	0.5	0.4
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	0.0	0.3	0.1
HEXANES PLUS	0.0	0.5	0.2
NITROGEN	1.9	2.9	8.3
OXYGEN	0.0	0.0	1.6
ARGON	TRACE	0.0	0.1
HYDROGEN	0.1	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.13	0.12	0.11
HEATING VALUE*	1043	1021	1047
SPECIFIC GRAVITY	0.594	0.654	0.684

	INDEX 1402 SAMPLE 17057	INDEX 1403 SAMPLE 5940	INDEX 1404 SAMPLE 6054
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	BLOOM N	BOGGS SW	BOGGS SW
WELL NAME	MAC NO. 1	MCCULLOUGH NO. 1	DONOVAN NO. A-1
LOCATION	SEC. 7, T32S, R11W	SEC. 30, T33S, R12W	SEC. 1, T34S, R13W
OWNER	BOWERS DRILLING CO.	TRANS-ERA PETROLEUM CO., ET	AYLWARD DRILLING CO.
COMPLETED	05/21/82	06/17/55	01/11/56
SAMPLED	09/10/83	09/14/55	05/11/56
FORMATION	MISS-	MISS---	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4284	4454	4635
WELLHEAD PRESSURE,PSIG	1500	1585	1480
OPEN FLOW, MCFD	950	4448	5400
COMPONENT, MOLE PCT			
METHANE	80.1	80.2	93.5
ETHANE	6.0	5.9	TRACE
PROPANE	3.0	2.6	0.1
N-BUTANE	1.0	0.8	0.1
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.5	0.2	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.5	9.2	5.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.46	0.23	0.36
HEATING VALUE*	1089	1049	966
SPECIFIC GRAVITY	0.684	0.676	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1405 SAMPLE 9879	INDEX 1406 SAMPLE 16015	INDEX 1407 SAMPLE 4611
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	BOGGS SW	CEDAR	COTTONWOOD CREEK
WELL NAME	W. L. COOK A NO. 1	MILLER NO. 1	WERNER B NO. 1
LOCATION	SEC. 8, T34S, R12W	SEC. 36, T33S, R10W	SEC. 21, T30S, R14W
OWNER	AMERADA PETROLEUM CORP.	GEORGE R. JONES	GREAT LAKES CARBON CORP.
COMPLETED	03/20/65	01/09/80	08/31/48
SAMPLED	04/26/65	07/10/80	11/04/48
FORMATION	MISS-NOT GIVEN	MISS-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4694	4569	4582
WELLHEAD PRESSURE,PSIG	1174	1600	1400
OPEN FLOW, MCFD	2400	2015	4000
COMPONENT, MOLE PCT			
METHANE	81.4	88.1	51.3
ETHANE	3.5	5.3	26.3
PROPANE	1.3	0.2	---
N-BUTANE	0.4	0.7	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	12.5	2.4	20.3
OXYGEN	0.0	TRACE	0.4
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.08	0.15	1.55
HEATING VALUE*	958	1109	991
SPECIFIC GRAVITY	0.655	0.642	0.766

	INDEX 1408 SAMPLE 3255	INDEX 1409 SAMPLE 3802	INDEX 1410 SAMPLE 4224
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	DEERHEAD	DEERHEAD	DEERHEAD
WELL NAME	HILDEBRAND NO. 1	HILDEBRAND NO. 2	HILDEBRAND NO. 9
LOCATION	SEC. 26, T32S, R15W	SEC. 22, T32S, R15W	SEC. 27, T32S, R15W
OWNER	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.
COMPLETED	03/01/42	06/28/43	01/--/47
SAMPLED	04/01/42	04/13/44	02/05/47
FORMATION	ORDO-VIOLA	ORDO-VIOLA U	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4926	4980	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1600	1700	380
OPEN FLOW, MCFD	14500	34000	2000
COMPONENT, MOLE PCT			
METHANE	78.6	69.4	75.8
ETHANE	13.0	18.2	8.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.1	11.3	8.4
OXYGEN	0.3	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	6.5
HELIUM	0.76	0.71	0.72
HEATING VALUE*	1029	1029	922
SPECIFIC GRAVITY	0.648	0.691	0.692

	INDEX 1411 SAMPLE 16179	INDEX 1412 SAMPLE 17597	INDEX 1413 SAMPLE 16473
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	DEERHEAD	DEERHEAD	DEERHEAD N
WELL NAME	MILLS "B" NO. 1	DEGEER NO. 1-34	RIDIN INTO HELL&BK AGAIN NO1
LOCATION	SEC. 27, T32S, R15W	SEC. 34, T32S, R15W	SEC. 14, T32S, R15W
OWNER	RAYMOND OIL CO., INC.	TEXAS ENERGIES, INC.	WILD BOYS & SILVER BULLET OI
COMPLETED	04/30/80	03/01/84	08/25/81
SAMPLED	01/27/81	02/20/85	03/30/82
FORMATION	PENN-TOPEKA	PENN-MARMATON	MISS---
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3508	4735	4769
WELLHEAD PRESSURE,PSIG	1553	1480	1328
OPEN FLOW, MCFD	2200	4500	1500
COMPONENT, MOLE PCT			
METHANE	86.8	80.2	81.6
ETHANE	4.1	5.8	6.0
PROPANE	1.7	2.9	2.6
N-BUTANE	0.6	1.0	0.8
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	5.4	8.5	7.2
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.19	0.30	0.42
HEATING VALUE*	1058	1078	1063
SPECIFIC GRAVITY	0.644	0.687	0.676

	INDEX 1414 SAMPLE 12039	INDEX 1415 SAMPLE 12091	INDEX 1416 SAMPLE 13402
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	DEGEER NE	DEGEER NE	DEGEER SW
WELL NAME	CARR NO. 1	CARR NO. 1	BRASS NO. 1
LOCATION	SEC. 36, T32S, R15W	SEC. 36, T32S, R15W	SEC. 5, T33S, R15W
OWNER	BEACON RESOURCES CORP.	BEACON RESOURCES CORP.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/00	12/03/69	01/19/71
SAMPLED	09/12/69	10/23/69	09/24/72
FORMATION	PERM-FORAKER	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2999	4315	4362
WELLHEAD PRESSURE,PSIG	1275	1480	1521
OPEN FLOW, MCFD	8	8	3500
COMPONENT, MOLE PCT			
METHANE	91.8	92.0	87.5
ETHANE	3.7	3.6	4.9
PROPANE	1.5	1.4	2.1
N-BUTANE	0.6	0.4	0.7
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.6	1.7	3.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.09	0.09	0.17
HEATING VALUE*	1083	1072	1093
SPECIFIC GRAVITY	0.615	0.610	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1417 SAMPLE 13471	INDEX 1418 SAMPLE 15266	INDEX 1419 SAMPLE 9648
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	DEGEER SW	EADS	GILBERT
WELL NAME	BRASS NO. 1	AYRES NO. 1	GILBERT NO. 1
LOCATION	SEC. 5, T33S, R15W	SEC. 3, T30S, R14W	SEC. 18, T32S, R11W
OWNER	CHAMPLIN PETROLEUM CO.	MAURICE L. BROWN CO.	BEARDMORE DRILLING CO.
COMPLETED	01/14/71	07/15/77	08/26/64
SAMPLED	11/10/72	08/20/78	11/25/64
FORMATION	ORDO-VIOLA	PENN-TORONTO	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4751	3831	3568
WELLHEAD PRESSURE,PSIG	310	930	1250
OPEN FLOW, MCFD	1550	2097	800
COMPONENT, MOLE PCT			
METHANE	81.2	77.3	86.1
ETHANE	6.3	4.7	4.1
PROPANE	3.8	2.5	1.4
N-BUTANE	1.7	0.9	0.4
ISOBUTANE	0.8	0.3	TRACE
N-PENTANE	0.7	0.3	0.2
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	4.5	12.8	7.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.17	0.44	0.23
HEATING VALUE*	1185	1012	1013
SPECIFIC GRAVITY	0.710	0.692	0.632

	INDEX 1420 SAMPLE 16302	INDEX 1421 SAMPLE 4017	INDEX 1422 SAMPLE 6085
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	HARDING	HIGHLAND SW	ILS
WELL NAME	JEWEL "A" NO. 1	SHRIVER NO. 1	SMITH ESTATE NO. 1
LOCATION	SEC. 6, T30S, R11W	SEC. 1, T30S, R14W	SEC. 9, T31S, R11W
OWNER	CITIES SERVICE CO.	LION OIL CO.	CARL TODD DRILLING
COMPLETED	05/20/80	--/--/00	02/25/56
SAMPLED	08/03/81	05/04/45	06/12/56
FORMATION	PERM-INDIAN CAVE	ORDO-SIMPSON	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2754	NOT GIVEN	4864
WELLHEAD PRESSURE,PSIG	918	NOT GIVEN	1531
OPEN FLOW, MCFD	2437	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	55.2	64.9
ETHANE	3.9	18.0	6.5
PROPANE	1.6	---	3.0
N-BUTANE	0.5	---	0.8
ISOBUTANE	0.3	---	0.4
N-PENTANE	0.2	---	0.4
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	4.1	23.3	22.9
OXYGEN	0.0	0.6	0.0
ARGON	TRACE	---	0.1
HYDROGEN	TRACE	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.19	1.79	1.21
HEATING VALUE*	1065	892	928
SPECIFIC GRAVITY	0.632	0.737	0.738

	INDEX 1423 SAMPLE 8802	INDEX 1424 SAMPLE 11293	INDEX 1425 SAMPLE 4031
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	ILS	KNACKSTEDT	LAKE CITY
WELL NAME	WATKINS-NELSON NO. 1	KNACKSTEDT NO. 1	D. V. MARGIS NO. 1
LOCATION	SEC. 17, T31S, R11W	SEC. 18, T30S, R13W	SEC. 3, T31S, R14W
OWNER	LARIO OIL & GAS CO.	SUNRAY DX OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	06/09/61	03/01/67	08/30/44
SAMPLED	05/24/61	02/12/68	10/15/45
FORMATION	PENN-DOUGLAS	ORDO-VIOLA	ORDO-MAQUOKETA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3757	4514	4399
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1359	1445
OPEN FLOW, MCFD	8060	5139	4000
COMPONENT, MOLE PCT			
METHANE	87.3	76.3	76.6
ETHANE	4.4	6.1	17.5
PROPANE	1.8	1.7	---
N-BUTANE	0.6	0.6	---
ISOBUTANE	0.4	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.2	0.0	---
NITROGEN	4.4	13.7	5.6
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.20	1.12	0.01
HEATING VALUE*	1070	947	1090
SPECIFIC GRAVITY	0.659	0.666	0.667

	INDEX 1426 SAMPLE 14566	INDEX 1427 SAMPLE 5924	INDEX 1428 SAMPLE 10305
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	LITTLE SANDY CREEK	MCGUIRE-GOEMANN	MCGUIRE-GOEMANN
WELL NAME	HARBAUGH NO. 1	GOEMANN NO. 1	RISER-MCGUIRE NO. 1
LOCATION	SEC. 36, T32S, R10W	SEC. 29, T32S, R10W	SEC. 24, T32S, R11W
OWNER	OIL PROPERTY MANAGEMENT, INC	GLOBE OIL & REFINING CO.	MOBIL OIL CORP.
COMPLETED	10/30/75	05/03/55	12/13/56
SAMPLED	01/23/76	08/29/55	12/03/65
FORMATION	MISS---	MISS-CHERT	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4288	4404	4434
WELLHEAD PRESSURE,PSIG	1329	1000	423
OPEN FLOW, MCFD	4599	681	214
COMPONENT, MOLE PCT			
METHANE	88.1	89.4	89.6
ETHANE	5.3	4.4	4.7
PROPANE	2.3	2.0	1.9
N-BUTANE	0.6	0.7	0.5
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.3	TRACE
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	2.6	1.9	1.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.11	0.10	0.13
HEATING VALUE*	1099	1114	1115
SPECIFIC GRAVITY	0.638	0.640	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1429 SAMPLE 10720	INDEX 1430 SAMPLE 10727	INDEX 1431 SAMPLE 12813
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEAIRS	MEAIRS	MEAIRS
WELL NAME	F. SPICER GAS UNIT NO. 1	MEAIRS NO. 1	HOAGLAND NO. 1
LOCATION	SEC. 34, T30S, R12W	SEC. 27, T30S, R12W	SEC. 36, T30S, R12W
OWNER	CONTINENTAL OIL CO.	CHIEF DRILLING CO., INC.	LEBEN OIL CORP.
COMPLETED	06/10/66	12/19/65	04/18/70
SAMPLED	09/14/66	09/20/66	05/04/71
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PENN-TARKIO
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3568	3656	3152
WELLHEAD PRESSURE,PSIG	1265	1300	1200
OPEN FLOW, MCFD	1250	1800	4100
COMPONENT, MOLE PCT			
METHANE	88.6	87.3	71.2
ETHANE	4.2	4.2	3.5
PROPANE	1.7	1.8	1.6
N-BUTANE	0.5	0.7	0.8
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.2	4.4	21.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.20	0.20	0.43
HEATING VALUE*	1067	1072	897
SPECIFIC GRAVITY	0.630	0.640	0.708

	INDEX 1432 SAMPLE 13841	INDEX 1433 SAMPLE 13842	INDEX 1434 SAMPLE 15388
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEAIRS	MEAIRS	MEANDER
WELL NAME	KUMBERG "B" NO. 1	KUMBERG "A" NO. 1	CLARK D NO. 1
LOCATION	SEC. 14, T30S, R12W	SEC. 15, T30S, R12W	SEC. 32, T31S, R12W
OWNER	GLEN N. RUPE	GLEN N. RUPE	TEXAS OIL & GAS CORP.
COMPLETED	06/22/73	06/19/73	08/11/77
SAMPLED	11/28/73	11/28/73	09/27/78
FORMATION	PENN-TARKIO	PENN-HOWARD	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3436	3146	4210
WELLHEAD PRESSURE,PSIG	1030	1120	1318
OPEN FLOW, MCFD	4177	3568	4694
COMPONENT, MOLE PCT			
METHANE	88.7	86.0	75.0
ETHANE	3.8	4.2	7.1
PROPANE	1.6	1.8	3.5
N-BUTANE	0.4	0.6	0.9
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	4.5	6.1	12.0
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.18	0.23	0.32
HEATING VALUE*	1050	1041	1048
SPECIFIC GRAVITY	0.625	0.641	0.705

	INDEX 1435 SAMPLE 12087	INDEX 1436 SAMPLE 1859	INDEX 1437 SAMPLE 5401
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEDICINE LODGE N	MEDICINE LODGE-BOGGS	MEDICINE LODGE-BOGGS
WELL NAME	KIRKBRIDE NO. 4	ALEXANDER NO. 1	LONKER NO. 1
LOCATION	SEC. 20, T32S, R12W	SEC. 13, T33S, R13W	SEC. 1, T33S, R13W
OWNER	BARBARA OIL CO.	BARBARA OIL CO.	SKELLY OIL CO.
COMPLETED	08/23/69	--/--/00	12/15/52
SAMPLED	10/13/69	09/04/29	02/24/53
FORMATION	MISS-NOT GIVEN	ORDO-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4420	NOT GIVEN	3976
WELLHEAD PRESSURE,PSIG	1412	1600	1081
OPEN FLOW, MCFD	3550	NOT GIVEN	42460
COMPONENT, MOLE PCT			
METHANE	78.7	84.0	84.6
ETHANE	6.5	13.6	3.4
PROPANE	3.8	---	1.6
N-BUTANE	0.9	---	0.6
ISOBUTANE	0.5	---	0.3
N-PENTANE	0.2	---	0.2
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.1
NITROGEN	8.9	2.0	8.4
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.2	0.2
HELIUM	0.28	0.01	0.23
HEATING VALUE*	1075	1095	1016
SPECIFIC GRAVITY	0.687	0.632	0.648

	INDEX 1438 SAMPLE 9114	INDEX 1439 SAMPLE 10489	INDEX 1440 SAMPLE 10490
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEDICINE LODGE-BOGGS	MEDICINE LODGE-BOGGS	MEDICINE LODGE-BOGGS
WELL NAME	HOLMES NO. 1	M. L. HOPKINS NO. 1	ALEXANDER A NO. 1
LOCATION	SEC. 35, T33S, R13W	SEC. 28, T32S, R13W	SEC. 7, T33S, R12W
OWNER	CONTINENTAL OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	--/--/00	03/31/66	03/31/66
SAMPLED	10/03/63	03/31/66	03/31/66
FORMATION	MISS-NOT GIVEN	MISS---	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4511	4446	4554
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1600	491
OPEN FLOW, MCFD	3120	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.9	79.7	87.7
ETHANE	4.6	6.1	4.9
PROPANE	1.8	3.0	2.0
N-BUTANE	0.7	1.0	0.7
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	2.0	8.2	3.5
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.18	0.18	0.17
HEATING VALUE*	1097	1090	1088
SPECIFIC GRAVITY	0.630	0.694	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1441 SAMPLE 10491	INDEX 1442 SAMPLE 10492	INDEX 1443 SAMPLE 15022
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEDICINE LODGE-BOGGS	MEDICINE LODGE-BOGGS	MEDICINE RIVER
WELL NAME	NOT GIVEN	G. S. LONKER NO. 4	WHEELOCK NO. 1
LOCATION	SEC. 11, T33S, R13W	SEC. 35, T32S, R13W	SEC. 33, T31S, R12W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	CHIEF DRILLING CO., INC.
COMPLETED	03/31/66	03/31/66	11/09/76
SAMPLED	03/31/66	03/31/66	06/08/77
FORMATION	MISS-	MISS-	MISS---
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4003	NOT GIVEN	4260
WELLHEAD PRESSURE,PSIG	338	396	1320
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	925
COMPONENT, MOLE PCT			
METHANE	83.9	85.8	76.5
ETHANE	3.8	5.3	6.8
PROPANE	1.9	2.5	3.5
N-BUTANE	0.8	0.8	1.0
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.5	0.2	0.1
NITROGEN	8.0	4.5	10.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.20	0.13	0.32
HEATING VALUE*	1044	1097	1062
SPECIFIC GRAVITY	0.662	0.655	0.700

	INDEX 1444 SAMPLE 15530	INDEX 1445 SAMPLE 16098	INDEX 1446 SAMPLE 5805
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	MEDICINE RIVER	MEDICINE RIVER	MOFFETT
WELL NAME	WHEELOCK NO. 2	SIMPSON NO. 1	MOFFETT NO. 1
LOCATION	SEC. 3, T31S, R12W	SEC. 32, T31S, R12W	SEC. 9, T30S, R15W
OWNER	CHIEF DRILLING CO., INC.	ABERCROMBIE DRILLING, INC.	MESSMAN-RINEHART OIL CO.
COMPLETED	02/01/78	--/--/00	01/25/55
SAMPLED	12/04/78	10/16/80	04/13/55
FORMATION	MISS-	MISS---	PENN-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4302	4200	4571
WELLHEAD PRESSURE,PSIG	1341	NOT GIVEN	1381
OPEN FLOW, MCFD	6563	11100	12400
COMPONENT, MOLE PCT			
METHANE	76.0	77.8	62.8
ETHANE	6.9	7.2	4.8
PROPANE	3.9	3.9	5.1
N-BUTANE	1.1	1.0	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	10.7	8.3	25.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.31	0.13	1.38
HEATING VALUE*	1067	1104	876
SPECIFIC GRAVITY	0.704	0.700	0.744

	INDEX 1447 SAMPLE 9445	INDEX 1448 SAMPLE 9459	INDEX 1449 SAMPLE 15067
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	NURSE	NURSE	NURSE
WELL NAME	WINTER NO. 1	GRESS NO. 1	PACKARD NO. 1
LOCATION	SEC. 7, T31S, R12W	SEC. 8, T31S, R12W	SEC. 22, T31S, R13W
OWNER	FRED B. ANSHUTZ	COLORADO OIL & GAS CORP.	OIL PROPERTY MANAGEMENT, INC
COMPLETED	--/--/00	--/--/00	05/05/77
SAMPLED	07/09/64	07/08/64	08/02/77
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3630	3699	2628
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1020
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4258
COMPONENT, MOLE PCT			
METHANE	87.5	88.0	77.6
ETHANE	4.1	3.9	3.7
PROPANE	1.4	1.6	1.2
N-BUTANE	0.6	0.7	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	5.0	4.4	16.1
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.20	0.18	0.44
HEATING VALUE*	1059	1065	910
SPECIFIC GRAVITY	0.640	0.637	0.662

	INDEX 1450 SAMPLE 15544	INDEX 1451 SAMPLE 16486	INDEX 1452 SAMPLE 10422
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	NURSE N	NURSE NW	PALMER
WELL NAME	OLSON NO. 1	HAMILTON "A" NO. 1	DEGEER A NO. 2
LOCATION	SEC. 32, T30S, R12W	SEC. 34, T30S, R13W	SEC. 13, T32S, R14W
OWNER	RAYMOND OIL CO., INC.	TXO PRODUCTION CORP.	LIVINGSTON OIL CO.
COMPLETED	08/30/78	01/09/81	11/14/62
SAMPLED	12/23/78	04/12/82	03/01/66
FORMATION	PENN-TARKIO	PENN-DOUGLAS	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2940	3820	4470
WELLHEAD PRESSURE,PSIG	940	1003	1034
OPEN FLOW, MCFD	2000	690	4701
COMPONENT, MOLE PCT			
METHANE	84.9	81.9	90.7
ETHANE	5.8	6.8	4.3
PROPANE	1.6	3.4	1.6
N-BUTANE	0.5	1.1	0.5
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.0	7.6	1.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.26	0.26	0.13
HEATING VALUE*	1021	1081	1087
SPECIFIC GRAVITY	0.650	0.678	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1453 SAMPLE 10423	INDEX 1454 SAMPLE 10324	INDEX 1455 SAMPLE 13077
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	PALMER	RHODES	RHODES
WELL NAME	MILLS NO. 3	EARLY B NO. 1	IVES NO. 1
LOCATION	SEC. 19, T32S, R13W	SEC. 4, T33, R11W	SEC. 11, T33S, R12W
OWNER	LIVINGSTON OIL CO.	SUPERIOR OIL CO.	OKMAR OIL CO.
COMPLETED	--/--/00	02/02/55	08/09/71
SAMPLED	03/01/66	12/13/65	10/--/71
FORMATION	MISS---	PENN-DOUGLAS	MISS---
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4510	3655	4375
WELLHEAD PRESSURE,PSIG	297	580	1505
OPEN FLOW, MCFD	881	547	17250
COMPONENT, MOLE PCT			
METHANE	87.2	84.8	88.3
ETHANE	6.8	5.1	4.8
PROPANE	2.6	2.3	2.4
N-BUTANE	0.9	0.8	0.5
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.4	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	0.9	5.7	2.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.04	0.21	0.18
HEATING VALUE*	1161	1078	1100
SPECIFIC GRAVITY	0.660	0.658	0.639

	INDEX 1456 SAMPLE 13441	INDEX 1457 SAMPLE 13442	INDEX 1458 SAMPLE 17932
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	RHODES	RHODES	RHODES NE EXTENSION
WELL NAME	MARBAUGH NO. 1	GROENDYKE NO. 1	COLTON NO. 2
LOCATION	SEC. 12, T33S, R12W	SEC. 14, T33S, R12W	SEC. 23, T32S, R11W
OWNER	OKMAR OIL CO.	OKMAR OIL CO.	TXO PRODUCTION CORP.
COMPLETED	12/31/71	12/15/71	05/09/85
SAMPLED	09/30/72	09/30/72	--/--/00
FORMATION	PENN-ELGIN	PENN-ELGIN	PENN-TARKIO
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3400	3450	2779
WELLHEAD PRESSURE,PSIG	1325	1300	1070
OPEN FLOW, MCFD	2500	1900	1000
COMPONENT, MOLE PCT			
METHANE	88.6	83.5	78.1
ETHANE	4.4	4.1	3.0
PROPANE	1.9	1.7	1.4
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.2	8.0	15.7
OXYGEN	TRACE	1.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.15	0.15	0.42
HEATING VALUE*	1083	1017	928
SPECIFIC GRAVITY	0.634	0.695	0.670

	INDEX 1459 SAMPLE 10331	INDEX 1460 SAMPLE 15570	INDEX 1461 SAMPLE 16354
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	RHODES S	ROUNDUP S	SAWYER E
WELL NAME	NEWKIRK B, NO. 1	FORRESTER "A" NO. 1	LEVENS NO. 3
LOCATION	SEC. 31, T33S, R11W	SEC. 34, T33S, R11W	SEC. 1, T30S, R13W
OWNER	GULF OIL CORP.	NATIONAL OIL CO.	CARL TODD
COMPLETED	10/26/57	11/18/78	05/04/81
SAMPLED	12/20/65	02/27/79	10/14/81
FORMATION	MISS-	MISS-NOT GIVEN	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4561	4517	2782
WELLHEAD PRESSURE,PSIG	543	1405	965
OPEN FLOW, MCFD	NOT GIVEN	4000	6193
COMPONENT, MOLE PCT			
METHANE	87.2	88.0	82.0
ETHANE	5.7	5.0	3.9
PROPANE	2.7	2.2	1.3
N-BUTANE	1.9	0.7	0.5
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.9	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.7	3.7	12.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.05	0.08	0.42
HEATING VALUE*	1154	1108	952
SPECIFIC GRAVITY	0.662	0.642	0.648

	INDEX 1462 SAMPLE 9835	INDEX 1463 SAMPLE 10303	INDEX 1464 SAMPLE 10407
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	SHARON NW	SHARON NW	SHARON NW
WELL NAME	KETZNER NO. 1	CORA SLINKER NO. 1	WENZEL NO. 1
LOCATION	SEC. 16, T32S, R10W	SEC. 11, T32S, R10W	SEC. 11, T32S, R10W
OWNER	LARIO OIL & GAS CO.	MOBIL OIL CORP.	E. K. EDMISTON
COMPLETED	12/23/64	11/26/56	09/25/64
SAMPLED	04/06/65	12/03/65	02/17/66
FORMATION	MISS---	MISS-	MISS---
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4370	4334	4358
WELLHEAD PRESSURE,PSIG	1292	794	1100
OPEN FLOW, MCFD	3400	5253	3426
COMPONENT, MOLE PCT			
METHANE	90.4	90.1	91.3
ETHANE	4.2	4.4	4.4
PROPANE	1.7	1.7	1.7
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.9	2.1	1.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.11
HEATING VALUE*	1096	1094	1088
SPECIFIC GRAVITY	0.628	0.629	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1465 SAMPLE 3944	INDEX 1466 SAMPLE 4653	INDEX 1467 SAMPLE 16978
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	SKINNER	SKINNER	SKINNER NE
WELL NAME	LEMON NO. 1	GANT A NO. 4	L. YOUNG NO. 1-18
LOCATION	SEC. 28, T30S, R13W	SEC. 32, T30S, R13W	SEC. 18, T30S, R12W
OWNER	LION OIL CO.	J. M. HUBER CORP.	F. G. HOLL
COMPLETED	01/--/45	--/--/00	05/27/82
SAMPLED	01/26/45	05/23/49	06/--/83
FORMATION	ORDO-VIOLA	NOT GIVEN	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4528	3310	3700
WELLHEAD PRESSURE,PSIG	1400	NOT GIVEN	1200
OPEN FLOW, MCFD	18	NOT GIVEN	2086
COMPONENT, MOLE PCT			
METHANE	80.8	59.6	72.2
ETHANE	12.7	17.4	5.6
PROPANE	---	---	4.6
N-BUTANE	---	---	1.5
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.6
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	5.6	19.9	13.7
OXYGEN	0.1	2.6	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.68	0.31	0.35
HEATING VALUE*	1046	916	1067
SPECIFIC GRAVITY	0.639	0.738	0.737

	INDEX 1468 SAMPLE 10323	INDEX 1469 SAMPLE 17196	INDEX 1470 SAMPLE 5867
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARBER
FIELD	STUMPH	STUMPH	TRAFFAS
WELL NAME	STUMPH-SMITH F NO. 1	MOAGLAND NO. 1-22	G. H. TRAFFAS NO. 1
LOCATION	SEC. 18, T32S, R14W	SEC. 22, T32S, R14W	SEC. 6, T33S, R10W
OWNER	NATIONAL COOP. REFINERY ASSN	TEXAS ENERGIES, INC.	MAGNOLIA PETROLEUM CO.
COMPLETED	12/13/65	01/07/82	03/31/55
SAMPLED	12/13/65	02/23/84	06/27/55
FORMATION	MISS---	MISS---	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4741	4602	4581
WELLHEAD PRESSURE,PSIG	189	1495	1516
OPEN FLOW, MCFD	110	10856	1262
COMPONENT, MOLE PCT			
METHANE	90.0	92.1	90.4
ETHANE	4.1	3.9	4.2
PROPANE	1.5	1.4	1.6
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	2.5	1.2	1.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.15	0.08	0.09
HEATING VALUE*	1091	1089	1100
SPECIFIC GRAVITY	0.631	0.616	0.631

	INDEX 1471 SAMPLE 11355	INDEX 1472 SAMPLE 11722	INDEX 1473 SAMPLE 4498
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARTON
FIELD	TRAFFAS	WOLGAMOTT	ADOLF
WELL NAME	NENTON-TUCKER NO. 1	WOLGAMOTT NO. 1	ADOLPH NO. 1
LOCATION	SEC. 8, T33S, R10W	SEC. 9, T35S, R14W	SEC. 16, T20S, R15W
OWNER	GRAYBOL OIL CORP.	SHENANDOAH OIL CORP.	KANSAS-NEBRASKA NATURAL GAS
COMPLETED	08/29/67	07/19/67	06/20/47
SAMPLED	02/28/68	01/07/69	06/--/48
FORMATION	MISS-	PENN-CHEROKEE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	375	375	385
DEPTH, FEET	4604	4800	3734
WELLHEAD PRESSURE,PSIG	1548	1392	1050
OPEN FLOW, MCFD	21000	9500	7000
COMPONENT, MOLE PCT			
METHANE	89.8	89.7	69.0
ETHANE	4.7	4.2	12.4
PROPANE	1.9	1.6	---
N-BUTANE	0.8	0.6	---
ISOBUTANE	0.2	0.1	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	1.5	2.2	15.9
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	0.10	0.09	2.17
HEATING VALUE*	1113	1085	921
SPECIFIC GRAVITY	0.635	0.629	0.677

	INDEX 1474 SAMPLE 5254	INDEX 1475 SAMPLE 5623	INDEX 1476 SAMPLE 7842
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	ALEFS	ALEFS	AMES SE
WELL NAME	ALEFS NO. 2	ALEFS NO. 2	FIEST NO. C-1
LOCATION	SEC. 14, T19S, R14W	SEC. 14, T19S, R14W	SEC. 35, T18S, R11W
OWNER	BRACK DRILLING CO., INC.	BRACK DRILLING CO., INC.	RAYMOND OIL CO., INC.
COMPLETED	06/28/52	06/28/52	02/16/61
SAMPLED	06/28/52	06/28/52	01/07/61
FORMATION	PENN-KANSAS CITY	CAMO-CONGLOMERATE	PENN-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3022
WELLHEAD PRESSURE,PSIG	1005	1005	1145
OPEN FLOW, MCFD	3633	3633	734
COMPONENT, MOLE PCT			
METHANE	49.5	49.9	65.5
ETHANE	5.5	6.1	5.8
PROPANE	2.5	3.0	3.8
N-BUTANE	0.9	1.1	1.4
ISOBUTANE	0.6	0.8	0.7
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	35.8	34.1	20.5
OXYGEN	0.1	TRACE	0.0
ARGON	0.2	0.2	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	3.82	3.55	1.00
HEATING VALUE*	746	797	973
SPECIFIC GRAVITY	0.782	0.791	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 1477 SAMPLE 4078	INDEX 1478 SAMPLE 4079	INDEX 1479 SAMPLE 5357
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	BEHRENS NE	BEHRENS NE	BEHRENS NE
WELL NAME	BEHRENS NO. 2	BEHRENS NO. 1	GEIL NO. 1
LOCATION	SEC. 6, T20S, R15W	SEC. 6, T20S, R15W	SEC. 29, T19S, R15W
OWNER	SOLAR OIL CO.	SOLAR OIL CO.	WARD & INGLING
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/21/45	09/21/45	12/09/52
FORMATION	NOT GIVEN	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3580
WELLHEAD PRESSURE,PSIG	800	50	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.6	68.8	83.9
ETHANE	13.2	25.8	3.7
PROPANE	---	---	1.7
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	8.0	3.3	7.7
OXYGEN	0.0	0.1	TRACE
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.4	0.5
HELIUM	0.87	0.58	1.09
HEATING VALUE*	1038	1177	1018
SPECIFIC GRAVITY	0.662	0.703	0.650

	INDEX 1480 SAMPLE 4494	INDEX 1481 SAMPLE 9214	INDEX 1482 SAMPLE 8605
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	BERGTAL	CHAFFEE	CHASE-SILICA
WELL NAME	HATTIE UNRUH NO. 1	RUSSELL NO. 1	ISERN NO. 1
LOCATION	SEC. 22, T20S, R15W	SEC. 36, T19S, R14W	SEC. 26, T19S, R11W
OWNER	KANSAS-NEBRASKA NATURAL GAS	VAUGHAN DRILLING, INC.	TROJAN OIL & GAS CO.
COMPLETED	07/27/47	01/16/64	--/--/00
SAMPLED	06/--/48	01/16/64	06/16/62
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3672	3680	3024
WELLHEAD PRESSURE,PSIG	1050	1062	1050
OPEN FLOW, MCFD	8700	3310	800
COMPONENT, MOLE PCT			
METHANE	79.3	77.0	65.1
ETHANE	10.9	4.6	5.2
PROPANE	---	1.8	3.2
N-BUTANE	---	0.8	1.1
ISOBUTANE	---	0.1	0.6
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.3	0.1
NITROGEN	8.1	12.7	22.9
OXYGEN	0.1	0.0	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	1.21	1.70	0.97
HEATING VALUE*	999	980	919
SPECIFIC GRAVITY	0.641	0.677	0.742

	INDEX 1483 SAMPLE 8668	INDEX 1484 SAMPLE 8898	INDEX 1485 SAMPLE 4342
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	CHASE-SILICA	CLARENCE	CONVERSE
WELL NAME	ISERN NO. 2	KLIEWER NO. 1	A. UNRUH NO. 1
LOCATION	SEC. 25, T19S, R11W	SEC. 1, T20S, R15W	SEC. 16, T20S, R15W
OWNER	TROJAN OIL & GAS CO.	WOODYS QUALITY OIL CO.	KANSAS-NEBRASKA NATURAL GAS
COMPLETED	--/--/00	--/--/00	05/10/47
SAMPLED	08/23/62	03/--/63	08/07/47
FORMATION	PENN-KANSAS CITY	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3044	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	430	NOT GIVEN	1150
OPEN FLOW, MCFD	537	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	68.1	58.9	69.8
ETHANE	7.3	6.1	11.0
PROPANE	5.0	2.3	---
N-BUTANE	1.9	0.8	---
ISOBUTANE	0.9	0.4	---
N-PENTANE	0.4	0.1	---
ISOPENTANE	0.4	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	14.7	27.2	16.3
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	0.75	3.15	2.22
HEATING VALUE*	1098	828	904
SPECIFIC GRAVITY	0.768	0.738	0.673

	INDEX 1486 SAMPLE 5546	INDEX 1487 SAMPLE 10359	INDEX 1488 SAMPLE 10360
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	CONVERSE	CONVERSE	CONVERSE
WELL NAME	CONVERSE NO. 1	SCHMIDT	SCHMIDT B. NO. 1
LOCATION	SEC. 20, T20S, R15W	SEC. 20, T20S, R15W	SEC. 17, T20, R15
OWNER	SUNRAY OIL CORP.	ROCK ISLAND O. & R. CO., INC	KANSAS-NEBRASKA NATURAL GAS
COMPLETED	--/--/00	--/--/00	12/01/65
SAMPLED	08/10/53	01/10/66	01/07/66
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3754
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1105	1078
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6160
COMPONENT, MOLE PCT			
METHANE	85.6	81.8	82.9
ETHANE	4.0	4.1	3.9
PROPANE	1.5	1.6	1.5
N-BUTANE	0.4	0.7	0.5
ISOBUTANE	0.3	TRACE	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	6.5	9.1	8.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.4
HELIUM	0.84	1.42	1.18
HEATING VALUE*	1020	1004	998
SPECIFIC GRAVITY	0.635	0.655	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1489 SAMPLE 4152	INDEX 1490 SAMPLE 5285	INDEX 1491 SAMPLE 5552
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	DUNDEE	DUNDEE	DUNDEE
WELL NAME	CHRISTIANSON NO. 1	A. J. SMITH NO. 1	RADENBERG NO. 4
LOCATION	SEC. 29, T20S, R14W	SEC. 20, T20S, R14W	SEC. 24, T20S, R15W
OWNER	CHAMPLIN REFINING CO.	ADAIR OIL CO.	MAGNOLIA PETROLEUM CO.
COMPLETED	05/09/45	09/29/52	--/--/00
SAMPLED	10/14/46	09/30/52	09/09/53
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3606	3580	3574
WELLHEAD PRESSURE,PSIG	1040	990	1200
OPEN FLOW, MCFD	8236	550	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.3	91.3	82.0
ETHANE	10.8	4.1	4.0
PROPANE	---	1.5	1.7
N-BUTANE	---	0.2	0.5
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	10.0	1.8	9.2
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	1.49	1.40	1.97
HEATING VALUE*	977	963	997
SPECIFIC GRAVITY	0.646	0.644	0.650

	INDEX 1492 SAMPLE 7684	INDEX 1493 SAMPLE 8256	INDEX 1494 SAMPLE 5207
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	ELLINWOOD S	FORT ZARAH W	GREAT BEND AIRPORT
WELL NAME	KOWALSKY NO. 7	WOOD NO. 1	Pa. ESSMILLER NO. 3
LOCATION	SEC. 18, T20S, R11W	SEC. 25, T19S, R13W	SEC. 26, T19S, R14W
OWNER	COOPERATIVE REFINERY ASSN.	NIDEL & GUSSMAN OIL CO.	MONAKER DRILLING CO.
COMPLETED	10/06/41	--/--/00	--/--/00
SAMPLED	09/15/60	10/22/61	05/23/52
FORMATION	PENN-TARKIO	CAMO-ARBUCKLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2415	3403	NOT GIVEN
WELLHEAD PRESSURE,PSIG	850	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3	300
COMPONENT, MOLE PCT			
METHANE	74.9	41.3	53.6
ETHANE	2.8	4.5	5.4
PROPANE	1.2	1.4	3.0
N-BUTANE	0.4	0.5	0.8
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	19.0	47.0	32.2
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.90	4.07	3.56
HEATING VALUE*	873	597	788
SPECIFIC GRAVITY	0.671	0.800	0.767

	INDEX 1495 SAMPLE 10768	INDEX 1496 SAMPLE 5208	INDEX 1497 SAMPLE 10614
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	GREAT BEND AIRPORT	GREAT BEND SHALLOW GAS	GREAT BEND SHALLOW GAS
WELL NAME	RUSSELL A NO. 9	WITTE NO. 1	HALL NO. 2
LOCATION	SEC. 26, T19S, R14W	SEC. 21, T19S, R14W	SEC. 28, T19S, R14W
OWNER	PETROLEUM MANAGEMENT, INC.	MONAKER DRILLING CO.	CLARENCE MERRIS
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/07/66	06/01/52	06/16/66
FORMATION	PENN-WABAUNSEE	CAMO-CONGLOMERATE	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2246	3513	2304
WELLHEAD PRESSURE,PSIG	700	1050	1000
OPEN FLOW, MCFD	10900	2400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.9	72.8	51.0
ETHANE	1.8	4.5	1.5
PROPANE	0.7	2.1	1.3
N-BUTANE	0.2	0.7	0.8
ISOBUTANE	0.0	0.2	0.5
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.2	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	23.3	16.7	42.9
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.94	2.11	1.45
HEATING VALUE*	796	930	642
SPECIFIC GRAVITY	0.668	0.687	0.779

	INDEX 1498 SAMPLE 5551	INDEX 1499 SAMPLE 7619	INDEX 1500 SAMPLE 7678
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	GREAT BEND TOWNSITE	GREAT BEND TOWNSITE	GREAT BEND TOWNSITE
WELL NAME	WILOCAT NO. 1	WALLACE NO. 1	WALLACE NO. 1
LOCATION	SEC. 21, T19S, R13W	SEC. 19, T19S, R13W	SEC. 19, T19S, R13W
OWNER	MONAKER DRILLING CO.	MONAKER DAVIS DRILLING CO.	GRARIDGE CORP.
COMPLETED	--/--/00	--/--/00	02/16/56
SAMPLED	08/31/53	07/22/60	08/24/60
FORMATION	CAMO-ARBUCKLE	PENN-LANSING	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3429	3250	3250
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	840
OPEN FLOW, MCFD	NOT GIVEN	2000	2000
COMPONENT, MOLE PCT			
METHANE	46.1	57.9	61.2
ETHANE	9.0	2.4	2.4
PROPANE	8.0	3.2	2.2
N-BUTANE	3.8	1.2	1.0
ISOBUTANE	3.1	0.2	0.6
N-PENTANE	1.2	0.2	0.2
ISOPENTANE	1.1	0.2	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	1.0	0.1	0.1
NITROGEN	24.0	29.5	30.2
OXYGEN	0.3	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	3.5	0.5
HELIUM	1.65	1.30	1.60
HEATING VALUE*	1226	786	801
SPECIFIC GRAVITY	0.955	0.781	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1501 SAMPLE 5255	INDEX 1502 SAMPLE 5265	INDEX 1503 SAMPLE 5550
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	GREAT BEND W	GREAT BEND W	GREAT BEND W
WELL NAME	ESSMILLER NO. 4	SUTTON NO. 1	RUSSELL NO. A-9
LOCATION	SEC. 26, T19S, R14W	SEC. 15, T19S, R14W	SEC. 26, T19S, R14W
OWNER	MONAKER DRILLING CO.	MARMAD OIL CO.	HELMERICH & PAYNE, INC.
COMPLETED	06/26/52	03/25/52	08/31/53
SAMPLED	06/28/52	07/03/52	09/01/53
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3203	3200	3457
WELLHEAD PRESSURE,PSIG	950	200	977
OPEN FLOW, MCFD	900	531	4730
COMPONENT, MOLE PCT			
METHANE	62.1	64.6	69.1
ETHANE	2.4	4.1	4.9
PROPANE	1.5	1.4	2.4
N-BUTANE	0.7	0.4	0.7
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.2	0.0	0.3
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	30.5	25.4	19.0
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	0.2	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE*	---	---	0.0
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	1.53	3.31	2.43
HEATING VALUE*	763	797	914
SPECIFIC GRAVITY	0.730	0.697	0.705

	INDEX 1504 SAMPLE 5408	INDEX 1505 SAMPLE 3233	INDEX 1506 SAMPLE 3212
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	MEIZER SW	KRAFT-PRUSA	KRUCKENBERG
WELL NAME	MILLER NO. 1	OSER NO. 1	MERTON NO. 1
LOCATION	SEC. 21, T19S, R14W	SEC. 17, T16S, R11W	SEC. 11, T19S, R15W
OWNER	MONAKER DRILLING CO.	SINCLAIR-PRAIRIE OIL CO.	SCHERMERHORN OIL CORP.
COMPLETED	--/--/00	02/21/39	04/--/41
SAMPLED	03/05/53	03/24/42	03/27/42
FORMATION	CAMO-ARBUCKLE	PENN-LANSING-KANSAS CITY	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3511	2970	3535
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	1027
OPEN FLOW, MCFD	2554	11600	8250
COMPONENT, MOLE PCT			
METHANE	52.3	54.7	78.2
ETHANE	4.4	11.0	11.9
PROPANE	1.2	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	36.4	32.6	8.2
OXYGEN	TRACE	0.3	0.3
ARGON	0.2	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	4.22	1.32	1.20
HEATING VALUE*	681	751	1005
SPECIFIC GRAVITY	0.744	0.741	0.646

	INDEX 1507 SAMPLE 8277	INDEX 1508 SAMPLE 2701	INDEX 1509 SAMPLE 3650
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	MERTEN SE	NOT GIVEN	NOT GIVEN
WELL NAME	SUCHY NO. 1	NOT GIVEN	AMES NO. 1
LOCATION	SEC. 27, T19S, R15W	SEC. 14, T19S, R11W	SEC. 22, T18S, R11W
OWNER	WESTERN PETROLEUM CO., INC.	DOWNING, ET AL.	EDOUARD JONAS
COMPLETED	--/--/00	--/--/00	06/30/43
SAMPLED	11/16/61	--/--/00	07/26/43
FORMATION	PENN-KANSAS CITY	NOT GIVEN	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3162	3052	3042
WELLHEAD PRESSURE,PSIG	NOT GIVEN	975	400
OPEN FLOW, MCFD	1500	7500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.9	60.6	51.3
ETHANE	2.4	18.0	33.1
PROPANE	2.0	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	30.2	20.1	14.8
OXYGEN	TRACE	0.3	0.6
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	TRACE	---	---
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	1.25	0.95	0.19
HEATING VALUE*	782	936	1113
SPECIFIC GRAVITY	0.737	0.724	0.782

	INDEX 1510 SAMPLE 7799	INDEX 1511 SAMPLE 8909	INDEX 1512 SAMPLE 2960
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	NOT GIVEN	NOT GIVEN	DTIS-ALBERT
WELL NAME	INJECTOR NO. 2	UNRUH	DIRKS NO. 1
LOCATION	SEC. 20, T18S, R15W	NOT GIVEN	SEC. 16, T18S, R15W
OWNER	KANSAS-NEBRASKA NATURAL GAS	PAWNEE SALT CO., ET AL.	HANNUM DRILLING CO.
COMPLETED	--/--/00	--/--/61	04/26/40
SAMPLED	12/08/60	03/28/63	11/07/41
FORMATION	NOT GIVEN	PENN-WICHITA-ALBANY	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3800	3478
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1000	700
OPEN FLOW, MCFD	NOT GIVEN	3000	48000
COMPONENT, MOLE PCT			
METHANE	66.7	85.8	73.9
ETHANE	4.1	3.8	13.2
PROPANE	1.6	1.5	---
N-BUTANE	0.6	0.7	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.1	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	25.0	6.1	11.0
OXYGEN	0.0	0.0	0.2
ARGON	0.1	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	2.80	0.79	1.48
HEATING VALUE*	838	1038	985
SPECIFIC GRAVITY	0.704	0.644	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1513 SAMPLE 2978	INDEX 1514 SAMPLE 3022	INDEX 1515 SAMPLE 3218
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	OTIS-ALBERT	OTIS-ALBERT	OTIS-ALBERT
WELL NAME	FERDINAND BRACK NO. 1	HUNTER	HABERMAN NO. 1
LOCATION	SEC. 21, T18S, R15W	SEC. 33, T18S, R15W	SEC. 8, T18S, R15W
OWNER	STANOLIND OIL & GAS CO.	KENWOOD OIL CO.	HANNUM DRILLING CO.
COMPLETED	12/28/35	--/--/00	03/03/41
SAMPLED	11/05/41	--/--/00	03/27/42
FORMATION	CAMB-REAGAN	NOT GIVEN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3496	NOT GIVEN	3500
WELLHEAD PRESSURE,PSIG	925	NOT GIVEN	629
OPEN FLOW, MCFD	18400	NOT GIVEN	14700
COMPONENT, MOLE PCT			
METHANE	76.7	78.2	66.8
ETHANE	13.7	12.3	11.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.9	8.0	19.1
OXYGEN	0.2	0.1	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	1.17	1.15	1.90
HEATING VALUE*	1022	1013	885
SPECIFIC GRAVITY	0.654	0.646	0.687

	INDEX 1516 SAMPLE 6355	INDEX 1517 SAMPLE 3214	INDEX 1518 SAMPLE 3440
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	OTIS-ALBERT	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	BIRD NO. 1	J. J. SCHMIDT NO. 1	E. D. BECKERT NO. 1
LOCATION	SEC. 28, T18S, R15W	SEC. 22, T20S, R15W	SEC. 18, T20S, R15W
OWNER	SKELLY OIL CO.	HELMERICH & PAYNE, INC.	TRANSWESTERN OIL CO.
COMPLETED	06/--/57	10/01/41	04/01/42
SAMPLED	08/08/57	03/26/42	05/28/42
FORMATION	PENN-KANSAS CITY	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3193	3669	3790
WELLHEAD PRESSURE,PSIG	1057	NOT GIVEN	1100
OPEN FLOW, MCFD	3400	1585	4000
COMPONENT, MOLE PCT			
METHANE	61.8	80.0	83.6
ETHANE	3.0	9.6	8.3
PROPANE	1.1	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	31.0	8.6	6.1
OXYGEN	TRACE	0.4	0.4
ARGON	0.1	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	2.31	1.23	1.10
HEATING VALUE*	725	982	996
SPECIFIC GRAVITY	0.707	0.637	0.623

	INDEX 1519 SAMPLE 5516	INDEX 1520 SAMPLE 3103	INDEX 1521 SAMPLE 3112
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	PAWNEE ROCK	PAWNEE ROCK E	PAWNEE ROCK E
WELL NAME	JURGENSON NO. 1	SH 45 4 55 1	J. B. SMITH NO. 1
LOCATION	SEC. 27, T19S, R15W	SEC. 17, T20S, R15W	SEC. 17, T20S, R15W
OWNER	SCHERMERHORN OIL CORP.	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	06/20/53	10/14/41	--/--/00
SAMPLED	07/16/53	02/26/42	02/26/42
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3600	3802	3799
WELLHEAD PRESSURE,PSIG	500	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	82.5	68.2	85.8
ETHANE	4.8	18.5	3.4
PROPANE	2.1	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	7.0	10.9	8.6
OXYGEN	TRACE	0.5	0.3
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.5	0.4
HELIUM	0.92	1.35	1.51
HEATING VALUE*	1057	1072	930
SPECIFIC GRAVITY	0.665	0.693	0.606

	INDEX 1522 SAMPLE 3234	INDEX 1523 SAMPLE 8268	INDEX 1524 SAMPLE 4072
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	RICK	SHAEFFER-ROTHGARN	UNRUH
WELL NAME	RADER NO. 2	ENGLEMAN NO. 1	UNRUH NO. 1
LOCATION	SEC. 11, T19S, R11W	SEC. 27, T20S, R13W	SEC. 24, T20S, R15W
OWNER	SHELL OIL CO.	ALPINE OIL & ROYALTY CO., INC	HARBER DRILLING CO.
COMPLETED	--/--/00	09/20/61	--/--/00
SAMPLED	03/25/42	11/02/61	09/21/45
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3107	3257	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1060	1040	1090
OPEN FLOW, MCFD	1863	2400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.7	71.2	75.3
ETHANE	19.0	2.6	14.4
PROPANE	---	1.4	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	20.8	22.3	8.9
OXYGEN	0.4	TRACE	0.0
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.93	1.04	1.26
HEATING VALUE*	935	852	1021
SPECIFIC GRAVITY	0.735	0.691	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1525 SAMPLE 4495	INDEX 1526 SAMPLE 4496	INDEX 1527 SAMPLE 17875
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	UNRUH	UNRUH	WILDCAT
WELL NAME	MOORE	LILLIAN STROBEL NO. 1	MILLER NO. 1
LOCATION	SEC. 18, T20S, R14W	SEC. 14, T20S, R15W	SEC. 28, T19S, R14W
OWNER	KANSAS-NEBRASKA NATURAL GAS	SINCLAIR-PRAIRIE OIL CO.	ROMANA CORP.
COMPLETED	09/25/47	12/29/47	03/21/85
SAMPLED	--/--/48	06/--/48	--/--/00
FORMATION	CAMO-ARBUCKLE	ORDO---	PERM-RED EAGLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3561	3596	2276
WELLHEAD PRESSURE,PSIG	1050	1021	650
OPEN FLOW, MCFD	24200	40500	1200
COMPONENT, MOLE PCT			
METHANE	79.5	79.9	66.5
ETHANE	9.8	10.7	2.3
PROPANE	---	---	0.8
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.4
NITROGEN	8.9	8.2	27.5
OXYGEN	0.1	0.1	0.0
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	1.34	1.28	1.18
HEATING VALUE*	981	996	800
SPECIFIC GRAVITY	0.639	0.639	0.716

	INDEX 1528 SAMPLE 6160	INDEX 1529 SAMPLE 3194	INDEX 1530 SAMPLE 137
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BOURBON	BUTLER
FIELD	WORKMAN NW	REDFIELD	AUGUSTA
WELL NAME	OPAL LANTERMAN	SCHLEGAL NO. 1	SCULLY NO. 1
LOCATION	SEC. 16, T20S, R12W	SEC. 9, T24S, R23E	SEC. 21, T27S, R4E
OWNER	SKELLY OIL CO.	RAYMOND MOWERY	EMPIRE GAS & FUEL CO.
COMPLETED	--/--/00	--/--/36	05/--/15
SAMPLED	10/16/56	03/25/42	03/10/20
FORMATION	PENN-KANSAS CITY	PENN-BARTLESVILLE	PENN-
GEOLOGIC PROVINCE CODE	385	365	370
DEPTH, FEET	3153	400	1451
WELLHEAD PRESSURE,PSIG	1060	100	94
OPEN FLOW, MCFD	500	1000	550
COMPONENT, MOLE PCT			
METHANE	66.3	98.4	70.3
ETHANE	2.9	0.0	2.2
PROPANE	2.1	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	25.3	0.7	25.8
OXYGEN	TRACE	0.5	0.7
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.99	0.06	0.97
HEATING VALUE*	855	997	752
SPECIFIC GRAVITY	0.726	0.563	0.671

	INDEX 1531 SAMPLE 138	INDEX 1532 SAMPLE 147	INDEX 1533 SAMPLE 149
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BUTLER	BUTLER	BUTLER
FIELD	AUGUSTA	EL DORADO	EL DORADO
WELL NAME	PENLEY NO. 1	ENGART NO. 11	MANNING NO. 4
LOCATION	SEC. 21, T27S, R4E	SEC. 12, T26S, R4E	SEC. 5, T26S, R5E
OWNER	SINCLAIR OIL & GAS CO.	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.
COMPLETED	09/--/15	03/--/18	--/--/00
SAMPLED	03/01/20	03/15/20	03/12/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1380	1190	1141
WELLHEAD PRESSURE,PSIG	65	250	196
OPEN FLOW, MCFD	480	210	380000
COMPONENT, MOLE PCT			
METHANE	69.9	69.2	72.2
ETHANE	2.7	4.0	1.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	25.4	24.4	24.3
OXYGEN	0.6	0.3	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	1.20	1.01	1.16
HEATING VALUE*	756	773	756
SPECIFIC GRAVITY	0.671	0.666	0.660

	INDEX 1534 SAMPLE 150	INDEX 1535 SAMPLE 152	INDEX 1536 SAMPLE 4369
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BUTLER	BUTLER	BUTLER
FIELD	EL DORADO	EL DORADO	FOX BUSH
WELL NAME	RALSTON NO. 11	GUSSMAN NO. 1	WOMACK NO. 1
LOCATION	SEC. 1, T26S, R4E	SEC. 17, T27S, R 7E	SEC. 19, T28S, R6E
OWNER	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.	J. M. HUBER CORP.
COMPLETED	05/--/18	09/--/16	02/--/47
SAMPLED	03/15/20	03/15/20	10/27/47
FORMATION	PENN-	PENN-	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1254	892	2697
WELLHEAD PRESSURE,PSIG	260	55	500
OPEN FLOW, MCFD	260	110	2000
COMPONENT, MOLE PCT			
METHANE	71.6	65.9	6.9
ETHANE	0.0	0.0	72.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	27.1	31.3	19.7
OXYGEN	0.0	1.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.4
HELIUM	1.25	1.49	0.72
HEATING VALUE*	725	668	1362
SPECIFIC GRAVITY	0.661	0.685	0.995

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1537 SAMPLE 922	INDEX 1538 SAMPLE 3816	INDEX 1539 SAMPLE 2536
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BUTLER	BUTLER	CHASE
FIELD	KNOX FARM	POTWIN	ELK
WELL NAME	NO. 1	BRAINERD NO. B-1	STEPHENSON NO. 1
LOCATION	SEC. 17, T27S, R7E	SEC. 3, T25S, R5E	SEC. 27, T19S, R6E
OWNER	TIDAL OIL CO.	VICKERS PETROLEUM CO.	K. R. & T. CO.
COMPLETED	--/--/00	03/29/44	02/--/32
SAMPLED	09/14/24	02/23/44	08/14/32
FORMATION	UNKN-DARK BROWN CLOSE SAND	UNKN---	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	2582	830	523
WELLHEAD PRESSURE,PSIG	850	NOT GIVEN	155
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	71.5	18.7	63.3
ETHANE	12.7	1.9	4.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.7	76.0	29.7
OXYGEN	1.9	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.9	0.4	0.7
HELIUM	0.45	2.64	1.19
HEATING VALUE	952	223	727
SPECIFIC GRAVITY	0.688	0.873	0.704

	INDEX 1540 SAMPLE 3242	INDEX 1541 SAMPLE 3245	INDEX 1542 SAMPLE 2640
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHASE	CHASE	CHASE
FIELD	ELK	ELK	LIPPS
WELL NAME	MILLER NO. 6	STEPHENSON NO. 2	MORRIS NO. 1
LOCATION	SEC. 21, T19S, R6E	SEC. 27, T19S, R6E	SEC. 32, T18S, R7E
OWNER	CHASE COUNTY PIPE LINE CO.	K. R. & T. CO.	K. R. & T. CO.
COMPLETED	12/--/34	04/--/39	09/--/32
SAMPLED	04/01/42	04/01/42	09/05/33
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	519	475	455
WELLHEAD PRESSURE,PSIG	90	80	40
OPEN FLOW, MCFD	195	750	250
COMPONENT, MOLE PCT			
METHANE	72.2	59.2	45.5
ETHANE	6.6	4.9	10.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.7	34.2	42.1
OXYGEN	0.5	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.1	0.9
HELIUM	0.99	1.33	1.03
HEATING VALUE	850	688	653
SPECIFIC GRAVITY	0.668	0.717	0.783

	INDEX 1543 SAMPLE 3246	INDEX 1544 SAMPLE 3247	INDEX 1545 SAMPLE 978
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHASE	CHASE	CHAUTAUQUA
FIELD	NEVA	NEVA	CHAUTAUQUA
WELL NAME	DOOLITTLE NO. 1	DRUMMOND NO. 6	NO. 80
LOCATION	SEC. 14, T19S, R7E	SEC. 14, T19S, R7E	SEC. 16, T34S, R11E
OWNER	COTTONWOOD FALLS GAS CO.	COTTONWOOD FALLS GAS CO.	DENMAN BROS.
COMPLETED	--/--/00	--/--/00	03/--/29
SAMPLED	04/01/42	04/01/42	01/22/35
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	365
DEPTH, FEET	107	454	715
WELLHEAD PRESSURE,PSIG	NOT GIVEN	25	180
OPEN FLOW, MCFD	1000	70	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.0	72.2	42.9
ETHANE	17.0	6.6	0.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	18.9	20.0	54.9
OXYGEN	0.1	0.2	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.4	0.1
HELIUM	0.55	0.60	0.98
HEATING VALUE	943	850	445
SPECIFIC GRAVITY	0.718	0.672	0.784

	INDEX 1546 SAMPLE 1793	INDEX 1547 SAMPLE 11763	INDEX 1548 SAMPLE 654
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	COACH LINES	ELGIN E	MEWINS
WELL NAME	MK&O COACHLINES NO. 2	ALLEN NO. 1	NOT GIVEN
LOCATION	SEC. 10, T32S, R8E	SEC. 7, T33S, R11E	SEC. 35, T34S, R9E
OWNER	PURE OIL CO.	WYATT PETROLEUM CORP.	EMPIRE GAS & FUEL CO.
COMPLETED	08/--/60	10/21/67	--/--/00
SAMPLED	12/13/60	02/17/69	09/06/21
FORMATION	PENN-LAYTON	MISS-CHAT	PENN-
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1758	1882	758
WELLHEAD PRESSURE,PSIG	579	660	292
OPEN FLOW, MCFD	3400	3000	2400
COMPONENT, MOLE PCT			
METHANE	52.1	92.5	59.7
ETHANE	3.8	0.9	0.0
PROPANE	2.7	0.1	---
N-BUTANE	0.8	0.0	---
ISOBUTANE	0.6	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.2	0.0	---
NITROGEN	38.3	4.2	39.1
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.2	1.9	0.0
HELIUM	0.90	0.30	1.00
HEATING VALUE	740	956	605
SPECIFIC GRAVITY	0.790	0.595	0.713

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1549 SAMPLE 15692	INDEX 1550 SAMPLE 16650	INDEX 1551 SAMPLE 17851
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHAUTAUQUA	CHEYENNE	CLARK
FIELD	OLIVER	CHERRY CREEK	BIG SAND CREEK
WELL NAME	ROGERS B NO. 1	FRITZ NO. A-1	EUBANK NO. 9-B
LOCATION	SEC. 2, T32S, R10E	SEC. 25, T4S, R40W	SEC. 9, T34S, R23W
OWNER	RAM OIL CO.	NIELSON ENTERPRISES, INC.	COBRA OIL & GAS CORP.
COMPLETED	06/--/78	11/24/81	05/24/85
SAMPLED	07/05/79	09/15/82	09/30/85
FORMATION	MISS-	CRET-NIOBRARA	MISS-CHESTER
GEOLOGIC PROVINCE CODE	365	450	360
DEPTH, FEET	2000	1292	5436
WELLHEAD PRESSURE,PSIG	600	300	1100
OPEN FLOW, MCFD	2200	50	1500
COMPONENT, MOLE PCT			
METHANE	82.5	93.6	79.5
ETHANE	1.3	1.3	6.0
PROPANE	0.5	0.6	3.6
N-BUTANE	0.3	0.1	1.3
ISOBUTANE	0.2	TRACE	0.6
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	12.3	4.1	7.5
OXYGEN	0.1	0.1	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	TRACE	0.1
HELIUM	1.24	0.08	0.24
HEATING VALUE*	905	990	1124
SPECIFIC GRAVITY	0.641	0.584	0.705

	INDEX 1552 SAMPLE 7059	INDEX 1553 SAMPLE 14224	INDEX 1554 SAMPLE 14785
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	CLARK CREEK	CLARK CREEK	GRANGER CREEK
WELL NAME	C. M. TUTTLE NO. 1	TUTTLE NO. 2	DAILY NO. 1-1
LOCATION	SEC. 8, T35S, R22W	SEC. 8, T35S, R22W	SEC. 11, T31S, R22W
OWNER	PURE OIL CO.	ROBERT L. MAYNIE	MESA PETROLEUM CO.
COMPLETED	10/26/58	06/21/74	01/23/76
SAMPLED	05/05/59	11/11/74	09/24/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5673	5707	5199
WELLHEAD PRESSURE,PSIG	1650	1700	1530
OPEN FLOW, MCFD	NOT GIVEN	7000	47000
COMPONENT, MOLE PCT			
METHANE	86.0	90.1	87.1
ETHANE	4.9	4.7	4.2
PROPANE	2.5	2.2	1.5
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	3.6	1.2	5.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	0.10	0.11	0.25
HEATING VALUE*	1111	1119	1042
SPECIFIC GRAVITY	0.662	0.635	0.635

	INDEX 1555 SAMPLE 8094	INDEX 1556 SAMPLE 14557	INDEX 1557 SAMPLE 17656
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	HARPER RANCH	HARPER RANCH	HARPER RANCH N
WELL NAME	KARL MOSSHART NO. 1	HARPER RANCH NO. 1	MCGEE NO. 1
LOCATION	SEC. 27, T33S, R21W	SEC. 12, T34S, R21W	SEC. 34, T32S, R21W
OWNER	SINCLAIR OIL & GAS CO.	TEXAS OIL & GAS CORP.	MIDCO EXPLORATION, INC.
COMPLETED	04/17/61	--/--/00	12/12/84
SAMPLED	07/25/61	--/--/00	04/--/85
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5430	5416	5254
WELLHEAD PRESSURE,PSIG	1161	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	8155	4000
COMPONENT, MOLE PCT			
METHANE	88.4	91.0	86.1
ETHANE	4.9	3.3	4.5
PROPANE	2.0	1.2	2.2
N-BUTANE	0.6	0.3	0.8
ISOBUTANE	0.5	0.2	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	3.0	3.4	4.3
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.10	0.12	0.14
HEATING VALUE*	1082	1037	1098
SPECIFIC GRAVITY	0.635	0.609	0.659

	INDEX 1558 SAMPLE 15693	INDEX 1559 SAMPLE 6227	INDEX 1560 SAMPLE 14903
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	LEXINGTON	MCKINNEY	MCKINNEY
WELL NAME	MOORE NO. 3	L. THEIS NO. 1	THEIS "W" NO. 1-8
LOCATION	SEC. 20, T31S, R21W	SEC. 10, T35S, R25W	SEC. 8, T35S, R25W
OWNER	MESA PETROLEUM CO.	SHELL OIL CO.	NORTHERN NATURAL GAS CO.
COMPLETED	04/23/79	08/01/56	10/21/76
SAMPLED	07/08/79	01/14/57	02/15/77
FORMATION	MISS-ST. LOUIS	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5181	5766	5955
WELLHEAD PRESSURE,PSIG	1500	1033	1576
OPEN FLOW, MCFD	3900	3600	4400
COMPONENT, MOLE PCT			
METHANE	83.1	88.7	90.0
ETHANE	4.8	5.2	4.8
PROPANE	0.7	2.6	2.1
N-BUTANE	0.4	0.8	0.6
ISOBUTANE	0.3	0.7	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	9.2	1.0	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.30	0.10	0.09
HEATING VALUE*	996	1145	1108
SPECIFIC GRAVITY	0.648	0.652	0.632

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1561 SAMPLE 5836	INDEX 1562 SAMPLE 1092	INDEX 1563 SAMPLE 1868
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	MORRISON NE	NOT GIVEN	NOT GIVEN
WELL NAME	STEPHENS H NO. 1	J. MORRISON NO. 1	STEPHENS NO. 1
LOCATION	SEC. 10, T32S, R21W	SEC. 20, T32S, R21W	SEC. 21, T32S, R21W
OWNER	SHAMROCK OIL & GAS CORP.	WATCHORN OIL & GAS CO.	WATCHORN OIL & GAS CO.
COMPLETED	03/05/55	06/--/25	10/--/28
SAMPLED	05/11/55	07/16/25	09/18/29
FORMATION	PENN-MORROW	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4193	5308	5440
WELLHEAD PRESSURE,PSIG	1760	50	800
OPEN FLOW, MCFD	14500	7765	8000
COMPONENT, MOLE PCT			
METHANE	90.2	90.4	83.3
ETHANE	3.8	17.8	14.6
PROPANE	1.5	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	2.8	1.4	1.8
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.13	0.12	0.13
HEATING VALUE*	1062	1133	1105
SPECIFIC GRAVITY	0.619	0.652	0.637

	INDEX 1564 SAMPLE 17682	INDEX 1565 SAMPLE 9963	INDEX 1566 SAMPLE 10337
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	NOT GIVEN	SITKA	SNAKE CREEK
WELL NAME	ESPLUND NO. 1	CAUTHERS TRUST UNIT 1	TUTTLE C NO. 1
LOCATION	SEC. 35, T30S, R25W	SEC. 29, T33S, R22W	SEC. 10, T35S, R21W
OWNER	LADD PETROLEUM CORP.	PETROLEUM, INC.	UNION OIL CO. OF CALIF.
COMPLETED	--/--/00	12/21/64	11/11/57
SAMPLED	05/21/85	07/08/65	12/13/65
FORMATION	PENN-& MISS	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5413	5435	5625
WELLHEAD PRESSURE,PSIG	1050	1647	1195
OPEN FLOW, MCFD	8000	3100	4040
COMPONENT, MOLE PCT			
METHANE	70.1	87.0	87.5
ETHANE	5.1	4.7	4.5
PROPANE	2.7	2.3	2.1
N-BUTANE	1.0	0.8	0.7
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.3	0.2	0.6
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	19.3	3.4	3.4
OXYGEN	0.2	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.35	0.10	0.11
HEATING VALUE*	947	1107	1098
SPECIFIC GRAVITY	0.720	0.655	0.648

	INDEX 1567 SAMPLE 10355	INDEX 1568 SAMPLE 16806	INDEX 1569 SAMPLE 17371
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	SNAKE CREEK	SNAKE CREEK	SNAKE CREEK
WELL NAME	R. S. SHUPE NO. 1	BARBY NO. 2-21	SMITH NO. 1-30-34-21
LOCATION	SEC. 16, T34S, R21W	SEC. 21, T34S, R21W	SEC. 30, T34S, R21W
OWNER	SUNRAY DX OIL CO.	RINE DRILLING CO.	DECK OIL CO.
COMPLETED	07/07/58	--/--/00	01/--/83
SAMPLED	01/11/66	03/17/83	08/08/84
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5580	NOT GIVEN	5488
WELLHEAD PRESSURE,PSIG	1057	265	840
OPEN FLOW, MCFD	7000	150	702
COMPONENT, MOLE PCT			
METHANE	88.3	88.1	87.7
ETHANE	5.0	4.3	5.1
PROPANE	2.2	2.3	2.6
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.2	0.5	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	2.0	2.5	1.9
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.12	0.13	0.12
HEATING VALUE*	1120	1113	1136
SPECIFIC GRAVITY	0.648	0.647	0.655

	INDEX 1570 SAMPLE 17409	INDEX 1571 SAMPLE 10013	INDEX 1572 SAMPLE 16303
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	SNAKE CREEK	SNAKE CREEK W	TUTTLE S
WELL NAME	BARBY NO. 5-23	RANDALL 1-11	TUTTLE NO. 11-116
LOCATION	SEC. 23, T34S, R21W	SEC. 11, T34S, R22W	SEC. 13, T35S, R21W
OWNER	RINE DRILLING CO.	GRAHAM-MICHAELIS DRILLING CO	KENNEDY & MITCHELL, INC.
COMPLETED	01/26/83	03/03/65	--/--/00
SAMPLED	01/14/84	07/24/65	08/07/81
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5409	5378	5577
WELLHEAD PRESSURE,PSIG	1700	1453	464
OPEN FLOW, MCFD	550	56300	3009
COMPONENT, MOLE PCT			
METHANE	89.6	83.6	90.5
ETHANE	3.7	5.1	3.5
PROPANE	1.5	2.5	1.5
N-BUTANE	0.5	0.8	0.5
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	3.5	6.6	2.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.16	0.18	0.11
HEATING VALUE*	1068	1069	1082
SPECIFIC GRAVITY	0.629	0.663	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1573 SAMPLE 1753	INDEX 1574 SAMPLE 14398	INDEX 1575 SAMPLE 6073
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COFFEY	COMANCHE	COMANCHE
FIELD	CARTER	AETNA GAS AREA	BEALS
WELL NAME	WINZELER NO. 1	BALLEY RANCH NO. 3	PARRS NO. 1
LOCATION	SEC. 9, T22S, R14E	SEC. 36, T34S, R16W	SEC. 32, T33S, R17W
OWNER	UNION GAS CORP.	BEREN CORP.	PURE OIL CO.
COMPLETED	01/--/29	01/29/75	04/10/56
SAMPLED	09/22/29	03/19/75	05/31/56
FORMATION	PENN-CHEROKEE	MISS---	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	335	360	360
DEPTH, FEET	1327	NOT GIVEN	5670
WELLHEAD PRESSURE,PSIG	510	1650	1784
OPEN FLOW, MCFD	3001	7236	16000
COMPONENT, MOLE PCT			
METHANE	86.6	93.5	71.5
ETHANE	4.3	3.1	5.8
PROPANE	---	1.1	3.0
N-BUTANE	---	0.3	1.5
ISOBUTANE	---	0.2	0.5
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	1.2
CYCLOPENTANE	---	0.1	0.4
HEXANES PLUS	---	0.2	0.3
NITROGEN	8.1	1.0	15.4
OXYGEN	0.2	0.0	0.0
ARGON	---	0.0	0.1
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.55	0.06	0.67
HEATING VALUE*	959	1071	1046
SPECIFIC GRAVITY	0.611	0.603	0.744

	INDEX 1576 SAMPLE 6074	INDEX 1577 SAMPLE 6075	INDEX 1578 SAMPLE 10333
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	BEALS	BEALS	BEALS
WELL NAME	PARRS NO. 1	HAZEL BEALS NO. 1	HUCK & HALL NO. 1
LOCATION	SEC. 32, T33S, R17W	SEC. 5, T34S, R17W	SEC. 33, T33S, R17W
OWNER	PURE OIL CO.	PURE OIL CO.	CONTINENTAL OIL CO.
COMPLETED	04/10/56	12/20/55	12/07/62
SAMPLED	05/31/56	05/29/56	12/15/65
FORMATION	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4368	4393	4351
WELLHEAD PRESSURE,PSIG	1464	1482	953
OPEN FLOW, MCFD	4400	5200	4784
COMPONENT, MOLE PCT			
METHANE	73.4	79.9	78.3
ETHANE	5.0	4.8	5.1
PROPANE	2.9	0.0	2.5
N-BUTANE	1.5	0.7	0.7
ISOBUTANE	0.3	0.7	0.5
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.8	0.4	0.3
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	14.1	12.1	11.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.57	0.27	0.29
HEATING VALUE*	1053	996	1016
SPECIFIC GRAVITY	0.731	0.673	0.684

	INDEX 1579 SAMPLE 10334	INDEX 1580 SAMPLE 10335	INDEX 1581 SAMPLE 10336
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	BEALS	BEALS	BEALS
WELL NAME	M. BEALS NO. 1	HUCK & HALL NO. 1	S. L. PARKS NO. 1
LOCATION	SEC. 5, T34S, R17W	SEC. 33, T33S, R17W	SEC. 32, T33S, R17W
OWNER	UNION OIL CO. OF CALIF.	CONTINENTAL OIL CO.	UNION OIL CO. OF CALIF.
COMPLETED	02/10/62	12/07/62	04/10/56
SAMPLED	12/15/65	12/15/65	12/13/65
FORMATION	PENN-MARMATON	MISS-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4948	1264	5670
WELLHEAD PRESSURE,PSIG	1259	1264	1700
OPEN FLOW, MCFD	900	2631	9777
COMPONENT, MOLE PCT			
METHANE	88.5	88.8	73.3
ETHANE	4.3	3.7	5.0
PROPANE	2.5	1.5	2.9
N-BUTANE	0.8	0.7	1.2
ISOBUTANE	0.3	TRACE	0.3
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.3	0.4	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.9	4.4	15.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.15	0.12	0.70
HEATING VALUE*	1098	1055	998
SPECIFIC GRAVITY	0.640	0.629	0.713

	INDEX 1582 SAMPLE 16541	INDEX 1583 SAMPLE 6818	INDEX 1584 SAMPLE 11231
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	BLUFF CREEK	GLICK	GLICK
WELL NAME	SCHOEFLER NO. 21-5	ROBBINS-GALLUP NO. A-1	SCHUETTE NO. 1-1
LOCATION	SEC. 21, T33S, R20W	SEC. 2, T31S, R16W	SEC. 1, T32S, R16W
OWNER	SAMUEL GARY OIL PRODUCER	BARBARA OIL CO.	EASON OIL CO.
COMPLETED	01/27/82	09/02/58	01/05/66
SAMPLED	06/10/82	09/30/58	11/21/67
FORMATION	PENN-MORROW & MISS	MISS---	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5255	4783	4855
WELLHEAD PRESSURE,PSIG	1453	1520	1100
OPEN FLOW, MCFD	2100	13	14000
COMPONENT, MOLE PCT			
METHANE	89.1	92.0	90.0
ETHANE	0.5	3.7	4.0
PROPANE	1.0	1.0	1.6
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	7.6	1.6	2.5
OXYGEN	0.6	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.38	0.10	0.17
HEATING VALUE*	979	1075	1082
SPECIFIC GRAVITY	0.615	0.614	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1585 SAMPLE 15981	INDEX 1586 SAMPLE 12818	INDEX 1587 SAMPLE 8469
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	HAAS	HAM	NESCATUNGA
WELL NAME	HAAS NO. 1	MERRILL RANCH NO. C-2	DALE B NO. 1
LOCATION	SEC. 19, T34S, R17W	SEC. 33, T33S, R16W	SEC. 21, T32S, R18W
OWNER	GEORGE R. JONES	SHENANDOAH OIL CORP.	J. M. HUBER CORP.
COMPLETED	01/19/80	10/--/69	12/15/61
SAMPLED	06/11/80	05/--/71	03/19/62
FORMATION	MISS----	MISS-	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5238	4972	5632
WELLHEAD PRESSURE,PSIG	1680	1250	1730
OPEN FLOW, MCFD	2443	4902	4188
COMPONENT, MOLE PCT			
METHANE	91.1	92.3	68.6
ETHANE	3.1	3.8	4.9
PROPANE	1.0	1.2	1.9
N-BUTANE	0.3	0.6	0.5
ISOBUTANE	0.1	0.0	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	0.1	TRACE	0.5
HEXANES PLUS	0.1	0.2	1.2
NITROGEN	3.8	1.2	20.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.13	0.08	0.94
HEATING VALUE*	1035	1082	971
SPECIFIC GRAVITY	0.612	0.613	0.743

	INDEX 1588 SAMPLE 8471	INDEX 1589 SAMPLE 10332	INDEX 1590 SAMPLE 15075
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	NESCATUNGA	NESCATUNGA	OVEROCKER
WELL NAME	DALE B NO. 1	DALE B NO. 1	OVEROCKER NO. 1
LOCATION	SEC. 21, T32S, R18W	SEC. 21, T32S, R18W	SEC. 6, T33S, R20W
OWNER	J. M. HUBER CORP.	ATLANTIC RICHFIELD CO.	NATIONAL OIL CO.
COMPLETED	12/15/61	01/18/62	03/--/76
SAMPLED	03/19/62	12/15/65	08/--/77
FORMATION	MISS-	ORDO-VIOLA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5174	5632	5216
WELLHEAD PRESSURE,PSIG	1580	1676	1650
OPEN FLOW, MCFD	3750	1296	2600
COMPONENT, MOLE PCT			
METHANE	90.2	69.8	90.6
ETHANE	3.2	5.1	3.9
PROPANE	0.9	2.3	1.3
N-BUTANE	0.3	0.6	0.4
ISOBUTANE	0.3	0.5	0.1
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	0.5	TRACE	TRACE
HEXANES PLUS	0.9	0.2	0.1
NITROGEN	3.2	20.0	3.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.15	0.07	0.15
HEATING VALUE*	1084	916	1052
SPECIFIC GRAVITY	0.637	0.710	0.616

	INDEX 1591 SAMPLE 6858	INDEX 1592 SAMPLE 7942	INDEX 1593 SAMPLE 10391
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	PERRY RANCH	PERRY RANCH	PERRY RANCH
WELL NAME	PERRY NO. 1	PERRY NO. 2	PERRY RANCH NO. 1
LOCATION	SEC. 12, T32S, R16W	SEC. 13, T32S, R16W	SEC. 12, T32S, R16W
OWNER	MESSMAN-RINEHART OIL CO.	MESSMAN-RINEHART OIL CO.	MESSMAN-RINEHART OIL CO.
COMPLETED	06/27/58	02/26/61	07/05/58
SAMPLED	11/05/58	04/28/61	02/10/66
FORMATION	MISS-CHAT	MISS-CHERT	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4785	4778	4795
WELLHEAD PRESSURE,PSIG	1515	1505	1610
OPEN FLOW, MCFD	11000	2460	6000
COMPONENT, MOLE PCT			
METHANE	92.6	92.4	91.8
ETHANE	3.6	3.7	3.8
PROPANE	1.2	1.2	1.2
N-BUTANE	0.4	0.4	0.5
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.3	1.4	1.6
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.10	0.10	0.15
HEATING VALUE*	1068	1066	1080
SPECIFIC GRAVITY	0.606	0.605	0.617

	INDEX 1594 SAMPLE 11230	INDEX 1595 SAMPLE 11936	INDEX 1596 SAMPLE 5430
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	PERRY RANCH	PERRY RANCH	ROBBINS RANCH
WELL NAME	SCHUETTE NO. 1-1	SCHUETTE NO. 1	ROBBINS RANCH NO. 1
LOCATION	SEC. 1, T32S, R16W	SEC. 1, T32S, R16W	SEC. 23, T31S, R16W
OWNER	EASON OIL CO.	EASON OIL CO.	BARBARA OIL CO.
COMPLETED	01/05/66	--/--/00	02/14/53
SAMPLED	11/22/67	06/16/69	03/27/53
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4808	NOT GIVEN	4886
WELLHEAD PRESSURE,PSIG	1100	1200	1498
OPEN FLOW, MCFD	12500	500	5922
COMPONENT, MOLE PCT			
METHANE	90.4	90.9	92.2
ETHANE	3.9	3.7	3.3
PROPANE	1.5	1.6	1.3
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	2.3	2.2	1.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	0.15	0.16	0.13
HEATING VALUE*	1095	1079	1070
SPECIFIC GRAVITY	0.630	0.620	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1597 SAMPLE 14329		INDEX 1598 SAMPLE 10693		INDEX 1599 SAMPLE 10728	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	SCHUETTE		SHIMER		SHIMER	
WELL NAME	SCHUETTE NO. 1		GREGG NO. 1-12		GREGG NO. 1-12	
LOCATION	SEC. 35, T31S, R16W		SEC. 12, T33S, R17W		SEC. 12, T33S, R17W	
OWNER	NATIONAL OIL CO.		SHELL OIL CO.		SHELL OIL CO.	
COMPLETED	03/01/74		02/04/66		01/19/66	
SAMPLED	05/09/75		08/16/66		09/20/66	
FORMATION	MISS-		MISS-		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4839		5065		5089	
WELLHEAD PRESSURE,PSIG	1100		1575		1540	
OPEN FLOW, MCFD	31000		5483		7000	
COMPONENT, MOLE PCT						
METHANE	91.1		92.4		91.4	
ETHANE	3.5		3.5		3.5	
PROPANE	1.1		1.2		1.3	
N-BUTANE	0.3		0.4		0.5	
ISOBUTANE	0.3		0.1		0.1	
N-PENTANE	TRACE		0.2		0.1	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	1.4		1.5		2.2	
OXYGEN	0.0		0.0		0.3	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.3		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.7		0.1		0.1	
HELIUM	0.11		0.08		0.08	
HEATING VALUE*	1094		1078		1070	
SPECIFIC GRAVITY	0.619		0.610		0.620	

	INDEX 1600 SAMPLE 11557		INDEX 1601 SAMPLE 9044		INDEX 1602 SAMPLE 15552	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	SHIMER		TUTTLE E		TUTTLE NE	
WELL NAME	GREGG NO. 1-7		ALEXANDER NO. 1		WOOLFOLK "E" NO. 1	
LOCATION	SEC. 7, T33S, R16W		SEC. 4, T35S, R20W		SEC. 29, T34S, R20W	
OWNER	GRAHAM-MICHAELIS DRILLING CO		SINCLAIR OIL & GAS CO.		DONALD C. SLAWSON	
COMPLETED	05/21/67		05/03/63		07/12/78	
SAMPLED	06/27/68		07/15/63		01/02/79	
FORMATION	MISS-NOT GIVEN		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5052		5461		5420	
WELLHEAD PRESSURE,PSIG	1551		1782		1780	
OPEN FLOW, MCFD	4700		3500		6000	
COMPONENT, MOLE PCT						
METHANE	91.0		91.3		89.7	
ETHANE	3.5		3.5		3.9	
PROPANE	1.1		1.8		1.5	
N-BUTANE	0.4		0.8		0.5	
ISOBUTANE	0.2		TRACE		0.2	
N-PENTANE	0.2		0.3		0.1	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.2		0.6		0.1	
NITROGEN	2.7		1.4		3.2	
OXYGEN	0.4		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.3	
HELIUM	0.09		0.10		0.15	
HEATING VALUE*	1060		1108		1059	
SPECIFIC GRAVITY	0.619		0.632		0.622	

	INDEX 1603 SAMPLE 15806		INDEX 1604 SAMPLE 4490		INDEX 1605 SAMPLE 11075	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	TUTTLE SE		WILDCAT		WILMORE	
WELL NAME	BOX RANCH NO. 1		Mc A. LORIMOR NO. 1		EMERICK A NO. 1	
LOCATION	SEC. 16, T35S, R20W		SEC. 36, T31S, R20W		SEC. 24, T31S, R18W	
OWNER	MID-CONTINENT ENERGY		GULF OIL CORP.		ANADARKO PRODUCTION CO.	
COMPLETED	10/13/78		--/--/00		10/24/66	
SAMPLED	09/09/79		04/23/48		08/25/67	
FORMATION	PENN-MORROW		MISS-		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5650		5191		4966	
WELLHEAD PRESSURE,PSIG	1400		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	8000		240		2570	
COMPONENT, MOLE PCT						
METHANE	92.5		0.0		92.5	
ETHANE	3.5		1.0		3.1	
PROPANE	1.3		---		1.1	
N-BUTANE	0.4		---		0.3	
ISOBUTANE	0.2		---		0.3	
N-PENTANE	0.2		---		0.2	
ISOPENTANE	0.1		---		0.0	
CYCLOPENTANE	TRACE		---		TRACE	
HEXANES PLUS	0.2		---		0.1	
NITROGEN	1.2		97.3		2.2	
OXYGEN	0.0		1.4		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.3		0.2		0.1	
HELIUM	0.03		0.07		0.13	
HEATING VALUE*	1077		18		1055	
SPECIFIC GRAVITY	0.612		0.970		0.606	

	INDEX 1606 SAMPLE 11948		INDEX 1607 SAMPLE 12554		INDEX 1608 SAMPLE 17081	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	COMANCHE		COMANCHE		COMANCHE	
FIELD	WILMORE		WILMORE		WILMORE E	
WELL NAME	BOISSEAU NO. 1		PEPPER D NO. 1-20		W. L. SMITH NO. 1	
LOCATION	SEC. 22, T31S, R18W		SEC. 20, T31S, R17W		SEC. 26, T31S, R17W	
OWNER	PETROLEUM, INC.		GRAHAM-MICHAELIS DRILLING CO		MAURICE L. BROWN CO.	
COMPLETED	09/30/68		04/29/70		08/17/82	
SAMPLED	07/02/68		11/23/70		09/08/83	
FORMATION	MISS-		MISS-NOT GIVEN		MISS---	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5075		5120		4921	
WELLHEAD PRESSURE,PSIG	1483		1504		620	
OPEN FLOW, MCFD	17200		5124		310	
COMPONENT, MOLE PCT						
METHANE	92.8		92.3		91.1	
ETHANE	2.8		3.4		4.0	
PROPANE	0.6		1.3		1.4	
N-BUTANE	0.8		0.4		0.4	
ISOBUTANE	0.0		0.3		0.2	
N-PENTANE	0.2		0.0		0.1	
ISOPENTANE	0.4		0.2		0.2	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	1.8		1.5		2.0	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.10		0.11		0.18	
HEATING VALUE*	1073		1067		1069	
SPECIFIC GRAVITY	0.612		0.606		0.613	

* CALCULATED GROSS BTU PER CU FT, DRY; AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1609 SAMPLE 15386	INDEX 1610 SAMPLE 15387	INDEX 1611 SAMPLE 2684
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COMANCHE	COMANCHE	COWLEY
FIELD	YELLOWSTONE N	YELLOWSTONE N	FERGUSON
WELL NAME	MCMORAN NO. 1	MCMORAN NO. 1	FERGUSON NO. 1
LOCATION	SEC. 8, T35S, R16W	SEC. 8, T35S, R16W	SEC. 21, T30S, R8E
OWNER	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.	BILL LASSEN, ET AL.
COMPLETED	06/15/78	06/15/78	--/--/00
SAMPLED	09/27/78	09/27/78	12/06/34
FORMATION	MISS---	PENN-FORT SCOTT	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	370
DEPTH, FEET	5280	5164	2055
WELLHEAD PRESSURE,PSIG	1735	1725	NOT GIVEN
OPEN FLOW, MCFD	700	8000	1750
COMPONENT, MOLE PCT			
METHANE	92.4	89.7	29.0
ETHANE	3.6	4.0	16.8
PROPANE	1.3	2.0	---
N-BUTANE	0.4	0.7	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	1.0	1.9	45.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	7.2
HELIUM	0.07	0.08	1.59
HEATING VALUE*	1086	1111	595
SPECIFIC GRAVITY	0.619	0.639	0.888

	INDEX 1612 SAMPLE 3185	INDEX 1613 SAMPLE 10435	INDEX 1614 SAMPLE 10436
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	GEUDA SPRINGS	GIBSON	GIBSON
WELL NAME	N. E. MULKEY NO. 1	L. V. SCOTT NO. 1	L. M. BRYANT A-S
LOCATION	SEC. 8, T34S, R3E	SEC. 9, T35S, R3E	SEC. 32, T34S, R3E
OWNER	CONSOLIDATED GAS UTIL. CORP.	TEXACO INC.	TEXACO INC.
COMPLETED	03/17/34	06/28/63	07/27/52
SAMPLED	03/19/42	03/08/66	03/08/66
FORMATION	PENN-BARTLESVILLE	PENN-SEVERY	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1863	1450	3375
WELLHEAD PRESSURE,PSIG	450	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	350	235	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.9	75.0	11.5
ETHANE	14.4	4.3	27.8
PROPANE	---	2.0	33.2
N-BUTANE	---	0.7	11.3
ISOBUTANE	---	0.4	4.0
N-PENTANE	---	0.1	3.2
ISOPENTANE	---	0.3	2.9
CYCLOPENTANE	---	0.1	0.5
HEXANES PLUS	---	0.2	2.1
NITROGEN	24.6	16.2	2.5
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.9
HELIUM	0.75	0.40	0.04
HEATING VALUE*	965	957	2379
SPECIFIC GRAVITY	0.725	0.695	1.454

	INDEX 1615 SAMPLE 1194	INDEX 1616 SAMPLE 1870	INDEX 1617 SAMPLE 1984
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	GRAHAM	JARVIS	JARVIS
WELL NAME	GRAHAM NO. 3	JARVIS NO. 1	HARRIS NO. 2
LOCATION	NOT GIVEN	SEC. 30, T31S, R5E	SEC. 20, T31S, R6E
OWNER	MARLAND OIL CO.	ROTH & FAUROT	MID-KANSAS OIL & GAS CO.
COMPLETED	--/--/00	08/--/25	12/31/29
SAMPLED	12/11/25	09/23/29	04/07/30
FORMATION	ORDO-WILCOX	NOT GIVEN	TERT-
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	3508	1700	2211
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	750
OPEN FLOW, MCFD	NOT GIVEN	5000	16500
COMPONENT, MOLE PCT			
METHANE	49.4	55.7	64.3
ETHANE	29.3	13.3	12.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.3	29.8	21.4
OXYGEN	0.9	0.8	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.85	0.90	0.78
HEATING VALUE*	1025	803	883
SPECIFIC GRAVITY	0.784	0.742	0.708

	INDEX 1618 SAMPLE 13144	INDEX 1619 SAMPLE 4772	INDEX 1620 SAMPLE 15683
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	LAYT	NEW SALEM N	POSEY
WELL NAME	WALKER NO. 1	ROBERTS NO. 1	LINK-RICHARDSON NO. 2
LOCATION	SEC. 18, T32S, R8E	SEC. 21, T31S, R5E	SEC. 28, T33S, R4E
OWNER	BRUCE D. BENSON	EARL J. WAKEFIELD	PETROLEUM ENTERPRISES
COMPLETED	10/20/71	06/--/49	06/16/79
SAMPLED	02/10/72	10/16/49	06/28/79
FORMATION	PENN-LAYTON	PENN-LAYTON	PERM-ADMIRE
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1950	2396	676
WELLHEAD PRESSURE,PSIG	400	800	230
OPEN FLOW, MCFD	12000	3300	1500
COMPONENT, MOLE PCT			
METHANE	54.2	73.0	78.2
ETHANE	3.9	6.6	4.8
PROPANE	2.5	5.2	2.3
N-BUTANE	0.5	0.9	0.7
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	37.3	14.6	12.8
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.87	0.56	0.38
HEATING VALUE*	719	1011	993
SPECIFIC GRAVITY	0.767	0.710	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1621 SAMPLE 5187	INDEX 1622 SAMPLE 1719	INDEX 1623 SAMPLE 1869
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	COWLEY
FIELD	WALNUT BEND	WERNER	WERNER
WELL NAME	F. M. LEMERT	NO. 1	WERNER NO. 1
LOCATION	SEC. 11, T34S, R4E	SEC. 31, T32S, R6E	SEC. 31, T32S, R6E
OWNER	F. M. LEMERT	ROTH & FAUROT	HOME NATURAL GAS CO.
COMPLETED	07/04/40	06/--/28	07/--/28
SAMPLED	03/19/42	02/26/29	09/20/29
FORMATION	MISS-CHAT	PENN-KANSAS CITY	PENN-LAYTON
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	3075	2400	2400
WELLHEAD PRESSURE,PSIG	1100	800	920
OPEN FLOW, MCFD	750	2000	2500
COMPONENT, MOLE PCT			
METHANE	51.1	41.2	52.4
ETHANE	16.5	31.3	23.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.4	26.5	21.3
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	1.6
HELIUM	0.55	0.55	0.61
HEATING VALUE*	915	978	959
SPECIFIC GRAVITY	0.724	0.820	0.776

	INDEX 1624 SAMPLE 1787	INDEX 1625 SAMPLE 1343	INDEX 1626 SAMPLE 2676
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	COWLEY	DICKINSON
FIELD	WILDCAT	WILMOT-FLORAL	NOT GIVEN
WELL NAME	STERLING NO. 1	COFFEE NO. 1	PHILLIPS LEASE
LOCATION	SEC. 5, T33, R5E	SEC. 30, T31S, R5E	SEC. 15, T15S, R1E
OWNER	BRADY & COOPER	ROTH & FAUROT	FRED FRANKS
COMPLETED	12/--/28	07/--/25	--/--/00
SAMPLED	05/24/29	01/13/27	07/17/34
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	380
DEPTH, FEET	1775	1682	2025
WELLHEAD PRESSURE,PSIG	680	250	NOT GIVEN
OPEN FLOW, MCFD	1000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	44.9	56.4	2.4
ETHANE	6.9	13.2	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	46.8	28.9	93.6
OXYGEN	0.3	0.7	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.5	0.0
HELIUM	0.91	0.78	3.76
HEATING VALUE*	578	808	24
SPECIFIC GRAVITY	0.782	0.747	0.926

	INDEX 1627 SAMPLE 3176	INDEX 1628 SAMPLE 12164	INDEX 1629 SAMPLE 11317
STATE	KANSAS	KANSAS	KANSAS
COUNTY	DOUGLAS	EDWARDS	EDWARDS
FIELD	EUDORA	BADGER HILL	BENSON
WELL NAME	NEIS ESTATE NO. 2	CARLSON NO. 1	HAMMEKE NO. 1
LOCATION	SEC. 3, T13S, R21E	SEC. 12, T23S, R19W	SEC. 1, T24S, R16W
OWNER	T. A. GOFF	WALTERS DRILLING CO.	ET AL, INC.
COMPLETED	09/--/40	06/30/69	10/04/67
SAMPLED	03/26/42	12/12/69	02/21/68
FORMATION	PENN-SQUIRREL	PENN-CHEROKEE	CAMO-CONGLOMERATE
GEOLOGIC PROVINCE CODE	335	360	360
DEPTH, FEET	580	4407	4060
WELLHEAD PRESSURE,PSIG	254	1600	NOT GIVEN
OPEN FLOW, MCFD	130	3000	3740
COMPONENT, MOLE PCT			
METHANE	91.3	33.2	63.8
ETHANE	4.3	3.3	3.6
PROPANE	---	1.6	1.5
N-BUTANE	---	0.4	0.6
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	3.4	57.1	24.6
OXYGEN	0.3	0.0	2.8
ARGON	---	0.2	0.2
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.4
HELIUM	0.30	3.34	1.72
HEATING VALUE*	1002	479	799
SPECIFIC GRAVITY	0.599	0.830	0.725

	INDEX 1630 SAMPLE 11397	INDEX 1631 SAMPLE 9604	INDEX 1632 SAMPLE 10115
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	BENSON	BORDEWICK	BORDEWICK E
WELL NAME	HAMMEKE NO. 1	BELCHER NO. 1	BORDEWICK UNIT NO. 1
LOCATION	SEC. 1, T24S, R16W	SEC. 19, T26S, R18W	SEC. 23, T26S, R18W
OWNER	ET AL, INC.	AYLWARD DRILLING CO.	WESTERN PETROLEUM CO., INC.
COMPLETED	10/04/67	09/09/63	10/02/64
SAMPLED	03/15/68	10/18/64	09/09/65
FORMATION	CAMO-CONGLOMERATE	PENN-TARKIO	PENN-WABAUNSEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4060	3336	3236
WELLHEAD PRESSURE,PSIG	1203	1050	1022
OPEN FLOW, MCFD	3740	1450	8157
COMPONENT, MOLE PCT			
METHANE	75.9	80.1	81.0
ETHANE	4.1	2.6	3.2
PROPANE	1.7	1.0	1.5
N-BUTANE	0.6	0.2	0.6
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	14.0	15.1	12.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	2.67	0.45	0.35
HEATING VALUE*	939	911	987
SPECIFIC GRAVITY	0.666	0.650	0.667

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1633 SAMPLE 11666	INDEX 1634 SAMPLE 9574	INDEX 1635 SAMPLE 9575
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	BORDEWICK SW	BRADBRIDGE	BRADBRIDGE
WELL NAME	BLANCHE A. KING NO. 1	KLEIN NO. 1	KLEIN NO. 1
LOCATION	SEC. 25, T26S, R19W	SEC. 2, T24S, R16W	SEC. 2, T24S, R16W
OWNER	NORTHERN PUMP CO.	MESSMAN-RINEHART OIL CO.	MESSMAN-RINEHART OIL CO.
COMPLETED	07/25/68	06/10/64	06/10/64
SAMPLED	10/02/68	09/29/64	09/24/64
FORMATION	MISS---	PENN-LANSING	PENN-HOWARD
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4758	3606	2994
WELLHEAD PRESSURE,PSIG	1558	1147	963
OPEN FLOW, MCFD	2310	9000	2500
COMPONENT, MOLE PCT			
METHANE	90.7	61.6	71.1
ETHANE	3.1	3.5	3.0
PROPANE	1.0	2.0	1.6
N-BUTANE	0.3	0.7	0.8
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	3.8	29.1	21.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.4	0.5
HELIUM	0.29	0.83	0.61
HEATING VALUE*	1040	796	897
SPECIFIC GRAVITY	0.612	0.749	0.712

	INDEX 1636 SAMPLE 10619	INDEX 1637 SAMPLE 8819	INDEX 1638 SAMPLE 15269
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	BRADBRIDGE	BRITTON	BRITTON
WELL NAME	MCDIG	BRITTON NO. 1	BRITTON NO. 1
LOCATION	SEC. 1, T24S, R16W	SEC. 9, T26S, R17W	SEC. 8, T26S, R18W
OWNER	BARNETT OIL CO.	LEBEN DRILLING, INC.	RUPE OIL CO., INC.
COMPLETED	--/--/00	--/--/00	01/--/71
SAMPLED	06/13/66	12/29/62	04/21/78
FORMATION	CAMO-ARBUCKLE	MISS-KINDERHOOK	MISS-CHERT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4053	4475	4709
WELLHEAD PRESSURE,PSIG	1300	NOT GIVEN	1330
OPEN FLOW, MCFD	8000	NOT GIVEN	21000
COMPONENT, MOLE PCT			
METHANE	38.8	88.5	89.4
ETHANE	4.8	1.2	3.2
PROPANE	2.4	1.1	1.1
N-BUTANE	0.9	0.4	0.4
ISOBUTANE	0.7	0.2	0.2
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	46.5	5.4	4.7
OXYGEN	0.0	0.0	0.0
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.1
HELIUM	4.25	0.49	0.440
HEATING VALUE*	495	1021	1029
SPECIFIC GRAVITY	0.826	0.620	0.617

	INDEX 1639 SAMPLE 10712	INDEX 1640 SAMPLE 10310	INDEX 1641 SAMPLE 10343
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	CHURCHVIEW	EMBRY	EMBRY
WELL NAME	PLOGER NO. 1	B. A. MEYER NO. 1	EMBRY NO. 1
LOCATION	SEC. 20, T23S, R19W	SEC. 23, T24S, R16W	SEC. 24, T24S, R16W
OWNER	STERLE DRILLING CO.	HUMBLE OIL & REFINING CO.	SUNRAY DX OIL CO.
COMPLETED	--/--/00	04/22/58	04/08/57
SAMPLED	09/08/66	12/06/65	12/21/65
FORMATION	MISS---	MISS-KINDERHOOK	MISS-KINDERHOOK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4520	4224	4215
WELLHEAD PRESSURE,PSIG	NOT GIVEN	739	731
OPEN FLOW, MCFD	367	1060	4704
COMPONENT, MOLE PCT			
METHANE	35.2	89.8	88.6
ETHANE	2.2	3.6	3.9
PROPANE	1.1	1.4	1.4
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.5	0.2	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	56.0	3.6	4.3
OXYGEN	0.3	0.0	0.0
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	3.25	0.45	0.44
HEATING VALUE*	476	1047	1049
SPECIFIC GRAVITY	0.820	0.617	0.625

	INDEX 1642 SAMPLE 11318	INDEX 1643 SAMPLE 13931	INDEX 1644 SAMPLE 12759
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	EMBRY	EMBRY	ENLOW
WELL NAME	HOWELL NO. 1	BELT-JOHNSON NO. 1	SMITH NO. 1
LOCATION	SEC. 12, T24S, R16W	SEC. 11, T24S, R16W	SEC. 8, T24S, R16W
OWNER	E-Z OIL, INC.	ALPINE DRILLING CO.	IMPERIAL OIL CO.
COMPLETED	09/27/67	04/12/70	--/--/00
SAMPLED	02/24/68	03/04/74	04/10/71
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4034	4075	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1177	1150	1250
OPEN FLOW, MCFD	3180	750000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	41.0	34.6	88.7
ETHANE	4.7	4.5	3.6
PROPANE	2.5	2.6	1.3
N-BUTANE	1.0	0.9	0.5
ISOBUTANE	0.6	0.9	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.5	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	44.5	50.2	4.7
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.2	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	TRACE
HELIUM	4.23	4.66	0.45
HEATING VALUE*	654	597	1052
SPECIFIC GRAVITY	0.816	0.841	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1645 SAMPLE 12885	INDEX 1646 SAMPLE 12886	INDEX 1647 SAMPLE 5853
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	ENLOW	ENLOW	GRONER
WELL NAME	MANN NO. 3	ENLOW NO. 1	GRONER NO. 1
LOCATION	SEC. 4, T24S, R16W	SEC. 9, T24S, R16W	SEC. 34, T25S, R20W
OWNER	MESSMAN-RINEHART OIL CO.	MESSMAN-RINEHART OIL CO.	GMR OIL CO.
COMPLETED	09/10/71	07/02/59	--/--/00
SAMPLED	09/01/71	06/16/71	06/01/55
FORMATION	MISS---	MISS---	MISS-OSAGE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4161	4104	4670
WELLHEAD PRESSURE,PSIG	1220	NOT GIVEN	1475
OPEN FLOW, MCFD	1000	NOT GIVEN	2600
COMPONENT, MOLE PCT			
METHANE	89.5	84.9	44.3
ETHANE	3.3	3.2	4.0
PROPANE	1.5	1.3	1.0
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	4.1	8.1	45.8
OXYGEN	0.1	1.0	TRACE
ARGON	TRACE	0.1	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.48	0.38	3.46
HEATING VALUE*	1043	989	593
SPECIFIC GRAVITY	0.619	0.640	0.785

	INDEX 1648 SAMPLE 9400	INDEX 1649 SAMPLE 11132	INDEX 1650 SAMPLE 13153
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	GRONER	GRONER	GRONER
WELL NAME	JENSEN NO. 1	JENSEN B NO. 1	JENSEN
LOCATION	SEC. 6, T23S, R20W	SEC. 6, T23S, R20W	SEC. 6, T23S, R20W
OWNER	IMPERIAL OIL OF KANSAS, INC.	CITIES SERVICE OIL CO.	RICHARD R. MORMER
COMPLETED	01/29/64	05/22/64	01/29/64
SAMPLED	05/14/64	09/22/67	02/20/72
FORMATION	MISS-	MISS-OSAGE	MISS-OSAGE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4496	4496	4496
WELLHEAD PRESSURE,PSIG	1050	1420	1050
OPEN FLOW, MCFD	1140	NOT GIVEN	1140
COMPONENT, MOLE PCT			
METHANE	56.1	56.2	57.3
ETHANE	3.8	3.7	3.7
PROPANE	1.6	1.5	1.7
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	34.3	34.2	32.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	2.72	2.76	2.68
HEATING VALUE*	719	725	735
SPECIFIC GRAVITY	0.742	0.741	0.738

	INDEX 1651 SAMPLE 11267	INDEX 1652 SAMPLE 16209	INDEX 1653 SAMPLE 1879
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	MARTIN	MASSEY	MCCARTY
WELL NAME	ROBBINS NO. 1	TWITCHELL NO. 1-2	MCCARTY NO. 1
LOCATION	SEC. 33, T26S, R20W	SEC. 2, T24S, R17W	SEC. 31, T25S, R17W
OWNER	MULL DRILLING CO., INC.	F. G. HOLL	BRITISH AMERICAN OIL CO. LTD
COMPLETED	07/17/67	06/04/80	07/--/29
SAMPLED	02/01/68	03/13/80	09/26/29
FORMATION	UNKN-DOLOMITE	MISS-CONGLOMERATE	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4797	4239	4666
WELLHEAD PRESSURE,PSIG	1350	1185	NOT GIVEN
OPEN FLOW, MCFD	3500	3876	14000
COMPONENT, MOLE PCT			
METHANE	78.7	86.9	88.5
ETHANE	5.2	3.4	7.1
PROPANE	1.9	1.3	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	11.4	6.5	3.4
OXYGEN	0.0	0.0	0.3
ARGON	0.1	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	1.04	0.73	0.44
HEATING VALUE*	993	1013	1024
SPECIFIC GRAVITY	0.669	0.626	0.607

	INDEX 1654 SAMPLE 3236	INDEX 1655 SAMPLE 7828	INDEX 1656 SAMPLE 8434
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	MCCARTY	MCCLANAHAN	MCCLANAHAN E
WELL NAME	T. L. MCCARTY	KING NO. 1	NEUSOM NO. 1
LOCATION	SEC. 22, T25S, R17W	SEC. 2, T26S, R18W	SEC. 12, T26S, R18W
OWNER	STANOLIND OIL & GAS CO.	JOHN R. EVANS	RAYMOND OIL CO., INC.
COMPLETED	05/23/30	12/--/59	02/22/62
SAMPLED	03/26/42	01/24/61	02/20/62
FORMATION	PENN-CONGLOMERATE BASAL	MISS---	CARO-CONGLOMERATE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4950	4650	4520
WELLHEAD PRESSURE,PSIG	340	950	NOT GIVEN
OPEN FLOW, MCFD	256	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.3	90.0	78.1
ETHANE	12.2	3.4	2.9
PROPANE	---	1.0	0.9
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.3	0.1
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	4.6	4.4	14.1
OXYGEN	0.3	0.0	2.5
ARGON	---	TRACE	0.1
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.38	0.20	0.30
HEATING VALUE*	1052	1036	898
SPECIFIC GRAVITY	0.636	0.617	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1657 SAMPLE 8437	INDEX 1658 SAMPLE 11390	INDEX 1659 SAMPLE 15845
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	MCCLANAHAN E	MCCLANAHAN E	MCLEAN
WELL NAME	NEUSOM NO. 1	WELSCH NO. 1	MCLEAN NO. 1
LOCATION	SEC. 12, T26S, R18W	SEC. 13, T26S, R18W	SEC. 9, T25S, R18W
OWNER	RAYMOND OIL CO., INC.	GLEN N. RUPE	IMPERIAL OIL CO.
COMPLETED	02/22/62	10/06/67	10/25/78
SAMPLED	02/28/62	03/12/68	11/29/79
FORMATION	MISS---	MISS-	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4355	4529	4398
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1080	1350
OPEN FLOW, MCFD	NOT GIVEN	4000	6600
COMPONENT, MOLE PCT			
METHANE	89.1	89.5	87.1
ETHANE	3.2	3.3	3.2
PROPANE	1.0	1.0	1.0
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.2	TRACE	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	4.9	4.5	6.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.6
HELIUM	0.57	0.38	0.64
HEATING VALUE*	1024	1030	993
SPECIFIC GRAVITY	0.619	0.617	0.622

	INDEX 1660 SAMPLE 16355	INDEX 1661 SAMPLE 15234	INDEX 1662 SAMPLE 11629
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	MCLEAN S	MULL	TITUS
WELL NAME	E. SCHALLER NO. 1	MULL NO. 2	TITUS NO. 1
LOCATION	SEC. 16, T25S, R18W	SEC. 33, T26S, R17W	SEC. 4, T26S, R19W
OWNER	BRUNSON-SPINES, INC.	IMPERIAL OIL CO.	GLEN N. RUPE
COMPLETED	08/22/81	04/23/77	06/26/68
SAMPLED	10/20/81	02/10/78	08/15/68
FORMATION	MISS-CHERT	PENN-CHEROKEE	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4588	4545	4730
WELLHEAD PRESSURE,PSIG	1100	1320	1250
OPEN FLOW, MCFD	1500	2777	1300
COMPONENT, MOLE PCT			
METHANE	84.4	90.6	65.2
ETHANE	3.3	3.3	4.7
PROPANE	1.1	1.4	1.9
N-BUTANE	0.4	0.5	0.7
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	9.4	2.9	24.2
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.3
HELIUM	0.45	0.28	1.97
HEATING VALUE*	985	1064	860
SPECIFIC GRAVITY	0.640	0.618	0.724

	INDEX 1663 SAMPLE 8218	INDEX 1664 SAMPLE 16872	INDEX 1665 SAMPLE 14755
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	TROUSDALE S	WAC N	WAYNE
WELL NAME	KING NO. 1	WHITE NO. 2-1	BRITTON NO. 1
LOCATION	SEC. 33, T26S, R16W	SEC. 1, T24S, R18W	SEC. 15, T24S, R17W
OWNER	SUNRAY MID-CONTINENT OIL CO.	F. G. HOLL	F. G. HOLL
COMPLETED	11/16/56	09/01/82	03/19/76
SAMPLED	12/13/56	04/08/83	09/14/76
FORMATION	PENN-CHEROKEE	PENN-CONGLOMERATE	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4472	4372	4321
WELLHEAD PRESSURE,PSIG	1180	480	1288
OPEN FLOW, MCFD	5	1340	5500
COMPONENT, MOLE PCT			
METHANE	82.8	78.7	88.8
ETHANE	3.5	4.0	3.2
PROPANE	0.9	1.5	1.1
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.6	0.3	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	10.1	13.0	5.6
OXYGEN	1.1	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.2	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.51	1.17	0.57
HEATING VALUE*	967	955	1012
SPECIFIC GRAVITY	0.651	0.660	0.614

	INDEX 1666 SAMPLE 3675	INDEX 1667 SAMPLE 3737	INDEX 1668 SAMPLE 5643
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	WIL	WIL	WIL
WELL NAME	BREITENBACH NO. 1	ENGLISH NO. 1	MOKATY NO. 1
LOCATION	SEC. 5, T25S, R16W	SEC. 8, T25S, R16W	SEC. 25, T25S, R17W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES PRODUCTION CORP.
COMPLETED	09/27/43	07/07/42	04/29/54
SAMPLED	10/09/43	03/24/44	06/23/54
FORMATION	PENN-LANSING-KANSAS CITY	PENN-LANSING	PENN-BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3778	3784	4385
WELLHEAD PRESSURE,PSIG	1100	NOT GIVEN	1588
OPEN FLOW, MCFD	17650	25203	2850
COMPONENT, MOLE PCT			
METHANE	70.6	58.8	87.1
ETHANE	12.8	24.6	3.2
PROPANE	---	---	1.3
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	15.7	15.6	6.2
OXYGEN	0.1	0.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.46	0.40	0.67
HEATING VALUE*	945	1036	1024
SPECIFIC GRAVITY	0.684	0.743	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1669 SAMPLE 7779	INDEX 1670 SAMPLE 10304	INDEX 1671 SAMPLE 10309
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	WIL	WIL	WIL
WELL NAME	FATZER NO. 1	FATZER UNIT NO. 1	RUSSELL A. NO. 1
LOCATION	SEC. 34, T25S, R17W	SEC. 34, T25S, R17W	SEC. 26, T25S, R16W
OWNER	NATIONAL DRILLING CO.	MOBIL OIL CO.	NATURAL GAS & OIL CORP.
COMPLETED	06/29/60	07/07/60	06/09/58
SAMPLED	11/21/60	12/01/65	12/03/65
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4489	4489	4373
WELLHEAD PRESSURE,PSIG	1400	1320	13
OPEN FLOW, MCFD	4985	4740	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.9	88.7	81.7
ETHANE	3.4	3.6	7.5
PROPANE	1.0	1.4	3.4
N-BUTANE	0.3	0.5	1.4
ISOBUTANE	0.3	0.2	0.7
N-PENTANE	TRACE	0.2	0.4
ISOPENTANE	0.2	0.1	0.7
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.8
NITROGEN	4.2	4.3	2.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.50	0.41	0.15
HEATING VALUE*	1027	1050	1220
SPECIFIC GRAVITY	0.610	0.627	0.717

	INDEX 1672 SAMPLE 14605	INDEX 1673 SAMPLE 16246	INDEX 1674 SAMPLE 16600
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	WIL	WIL	WIL
WELL NAME	RUSSELL "A" NO. 1	SCHULTZ D NO. 1	TURNER NO. 1
LOCATION	SEC. 19, T25S, R16W	SEC. 16, T26S, R16W	SEC. 26, T25S, R17W
OWNER	D. R. LAUCK OIL CO., INC.	BENSON MINERALS GROUP, INC.	LEBSACK OIL PRODUCTION, INC.
COMPLETED	12/01/75	--/--/00	08/02/82
SAMPLED	03/03/76	04/22/81	08/02/82
FORMATION	PENN-CHEROKEE	MISS-KINDERHOOK	MISS-CHERT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4354	4450	4474
WELLHEAD PRESSURE,PSIG	1185	NOT GIVEN	1120
OPEN FLOW, MCFD	2800	700	300
COMPONENT, MOLE PCT			
METHANE	85.7	80.5	88.7
ETHANE	3.3	4.2	3.3
PROPANE	1.0	1.8	1.1
N-BUTANE	0.3	0.5	0.4
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	8.3	10.8	4.8
OXYGEN	0.0	0.0	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.48	1.00	0.47
HEATING VALUE*	978	995	1034
SPECIFIC GRAVITY	0.629	0.662	0.625

	INDEX 1675 SAMPLE 16676	INDEX 1676 SAMPLE 7677	INDEX 1677 SAMPLE 16685
STATE	KANSAS	KANSAS	KANSAS
COUNTY	EDWARDS	EDWARDS	EDWARDS
FIELD	WIL	WILDCAT	WILDCAT
WELL NAME	EUGENE FISHER NO. 1	KING B NO. 1	STATE NO. 1-8
LOCATION	SEC. 25, T25S, R17W	NOT GIVEN	SEC. 8, T25S, R18W
OWNER	PETROMARK EXPLORATION, INC.	PICKRELL DRILLING CO.	IMPERIAL OIL CO.
COMPLETED	09/15/81	--/--/00	08/03/82
SAMPLED	09/29/82	09/13/60	10/07/82
FORMATION	MISS---	MISS-	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4428	NOT GIVEN	4565
WELLHEAD PRESSURE,PSIG	1300	1680	1260
OPEN FLOW, MCFD	340	NOT GIVEN	3500
COMPONENT, MOLE PCT			
METHANE	88.7	90.2	80.4
ETHANE	3.3	3.4	3.3
PROPANE	1.1	0.8	1.3
N-BUTANE	0.4	0.2	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	4.3	3.7	10.6
OXYGEN	0.1	0.0	0.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	2.1
HELIUM	0.45	0.30	0.66
HEATING VALUE*	1028	1051	951
SPECIFIC GRAVITY	0.621	0.621	0.664

	INDEX 1678 SAMPLE 171	INDEX 1679 SAMPLE 184	INDEX 1680 SAMPLE 185
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELK	ELK	ELK
FIELD	HALE-INGE	HALE-INGE	HALE-INGE
WELL NAME	RUDDLE NO. 3 SW	KIMSEY NO. 1	FOSTER NO. 1
LOCATION	SEC. 21, T31S, R12E	SEC. 20, T31S, R12E	SEC. 13, T31S, R12E
OWNER	SOUTHWESTERN GAS CO.	HOUSTON-OKLAHOMA OIL & GAS C	SOUTHWESTERN GAS CO.
COMPLETED	10/--/17	--/--/00	09/--/29
SAMPLED	03/29/20	03/31/20	03/31/20
FORMATION	PENN---	NOT GIVEN	PENN---
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	778	NOT GIVEN	689
WELLHEAD PRESSURE,PSIG	115	NOT GIVEN	120
OPEN FLOW, MCFD	790	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	81.7	83.4	85.7
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	17.0	14.5	13.7
OXYGEN	0.4	1.4	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	0.60	0.62	0.52
HEATING VALUE*	828	845	868
SPECIFIC GRAVITY	0.626	0.629	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1681 SAMPLE 15684	INDEX 1682 SAMPLE 15828	INDEX 1683 SAMPLE 215
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELK	ELK	ELK
FIELD	LOGSDEN	LOGSDEN	MOLINE
WELL NAME	TODD NO. 2	PINEGAR NO. 1	SWISHER NO. 1
LOCATION	SEC. 28, T31S, R9E	SEC. 21, T31S, R9E	SEC. 10, T32S, R9E
OWNER	PETROLEUM ENTERPRISES	RAM OIL CO.	MOLINE GAS CO.
COMPLETED	10/17/78	06/--/79	03/--/20
SAMPLED	06/28/79	11/02/79	04/15/20
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN---
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1766	1812	1450
WELLHEAD PRESSURE,PSIG	600	600	200
OPEN FLOW, MCFD	4000	2500	1500
COMPONENT, MOLE PCT			
METHANE	55.9	54.2	74.4
ETHANE	5.9	5.6	4.9
PROPANE	3.8	3.6	---
N-BUTANE	1.1	1.1	---
ISOBUTANE	0.6	0.6	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	30.7	32.5	19.6
OXYGEN	0.1	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	1.15	1.24	0.72
HEATING VALUE*	859	841	841
SPECIFIC GRAVITY	0.786	0.792	0.658

	INDEX 1684 SAMPLE 216	INDEX 1685 SAMPLE 1585	INDEX 1686 SAMPLE 3222
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELK	ELK	ELLSWORTH
FIELD	MOLINE	WEBB	ELLSWORTH
WELL NAME	WOLF NO. 1	WEBB NO. 22	STATE NO. 1
LOCATION	SEC. 2, T32S, R9E	SEC. 14, T31S, R10E	SEC. 29, T15S, R8W
OWNER	MOLINE GAS CO.	UNION GAS CORP.	INGLING & PARKER
COMPLETED	02/--/19	01/14/28	06/25/41
SAMPLED	04/15/20	03/07/28	03/25/42
FORMATION	PENN---	NOT GIVEN	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	365	365	385
DEPTH, FEET	1500	1113	2480
WELLHEAD PRESSURE,PSIG	130	335	914
OPEN FLOW, MCFD	2000	1036	3079
COMPONENT, MOLE PCT			
METHANE	75.1	66.7	58.4
ETHANE	5.5	9.7	12.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	18.6	22.2	27.4
OXYGEN	0.5	0.6	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	TRACE	0.63	0.80
HEATING VALUE*	859	849	821
SPECIFIC GRAVITY	0.663	0.698	0.732

	INDEX 1687 SAMPLE 14417	INDEX 1688 SAMPLE 16739	INDEX 1689 SAMPLE 16210
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELLSWORTH	ELLSWORTH	ELLSWORTH
FIELD	ELLSWORTH	GREEN GARDEN	WANAK
WELL NAME	KIHN NO. 1	MARIE WARHOFF NO. 1	WANAK NO. 1
LOCATION	SEC. 30, T15S, R8W	SEC. 36, T16S, R9W	SEC. 22, T16S, R7W
OWNER	ARTHUR J GORSKI	AMERICAN PETROFINA CO. OF TE	RESOURCES INVESTMENT CORP.
COMPLETED	06/06/75	05/05/82	--/--/00
SAMPLED	07/23/75	12/17/82	03/--/81
FORMATION	PENN-LANSING	PENN-SEWERY	PENN-INDIAN CAVE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2550	2445	1732
WELLHEAD PRESSURE,PSIG	900	825	NOT GIVEN
OPEN FLOW, MCFD	2000	970	3350
COMPONENT, MOLE PCT			
METHANE	62.1	55.8	55.9
ETHANE	5.8	2.2	1.9
PROPANE	3.2	1.1	0.8
N-BUTANE	1.1	0.2	0.2
ISOBUTANE	0.6	0.2	0.1
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	25.6	38.6	39.3
OXYGEN	0.8	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.9	0.1	0.9
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.80	1.15	1.40
HEATING VALUE*	904	860	635
SPECIFIC GRAVITY	0.758	0.747	0.734

	INDEX 1690 SAMPLE 2582	INDEX 1691 SAMPLE 9930	INDEX 1692 SAMPLE 16583
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELLSWORTH	ELLSWORTH	ELLSWORTH
FIELD	NOT GIVEN	SCHLESSINGER	STOLTENBERG
WELL NAME	KONAK NO. 1	SCHLESSINGER	KRUSE NO. 1
LOCATION	SEC. 15, T16S, R7W	SEC. 30, T16S, R10W	SEC. 20, T17S, R9W
OWNER	MID-KANSAS OIL & GAS CO.	MESSMAN-RINEHART OIL CO.	PATTON OIL CO.
COMPLETED	--/--/00	05/11/65	01/20/82
SAMPLED	01/09/33	06/17/65	07/20/82
FORMATION	NOT GIVEN	PENN-LANSING	PENN-STOTLER
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	1765	3042	2134
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1050	670
OPEN FLOW, MCFD	2400	2500	950
COMPONENT, MOLE PCT			
METHANE	49.2	62.4	61.9
ETHANE	3.8	4.8	1.9
PROPANE	---	3.2	0.7
N-BUTANE	---	1.0	0.2
ISOBUTANE	---	0.4	0.1
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	46.6	24.7	33.8
OXYGEN	4.7	0.0	0.0
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	1.9	0.1
HELIUM	1.10	1.05	1.12
HEATING VALUE*	507	871	699
SPECIFIC GRAVITY	0.785	0.757	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1693 SAMPLE 7640	INDEX 1694 SAMPLE 2580	INDEX 1695 SAMPLE 3875
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELLSWORTH	FINNEY	FINNEY
FIELD	WILDCAT	HUGOTON	HUGOTON
WELL NAME	NOT GIVEN	BROWN NO. 1	JONES NO. 1
LOCATION	SEC. 19, T16S, R7W	SEC. 16, T25S, R34W	SEC. 34, T26S, R34W
OWNER	KANSAS PETROLEUM, INC.	DENHAM, ET AL.	KELMERICH & PAYNE, INC.
COMPLETED	07/29/60	--/--/00	09/29/36
SAMPLED	07/29/60	12/18/32	05/16/42
FORMATION	PERM-INDIAN CAVE	NOT GIVEN	PERM-LIME
GEOLOGIC PROVINCE CODE	385	360	360
DEPTH, FEET	1770	2534	2700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	437	440
OPEN FLOW, MCFD	NOT GIVEN	5500	6398
COMPONENT, MOLE PCT			
METHANE	50.7	65.7	65.0
ETHANE	1.6	17.1	14.7
PROPANE	0.8	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	44.0	16.3	18.3
OXYGEN	0.0	0.3	0.5
ARGON	0.1	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	0.1	1.0
HELIUM	1.30	0.47	0.45
HEATING VALUE*	578	972	922
SPECIFIC GRAVITY	0.762	0.707	0.713

	INDEX 1696 SAMPLE 3767	INDEX 1697 SAMPLE 4227	INDEX 1698 SAMPLE 7478
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	LAYMAN NO. 1	WRIGHT NO. 1	W. K. TATE NO. 1
LOCATION	SEC. 13, T24S, R34W	SEC. 33, T21S, R34W	SEC. 35, T24S, R31W
OWNER	KANSAS-NEBRASKA NATURAL GAS	SHALLOW WATER REFINING CO.	NATIONAL COOP. REFINERY ASSN
COMPLETED	06/20/42	07/26/45	11/04/59
SAMPLED	04/07/44	02/10/47	03/29/60
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2750	2537	2688
WELLHEAD PRESSURE,PSIG	NOT GIVEN	418	420
OPEN FLOW, MCFD	NOT GIVEN	9115	2060
COMPONENT, MOLE PCT			
METHANE	57.6	77.2	46.8
ETHANE	28.2	0.0	1.2
PROPANE	---	---	1.0
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	13.9	21.7	37.9
OXYGEN	0.0	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.9
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.3	11.6
HELIUM	0.16	0.73	0.40
HEATING VALUE*	789	782	528
SPECIFIC GRAVITY	0.751	0.645	0.835

	INDEX 1699 SAMPLE 7494	INDEX 1700 SAMPLE 7517	INDEX 1701 SAMPLE 7695
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	GARDEN CITY AIRPORT NO. 1	SPRATT	GANO NO. 21-1
LOCATION	SEC. 28, T24, R31	SEC. 32, T24S, R33W	SEC. 21, T21S, R33W
OWNER	NORTHERN NATURAL GAS CO.	KANSAS NATURAL GAS, INC.	A. D. MCKELVY
COMPLETED	11/29/59	11/12/59	07/--/60
SAMPLED	04/04/60	04/18/60	09/26/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2658	2556	2588
WELLHEAD PRESSURE,PSIG	400	462	445
OPEN FLOW, MCFD	3500	14500	16300
COMPONENT, MOLE PCT			
METHANE	55.3	67.0	52.9
ETHANE	2.5	5.4	4.1
PROPANE	1.2	2.7	2.4
N-BUTANE	0.4	0.7	0.7
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	39.2	22.9	38.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.80	0.50	0.70
HEATING VALUE*	662	893	724
SPECIFIC GRAVITY	0.749	0.723	0.775

	INDEX 1702 SAMPLE 7697	INDEX 1703 SAMPLE 7771	INDEX 1704 SAMPLE 7772
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	GANO NO. 34-1	MAUDE GREATHOUSE NO. 20	HIPP NO. 11
LOCATION	SEC. 34, T21S, R33W	SEC. 20, T21S, R32W	SEC. 11, T21S, R33W
OWNER	A. D. MCKELVY	A. D. MCKELVY	A. D. MCKELVY
COMPLETED	11/27/59	11/08/60	11/12/60
SAMPLED	09/26/60	11/12/60	11/12/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2629	2656	2581
WELLHEAD PRESSURE,PSIG	408	365	430
OPEN FLOW, MCFD	724	9212	14028
COMPONENT, MOLE PCT			
METHANE	49.7	47.8	42.4
ETHANE	3.7	3.3	4.2
PROPANE	2.1	2.0	2.4
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	42.4	44.8	48.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.80	0.90	0.90
HEATING VALUE*	668	636	623
SPECIFIC GRAVITY	0.788	0.790	0.820

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1705 SAMPLE 7773	INDEX 1706 SAMPLE 7782	INDEX 1707 SAMPLE 7863
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	GANO NO. 1	BIERNACKI NO. 16	FINNUP NO. 1-28
LOCATION	SEC. 35, T21S, R33W	SEC. 16, T24S, R31W	SEC. 28, T21S, R33W
OWNER	A. D. MCKELVY	A. D. MCKELVY	SHELL OIL CO.
COMPLETED	--/--/00	11/19/60	07/21/60
SAMPLED	11/12/60	11/19/60	--/--/00
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2664	2548
WELLHEAD PRESSURE,PSIG	NOT GIVEN	418	392
OPEN FLOW, MCFD	7000	12857	464
COMPONENT, MOLE PCT			
METHANE	43.5	56.1	51.3
ETHANE	2.5	3.2	4.0
PROPANE	1.3	1.6	2.3
N-BUTANE	0.2	0.9	0.6
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	51.9	37.5	40.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.90	0.80	0.80
HEATING VALUE*	538	697	694
SPECIFIC GRAVITY	0.792	0.753	0.778

	INDEX 1708 SAMPLE 7956	INDEX 1709 SAMPLE 8046	INDEX 1710 SAMPLE 12871
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BROWN NO. 1	KERFOOT A-1	U.S.A. NO. 1
LOCATION	SEC. 33, T21S, R33W	SEC. 37, T23S, R31W	SEC. 32, T24S, R34W
OWNER	W. L. HARTMAN	CITIES SERVICE OIL CO.	MOBIL OIL CORP.
COMPLETED	01/28/61	01/20/61	--/--/00
SAMPLED	05/--/61	06/20/61	06/22/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2558	2664	NOT GIVEN
WELLHEAD PRESSURE,PSIG	415	407	235
OPEN FLOW, MCFD	5000	8770	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	50.5	58.2	72.1
ETHANE	3.7	4.0	6.0
PROPANE	2.1	2.5	3.5
N-BUTANE	0.6	0.9	1.0
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	41.4	33.8	16.1
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.80	0.70	0.44
HEATING VALUE*	676	756	992
SPECIFIC GRAVITY	0.782	0.750	0.712

	INDEX 1711 SAMPLE 12987	INDEX 1712 SAMPLE 12992	INDEX 1713 SAMPLE 12993
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	HUGOTON - USA C-1	REEVES NO. 1	HICKS E NO. 1
LOCATION	SEC. 26, T26S, R34W	SEC. 11, T25S, R33W	SEC. 12, T25S, R32W
OWNER	MOBIL OIL CORP.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/25/71	08/24/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.9	66.8	60.6
ETHANE	4.9	4.0	2.5
PROPANE	2.7	2.3	1.3
N-BUTANE	0.6	0.5	0.3
ISOBUTANE	0.4	0.5	0.1
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	17.7	25.4	34.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.45	0.58	0.76
HEATING VALUE*	939	839	714
SPECIFIC GRAVITY	0.695	0.714	0.728

	INDEX 1714 SAMPLE 15231	INDEX 1715 SAMPLE 15232	INDEX 1716 SAMPLE 7589
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	PANOMA	PANOMA	WAMPLER
WELL NAME	U.S.A. "D" NO. 7	JONES-I NO. 1	WAMPLER NO. A-2
LOCATION	SEC. 18, T26S, R34W	SEC. 29, T26S, R34W	SEC. 30, T21S, R33W
OWNER	MELMERICH & PAYNE, INC.	MELMERICH & PAYNE, INC.	IMPERIAL OIL OF KANSAS, INC.
COMPLETED	05/14/77	09/10/77	11/09/59
SAMPLED	03/18/78	03/17/78	06/22/60
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2790	2813	2519
WELLHEAD PRESSURE,PSIG	205	194	600
OPEN FLOW, MCFD	495	340	7000
COMPONENT, MOLE PCT			
METHANE	72.1	71.7	50.7
ETHANE	6.8	5.6	4.2
PROPANE	3.4	3.0	2.5
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	16.0	17.3	39.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.42	0.45	0.80
HEATING VALUE*	1001	973	717
SPECIFIC GRAVITY	0.718	0.714	0.792

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1717 SAMPLE 3932	INDEX 1718 SAMPLE 9206	INDEX 1719 SAMPLE 17152
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FORD	FORD
FIELD	WILDCAT	BUCKLIN	MINNEOLA
WELL NAME	TRESNAN-MILLER NO. 1	JAY BELINGER NO. 1	MCCUNE A NO. 1
LOCATION	SEC. 26, T22S, R34W	SEC. 7, T29S, R21W	SEC. 25, T29S, R25W
OWNER	CARTER OIL CO.	TIME PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/00	08/08/63	11/23/82
SAMPLED	09/14/39	12/26/63	01/10/84
FORMATION	PERM-DOLOMITE	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2608	5057	5404
WELLHEAD PRESSURE,PSIG	435	1520	283
OPEN FLOW, MCFD	1000	3500	163
COMPONENT, MOLE PCT			
METHANE	52.0	83.6	71.0
ETHANE	16.0	4.3	6.6
PROPANE	---	1.4	4.7
N-BUTANE	---	0.6	1.6
ISOBUTANE	---	0.1	0.9
N-PENTANE	---	0.2	0.4
ISOPENTANE	---	0.1	0.5
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	30.8	8.8	13.5
OXYGEN	0.1	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	0.74	0.50	0.30
HEATING VALUE*	813	1011	1101
SPECIFIC GRAVITY	0.762	0.648	0.753

	INDEX 1720 SAMPLE 3204	INDEX 1721 SAMPLE 5622	INDEX 1722 SAMPLE 7641
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FORD	FORD	FORD
FIELD	PLEASANT VALLEY	PLEASANT VALLEY	WILLROADS
WELL NAME	NOT GIVEN	VICE NO. 1	L. A. MCCOY NO. 1
LOCATION	SEC. 34, T27S, R21W	SEC. 1, T28S, R21W	SEC. 26, T27S, R24W
OWNER	SINCLAIR-PRAIRIE OIL CO.	W. J. COPPINGER	TENNESSEE GAS TRANSMISSION C
COMPLETED	06/13/48	02/24/54	07/30/60
SAMPLED	03/19/42	03/04/54	07/30/60
FORMATION	MISS-LIME	MISS-LIME	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4890	5018	2663
WELLHEAD PRESSURE,PSIG	500	1408	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	8520	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.8	83.8	64.0
ETHANE	12.1	4.8	0.5
PROPANE	---	1.7	0.1
N-BUTANE	---	0.6	TRACE
ISOBUTANE	---	0.5	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	7.1	7.4	34.0
OXYGEN	0.4	0.0	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.42	0.41	1.00
HEATING VALUE*	1025	1043	660
SPECIFIC GRAVITY	0.646	0.655	0.696

	INDEX 1723 SAMPLE 7644	INDEX 1724 SAMPLE 1874	INDEX 1725 SAMPLE 3216
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FORD	FRANKLIN	GRAHAM
FIELD	WILLROADS	POMONA N	GETTYSBURG
WELL NAME	MCCOY NO. 1	BARTON NO. 2	MONTGOMERY NO. 1
LOCATION	SEC. 26, T27S, R24W	SEC. 25, T16S, R17E	SEC. 7, T8S, R23W
OWNER	TENNESSEE GAS TRANSMISSION C	H. H. HAWORTH	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	10/01/28	09/20/41
SAMPLED	08/12/60	09/23/29	03/23/42
FORMATION	MISS-	NOT GIVEN	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	360	335	385
DEPTH, FEET	5066	1230	3551
WELLHEAD PRESSURE,PSIG	NOT GIVEN	425	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.9	81.5	3.1
ETHANE	5.9	1.9	25.3
PROPANE	3.5	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	20.2	14.5	67.3
OXYGEN	TRACE	0.7	0.3
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	1.9
HELIUM	0.90	1.05	2.61
HEATING VALUE*	968	860	485
SPECIFIC GRAVITY	0.742	0.627	0.962

	INDEX 1726 SAMPLE 3207	INDEX 1727 SAMPLE 7055	INDEX 1728 SAMPLE 10824
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BLACKWELDER	B. M. RADCLIFF NO. 1	KERMEYER ESTATE NO. 2
LOCATION	SEC. 24, T29S, R35W	SEC. 21, T30S, R35W	SEC. 24, T29S, R37W
OWNER	UNITED PRODUCING CO., INC.	UNITED PRODUCING CO., INC.	ASHLAND OIL & REFINING CO.
COMPLETED	09/27/37	10/13/42	09/17/66
SAMPLED	03/21/42	05/04/59	12/16/66
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2542	2690
WELLHEAD PRESSURE,PSIG	417	362	343
OPEN FLOW, MCFD	11397	13000	38000
COMPONENT, MOLE PCT			
METHANE	68.5	74.2	73.0
ETHANE	16.8	6.1	6.3
PROPANE	---	3.1	3.8
N-BUTANE	---	0.9	1.0
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	13.9	14.0	14.6
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.41	0.40	0.41
HEATING VALUE*	995	1013	1017
SPECIFIC GRAVITY	0.696	0.706	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1729 SAMPLE 6733	INDEX 1730 SAMPLE 7268	INDEX 1731 SAMPLE 7356
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	HINDMARSH NO. 2	WINGER	ANDERSON NO. 1
LOCATION	SEC. 33, T29S, R37W	SEC. 19, T29S, R37W	SEC. 7, T27S, R37W
OWNER	HUGOTON PRODUCTION CO.	HUGOTON PRODUCTION CO.	NORTHERN NATURAL GAS CO.
COMPLETED	01/27/58	07/09/59	08/14/59
SAMPLED	07/16/58	10/29/59	01/21/60
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2755	2880	2694
WELLHEAD PRESSURE,PSIG	407	338	370
OPEN FLOW, MCFD	2431	6727	14670
COMPONENT, MOLE PCT			
METHANE	72.7	71.6	71.0
ETHANE	6.3	4.6	6.3
PROPANE	3.6	5.3	3.4
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.1	0.5	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.7	17.7	17.2
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.40	0.40	0.48
HEATING VALUE*	1015	967	972
SPECIFIC GRAVITY	0.715	0.718	0.710

	INDEX 1732 SAMPLE 7477	INDEX 1733 SAMPLE 7732	INDEX 1734 SAMPLE 7983
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	THORPE C NO. 2	JARVIS NO. 2	GOERTZEN B
LOCATION	SEC. 5, T27S, R37W	SEC. 36, T30S, R38W	SEC. 5, T29S, R38W
OWNER	NORTHERN NATURAL GAS CO.	HUGOTON PRODUCTION CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	01/27/60	09/04/60	04/16/61
SAMPLED	03/29/60	10/21/60	05/20/61
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2725	2800	2650
WELLHEAD PRESSURE,PSIG	425	351	367
OPEN FLOW, MCFD	269	5609	931
COMPONENT, MOLE PCT			
METHANE	71.0	67.4	72.7
ETHANE	5.4	7.4	6.6
PROPANE	2.2	4.1	3.4
N-BUTANE	0.5	1.1	0.8
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	19.7	17.9	15.2
OXYGEN	0.1	0.3	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.40	0.50
HEATING VALUE*	917	1006	997
SPECIFIC GRAVITY	0.705	0.746	0.707

	INDEX 1735 SAMPLE 10883	INDEX 1736 SAMPLE 13116	INDEX 1737 SAMPLE 15034
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	HAMPTON A NO. 2	LUCAS NO. 2	DAVATZ "B" NO. 4
LOCATION	SEC. 2, T28S, R36W	SEC. 33, T30S, R38W	SEC. 13, T28S, R36W
OWNER	CITIES SERVICE OIL CO.	MESA PETROLEUM CO.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	11/07/71	--/--/00
SAMPLED	--/--/00	12/15/71	06/22/TT
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2878	2751	2939
WELLHEAD PRESSURE,PSIG	NOT GIVEN	263	201
OPEN FLOW, MCFD	4600	5100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	70.8	72.5
ETHANE	6.3	5.7	6.5
PROPANE	3.6	3.5	3.6
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	12.6	17.5	15.8
OXYGEN	0.0	0.2	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.40	0.44	0.41
HEATING VALUE*	1010	988	1014
SPECIFIC GRAVITY	0.709	0.726	0.715

	INDEX 1738 SAMPLE 7791	INDEX 1739 SAMPLE 8635	INDEX 1740 SAMPLE 8934
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREELEY	GREELEY	GREELEY
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	CLIFT NO. 1	CLIFT NO. 1	MILLER NO. 1
LOCATION	SEC. 9, T19S, R40W	SEC. 9, T19S, R40W	SEC. 9, T20S, R39W
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	MADSON OIL & GAS CO.
COMPLETED	09/13/60	09/02/60	04/--/60
SAMPLED	12/06/60	08/17/62	04/15/63
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2884	2800	NOT GIVEN
WELLHEAD PRESSURE,PSIG	434	434	NOT GIVEN
OPEN FLOW, MCFD	435	435	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	52.2	52.8	64.1
ETHANE	4.9	4.6	5.2
PROPANE	2.8	2.8	2.9
N-BUTANE	0.8	0.8	1.0
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	37.1	36.9	24.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.6
HELIUM	1.00	0.86	0.60
HEATING VALUE*	748	753	891
SPECIFIC GRAVITY	0.784	0.783	0.747

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1741 SAMPLE 8935	INDEX 1742 SAMPLE 17345	INDEX 1743 SAMPLE 17346
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREELEY	GREELEY	GREELEY
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	FLOYD UNIT NO. 1	FECHT 7 NO. 5	FECHT 7 NO. 4
LOCATION	SEC. 25, T19S, R40W	SEC. 27, T18W, R40S	SEC. 27, T18W, R40S
OWNER	HADSON OIL & GAS CO.	SMITH CATTLE, INC.	SMITH CATTLE, INC.
COMPLETED	04/--/63	05/--/84	05/--/84
SAMPLED	04/17/63	06/28/84	06/28/84
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2744	2920	2920
WELLHEAD PRESSURE,PSIG	NOT GIVEN	550	550
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.4	48.3	51.6
ETHANE	4.8	4.4	4.7
PROPANE	2.8	2.8	3.0
N-BUTANE	1.1	0.9	0.9
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.2	40.4	37.7
OXYGEN	0.0	1.3	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.70	0.83	0.87
HEATING VALUE*	837	703	751
SPECIFIC GRAVITY	0.754	0.803	0.790

	INDEX 1744 SAMPLE 17347	INDEX 1745 SAMPLE 17348	INDEX 1746 SAMPLE 14631
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREELEY	GREELEY	GREELEY
FIELD	BRADSHAW	BRADSHAW	BYERLY
WELL NAME	HELM 1 NO. 5	HELM 1 NO. 6	ROE NO. 1
LOCATION	SEC. 35, T18W, R40S	SEC. 35, T18W, R40S	SEC. 29, T17S, R40W
OWNER	SMITH CATTLE, INC.	SMITH CATTLE, INC.	R. C. BANKS
COMPLETED	06/--/84	06/--/84	09/24/75
SAMPLED	06/28/84	06/28/84	04/22/76
FORMATION	PERM-GLORIETA	PERM-GLORIETA	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2200	2200	2937
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2150
COMPONENT, MOLE PCT			
METHANE	0.1	0.1	44.4
ETHANE	0.0	0.0	4.3
PROPANE	0.0	0.0	2.9
N-BUTANE	0.0	0.0	0.9
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.5
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	98.9	96.8	45.4
OXYGEN	0.6	2.4	0.0
ARGON	0.1	0.2	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.1
HELIUM	0.07	0.06	0.95
HEATING VALUE*	1	1	668
SPECIFIC GRAVITY	0.968	0.972	0.820

	INDEX 1747 SAMPLE 14729	INDEX 1748 SAMPLE 14730	INDEX 1749 SAMPLE 141
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREELEY	GREELEY	GREENWOOD
FIELD	BYERLY	BYERLY	BEAUMONT
WELL NAME	SELL "B" NO. 1	WEAR "B" NO. 1	R. B. TEMPLE NO. 2
LOCATION	SEC. 3, T17S, R40W	SEC. 25, T17S, R40W	SEC. 13, T27S, R8E
OWNER	DORCHESTER EXPLORATION, INC.	DORCHESTER EXPLORATION, INC.	EMPIRE GAS & FUEL CO.
COMPLETED	06/04/76	05/14/76	07/--/19
SAMPLED	08/02/76	08/02/76	03/13/20
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PENN-
GEOLOGIC PROVINCE CODE	360	360	365
DEPTH, FEET	2994	2941	1125
WELLHEAD PRESSURE,PSIG	516	522	310
OPEN FLOW, MCFD	1721	7624	10000
COMPONENT, MOLE PCT			
METHANE	35.8	52.5	82.1
ETHANE	3.2	4.5	0.0
PROPANE	2.4	2.9	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	55.3	37.3	16.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	1.13	0.86	0.92
HEATING VALUE*	545	754	832
SPECIFIC GRAVITY	0.847	0.788	0.620

	INDEX 1750 SAMPLE 145	INDEX 1751 SAMPLE 146	INDEX 1752 SAMPLE 153
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GREENWOOD	GREENWOOD	GREENWOOD
FIELD	BEAUMONT	BEAUMONT	BEAUMONT
WELL NAME	C. R. LEWIS NO. 1	T. F. RILEY NO. 1	M. SELBACK NO. 1
LOCATION	SEC. 15, T27S, R8E	SEC. 7, T27S, R4E	SEC. 24, T27S, R8E
OWNER	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.
COMPLETED	03/--/19	--/--/00	01/--/19
SAMPLED	03/13/20	03/13/20	03/18/20
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1174	1118	1142
WELLHEAD PRESSURE,PSIG	125	300	270
OPEN FLOW, MCFD	350	2000	5000
COMPONENT, MOLE PCT			
METHANE	82.5	85.9	84.2
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.4	12.6	14.3
OXYGEN	1.9	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	1.00	0.93	0.89
HEATING VALUE*	836	870	853
SPECIFIC GRAVITY	0.624	0.604	0.611

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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1753 SAMPLE 155		INDEX 1754 SAMPLE 16973		INDEX 1755 SAMPLE 3554	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	GREENWOOD		GREENWOOD		GREENWOOD	
FIELD	BEAUMONT		FANCY S		NOT GIVEN	
WELL NAME	STEWART NO. 3		LATHAM NO. 8		RUSH NO. 1	
LOCATION	SEC. 12, T27S, R8E		SEC. 12, T27S, R12E		SEC. 9, T27S, R11E	
OWNER	EMPIRE GAS & FUEL CO.		OSAGE DRILLING, INC.		H. E. DZENBERGER, ET AL.	
COMPLETED	09/--/19		02/02/83		--/--/00	
SAMPLED	03/18/20		06/13/83		07/07/42	
FORMATION	PENN-		MISS-		PENN-KANSAS CITY	
GEOLOGIC PROVINCE CODE	365		365		365	
DEPTH, FEET	1146		1630		960	
WELLHEAD PRESSURE,PSIG	265		50		460	
OPEN FLOW, MCFD	2700		1200		1500	
COMPONENT, MOLE PCT						
METHANE	88.0		82.7		31.9	
ETHANE	0.0		0.4		0.0	
PROPANE	---		0.2		---	
N-BUTANE	---		0.1		---	
ISOBUTANE	---		0.1		---	
N-PENTANE	---		0.0		---	
ISOPENTANE	---		0.1		---	
CYCLOPENTANE	---		TRACE		---	
HEXANES PLUS	---		0.1		---	
NITROGEN	10.0		12.4		66.2	
OXYGEN	0.9		0.1		0.5	
ARGON	---		0.1		---	
HYDROGEN	---		0.4		---	
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.6		2.5		0.3	
HELIUM	0.55		0.85		1.31	
HEATING VALUE*	891		1068		393	
SPECIFIC GRAVITY	0.596		0.637		0.826	

	INDEX 1756 SAMPLE 5649		INDEX 1757 SAMPLE 957		INDEX 1758 SAMPLE 997	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	GREENWOOD		GREENWOOD		GREENWOOD	
FIELD	NOT GIVEN		REECE		REECE	
WELL NAME	MARHENKE LEASE		CHRIST KUHN NO. 2		CHRIST KUHN NO. 1	
LOCATION	NOT GIVEN		SEC. 28, T26S, R9E		SEC. 28, T26S, R9E	
OWNER	STERLING DAVIS		MAGNOLIA PETROLEUM CO.		MAGNOLIA PETROLEUM CO.	
COMPLETED	--/--/00		--/--/00		02/10/25	
SAMPLED	07/13/54		12/26/24		02/13/25	
FORMATION	NOT GIVEN		-LIME		NOT GIVEN	
GEOLOGIC PROVINCE CODE	365		365		365	
DEPTH, FEET	NOT GIVEN		953		875	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		240		220	
OPEN FLOW, MCFD	NOT GIVEN		8115		3478	
COMPONENT, MOLE PCT						
METHANE	54.7		74.4		73.3	
ETHANE	0.1		2.3		1.5	
PROPANE	0.0		---		---	
N-BUTANE	0.0		---		---	
ISOBUTANE	0.0		---		---	
N-PENTANE	0.0		---		---	
ISOPENTANE	0.0		---		---	
CYCLOPENTANE	0.0		---		---	
HEXANES PLUS	0.0		---		---	
NITROGEN	42.0		21.5		22.4	
OXYGEN	1.4		0.5		0.6	
ARGON	0.1		---		---	
HYDROGEN	0.1		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.5		0.5		1.3	
HELIUM	1.16		1.04		0.95	
HEATING VALUE*	556		795		769	
SPECIFIC GRAVITY	0.737		0.659		0.667	

	INDEX 1759 SAMPLE 1673		INDEX 1760 SAMPLE 5174		INDEX 1761 SAMPLE 6506	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	GREENWOOD		GREENWOOD		HAMILTON	
FIELD	REECE		TUCKER		BRADSHAW	
WELL NAME	OLSEN NO. 1		BUTLER NO. 1		WEDEL NO. 1	
LOCATION	SEC. 28, T26S, R9E		SEC. 15, T26S, R11E		SEC. 1, T22S, R41W	
OWNER	REED & WILSON		WARD A. MCGINNIS		KANSAS-NEBRASKA NATURAL GAS	
COMPLETED	--/--/27		--/--/26		12/13/57	
SAMPLED	09/21/29		02/25/52		02/18/58	
FORMATION	NOT GIVEN		PENN-DOUGLAS		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	365		365		360	
DEPTH, FEET	NOT GIVEN		620		2752	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		240		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		1000		3200	
COMPONENT, MOLE PCT						
METHANE	75.8		58.5		62.9	
ETHANE	0.9		0.1		5.5	
PROPANE	---		0.1		3.1	
N-BUTANE	---		0.0		1.8	
ISOBUTANE	---		0.0		0.3	
N-PENTANE	---		0.0		0.2	
ISOPENTANE	---		0.0		0.2	
CYCLOPENTANE	---		0.0		0.1	
HEXANES PLUS	---		TRACE		0.2	
NITROGEN	21.8		39.7		25.8	
OXYGEN	0.2		0.1		TRACE	
ARGON	---		0.1		TRACE	
HYDROGEN	---		TRACE		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.2		0.0		0.1	
HELIUM	1.06		1.38		0.60	
HEATING VALUE*	784		597		891	
SPECIFIC GRAVITY	0.647		0.715		0.752	

	INDEX 1762 SAMPLE 7317		INDEX 1763 SAMPLE 7558		INDEX 1764 SAMPLE 7601	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	HAMILTON		HAMILTON		HAMILTON	
FIELD	BRADSHAW		BRADSHAW		BRADSHAW	
WELL NAME	TATE A-1		TATE A NO. 1-16		P. A. CRAIG NO. 1-24	
LOCATION	SEC. 16, T24S, R41W		SEC. 16, T24S, R41W		SEC. 24, T21S, R42W	
OWNER	HAMILTON BROS., INC.		HAMILTON BROS., INC.		MAYFLO OIL CO.	
COMPLETED	--/--/00		--/--/00		07/09/60	
SAMPLED	12/26/59		01/25/60		07/09/60	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2305		2305		2765	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	887		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	48.2		47.2		49.5	
ETHANE	4.2		4.3		4.6	
PROPANE	3.1		3.3		3.5	
N-BUTANE	1.0		1.1		1.3	
ISOBUTANE	0.5		0.6		0.2	
N-PENTANE	0.3		0.5		0.6	
ISOPENTANE	0.1		0.4		0.7	
CYCLOPENTANE	0.1		0.2		0.3	
HEXANES PLUS	0.2		0.6		0.9	
NITROGEN	41.2		40.8		35.9	
OXYGEN	TRACE		0.1		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		1.5	
HELIUM	1.00		0.98		0.80	
HEATING VALUE*	725		767		839	
SPECIFIC GRAVITY	0.810		0.832		0.847	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1765 SAMPLE 7607	INDEX 1766 SAMPLE 7608	INDEX 1767 SAMPLE 7634
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	J. B. OWINGS NO. 1-5	TATE A NO. 1-16	J. B. OWINGS NO. 1-5
LOCATION	SEC. 5, T24S, R41W	SEC. 16, T24S, R41W	SEC. 5, T24S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	--/--/00	12/26/59	--/--/00
SAMPLED	07/16/60	07/16/60	--/--/00
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	-UPPER ZONE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2305	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	321	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	41.0	47.0	41.1
ETHANE	3.7	4.5	3.6
PROPANE	3.1	3.5	3.0
N-BUTANE	1.5	1.2	1.2
ISOBUTANE	0.2	1.0	0.3
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	48.7	40.6	48.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	1.00	1.00	1.00
HEATING VALUE*	649	758	632
SPECIFIC GRAVITY	0.842	0.825	0.833

	INDEX 1768 SAMPLE 7664	INDEX 1769 SAMPLE 7702	INDEX 1770 SAMPLE 7703
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	J. E. TRACY NO. 1-33	MATTIE MAXFIELD NO. 1-30	D. CONNOR NO. 1-30
LOCATION	SEC. 33, T23S, R41W	SEC. 30, T22S, R40W	SEC. 30, T23S, R40W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	08/15/60	--/--/00	--/--/00
SAMPLED	--/--/00	10/04/60	10/01/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2306	2594	2440
WELLHEAD PRESSURE,PSIG	262	NOT GIVEN	460
OPEN FLOW, MCFD	1536	3305	1050
COMPONENT, MOLE PCT			
METHANE	44.8	57.7	55.6
ETHANE	4.0	5.9	5.1
PROPANE	2.9	3.5	3.3
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	44.8	29.9	33.0
OXYGEN	0.3	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.90	0.60	0.70
HEATING VALUE*	682	658	622
SPECIFIC GRAVITY	0.826	0.777	0.785

	INDEX 1771 SAMPLE 7704	INDEX 1772 SAMPLE 7723	INDEX 1773 SAMPLE 7890
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	U.S.A. HARBISON NO. 1-22	HOWELL NO. 1	GRISSOM NO. 1-4
LOCATION	SEC. 22, T24S, R41W	SEC. 21, T21S, R41W	SEC. 8, T22S, R41W
OWNER	HAMILTON BROS., INC.	MAYFLO OIL CO.	HAMILTON BROS., INC.
COMPLETED	--/--/00	09/09/60	--/--/00
SAMPLED	10/04/60	--/--/00	05/01/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2310	2770	2750
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1300	1400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	44.9	59.7	60.2
ETHANE	4.2	5.8	5.6
PROPANE	3.2	3.3	3.1
N-BUTANE	1.1	1.0	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	44.0	28.4	28.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.10	0.70	0.60
HEATING VALUE*	699	867	856
SPECIFIC GRAVITY	0.824	0.766	0.757

	INDEX 1774 SAMPLE 7986	INDEX 1775 SAMPLE 7987	INDEX 1776 SAMPLE 7988
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	TATE A NO. 1-16	C. A. TATE D NO. 1-9	J. E. TRACY NO. 1-33
LOCATION	SEC. 16, T24S, R41W	SEC. 9, T24S, R41W	SEC. 33, T23S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	12/26/59	05/30/61	08/15/60
SAMPLED	06/02/61	06/22/61	06/02/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2305	2274	2306
WELLHEAD PRESSURE,PSIG	321	319	262
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	48.5	47.8	45.4
ETHANE	4.5	4.5	4.1
PROPANE	3.3	3.2	3.0
N-BUTANE	1.4	1.0	1.0
ISOBUTANE	0.8	0.5	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	40.4	41.2	44.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.90	1.00	0.90
HEATING VALUE*	739	730	689
SPECIFIC GRAVITY	0.810	0.813	0.821

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1777 SAMPLE 7989	INDEX 1778 SAMPLE 7990	INDEX 1779 SAMPLE 7991
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	MATTIE MAXFIELD NO. 1-30	GRISSOM NO. 1-8	KEITH ROSSON NO. 1-32
LOCATION	SEC. 30, T22S, R41W	SEC. 8, T23S, R41W	SEC. 32, T22S, R40W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	--/--/00	03/03/61	03/17/61
SAMPLED	06/02/61	06/02/61	06/02/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2738	2600
WELLHEAD PRESSURE,PSIG	NOT GIVEN	255	353
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.1	59.6	61.0
ETHANE	5.8	5.9	5.9
PROPANE	3.4	3.3	3.5
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	28.0	28.3	26.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.60	0.60	0.60
HEATING VALUE*	869	876	892
SPECIFIC GRAVITY	0.762	0.770	0.762

	INDEX 1780 SAMPLE 7992	INDEX 1781 SAMPLE 8062	INDEX 1782 SAMPLE 8104
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	U. W. SIMON NO. 1-33	LARRY DIKEMAN NO. 1-16	CARL LEWIS NO. 1-6
LOCATION	SEC. 33, T22S, R41W	SEC. 16, T22W, R40S	SEC. 6, T22S, R41W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	12/10/60	06/26/61	07/25/61
SAMPLED	06/02/61	06/26/61	07/24/61
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2586	2700	2752
WELLHEAD PRESSURE,PSIG	356	NOT GIVEN	460
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.8	60.4	58.7
ETHANE	5.6	5.9	5.8
PROPANE	3.4	3.5	3.5
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	29.3	27.2	29.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.60	0.60	0.70
HEATING VALUE*	856	890	863
SPECIFIC GRAVITY	0.766	0.766	0.771

	INDEX 1783 SAMPLE 8255	INDEX 1784 SAMPLE 8259	INDEX 1785 SAMPLE 8357
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	GEORGE T. INGE NO. 1-9	F. J. GILLAM NO. 1-15	F. ADAMS NO. 1-31
LOCATION	SEC. 9, T23S, R41W	SEC. 15, T21S, R41W	SEC. 31, T22S, R40W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	10/13/61	10/09/61	--/--/00
SAMPLED	12/29/61	12/22/61	02/--/62
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2766	2590
WELLHEAD PRESSURE,PSIG	NOT GIVEN	321	465
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.8	60.9	59.7
ETHANE	5.2	5.4	4.7
PROPANE	3.2	3.2	2.9
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	31.7	27.9	29.4
OXYGEN	TRACE	0.0	0.5
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.69	0.68	0.61
HEATING VALUE*	838	863	835
SPECIFIC GRAVITY	0.781	0.755	0.763

	INDEX 1786 SAMPLE 8358	INDEX 1787 SAMPLE 8624	INDEX 1788 SAMPLE 8625
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	W. M. MALTHILL NO. 1-14	OCHS UNIT NO. 1	FRAZIER UNIT NO. 1
LOCATION	SEC. 14, T24S, R41W	SEC. 16, T23S, R41W	SEC. 34, T21S, R41W
OWNER	HAMILTON BROS., INC.	LEO CORP.	HADSON OIL & GAS CO.
COMPLETED	11/30/61	07/--/62	07/--/62
SAMPLED	12/16/61	07/31/62	07/31/62
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2317	2966	NOT GIVEN
WELLHEAD PRESSURE,PSIG	465	359	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	49.5	53.7	60.3
ETHANE	4.0	4.8	5.5
PROPANE	3.0	3.1	3.3
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	40.3	35.4	28.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.96	0.74	0.66
HEATING VALUE*	720	783	872
SPECIFIC GRAVITY	0.799	0.787	0.763

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1789 SAMPLE 8626	INDEX 1790 SAMPLE 8628	INDEX 1791 SAMPLE 8754
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	BUHRLE UNIT NO. 1	HATFIELD UNIT NO. 1	WITT UNIT NO. 1
LOCATION	SEC. 28, T22S, R41W	SEC. 31, T21S, R41W	SEC. 21, T23S, R40W
OWNER	HADSON OIL & GAS CO.	HADSON OIL & GAS CO.	LVO CORP.
COMPLETED	07/--/62	07/17/62	10/--/62
SAMPLED	07/30/62	07/30/62	11/05/62
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2528
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	294
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	727
COMPONENT, MOLE PCT			
METHANE	59.7	59.9	57.8
ETHANE	5.5	5.5	5.0
PROPANE	3.4	3.2	3.2
N-BUTANE	1.0	1.0	1.8
ISOBUTANE	0.3	0.5	0.9
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	28.6	28.3	30.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.64	0.66	0.65
HEATING VALUE*	874	865	837
SPECIFIC GRAVITY	0.768	0.764	0.775

	INDEX 1792 SAMPLE 8828	INDEX 1793 SAMPLE 8831	INDEX 1794 SAMPLE 8833
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	WOLF NO. 1	JOHNSON UNIT NO. 1	DURBIN NO. 1
LOCATION	SEC. 17, T23S, R40W	SEC. 22, T21S, R41W	SEC. 13, T22S, R40W
OWNER	LIVINGSTON OIL CO.	HADSON OIL & GAS CO.	LIVINGSTON OIL CO.
COMPLETED	12/--/62	01/--/63	12/--/62
SAMPLED	01/15/63	01/15/63	01/15/63
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2548	2773	2648
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.9	59.3	60.7
ETHANE	5.2	5.3	5.4
PROPANE	3.4	3.4	3.5
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	29.3	28.3	27.2
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	TRACE
HELIUM	0.65	0.64	0.62
HEATING VALUE*	867	861	896
SPECIFIC GRAVITY	0.775	0.772	0.768

	INDEX 1795 SAMPLE 8834	INDEX 1796 SAMPLE 8903	INDEX 1797 SAMPLE 8905
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	BOLTZ NO. 1	WILLIAM BOCK NO. 1-10	J. B. SMASTIC NO. 1-5
LOCATION	NOT GIVEN	SEC. 10, T21S, R41W	SEC. 5, T22S, R41W
OWNER	HADSON OIL & GAS CO.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	--/--/00	03/20/63	03/12/63
SAMPLED	02/--/63	03/20/63	03/12/63
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2764	3746
WELLHEAD PRESSURE,PSIG	NOT GIVEN	465	465
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.8	61.1	61.0
ETHANE	4.5	5.1	5.3
PROPANE	3.1	3.5	3.2
N-BUTANE	1.2	1.1	1.1
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	32.3	27.7	27.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.78	0.69	0.65
HEATING VALUE*	819	865	871
SPECIFIC GRAVITY	0.777	0.755	0.760

	INDEX 1798 SAMPLE 8936	INDEX 1799 SAMPLE 8937	INDEX 1800 SAMPLE 9103
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	BRADSHAW
WELL NAME	GRISSOM UNIT NO. 1	MOWELL UNIT NO. 1	BUHRLIE B
LOCATION	SEC. 9, T22S, R41W	SEC. 26, T21S, R41W	NOT GIVEN
OWNER	HADSON OIL & GAS CO.	HADSON OIL & GAS CO.	HADSON OIL & GAS CO.
COMPLETED	04/--/63	04/15/63	--/--/00
SAMPLED	04/17/63	04/17/63	07/17/63
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2750	2800	2632
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	460
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1020
COMPONENT, MOLE PCT			
METHANE	61.1	62.4	59.6
ETHANE	5.3	5.3	5.6
PROPANE	3.1	2.9	3.3
N-BUTANE	1.1	1.1	1.0
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	27.5	26.6	28.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.60	0.60	0.60
HEATING VALUE*	869	873	868
SPECIFIC GRAVITY	0.760	0.752	0.767

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1801 SAMPLE 9104	INDEX 1802 SAMPLE 9708	INDEX 1803 SAMPLE 5971
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	BRADSHAW	BRADSHAW	WILDCAT
WELL NAME	STANLEY	CHEATUM UNIT NO. 1	TATE NO. 1
LOCATION	NOT GIVEN	SEC. 2, T24S, R41W	SEC. 17, T24S, R42W
OWNER	MADSON OIL & GAS CO.	TEXACO INC.	MONSANTO CHEMICAL CO.
COMPLETED	--/--/00	09/01/63	11/30/55
SAMPLED	07/17/63	12/24/64	11/27/55
FORMATION	PERM-KOIOU	PERM-CHASE GROUP	PERM-SALT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2657	2310	1540
WELLHEAD PRESSURE,PSIG	463	450	NOT GIVEN
OPEN FLOW, MCFD	7500	4200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	50.6	52.4	0.5
ETHANE	4.8	4.7	0.0
PROPANE	2.8	3.1	0.0
N-BUTANE	1.0	1.0	0.0
ISOBUTANE	0.2	0.5	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	37.2	36.4	99.0
OXYGEN	1.9	0.2	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.5	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.70	0.86	0.11
HEATING VALUE*	738	773	5
SPECIFIC GRAVITY	0.799	0.793	0.966

	INDEX 1804 SAMPLE 17579	INDEX 1805 SAMPLE 11419	INDEX 1806 SAMPLE 14301
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	CRYSTAL SPRINGS SE	M-K-W	HARPER
WELL NAME	WILLIAMS NO. 1	JADE NO. 1	CLEMENTS NO. 1
LOCATION	SEC. 32, T32S, R7W	SEC. 15, T35S, R6W	SEC. 11, T32S, R7W
OWNER	ATTICA GAS VENTURE CORP.	JAYSON OIL CO.	BEREN CORP.
COMPLETED	--/--/00	08/--/66	08/07/74
SAMPLED	--/--/00	03/28/68	08/07/74
FORMATION	MISS-NOT GIVEN	PENN-STALNAKER	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4397	3750	4713
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1525	1451
OPEN FLOW, MCFD	100	NOT GIVEN	1272
COMPONENT, MOLE PCT			
METHANE	83.9	80.6	63.6
ETHANE	6.1	4.9	7.1
PROPANE	2.7	3.1	5.1
N-BUTANE	0.9	1.2	1.4
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.5	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	4.3	7.9	21.2
OXYGEN	0.2	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	TRACE
HELIUM	0.21	0.23	0.61
HEATING VALUE*	1114	1096	994
SPECIFIC GRAVITY	0.674	0.693	0.769

	INDEX 1807 SAMPLE 14302	INDEX 1808 SAMPLE 13267	INDEX 1809 SAMPLE 14682
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	HARPER	HIBBORD NE	LITTLE SANDY CREEK
WELL NAME	CLEMENTS NO. 1	LEWIS B NO. 1	WILLIAMS NO. 2
LOCATION	SEC. 11, T32S, R7W	SEC. 31, T33S, R8W	SEC. 31, T32S, R9W
OWNER	BEREN CORP.	MCCOY PETROLEUM CO.	ENERGY RESERVES GROUP, INC.
COMPLETED	08/07/74	05/17/72	03/24/76
SAMPLED	03/14/75	06/09/72	05/25/76
FORMATION	PENN-LANSING-KANSAS CITY	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3960	4483	4314
WELLHEAD PRESSURE,PSIG	600	1611	1410
OPEN FLOW, MCFD	40	5500	6500
COMPONENT, MOLE PCT			
METHANE	63.7	96.5	88.9
ETHANE	7.2	0.9	5.4
PROPANE	5.0	2.1	2.2
N-BUTANE	1.4	0.9	0.7
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	21.0	2.4	1.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.61	0.11	0.10
HEATING VALUE*	998	1129	1111
SPECIFIC GRAVITY	0.765	0.653	0.636

	INDEX 1810 SAMPLE 4951	INDEX 1811 SAMPLE 8888	INDEX 1812 SAMPLE 8889
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL
WELL NAME	STODDARD NO. 1	GATES NO. 1 NS	GATES NO. 2 NS
LOCATION	SEC. 17, T31S, R8W	SEC. 26, T31S, R9W	SEC. 26, T31S, R9W
OWNER	DEEP ROCK OIL CORP.	MULL DRILLING CO., INC.	MULL DRILLING CO., INC.
COMPLETED	06/14/50	04/--/58	12/--/59
SAMPLED	10/15/50	03/04/63	03/04/63
FORMATION	MISS-OSAGE	MISS-CHAT	MISS——
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4410	4475	4450
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1045	1125
OPEN FLOW, MCFD	NOT GIVEN	1730	1550
COMPONENT, MOLE PCT			
METHANE	86.9	85.2	77.3
ETHANE	6.8	4.6	3.5
PROPANE	2.4	1.8	1.4
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.6	6.1	14.2
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.2
HELIUM	0.16	0.10	1.80
HEATING VALUE*	1185	1051	941
SPECIFIC GRAVITY	0.648	0.654	0.667

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1813 SAMPLE 9603	INDEX 1814 SAMPLE 17402	INDEX 1815 SAMPLE 17522
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	STOHRVILLE	STOHRVILLE	STOHRVILLE NW
WELL NAME	DOROTHY REINEKE NO. 1	BASSFORD NO. 1	TRUBY NO. 1
LOCATION	SEC. 26, T33S, R6W	SEC. 21, T33S, R6W	SEC. 17, T33S, R6W
OWNER	SUNRAY DX OIL CO.	REACH GROUP	REACH GROUP
COMPLETED	01/28/63	04/24/83	04/29/81
SAMPLED	10/16/64	08/31/84	11/09/84
FORMATION	MISS---	MISS---	PENN-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4384	4436	2170
WELLHEAD PRESSURE,PSIG	1600	1050	NOT GIVEN
OPEN FLOW, MCFD	2997	800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.2	81.1	50.3
ETHANE	6.5	7.0	0.9
PROPANE	2.8	3.3	0.3
N-BUTANE	1.0	1.2	0.1
ISOBUTANE	0.3	0.6	TRACE
N-PENTANE	0.3	0.5	TRACE
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.4	TRACE
NITROGEN	5.1	5.2	47.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.18	0.21	0.99
HEATING VALUE*	1115	1151	537
SPECIFIC GRAVITY	0.673	0.698	0.756

	INDEX 1816 SAMPLE 16703	INDEX 1817 SAMPLE 16702	INDEX 1818 SAMPLE 16704
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	SULLIVAN	SULLIVAN E	SULLIVAN E
WELL NAME	ANTRIM "A" NO. 2	FINDLEY "B" NO. 1	ROBINSON "C" NO. 2
LOCATION	SEC. 30, T32S, R8W	SEC. 27, T32S, R8W	SEC. 22, T32S, R8W
OWNER	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED	09/13/82	07/27/82	05/10/82
SAMPLED	10/27/82	10/27/82	10/27/82
FORMATION	PENN-STALNAKER	PENN-STALNAKER	PENN-STALNAKER
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1232	1328	1300
OPEN FLOW, MCFD	17378	4298	1302
COMPONENT, MOLE PCT			
METHANE	78.6	75.3	75.5
ETHANE	1.3	3.3	3.4
PROPANE	2.6	2.8	2.8
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.0	15.3	15.0
OXYGEN	0.1	TRACE	0.2
ARGON	2.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.33	0.40	0.38
HEATING VALUE*	1034	988	997
SPECIFIC GRAVITY	0.707	0.702	0.706

	INDEX 1819 SAMPLE 13266	INDEX 1820 SAMPLE 12765	INDEX 1821 SAMPLE 16705
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	WHARTON	WILDCAT	ZUERCHER
WELL NAME	HAL BOWER B NO. 1	HUGHBANKS NO. 1	ZUERCHER NO. 3
LOCATION	SEC. 3, T34S, R8W	SEC. 23, T33S, R9W	SEC. 9, T32S, R7W
OWNER	MCCOY PETROLEUM CO.	LEBEN OIL CORP.	TXO PRODUCTION CORP.
COMPLETED	01/24/72	07/22/70	06/07/82
SAMPLED	06/09/72	04/13/71	10/27/82
FORMATION	MISS---	PENN-STALNAKER	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4597	3725	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1640	500	1493
OPEN FLOW, MCFD	6224	1750	766
COMPONENT, MOLE PCT			
METHANE	85.7	65.1	82.5
ETHANE	6.1	5.4	6.5
PROPANE	2.6	2.9	2.9
N-BUTANE	0.8	1.7	1.1
ISOBUTANE	0.5	0.7	0.3
N-PENTANE	0.3	0.9	0.3
ISOPENTANE	0.1	0.3	0.5
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	2.5	5.9	5.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	TRACE	0.1
HELIUM	0.11	0.26	0.31
HEATING VALUE*	1128	1099	1125
SPECIFIC GRAVITY	0.666	0.671	0.678

	INDEX 1822 SAMPLE 9535	INDEX 1823 SAMPLE 4777	INDEX 1824 SAMPLE 15264
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	HARVEY
FIELD	BURRTON	BURRTON NE	BURRTON NE
WELL NAME	PETERS NO. 1	J. WARKENTINE	J. SCHRAG NO. 1
LOCATION	SEC. 31, T22S, R3W	SEC. 16, T23S, R3W	SEC. 20, T22S, R3W
OWNER	DRILLERS PRODUCTION CO., INC	AINSWORTH BROS., INC.	GEAR PETROLEUM CO.
COMPLETED	06/01/64	07/16/49	09/20/77
SAMPLED	08/11/64	10/17/49	04/21/78
FORMATION	MISS-NOT GIVEN	MISS---	MISS---
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3311	3304	3200
WELLHEAD PRESSURE,PSIG	623	936	850
OPEN FLOW, MCFD	358	6	8000
COMPONENT, MOLE PCT			
METHANE	80.6	83.9	83.4
ETHANE	6.6	6.0	6.0
PROPANE	3.9	2.8	3.0
N-BUTANE	1.9	1.9	1.2
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.5	0.3	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	5.6	4.9	4.9
OXYGEN	TRACE	0.1	0.6
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.30	0.31	0.33
HEATING VALUE*	1154	1098	1116
SPECIFIC GRAVITY	0.704	0.665	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1825 SAMPLE 12417	INDEX 1826 SAMPLE 1723	INDEX 1827 SAMPLE 2621
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	HARVEY
FIELD	GRAHER	HALSTEAD	HOLLOW
WELL NAME	WEDEL NO. 2	MOURY NO. 1	A. R. NIKKEL NO. 2
LOCATION	SEC. 12, T22S, R2W	SEC. 11, T23S, R2W	SEC. 8, T22S, R3W
OWNER	J. A. ALLISON	MCPHERSON OIL & GAS DEV. CO.	SHELL OIL CO.
COMPLETED	08/05/70	10/--/28	05/20/33
SAMPLED	09/19/70	03/09/29	06/29/33
FORMATION	MISS-OSAGE	MISS-CHERT	MISS-LIME
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2971	2942	3152
WELLHEAD PRESSURE,PSIG	780	1000	900
OPEN FLOW, MCFD	3800	7000	1440
COMPONENT, MOLE PCT			
METHANE	82.3	59.3	82.4
ETHANE	5.6	21.3	13.4
PROPANE	3.0	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	6.5	18.5	3.5
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.3	0.3
HELIUM	0.38	0.41	0.34
HEATING VALUE*	1087	982	1075
SPECIFIC GRAVITY	0.671	0.739	0.637

	INDEX 1828 SAMPLE 2685	INDEX 1829 SAMPLE 5231	INDEX 1830 SAMPLE 15319
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	HARVEY
FIELD	SPERLING	WALL	WALL N
WELL NAME	SPERLING NO. 1	WALL NO. 1	SCHRAG "D" NO. 1
LOCATION	SEC. 23, T22S, R2W	SEC. 25, T22S, R3W	SEC. 24, T22S, R3W
OWNER	IMO OIL & GAS & WOOD BROS.	DRILLERS PRODUCTION CO., INC	HAROLD J. MILBURN
COMPLETED	--/--/00	12/29/51	12/03/77
SAMPLED	12/13/34	04/14/52	07/17/78
FORMATION	MISS-CHAT	MISS-LIME	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2950	3145	3183
WELLHEAD PRESSURE,PSIG	NOT GIVEN	725	826
OPEN FLOW, MCFD	7150	569	5800
COMPONENT, MOLE PCT			
METHANE	73.0	82.6	82.1
ETHANE	21.0	5.9	6.8
PROPANE	---	2.9	3.0
N-BUTANE	---	0.9	1.0
ISOBUTANE	---	0.4	0.5
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.4	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	5.3	5.8	4.8
OXYGEN	0.3	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.4
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.38	0.35	0.33
HEATING VALUE*	1116	1101	1115
SPECIFIC GRAVITY	0.681	0.674	0.673

	INDEX 1831 SAMPLE 10278	INDEX 1832 SAMPLE 6651	INDEX 1833 SAMPLE 7002
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HASKELL	HASKELL
FIELD	WEDEL	EUBANK	EUBANK
WELL NAME	WEDEL	EUBANK NO. 1	COLLINGWOOD NO. 1
LOCATION	NOT GIVEN	SEC. 28, T28S, R34W	SEC. 34, T29S, R34W
OWNER	LEE PHILLIPS OIL CO.	WHITE EAGLE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	03/03/58	--/--/00
SAMPLED	11/11/65	06/25/58	03/17/59
FORMATION	MISS-	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	375	360	360
DEPTH, FEET	2966	5429	5438
WELLHEAD PRESSURE,PSIG	850	800	1317
OPEN FLOW, MCFD	4000	NOT GIVEN	5400
COMPONENT, MOLE PCT			
METHANE	82.6	53.4	77.8
ETHANE	5.7	7.0	4.5
PROPANE	2.7	10.5	2.3
N-BUTANE	1.0	5.3	0.8
ISOBUTANE	0.6	3.2	0.4
N-PENTANE	0.4	1.1	0.2
ISOPENTANE	0.2	1.9	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	0.8	0.2
NITROGEN	5.9	16.4	13.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.38	0.40	1.20
HEATING VALUE*	1101	1376	983
SPECIFIC GRAVITY	0.674	0.964	0.684

	INDEX 1834 SAMPLE 7054	INDEX 1835 SAMPLE 7207	INDEX 1836 SAMPLE 7354
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	EUBANK	EUBANK	EUBANK
WELL NAME	O. V. RAY NO. 1	J. D. & S. STUCKY NO. 1	E. M. GREGG NO. 2
LOCATION	SEC. 21, T29S, R34W	SEC. 29, T28S, R34W	SEC. 43, T29S, R34W
OWNER	UNITED PRODUCING CO., INC.	UNITED PRODUCING CO., INC.	UNITED PRODUCING CO., INC.
COMPLETED	--/--/00	05/14/58	11/19/59
SAMPLED	04/29/59	09/02/59	01/21/60
FORMATION	NOT GIVEN	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5460	5125
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1210
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	51.1	73.3
ETHANE	6.3	0.6	5.3
PROPANE	3.9	5.9	3.3
N-BUTANE	0.9	3.9	0.8
ISOBUTANE	0.5	2.4	0.5
N-PENTANE	0.2	0.7	0.1
ISOPENTANE	0.2	2.8	0.2
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.2	1.2	0.1
NITROGEN	14.7	30.0	15.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.40	1.60	0.70
HEATING VALUE*	1019	1096	985
SPECIFIC GRAVITY	0.715	0.927	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES -

	INDEX 1837 SAMPLE 7667	INDEX 1838 SAMPLE 8366	INDEX 1839 SAMPLE 8864
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	EUBANK	EUBANK	EUBANK
WELL NAME	EUBANK D NO. 3	HALL K NO. 4	HALL K NO. 4
LOCATION	SEC. 33, T28S, R34W	SEC. 5, T29S, R34W	SEC. 5, T29S, R34W
OWNER	HELMERICH & PAYNE, INC.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	06/25/60	08/10/60	07/01/60
SAMPLED	09/07/60	01/08/62	02/01/63
FORMATION	PENN-KANSAS CITY	MISS-CHESTER	PENN-TORONTO & LANSING-KC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4083	5390	4032
WELLHEAD PRESSURE,PSIG	1080	1281	1146
OPEN FLOW, MCFD	7116	15000	11400
COMPONENT, MOLE PCT			
METHANE	63.2	72.4	57.8
ETHANE	4.7	3.4	4.4
PROPANE	2.6	2.2	2.7
N-BUTANE	0.8	0.8	1.0
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	26.7	18.1	32.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.7	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.70	1.67	0.67
HEATING VALUE*	869	914	815
SPECIFIC GRAVITY	0.748	0.696	0.771

	INDEX 1840 SAMPLE 8865	INDEX 1841 SAMPLE 9767	INDEX 1842 SAMPLE 9781
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	EUBANK	EUBANK	EUBANK
WELL NAME	HALL K NO. 9	HALL K NO. 4	SPRUNGER C NO. 1
LOCATION	SEC. 5, T29S, R34W	SEC. 5, T29S, R34W	SEC. 20, T28S, R34W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	NORTHERN NATURAL GAS PROD. C
COMPLETED	07/01/60	08/19/60	12/09/58
SAMPLED	02/01/63	04/01/65	03/05/65
FORMATION	MISS-CHESTER	PENN-TORONTO	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	4032	4709
WELLHEAD PRESSURE,PSIG	NOT GIVEN	924	298
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	293
COMPONENT, MOLE PCT			
METHANE	58.2	60.4	76.4
ETHANE	4.4	4.5	4.8
PROPANE	2.7	2.5	2.8
N-BUTANE	1.0	0.7	1.0
ISOBUTANE	0.2	0.6	0.7
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	32.1	29.9	12.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.64	0.66	0.91
HEATING VALUE*	819	924	1030
SPECIFIC GRAVITY	0.769	0.753	0.698

	INDEX 1843 SAMPLE 3202	INDEX 1844 SAMPLE 3210	INDEX 1845 SAMPLE 7316
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	TRIMPA NO. 1	ELLIOTT NO. 1	CORNELSON NO. 1-A
LOCATION	SEC. 28, T28S, R33W	SEC. 30, T29S, R33W	SEC. 36, T28S, R34W
OWNER	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	10/18/35	01/11/36	12/24/59
SAMPLED	03/21/42	03/21/42	12/16/59
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2640	2600	2624
WELLHEAD PRESSURE,PSIG	436	436	348
OPEN FLOW, MCFD	116	15320	12382
COMPONENT, MOLE PCT			
METHANE	64.6	70.0	70.6
ETHANE	11.7	12.9	5.5
PROPANE	---	---	2.9
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	22.6	16.2	18.9
OXYGEN	0.3	0.3	TRACE
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.59	0.48	0.50
HEATING VALUE*	869	940	944
SPECIFIC GRAVITY	0.707	0.686	0.714

	INDEX 1846 SAMPLE 12860	INDEX 1847 SAMPLE 6996	INDEX 1848 SAMPLE 12253
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	HUGOTON	KOENIG	KOENIG
WELL NAME	ATKINS 6-1	KOENIG NO. 1	LIGHT D-1
LOCATION	SEC. 8, T27S, R33W	SEC. 12, T29S, R34W	SEC. 1, T29S, R34W
OWNER	CITIES SERVICE OIL CO.	W. J. COPPINGER	CITIES SERVICE OIL CO.
COMPLETED	--/-/00	12/15/58	02/20/70
SAMPLED	06/23/71	03/10/59	05/06/70
FORMATION	PERM-CHASE GROUP	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5280	5351
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1440	749
OPEN FLOW, MCFD	NOT GIVEN	1770	14500
COMPONENT, MOLE PCT			
METHANE	72.8	69.4	69.2
ETHANE	4.8	6.0	5.7
PROPANE	2.4	3.2	3.4
N-BUTANE	1.1	0.8	0.8
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.5	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	18.4	18.4	19.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.51	0.50	0.53
HEATING VALUE*	936	972	953
SPECIFIC GRAVITY	0.702	0.727	0.723

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1849 SAMPLE 13154	INDEX 1850 SAMPLE 17730	INDEX 1851 SAMPLE 10689
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KOENIG E	LEMON	LEMON NE
WELL NAME	LEMON NO. 1	W. M. WILSON "A" NO. 1	ROHMEYER OPER. UNIT NO. 1
LOCATION	SEC. 3, T29S, R33W	SEC. 30, T30S, R33W	SEC. 30, T29S, R32W
OWNER	MALLONEE-MAHONEY, INC.	AMOCO PRODUCTION CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	08/30/71	03/29/84	06/29/66
SAMPLED	02/29/72	07/01/85	08/12/66
FORMATION	PENN-CHEROKEE	PENN-DES MOINES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5080	5112	5232
WELLHEAD PRESSURE,PSIG	1167	1250	1374
OPEN FLOW, MCFD	4200	2600	3650
COMPONENT, MOLE PCT			
METHANE	71.7	82.5	73.4
ETHANE	7.2	4.6	9.8
PROPANE	4.7	2.4	3.4
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	13.7	6.7	10.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.27	0.55	0.16
HEATING VALUE*	1061	1094	1026
SPECIFIC GRAVITY	0.731	0.681	0.720

	INDEX 1852 SAMPLE 14990	INDEX 1853 SAMPLE 8777	INDEX 1854 SAMPLE 10339
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	PLEASANT PRAIRIE	VICTORY	VICTORY
WELL NAME	ENGLER NO. B-1	WILSON G.U. E NO. 2	U. V. ANTON B. NO. 1
LOCATION	SEC. 22, T27S, R34W	SEC. 30, T30S, R33W	SEC. 21, T30S, R33W
OWNER	CITIES SERVICE OIL CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	10/03/62	11/06/62
SAMPLED	05/06/77	11/20/62	12/21/65
FORMATION	PERM-COUNCIL GROVE	PENN-LANSING A	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2971	4107	5228
WELLHEAD PRESSURE,PSIG	269	875	862
OPEN FLOW, MCFD	1000	2320	953
COMPONENT, MOLE PCT			
METHANE	70.5	71.0	78.1
ETHANE	5.8	4.7	5.9
PROPANE	3.1	2.8	3.3
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.2	0.4	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	18.3	18.5	9.7
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.48	0.81	0.60
HEATING VALUE*	958	943	1068
SPECIFIC GRAVITY	0.715	0.709	0.694

	INDEX 1855 SAMPLE 14967	INDEX 1856 SAMPLE 17277	INDEX 1857 SAMPLE 17278
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	VICTORY	VICTORY	VICTORY
WELL NAME	UNGLES A-2	LIZ SMITH NO. 2	STANLEY NO. 2
LOCATION	SEC. 36, T30N, R34W	SEC. 26, T30S, R34W	SEC. 13, T30S, R34W
OWNER	CITIES SERVICE OIL CO.	CONTINENTAL ENERGY	CONTINENTAL ENERGY
COMPLETED	--/--/00	07/28/83	02/01/84
SAMPLED	04/15/77	04/10/84	04/10/84
FORMATION	PENN-LANSING	MISS-	MISS-ST. LOUIS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4161	5381	5491
WELLHEAD PRESSURE,PSIG	929	NOT GIVEN	1000
OPEN FLOW, MCFD	1411	5300	1700
COMPONENT, MOLE PCT			
METHANE	86.5	85.7	69.8
ETHANE	5.8	4.7	6.1
PROPANE	2.7	2.4	5.2
N-BUTANE	0.8	0.8	2.2
ISOBUTANE	0.3	0.5	1.4
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.3	0.4	1.5
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.3	0.5	0.7
NITROGEN	2.6	4.1	11.3
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.17	0.37	1.04
HEATING VALUE*	1132	1107	1197
SPECIFIC GRAVITY	0.658	0.662	0.792

	INDEX 1858 SAMPLE 12659	INDEX 1859 SAMPLE 9643	INDEX 1860 SAMPLE 9673
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HODGEMAN	HODGEMAN	HODGEMAN
FIELD	GRONER	REGINER	REGINER
WELL NAME	GRONER NO. 1	P REGINER NO. 1	MARY HOGAN NO. 1
LOCATION	SEC. 1, T23S, R21W	SEC. 2, T24S, R21W	SEC. 2, T24S, R21W
OWNER	RICHARD R. MORNER	SUNRAY DX OIL CO.	SUNRAY DX OIL CO.
COMPLETED	--/--/00	09/28/64	12/15/64
SAMPLED	02/03/71	11/24/64	12/22/64
FORMATION	MISS-	MISS-OSAGE	MISS-OSAGE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4512	4617	4654
WELLHEAD PRESSURE,PSIG	1243	1300	1280
OPEN FLOW, MCFD	1540	2500	650
COMPONENT, MOLE PCT			
METHANE	55.3	59.4	59.0
ETHANE	3.7	3.7	3.7
PROPANE	1.7	1.4	1.4
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	35.0	31.7	32.4
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	2.65	2.58	2.36
HEATING VALUE*	707	751	734
SPECIFIC GRAVITY	0.743	0.731	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1861 SAMPLE 3251		INDEX 1862 SAMPLE 3252		INDEX 1863 SAMPLE 3201	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	JEFFERSON		JEFFERSON		KEARNY	
FIELD	MCLOUTH		MCLOUTH		HUGOTON	
WELL NAME	DART NO. 1		ALBERT BARTLETT NO. 2		JONES NO. 2	
LOCATION	SEC. 4, T10S, R20E		SEC. 33, T9S, R20E		SEC. 25, T26S, R36W	
OWNER	MCLOUGHLIN DEVELOPMENT CO.		MCLOUGHLIN DEVELOPMENT CO.		HELMERICH & PAYNE, INC.	
COMPLETED	06/01/40		05/04/41		02/28/37	
SAMPLED	03/27/42		03/27/42		03/21/42	
FORMATION	PENN-MCLOUTH		MISS-LIME		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	335		335		360	
DEPTH, FEET	1379		1433		2689	
WELLHEAD PRESSURE,PSIG	485		485		440	
OPEN FLOW, MCFD	14000		6000		2821	
COMPONENT, MOLE PCT						
METHANE	91.6		92.3		63.4	
ETHANE	1.1		1.4		20.1	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	6.4		5.4		15.7	
OXYGEN	0.3		0.4		0.3	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3		0.2		0.1	
HELIUM	0.34		0.32		0.42	
HEATING VALUE*	948		960		1002	
SPECIFIC GRAVITY	0.590		0.587		0.720	

	INDEX 1864 SAMPLE 3931		INDEX 1865 SAMPLE 4179		INDEX 1866 SAMPLE 4439	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KEARNY		KEARNY		KEARNY	
FIELD	HUGOTON		HUGOTON		HUGOTON	
WELL NAME	W. STRONG NO. 1		STALLMAN NO. 1		ROSS UNIT NO. 1	
LOCATION	SEC. 27, T22S, R35W		SEC. 24, T23S, R37W		SEC. 36, T21S, R35W	
OWNER	CARTER OIL CO.		STANOLIND OIL & GAS CO.		STANOLIND OIL & GAS CO.	
COMPLETED	09/29/44		09/19/46		01/27/47	
SAMPLED	10/05/44		12/07/46		01/08/48	
FORMATION	PERM-DOLOMITE		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2931		2588		2628	
WELLHEAD PRESSURE,PSIG	450		400		452	
OPEN FLOW, MCFD	16000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	60.4		60.2		53.4	
ETHANE	18.2		17.9		18.1	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	19.8		20.5		27.4	
OXYGEN	0.4		0.2		0.2	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.6		0.7		0.3	
HELIUM	0.62		0.52		0.64	
HEATING VALUE*	938		931		865	
SPECIFIC GRAVITY	0.732		0.733		0.759	

	INDEX 1867 SAMPLE 4764		INDEX 1868 SAMPLE 7757		INDEX 1869 SAMPLE 12867	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KEARNY		KEARNY		KEARNY	
FIELD	HUGOTON		HUGOTON		HUGOTON	
WELL NAME	NO. 1 BEIDERWELL		M. F. POWERS B NO. 1		LEE NO. 6	
LOCATION	SEC. 16, T23S, R38W		SEC. 32, T22S, R37W		SEC. 24, T26S, R37W	
OWNER	KANSAS-NEBRASKA NATURAL GAS		TEXACO INC.		NORTHERN NATURAL GAS PROD. C	
COMPLETED	05/05/48		07/17/60		--/--/00	
SAMPLED	11/19/49		11/02/60		06/22/71	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	2608		2574		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	434		433		220	
OPEN FLOW, MCFD	65		2070		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	62.5		67.1		75.0	
ETHANE	5.5		5.8		6.0	
PROPANE	3.3		3.0		3.5	
N-BUTANE	0.9		0.9		0.9	
ISOBUTANE	0.3		0.5		0.2	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.3		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.0		0.1		0.1	
NITROGEN	25.7		21.4		13.4	
OXYGEN	0.1		TRACE		0.0	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.5		0.2		0.0	
HELIUM	0.58		0.60		0.39	
HEATING VALUE*	882		927		1017	
SPECIFIC GRAVITY	0.752		0.730		0.699	

	INDEX 1870 SAMPLE 12868		INDEX 1871 SAMPLE 12978		INDEX 1872 SAMPLE 12979	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KEARNY		KEARNY		KEARNY	
FIELD	HUGOTON		HUGOTON		HUGOTON	
WELL NAME	LEE NO. 9		U.S.A.-WHITE NO. A-1		U.S.A.-DEAN NO. 1	
LOCATION	SEC. 29, T26S, R36W		SEC. 23, T25S, R35W		SEC. 13, T25S, R35W	
OWNER	NORTHERN NATURAL GAS PROD. C		MOBIL OIL CORP.		MOBIL OIL CORP.	
COMPLETED	--/--/00		--/--/00		--/--/00	
SAMPLED	06/22/71		08/25/71		--/--/00	
FORMATION	PERM-CHASE GROUP		PERM-CHASE GROUP		PERM-CHASE GROUP	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	220		NOT GIVEN		225	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	74.1		74.2		72.7	
ETHANE	6.0		5.6		5.5	
PROPANE	3.6		3.2		3.1	
N-BUTANE	0.8		0.8		0.8	
ISOBUTANE	0.5		0.4		0.3	
N-PENTANE	0.2		0.3		0.5	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	14.3		14.9		16.9	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.0	
HELIUM	0.41		0.41		0.42	
HEATING VALUE*	1009		993		974	
SPECIFIC GRAVITY	0.704		0.700		0.709	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1873 SAMPLE 12980	INDEX 1874 SAMPLE 12981	INDEX 1875 SAMPLE 12982
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	U.S.A.-WHITE NO. B-1	HUGOTON-USA NO. 1	U.S.A.-WAMPLER NO. 1
LOCATION	SEC. 3, T26S, R35W	SEC. 19, T26S, R35W	SEC. 28, T26S, R35W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/25/71	08/25/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	75.0	73.7
ETHANE	5.7	5.6	5.6
PROPANE	3.2	3.2	3.2
N-BUTANE	0.9	0.9	0.7
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.7	14.2	15.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.3
HELIUM	0.41	0.40	0.41
HEATING VALUE*	997	1002	985
SPECIFIC GRAVITY	0.700	0.698	0.704

	INDEX 1876 SAMPLE 12983	INDEX 1877 SAMPLE 12984	INDEX 1878 SAMPLE 12985
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	U.S.A.-WHITE NO. D-1	U.S.A.-WHITE E-1	TATE-USA NO. 1
LOCATION	SEC. 17, T26S, R35W	SEC. 21, T26S, R35W	SEC. 20, T26S, R35W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/25/71	08/25/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	74.2	74.8
ETHANE	5.7	5.6	5.7
PROPANE	3.4	3.2	3.3
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	14.2	15.1	14.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.40	0.40	0.40
HEATING VALUE*	998	990	1000
SPECIFIC GRAVITY	0.696	0.700	0.698

	INDEX 1879 SAMPLE 12986	INDEX 1880 SAMPLE 12988	INDEX 1881 SAMPLE 12989
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	U.S.A.-WHITE NO. C-1	HUGOTON-USA NO. B-1	U.S.A.-MOORE NO. 1
LOCATION	SEC. 8, T26S, R35W	SEC. 26, T26S, R36W	SEC. 32, T26S, R35W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/25/71	08/25/71	08/25/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.5	75.6	74.7
ETHANE	5.7	5.7	5.7
PROPANE	3.4	3.3	3.3
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	14.7	13.6	14.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.40	0.39	0.42
HEATING VALUE*	994	999	995
SPECIFIC GRAVITY	0.696	0.689	0.696

	INDEX 1882 SAMPLE 12990	INDEX 1883 SAMPLE 12994	INDEX 1884 SAMPLE 12995
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	PHELPS-USA NO. 1	BEATY E	BEATY F
LOCATION	SEC. 35, T26S, R36W	SEC. 26, T25S, R38W	SEC. 14, T25S, R38W
OWNER	MOBIL OIL CORP.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/25/71	08/24/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.3	72.1	70.7
ETHANE	5.7	5.8	5.7
PROPANE	3.4	3.4	3.4
N-BUTANE	0.8	0.9	0.9
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.7	16.6	18.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.40	0.42	0.44
HEATING VALUE*	1011	981	968
SPECIFIC GRAVITY	0.698	0.710	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1885 SAMPLE 12996	INDEX 1886 SAMPLE 12997	INDEX 1887 SAMPLE 12998
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	WAECHTER M UNIT	WAECHTER UNIT G NO. 1	WAECHTER J UNIT
LOCATION	SEC. 6, T26S, R37W	SEC. 4, T26S, R37W	SEC. 33, T25S, R37W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/24/71	08/24/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.6	75.4	75.1
ETHANE	5.1	5.0	6.0
PROPANE	3.6	3.5	3.6
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.6	13.1	13.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.37	0.38	0.38
HEATING VALUE*	1035	1017	1020
SPECIFIC GRAVITY	0.701	0.696	0.700

	INDEX 1888 SAMPLE 12999	INDEX 1889 SAMPLE 13000	INDEX 1890 SAMPLE 13001
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BARBEN D-1 UNIT	U.S.A., NO. 1	TATE-HUTTON NO. 1
LOCATION	SEC. 32, T25S, R37W	SEC. 30, T25S, R37W	SEC. 28, T25S, R37W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/24/71	08/24/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.1	75.2	74.4
ETHANE	6.1	5.9	5.8
PROPANE	3.5	3.6	3.7
N-BUTANE	1.0	0.9	0.7
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.2	14.2	14.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.38	0.39	0.39
HEATING VALUE*	1023	1013	1015
SPECIFIC GRAVITY	0.700	0.705	0.705

	INDEX 1891 SAMPLE 6405	INDEX 1892 SAMPLE 12869	INDEX 1893 SAMPLE 14018
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	LAKIN	PANOMA	PANOMA
WELL NAME	SHAFFER NO. 1	TOOMBS NO. 1	JOHNSON NO. 4A
LOCATION	SEC. 34, T25S, R36W	SEC. 29, T26S, R36W	SEC. 19, T25S, R36W
OWNER	EXCELSIOR OIL CORP.	NORTHERN NATURAL GAS PROD. C	W. B. OSBORN
COMPLETED	07/10/57	--/--/00	11/01/73
SAMPLED	09/25/57	06/22/71	06/01/74
FORMATION	MISS-	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4994	NOT GIVEN	2770
WELLHEAD PRESSURE,PSIG	60	190	243
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4500
COMPONENT, MOLE PCT			
METHANE	45.7	73.7	72.0
ETHANE	2.4	6.0	5.9
PROPANE	0.0	3.6	3.3
N-BUTANE	0.7	0.8	0.8
ISOBUTANE	0.7	0.6	0.5
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	36.7	14.6	16.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.4	TRACE	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.8	0.0	TRACE
HELIUM	2.00	0.40	0.49
HEATING VALUE*	609	1008	987
SPECIFIC GRAVITY	0.853	0.706	0.713

	INDEX 1894 SAMPLE 14019	INDEX 1895 SAMPLE 14736	INDEX 1896 SAMPLE 14976
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KINGMAN
FIELD	PANOMA	PANOMA	ALAMEDA W
WELL NAME	JOHNSON NO. 2A	KURZ "A" NO. 2	LOWE NO. 1
LOCATION	SEC. 20, T25S, R37W	SEC. 30, T24S, R37W	SEC. 21, T28N, R7W
OWNER	W. B. OSBORN	AMOCO PRODUCTION CO.	MACK OIL CO.
COMPLETED	11/01/73	07/23/76	05/24/76
SAMPLED	06/01/74	08/19/76	04/18/77
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	MISS---
GEOLOGIC PROVINCE CODE	360	360	375
DEPTH, FEET	2750	2827	3970
WELLHEAD PRESSURE,PSIG	306	225	1345
OPEN FLOW, MCFD	4500	4500	668
COMPONENT, MOLE PCT			
METHANE	73.1	69.0	86.4
ETHANE	6.3	6.2	5.5
PROPANE	3.8	3.6	2.6
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.3	18.7	3.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.40	0.46	0.20
HEATING VALUE*	1026	973	1112
SPECIFIC GRAVITY	0.715	0.727	0.651

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1897 SAMPLE 14530	INDEX 1898 SAMPLE 10760	INDEX 1899 SAMPLE 17118
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	BELMONT CENTER	BONJOUR	BROADWAY
WELL NAME	DUCKWORTH NO. 1	BONJOUR NO. 1X	ZERGER NO. 1
LOCATION	SEC. 23, T29S, R8W	SEC. 26, T27S, R5W	SEC. 1, T28S, R5W
OWNER	KEENER OIL CO.	KEWANEE OIL CO.	VINCENT OIL CORP.
COMPLETED	06/14/75	07/05/66	10/01/82
SAMPLED	11/13/75	10/25/66	10/25/83
FORMATION	MISS-	MISS---	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4208	3740	3800
WELLHEAD PRESSURE,PSIG	1245	1300	990
OPEN FLOW, MCFD	4707	2755	350
COMPONENT, MOLE PCT			
METHANE	87.4	82.0	78.6
ETHANE	5.2	6.2	7.1
PROPANE	2.4	2.8	3.3
N-BUTANE	0.7	1.0	1.1
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	2.9	6.3	8.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.17	0.28	0.38
HEATING VALUE*	1108	1102	1095
SPECIFIC GRAVITY	0.647	0.679	0.694

	INDEX 1900 SAMPLE 16333	INDEX 1901 SAMPLE 11555	INDEX 1902 SAMPLE 12709
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CHIK	COX	COX
WELL NAME	DEWEY NO. 1	COX NO. 1	COX NO. 1
LOCATION	SEC. 15, T30S, R6W	SEC. 26, T30S, R10W	SEC. 26, T30S, R10W
OWNER	RAYMOND OIL CO., INC.	BARBARA OIL CO.	BARBARA OIL CO.
COMPLETED	--/--/00	05/08/68	12/22/70
SAMPLED	06/30/81	06/25/68	03/11/71
FORMATION	PERM-INDIAN CAVE	PENN-TOPEKA	PENN-HOWARD
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	1960	3085	2970
WELLHEAD PRESSURE,PSIG	200	1200	1100
OPEN FLOW, MCFD	30000	28000	9300
COMPONENT, MOLE PCT			
METHANE	60.0	77.9	79.9
ETHANE	2.4	5.7	3.4
PROPANE	1.3	1.9	1.8
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	TRACE	0.3	0.0
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.3	0.1
NITROGEN	34.7	14.3	13.2
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.90	0.35	0.36
HEATING VALUE*	706	960	959
SPECIFIC GRAVITY	0.729	0.676	0.663

	INDEX 1903 SAMPLE 2250	INDEX 1904 SAMPLE 2541	INDEX 1905 SAMPLE 2892
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	F. C. MILES NO. 1	LEISMAN NO. 1	F. C. MILES NO. A-5
LOCATION	SEC. 30, T27S, R10W	SEC. 20, T27S, R10W	SEC. 30, T27S, R10W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/21/30	08/25/32	10/04/41
FORMATION	PERM-CHASE GROUP	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2002	4190	NOT GIVEN
WELLHEAD PRESSURE,PSIG	675	1585	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	30200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.2	59.3	67.1
ETHANE	11.4	21.2	15.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.8	17.0	15.3
OXYGEN	0.0	0.9	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.51	1.22	1.23
HEATING VALUE*	936	981	957
SPECIFIC GRAVITY	0.675	0.733	0.695

	INDEX 1906 SAMPLE 2893	INDEX 1907 SAMPLE 2894	INDEX 1908 SAMPLE 2895
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	F. C. MILES NO. A-8	J. M. RATCLIFF NO. 7	A. J. CONLEY NO. 2
LOCATION	SEC. 19, T27S, R10W	SEC. 30, T27S, R10W	SEC. 20, T27S, R10W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/04/41	10/04/41	10/04/41
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	1350	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1340	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.6	62.3	64.2
ETHANE	19.6	21.2	20.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.2	14.8	13.6
OXYGEN	0.2	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	1.20	1.23	1.15
HEATING VALUE*	996	1011	1023
SPECIFIC GRAVITY	0.712	0.719	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1909 SAMPLE 3630	INDEX 1910 SAMPLE 15583	INDEX 1911 SAMPLE 16578
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CUNNINGHAM	DEWEY	DRESDEN
WELL NAME	F. C. MILES O-1	RAMSDALE NO. 2	GRIDLEY NO. 1
LOCATION	NOT GIVEN	SEC. 5, T28S, R5W	SEC. 19, T27S, R10W
OWNER	SKELLY OIL CO.	GEAR PETROLEUM CO.	PATTON OIL CO.
COMPLETED	--/--/00	06/28/78	04/20/82
SAMPLED	--/--/00	03/99/79	07/17/82
FORMATION	ORDO-VIOLA	PERM-INDIAN CAVE	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	1744	4018
WELLHEAD PRESSURE, PSIG	NOT GIVEN	680	1140
OPEN FLOW, MCFD	NOT GIVEN	1500	3490
COMPONENT, MOLE PCT			
METHANE	61.2	70.8	71.7
ETHANE	23.3	2.1	6.2
PROPANE	---	0.7	1.5
N-BUTANE	---	0.2	1.2
ISOBUTANE	---	0.1	0.4
N-PENTANE	---	0.0	0.3
ISOPENTANE	---	TRACE	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	13.9	24.9	14.5
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.1
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	1.13	0.88	1.14
HEATING VALUE*	1038	788	1022
SPECIFIC GRAVITY	0.727	0.678	0.717

	INDEX 1912 SAMPLE 14155	INDEX 1913 SAMPLE 14162	INDEX 1914 SAMPLE 9639
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	FANNIE	GEORGIA SPUR	GOETZ
WELL NAME	PRICE NO. 1	LAKIN NO. 1	GOETZ B-3
LOCATION	SEC. 4, T30S, R10W	SEC. 6, T28S, R6W	SEC. 32, T29S, R9W
OWNER	MALLONEE-MAHONEY, INC.	VULCAN MATERIALS CO.	BACHUS OIL CO.
COMPLETED	05/07/74	03/22/74	--/--/00
SAMPLED	09/--/74	10/03/74	11/21/64
FORMATION	MISS-NOT GIVEN	MISS---	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4395	3842	2346
WELLHEAD PRESSURE, PSIG	1443	1324	883
OPEN FLOW, MCFD	5200	3206	1500
COMPONENT, MOLE PCT			
METHANE	82.3	86.6	85.4
ETHANE	6.6	5.3	2.8
PROPANE	3.6	2.6	0.9
N-BUTANE	0.9	0.9	0.2
ISOBUTANE	0.5	0.4	0.1
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	5.2	3.1	9.8
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.27	0.18	0.39
HEATING VALUE*	1115	1119	958
SPECIFIC GRAVITY	0.676	0.656	0.625

	INDEX 1915 SAMPLE 12254	INDEX 1916 SAMPLE 1226	INDEX 1917 SAMPLE 15307
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	GOETZ E	KINGMAN	LANSDOWNE NW
WELL NAME	GOETZ NO. 1	RICHARDSON NO. 1	JOHNSON "A" NO. 1
LOCATION	SEC. 28, T29S, R9W	SEC. 16, T27S, R 7W	SEC. 4, T28S, R5W
OWNER	REX E MORRIS DRILLING CO.	P. FLEEGER & CARTER OIL CO.	GEAR PETROLEUM CO.
COMPLETED	03/09/70	01/--/26	05/30/78
SAMPLED	05/07/70	02/28/26	06/22/78
FORMATION	PENN-TOPEKA	MISS-	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2930	3889	1761
WELLHEAD PRESSURE, PSIG	1150	70	695
OPEN FLOW, MCFD	NOT GIVEN	300	3490
COMPONENT, MOLE PCT			
METHANE	65.5	66.7	68.7
ETHANE	3.1	31.7	2.0
PROPANE	1.9	---	0.7
N-BUTANE	0.1	---	0.2
ISOBUTANE	0.2	---	0.1
N-PENTANE	0.1	---	TRACE
ISOPENTANE	0.1	---	TRACE
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	TRACE	---	0.1
NITROGEN	28.0	0.9	27.0
OXYGEN	TRACE	0.5	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.54	0.19	0.91
HEATING VALUE*	787	1244	769
SPECIFIC GRAVITY	0.714	0.720	0.688

	INDEX 1918 SAMPLE 9637	INDEX 1919 SAMPLE 15980	INDEX 1920 SAMPLE 16641
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	NASHVILLE	NASHVILLE W	NASHVILLE W
WELL NAME	BERTHOLF NO. 1	KATZER NO. 1	KATZER NO.1-A
LOCATION	SEC. 1, T30S, R10W	SEC. 10, T30S, R10W	SEC. 10, T30S, R10W
OWNER	BACHUS OIL CO.	RAYMOND OIL CO., INC.	RAYMOND OIL CO., INC.
COMPLETED	10/01/63	09/01/79	07/30/82
SAMPLED	11/21/64	10/06/80	09/10/82
FORMATION	PERM-INDIAN CAVE	PENN-TOPEKA	PENN-HOWARD
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2519	3156	2994
WELLHEAD PRESSURE, PSIG	962	940	1038
OPEN FLOW, MCFD	1020	5400	2190
COMPONENT, MOLE PCT			
METHANE	82.3	76.5	73.8
ETHANE	3.3	3.8	3.3
PROPANE	1.3	1.9	1.4
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	11.6	15.1	16.3
OXYGEN	0.1	0.1	1.7
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.37	0.36	0.31
HEATING VALUE*	960	954	881
SPECIFIC GRAVITY	0.644	0.687	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1921 SAMPLE 8981	INDEX 1922 SAMPLE 13352	INDEX 1923 SAMPLE 6162
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	NEGRO CREEK	PRATHER	SPIVEY-GRABS
WELL NAME	GREENLEAF NO. 1	KENNING NO. 1	TJADEN A NO. 1
LOCATION	SEC. 13, T27S, R7W	SEC. 19, T28S, R7W	SEC. 13, T30S, R8W
OWNER	MESSMAN-RINEHART OIL CO.	MACK OIL CO.	NATIONAL COOP. REFINERY ASSN
COMPLETED	12/15/61	06/01/72	10/28/54
SAMPLED	05/27/63	08/10/72	10/11/56
FORMATION	PENN-TORONTO	MISS---	PENN-MORROW U
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	4076	4187
WELLHEAD PRESSURE,PSIG	1117	1305	1400
OPEN FLOW, MCFD	5000	4536	315
COMPONENT, MOLE PCT			
METHANE	64.2	86.5	75.5
ETHANE	3.6	5.8	7.6
PROPANE	1.6	2.7	3.9
N-BUTANE	0.7	0.9	1.1
ISOBUTANE	0.2	0.4	0.7
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.3	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	24.8	3.0	9.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.1
CARBON DIOXIDE	0.4	TRACE	0.32
HELIUM	1.90	0.20	0.32
HEATING VALUE*	829	1116	1099
SPECIFIC GRAVITY	0.711	0.652	0.714

	INDEX 1924 SAMPLE 5833	INDEX 1925 SAMPLE 5880	INDEX 1926 SAMPLE 5881
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL
WELL NAME	FOLKES NO. 1	NIRSCHL NO. 1	KIBBE A NO. 1
LOCATION	SEC. 32, T30S, R9W	SEC. 6, T30S, R8W	SEC. 34, T29S, R9W
OWNER	TIME PETROLEUM CO.	PETROLEUM, INC.	PETROLEUM, INC.
COMPLETED	--/--/00	03/20/55	04/07/55
SAMPLED	05/05/55	07/13/55	07/13/55
FORMATION	MISS-CHAT	MISS-OSAGE	MISS-OSAGE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4424	4167	4167
WELLHEAD PRESSURE,PSIG	1400	1445	1033
OPEN FLOW, MCFD	5000	2520	1082
COMPONENT, MOLE PCT			
METHANE	86.4	91.2	79.1
ETHANE	5.4	0.3	6.0
PROPANE	2.7	0.4	2.9
N-BUTANE	0.8	0.4	0.8
ISOBUTANE	0.5	0.1	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	3.1	6.6	9.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.19	0.38	0.55
HEATING VALUE*	1117	983	1042
SPECIFIC GRAVITY	0.655	0.606	0.677

	INDEX 1927 SAMPLE 5912	INDEX 1928 SAMPLE 5916	INDEX 1929 SAMPLE 5928
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL
WELL NAME	HOLCOMB NO. 1	SWINGLE NO. A-1	REIMIG NO. 1
LOCATION	SEC. 26, T30S, R9W	SEC. 36, T30S, R9W	SEC. 34, T30S, R9W
OWNER	PICKRELL DRILLING CO.	PICKRELL DRILLING CO.	PICKRELL DRILLING CO.
COMPLETED	04/21/55	01/26/55	03/07/55
SAMPLED	08/15/55	08/16/55	08/16/55
FORMATION	MISS-OSAGE	MISS-OSAGE	MISS-OSAGE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4344	4307	4364
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1700	1450	5040
COMPONENT, MOLE PCT			
METHANE	87.8	88.7	89.9
ETHANE	5.1	4.8	4.6
PROPANE	2.3	2.1	2.0
N-BUTANE	0.6	0.8	0.6
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	3.3	2.3	2.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.18	0.13	0.13
HEATING VALUE*	1084	1111	1085
SPECIFIC GRAVITY	0.636	0.642	0.625

	INDEX 1930 SAMPLE 5967	INDEX 1931 SAMPLE 6531	INDEX 1932 SAMPLE 9071
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL	SPIVEY-GRABS-BASIL
WELL NAME	L. M. WELLS, UNIT NO. 1	POMEROY UNIT NO. 1	EARL JOHNSON NO. 1
LOCATION	SEC. 17, T30S, R8W	SEC. 5, T30S, R8W	SEC. 18, T30S, R7W
OWNER	MAGNOLIA PETROLEUM CO.	PAN AMERICAN PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	05/11/55	01/12/58	02/02/55
SAMPLED	11/07/55	03/19/58	08/23/63
FORMATION	MISS-CHAT	MISS-OSAGE	MISS-OSAGE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	4172	4212	4183
WELLHEAD PRESSURE,PSIG	1300	1442	280
OPEN FLOW, MCFD	1640	4300	108
COMPONENT, MOLE PCT			
METHANE	88.7	88.2	73.5
ETHANE	4.7	5.2	7.8
PROPANE	2.2	2.1	3.6
N-BUTANE	0.8	0.7	1.1
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.0	2.2	12.1
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.20	0.30
HEATING VALUE*	1117	1114	1070
SPECIFIC GRAVITY	0.643	0.644	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1933 SAMPLE 11239		INDEX 1934 SAMPLE 11469		INDEX 1935 SAMPLE 15061	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KINGMAN		KINGMAN		KINGMAN	
FIELD	SPIVEY-GRABS-BASIL		SPIVEY-GRABS-BASIL		WILDCAT	
WELL NAME	GOETZ NO. 1		BIRKENBAUGH NO. 1		MILDRED-ARNOLD NO. 1	
LOCATION	SEC. 17, T30S, R9W		SEC. 16, T29S, R7W		SEC. 35, T27S, R8W	
OWNER	SIERRA PETROLEUM CO., INC.		BARBARA OIL CO.		PUBLISHERS PETROLEUM	
COMPLETED	02/25/66		02/21/68		07/--/77	
SAMPLED	12/05/67		05/04/68		07/--/77	
FORMATION	MISS---		MISS-OSAGE		MISS-	
GEOLOGIC PROVINCE CODE	375		375		375	
DEPTH, FEET	4304		4156		3971	
WELLHEAD PRESSURE,PSIG	1373		1345		NOT GIVEN	
OPEN FLOW, MCFD	1593		4200		85	
COMPONENT, MOLE PCT						
METHANE	83.3		87.1		68.6	
ETHANE	6.2		5.2		6.2	
PROPANE	3.1		2.6		3.3	
N-BUTANE	1.1		0.9		0.9	
ISOBUTANE	0.3		0.5		0.5	
N-PENTANE	0.2		0.1		0.3	
ISOPENTANE	0.3		0.3		0.3	
CYCLOPENTANE	0.1		0.1		0.2	
HEXANES PLUS	0.2		0.2		0.3	
NITROGEN	4.8		2.7		18.7	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		0.0	
HELIUM	0.25		0.18		0.77	
HEATING VALUE*	1118		1121		987	
SPECIFIC GRAVITY	0.673		0.653		0.738	

	INDEX 1936 SAMPLE 16389		INDEX 1937 SAMPLE 10299		INDEX 1938 SAMPLE 10120	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KINGMAN		KINGMAN		KIOWA	
FIELD	WILDCAT		WILLOWDALE		ALFORD	
WELL NAME	FUNKE-BERGH NO. 1		CONRARDY NO. 1		TAYES NO. 1	
LOCATION	SEC. 5, T29S, R8W		SEC. 11, T29S, R9W		SEC. 20, T30S, R18W	
OWNER	RAYMOND OIL CO., INC.		BACHUS OIL CO.		AYLWARD DRILLING CO.	
COMPLETED	08/21/81		11/09/65		07/22/65	
SAMPLED	11/16/81		11/29/65		08/02/65	
FORMATION	PERM-INDIAN CAVE		PERM-INDIAN CAVE		MISS---	
GEOLOGIC PROVINCE CODE	375		375		360	
DEPTH, FEET	2358		2396		4967	
WELLHEAD PRESSURE,PSIG	900		890		1467	
OPEN FLOW, MCFD	2500		8250		4150	
COMPONENT, MOLE PCT						
METHANE	78.4		84.2		93.0	
ETHANE	3.4		3.5		3.0	
PROPANE	1.7		1.4		0.9	
N-BUTANE	0.5		0.4		0.3	
ISOBUTANE	0.3		0.2		0.2	
N-PENTANE	0.2		TRACE		0.1	
ISOPENTANE	0.1		0.3		0.1	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	14.9		9.4		1.6	
OXYGEN	0.2		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.1		0.1	
HELIUM	0.48		0.37		0.13	
HEATING VALUE*	948		990		1059	
SPECIFIC GRAVITY	0.671		0.641		0.604	

	INDEX 1939 SAMPLE 10732		INDEX 1940 SAMPLE 10766		INDEX 1941 SAMPLE 11556	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KIOWA		KIOWA		KIOWA	
FIELD	ALFORD		ALFORD		ALFORD	
WELL NAME	PARKIN NO. 2		SMITH E NO. 1		ROBBINS NO. 1-34	
LOCATION	SEC. 3, T30S, R18W		SEC. 3, T30S, R19W		SEC. 34, T30S, R18W	
OWNER	K & E DRILLING, INC.		ANADARKO PRODUCTION CO.		GRAHAM-MICHAELIS DRILLING CO	
COMPLETED	10/29/65		09/10/66		07/09/66	
SAMPLED	09/26/66		11/01/66		06/27/68	
FORMATION	MISS---		MISS---		MISS-NOT GIVEN	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4893		5055		5032	
WELLHEAD PRESSURE,PSIG	1459		1465		1507	
OPEN FLOW, MCFD	18200		7150		3010	
COMPONENT, MOLE PCT						
METHANE	90.8		85.1		92.9	
ETHANE	3.1		3.5		3.0	
PROPANE	1.0		1.1		0.9	
N-BUTANE	0.3		0.5		0.4	
ISOBUTANE	0.2		TRACE		TRACE	
N-PENTANE	TRACE		0.1		0.2	
ISOPENTANE	0.2		0.2		0.1	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	3.4		8.7		2.0	
OXYGEN	0.3		0.0		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.1		0.1	
HELIUM	0.12		0.39		0.12	
HEATING VALUE*	1032		992		1059	
SPECIFIC GRAVITY	0.610		0.635		0.607	

	INDEX 1942 SAMPLE 14385		INDEX 1943 SAMPLE 14386		INDEX 1944 SAMPLE 14389	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	KIOWA		KIOWA		KIOWA	
FIELD	ALFORD		ALFORD		ALFORD	
WELL NAME	UNRUH D-1		KOEHN NO. 1		PARKIN NO. 1	
LOCATION	SEC. 36, T30S, R18W		SEC. 27, T30S, R18W		SEC. 2, T30S, R19W	
OWNER	MAURICE L. BROWN CO.		MAURICE L. BROWN CO.		MAURICE L. BROWN CO.	
COMPLETED	10/20/75		--/--/00		06/20/74	
SAMPLED	06/13/75		06/12/75		06/13/75	
FORMATION	MISS-		MISS---		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4948		5056		5050	
WELLHEAD PRESSURE,PSIG	1100		1200		1200	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		4500	
COMPONENT, MOLE PCT						
METHANE	72.2		87.0		90.4	
ETHANE	0.2		3.6		3.3	
PROPANE	0.2		1.5		1.0	
N-BUTANE	0.1		0.3		0.3	
ISOBUTANE	0.1		0.2		0.2	
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	TRACE		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	TRACE		0.1		0.1	
NITROGEN	24.4		6.2		4.1	
OXYGEN	2.2		0.0		TRACE	
ARGON	0.3		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.5		0.1	
HELIUM	0.20		0.47		0.20	
HEATING VALUE*	747		1010		1036	
SPECIFIC GRAVITY	0.676		0.627		0.614	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1945 SAMPLE 16107	INDEX 1946 SAMPLE 14143	INDEX 1947 SAMPLE 14146
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	ALFORD	ALLSTOTT	ALLSTOTT
WELL NAME	KEENAN NO. 1	EINSEL NO. 1	MINKS NO. 1
LOCATION	SEC. 20, T30S, R19W	SEC. 11, T28S, R18W	SEC. 13, T28S, R18W
OWNER	J. MARK RICHARDSON	A. L. ABERCROMBIE, INC.	A. L. ABERCROMBIE, INC.
COMPLETED	--/--/80	03/09/74	03/26/74
SAMPLED	10/22/80	09/11/74	09/11/74
FORMATION	MISS	PENN-KANSAS CITY	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5090	4166	4766
WELLHEAD PRESSURE,PSIG	700	1290	1360
OPEN FLOW, MCFD	5800	4311	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	79.3	92.2
ETHANE	3.8	3.8	3.3
PROPANE	1.0	1.9	1.1
N-BUTANE	0.4	0.7	0.3
ISOBUTANE	0.2	0.5	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.1	12.5	2.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.37	0.34	0.17
HEATING VALUE*	1006	997	1056
SPECIFIC GRAVITY	0.627	0.673	0.606

	INDEX 1948 SAMPLE 6788	INDEX 1949 SAMPLE 13457	INDEX 1950 SAMPLE 13674
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	BARSTOW	BARSTOW	BARSTOW
WELL NAME	WELL NO. 1	BARSTOW NO. 1	JANTZ NO. 1
LOCATION	SEC. 20, T29S, R17W	SEC. 28, T29S, R17W	SEC. 28, T29S, R17W
OWNER	RUPP-FERGUSON OIL CO.	DAVIES & FITZGERALD	DAVIES & FITZGERALD
COMPLETED	08/19/58	09/01/72	05/16/73
SAMPLED	08/18/58	10/22/72	07/28/73
FORMATION	MISS-	MISS---	PERM-COTTONWOOD
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4892	4861	2896
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1460	964
OPEN FLOW, MCFD	NOT GIVEN	8870	14000
COMPONENT, MOLE PCT			
METHANE	91.7	90.7	78.9
ETHANE	3.8	3.9	2.8
PROPANE	1.2	1.9	1.4
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.0	0.3	0.3
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.5	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	1.6	2.8	14.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.20	0.18	0.53
HEATING VALUE*	1080	1087	920
SPECIFIC GRAVITY	0.617	0.624	0.663

	INDEX 1951 SAMPLE 4434	INDEX 1952 SAMPLE 4555	INDEX 1953 SAMPLE 14011
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	BRENHAM	BRENHAM	COMKLIN ESTATE
WELL NAME	L. C. REPP NO. 1	CULLINS NO. 1	COMKLIN NO. 1
LOCATION	SEC. 29, T28S, R17W	SEC. 20, T28S, R17W	SEC. 15, T29S, R17W
OWNER	STANOLIND OIL & GAS CO.	J. M. HUBER CORP.	MARSH OIL ASSOC.
COMPLETED	10/01/47	08/28/48	08/05/73
SAMPLED	01/21/48	09/13/48	05/21/74
FORMATION	MISS-LIME	MISS-LIME	PERM-COTTONWOOD
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4841	4832	2866
WELLHEAD PRESSURE,PSIG	1221	1600	945
OPEN FLOW, MCFD	1488	1821	11000
COMPONENT, MOLE PCT			
METHANE	82.4	78.8	77.2
ETHANE	14.0	9.0	2.2
PROPANE	---	---	1.0
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	2.6	10.4	16.3
OXYGEN	0.9	1.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.31	0.16	0.55
HEATING VALUE*	1086	960	874
SPECIFIC GRAVITY	0.638	0.650	0.660

	INDEX 1954 SAMPLE 14144	INDEX 1955 SAMPLE 7840	INDEX 1956 SAMPLE 10713
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	EINSEL	GLICK	GLICK
WELL NAME	GAMBLE NO. 1	E. D. ROBBINS N NO. 1	BOOTH UNIT NO. 1
LOCATION	SEC. 11, T28S, R18W	SEC. 26, T30S, R16W	SEC. 22, T30S, R17W
OWNER	A. L. ABERCROMBIE, INC.	GULF OIL CORP.	PETROLEUM, INC.
COMPLETED	02/23/74	08/27/60	03/23/66
SAMPLED	09/11/74	02/02/61	09/08/66
FORMATION	MISS-	MISS---	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4776	4632	4863
WELLHEAD PRESSURE,PSIG	1392	1496	1493
OPEN FLOW, MCFD	4189	14930	13094
COMPONENT, MOLE PCT			
METHANE	92.1	90.8	91.2
ETHANE	3.2	3.7	3.6
PROPANE	1.2	1.2	1.5
N-BUTANE	0.3	0.3	0.4
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	2.2	1.8	2.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	1.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.19	0.20	0.18
HEATING VALUE*	1069	1056	1087
SPECIFIC GRAVITY	0.609	0.601	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1957 SAMPLE 10779	INDEX 1958 SAMPLE 13837	INDEX 1959 SAMPLE 16309
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	GLICK	GREENSBURG	GREENSBURG E
WELL NAME	KANE NO. 2	MILLER NO. 1	FATZER NO. 1
LOCATION	SEC. 17, T30S, R17W	SEC. 5, T27S, R18W	SEC 22, T27S, R17W
OWNER	PETROLEUM, INC.	BARNETT OIL CO.	STELBAR OIL CORP., INC.
COMPLETED	10/27/66	10/31/73	12/11/80
SAMPLED	11/19/66	12/10/73	08/--/81
FORMATION	MISS---	MISS-	MISS-KINDERHOOK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4894	4698	4679
WELLHEAD PRESSURE,PSIG	1472	1572	1381
OPEN FLOW, MCFD	39000	10087	5400
COMPONENT, MOLE PCT			
METHANE	91.2	89.0	80.1
ETHANE	3.6	3.2	3.2
PROPANE	1.9	1.3	1.4
N-BUTANE	0.5	0.1	0.5
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	2.2	4.8	12.5
OXYGEN	0.0	0.7	0.5
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.2
HELIUM	0.18	0.18	0.73
HEATING VALUE*	1075	1022	964
SPECIFIC GRAVITY	0.620	0.620	0.667

	INDEX 1960 SAMPLE 14145	INDEX 1961 SAMPLE 5992	INDEX 1962 SAMPLE 13627
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	HARDY	MAYLAND NE	MULLINVILLE
WELL NAME	BERTRAM NO. 1	BERGNER NO. 1	SHERER E NO. 3
LOCATION	SEC. 14, T28S, R18W	SEC. 17, T29S, R16W	SEC. 12, T28S, R20W
OWNER	A. L. ABERCROMBIE, INC.	MURFIN DRILLING CO.	PETROLEUM, INC.
COMPLETED	06/07/73	07/02/55	05/10/73
SAMPLED	09/11/74	12/27/55	06/12/73
FORMATION	MISS-	MISS-KINDERHOOK	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4774	4761	4868
WELLHEAD PRESSURE,PSIG	1325	1170	1180
OPEN FLOW, MCFD	7510	411	3400
COMPONENT, MOLE PCT			
METHANE	92.5	91.3	49.7
ETHANE	3.2	3.7	3.3
PROPANE	1.2	1.2	1.1
N-BUTANE	0.3	0.9	0.2
ISOBUTANE	0.3	0.0	0.3
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	1.9	2.0	42.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.17	0.22	2.77
HEATING VALUE*	1059	1072	612
SPECIFIC GRAVITY	0.604	0.615	0.755

	INDEX 1963 SAMPLE 5864	INDEX 1964 SAMPLE 6617	INDEX 1965 SAMPLE 17749
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	NICHOLS	NICHOLS	NICHOLS "20"
WELL NAME	NICHOLS NO. 1	BROWN NO. 1	HARPER E NO. 1
LOCATION	SEC. 20, T29S, R18W	SEC. 32, T29S, R18W	SEC. 20, T29S, R18W
OWNER	GULF OIL CORP.	FALCON SEABOARD DRILLING CO.	TXO PRODUCTION CO.
COMPLETED	02/27/55	08/06/58	03/10/85
SAMPLED	06/15/55	05/30/58	07/09/85
FORMATION	MISS-	MISS-OSAGE	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4997	4911	4360
WELLHEAD PRESSURE,PSIG	1400	250	1050
OPEN FLOW, MCFD	7300	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	94.8	92.4	71.9
ETHANE	1.9	3.3	3.6
PROPANE	0.4	1.0	2.3
N-BUTANE	0.1	0.4	0.9
ISOBUTANE	TRACE	0.3	0.6
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	2.3	1.7	19.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.14	0.10	0.38
HEATING VALUE*	1008	1072	947
SPECIFIC GRAVITY	0.578	0.612	0.718

	INDEX 1966 SAMPLE 6706	INDEX 1967 SAMPLE 14625	INDEX 1968 SAMPLE 14740
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	NOT GIVEN	PLEASANT VALLEY	PLEASANT VALLEY
WELL NAME	BECKER NO. 1	DURREE NO. 1	PALMER-MILLER NO. 1
LOCATION	SEC. 13, T28S, R19W	SEC. 31, T28S, R20W	SEC. 31, T28S, R20W
OWNER	PETROLEUM, INC.	HALLIBURTON OIL PRODUCING CO	DONALD C. SLAWSON
COMPLETED	10/10/57	07/17/75	04/14/75
SAMPLED	07/01/58	03/24/76	08/27/76
FORMATION	MISS-CHERT	MISS-NOT GIVEN	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4839	5064	5021
WELLHEAD PRESSURE,PSIG	1365	1400	1410
OPEN FLOW, MCFD	3604	8000	44780
COMPONENT, MOLE PCT			
METHANE	91.7	84.7	84.2
ETHANE	3.3	4.9	4.9
PROPANE	0.9	1.8	1.8
N-BUTANE	0.4	0.5	0.6
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.6	6.8	7.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.33	0.34
HEATING VALUE*	1054	1045	1040
SPECIFIC GRAVITY	0.610	0.648	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX SAMPLE 15185	INDEX SAMPLE 7932	INDEX SAMPLE 13258
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	PLEASANT VALLEY E	QUAKER	QUAKER
WELL NAME	BRENSING NO. 1	DAVIS NO. 1	KERR NO. 1
LOCATION	SEC. 6, T28S, R20W	NOT GIVEN	SEC. 10, T27S, R19W
OWNER	KRM PETROLEUM CORP.	WESTERN PETROLEUM, INC.	PETROLEUM, INC.
COMPLETED	12/29/77	--/--/00	11/11/71
SAMPLED	12/29/77	04/20/61	06/07/72
FORMATION	MISS---	MISS-	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4959	4792	4242
WELLHEAD PRESSURE,PSIG	1250	NOT GIVEN	1450
OPEN FLOW, MCFD	65000	1630	1020
COMPONENT, MOLE PCT			
METHANE	83.6	90.3	68.1
ETHANE	4.9	3.5	2.9
PROPANE	1.8	0.9	2.0
N-BUTANE	0.6	0.3	0.7
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	7.7	3.8	24.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.40	0.30	0.45
HEATING VALUE*	1039	1038	856
SPECIFIC GRAVITY	0.656	0.614	0.728

	INDEX SAMPLE 13259	INDEX SAMPLE 7998	INDEX SAMPLE 10729
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	QUAKER	SCHWARM	THACH
WELL NAME	KERR NO. 1	SCHWARM NO. 1	SWISHER NO. 1-21
LOCATION	SEC. 10, T27S, R19W	SEC. 32, T29S, R17W	SEC. 21, T29S, R19W
OWNER	PETROLEUM, INC.	KAISER-FRANCIS OIL CO.	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	08/01/70	--/--/00	09/29/65
SAMPLED	06/08/72	05/25/61	08/15/66
FORMATION	MISS-	MISS---	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4790	NOT GIVEN	5084
WELLHEAD PRESSURE,PSIG	1224	NOT GIVEN	1327
OPEN FLOW, MCFD	1390	NOT GIVEN	10170
COMPONENT, MOLE PCT			
METHANE	90.6	90.9	80.1
ETHANE	3.2	3.9	3.8
PROPANE	1.1	1.4	1.5
N-BUTANE	0.3	0.5	0.4
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	3.8	2.1	12.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.27	0.20	0.60
HEATING VALUE*	1041	1077	953
SPECIFIC GRAVITY	0.614	0.620	0.660

	INDEX SAMPLE 12159	INDEX SAMPLE 13749	INDEX SAMPLE 9205
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	THACH	THACH	URSULA NE
WELL NAME	PORTER NO. 1	NELSON NO. 1	KRUSE NO. 1
LOCATION	SEC. 5, T29S, R19W	SEC. 32, T28S, R19W	SEC. 5, T29S, R17W
OWNER	RAYMOND OIL CO., INC.	ALPINE DRILLING CO.	JAMES F. SMITH
COMPLETED	12/06/69	08/01/73	12/--/63
SAMPLED	01/03/70	10/09/73	12/18/63
FORMATION	MISS---	MISS-WARSAW	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4984	4986	4900
WELLHEAD PRESSURE,PSIG	1380	1400	1380
OPEN FLOW, MCFD	4070	1775	2000
COMPONENT, MOLE PCT			
METHANE	70.3	47.3	90.0
ETHANE	3.8	4.4	3.6
PROPANE	1.0	0.8	1.1
N-BUTANE	0.3	0.3	0.5
ISOBUTANE	0.2	0.3	TRACE
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	22.1	43.9	3.3
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.2	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	1.31	2.27	0.40
HEATING VALUE*	837	613	1062
SPECIFIC GRAVITY	0.686	0.773	0.623

	INDEX SAMPLE 9224	INDEX SAMPLE 9293	INDEX SAMPLE 14997
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	URSULA NE	URSULA NE	WOD
WELL NAME	WEDEL NO. 1	WEDEL NO. 1	LONG NO. 1
LOCATION	SEC. 17, T29S, R18W	SEC. 17, T29S, R18W	SEC. 21, T27S, R17W
OWNER	APACHE CORP.	APACHE CORP.	IMPERIAL OIL CO.
COMPLETED	10/17/63	10/01/63	10/08/76
SAMPLED	01/22/64	04/09/64	05/12/77
FORMATION	MISS-CHERT	MISS-	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4875	4863	4648
WELLHEAD PRESSURE,PSIG	961	800	1350
OPEN FLOW, MCFD	2420	NOT GIVEN	4094
COMPONENT, MOLE PCT			
METHANE	90.2	94.6	84.6
ETHANE	3.8	TRACE	5.2
PROPANE	1.1	0.1	2.7
N-BUTANE	0.5	TRACE	0.6
ISOBUTANE	0.2	TRACE	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	3.0	4.7	5.3
OXYGEN	0.3	TRACE	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.20	0.35	0.36
HEATING VALUE*	1060	961	1080
SPECIFIC GRAVITY	0.622	0.573	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1981 SAMPLE 14998	INDEX 1982 SAMPLE 16675	INDEX 1983 SAMPLE 15257
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	VOD	VOD	WELLSFORD
WELL NAME	DAVIS NO. 1	MATTHEWS NO. 2	GRIMM NO. 1
LOCATION	SEC. 18, T27S, R16W	SEC. 7, T27S, R16W	SEC. 2, T28S, R16W
OWNER	IMPERIAL OIL CO.	BEREN CORP.	IMPERIAL OIL CO.
COMPLETED	10/22/76	12/--/81	07/18/77
SAMPLED	05/12/77	09/29/82	04/--/78
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4593	4566	4635
WELLHEAD PRESSURE,PSIG	1370	1360	1370
OPEN FLOW, MCFD	3624	4750	4550
COMPONENT, MOLE PCT			
METHANE	87.9	86.9	87.0
ETHANE	3.7	3.6	4.3
PROPANE	1.7	1.5	2.0
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.5	5.6	4.8
OXYGEN	0.3	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.37	0.42	0.36
HEATING VALUE*	1055	1038	1055
SPECIFIC GRAVITY	0.634	0.635	0.635

	INDEX 1984 SAMPLE 6206	INDEX 1985 SAMPLE 17082	INDEX 1986 SAMPLE 3193
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KIOWA	KIOWA	LABETTE
FIELD	WILDCAT	WILDCAT	CHERRYVALE S
WELL NAME	STEWART NO. 1	NIER NO. 1	JOHN WILMOTH NO. 1
LOCATION	SEC. 35, T27S, R18W	SEC. 8, T29S, R20W	SEC. 12, T34S, R18E
OWNER	ANSCHUTZ DRILLING CO., INC.	MIDCO EXPLORATION, INC.	VEEDER SUPPLY & DEV. CO.
COMPLETED	10/12/56	10/04/83	09/19/41
SAMPLED	10/15/56	10/03/83	03/25/42
FORMATION	MISS-KINDERHOOK	MISS-	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	360	360	365
DEPTH, FEET	4730	5092	558
WELLHEAD PRESSURE,PSIG	1172	NOT GIVEN	220
OPEN FLOW, MCFD	2738	4119	500
COMPONENT, MOLE PCT			
METHANE	92.4	77.8	71.5
ETHANE	3.2	5.0	23.9
PROPANE	0.6	2.5	---
N-BUTANE	0.5	0.7	---
ISOBUTANE	TRACE	0.4	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.5	0.2	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	2.3	12.3	3.8
OXYGEN	0.0	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.19	0.57	0.13
HEATING VALUE*	1047	998	1153
SPECIFIC GRAVITY	0.604	0.678	0.695

	INDEX 1987 SAMPLE 3195	INDEX 1988 SAMPLE 3206	INDEX 1989 SAMPLE 3186
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LABETTE	LABETTE	LEAVENWORTH
FIELD	CHERRYVALE S	CHERRYVALE S	LINWOOD
WELL NAME	BROWN NO. 1	JOHN WILMOTH NO. 1	SMITH NO. 1
LOCATION	SEC. 13, T34S, R18E	SEC. 12, T34S, R18E	SEC. 14, T12S, R21E
OWNER	VEEDER SUPPLY & DEV. CO.	VEEDER SUPPLY & DEV. CO.	HARRY J. SMITH
COMPLETED	10/01/41	--/--/41	12/--/39
SAMPLED	03/25/42	03/25/42	03/26/42
FORMATION	PENN-SQUIRREL	PENN-OSWEGO	PENN-SQUIRREL
GEOLOGIC PROVINCE CODE	365	365	335
DEPTH, FEET	370	272	575
WELLHEAD PRESSURE,PSIG	150	NOT GIVEN	170
OPEN FLOW, MCFD	200	70	180
COMPONENT, MOLE PCT			
METHANE	97.8	88.8	95.0
ETHANE	0.0	0.4	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.3	8.3	4.2
OXYGEN	0.4	1.7	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.7	0.2
HELIUM	0.07	0.13	0.29
HEATING VALUE*	991	907	962
SPECIFIC GRAVITY	0.567	0.606	0.574

	INDEX 1990 SAMPLE 3254	INDEX 1991 SAMPLE 3179	INDEX 1992 SAMPLE 1741
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LEAVENWORTH	LEAVENWORTH	MARION
FIELD	MCLOUTH	ROBERTS	ANTELOPE
WELL NAME	M. J. REGAN NO. 1	ROBERTS NO. 2	PROPP NO. 1
LOCATION	SEC. 3, T9S, R20E	SEC. 12, T11S, R22E	SEC. 8, T19S, R4E
OWNER	MCLOUGHLIN DEVELOPMENT CO.	ROBERTS ESTATE	CITIES SERVICE GAS CO.
COMPLETED	09/--/40	--/--/00	05/--/26
SAMPLED	03/27/42	03/26/42	04/12/29
FORMATION	PENN-MCLOUTH	PENN-SQUIRREL	MISS-CHAT
GEOLOGIC PROVINCE CODE	335	335	375
DEPTH, FEET	1412	NOT GIVEN	2360
WELLHEAD PRESSURE,PSIG	370	105	740
OPEN FLOW, MCFD	6000	NOT GIVEN	4250
COMPONENT, MOLE PCT			
METHANE	92.4	91.0	62.7
ETHANE	1.0	0.4	23.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.5	7.7	13.0
OXYGEN	0.4	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.1
HELIUM	0.33	0.32	0.56
HEATING VALUE*	955	929	1054
SPECIFIC GRAVITY	0.587	0.592	0.723

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 1993 SAMPLE 1742	INDEX 1994 SAMPLE 11794	INDEX 1995 SAMPLE 10956
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MARION	MARION	MARION
FIELD	ANTELOPE	DURHAM E	GREVE
WELL NAME	PROPP NO. 2	SCULLY-HANSON NO. 1	GREVE NO. 1
LOCATION	SEC. 8, T19S, R4E	SEC. 35, T18S, R2E	SEC. 10, T19S, R2E
OWNER	CITIES SERVICE GAS CO.	ROUNDS & STEWART NATURAL GAS	DIETER PRODUCTION CO.
COMPLETED	08/--/26	06/29/66	--/--/00
SAMPLED	04/13/29	03/20/69	05/15/67
FORMATION	MISS-CHAT	MISS---	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2360	2533	2550
WELLHEAD PRESSURE,PSIG	740	180	680
OPEN FLOW, MCFD	1250	65	500
COMPONENT, MOLE PCT			
METHANE	62.0	69.6	79.1
ETHANE	24.4	5.9	6.3
PROPANE	---	3.6	3.1
N-BUTANE	---	1.3	1.2
ISOBUTANE	---	0.5	0.5
N-PENTANE	---	0.4	0.3
ISOPENTANE	---	0.3	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	12.6	16.8	8.1
OXYGEN	0.3	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.56	0.84	0.53
HEATING VALUE*	1065	1012	1092
SPECIFIC GRAVITY	0.729	0.736	0.694

	INDEX 1996 SAMPLE 4282	INDEX 1997 SAMPLE 5580	INDEX 1998 SAMPLE 7543
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MARION	MARION	MARION
FIELD	LEHIGH	LEHIGH N	LOST SPRINGS
WELL NAME	WARKENTIN NO. 1	WASEMILLER NO. 1	VOGEL NO. 1
LOCATION	SEC. 27, T19S, R1E	SEC. 23, T19S, R1E	SEC. 10, T19, R3E
OWNER	ANDERSON-PRICHARD OIL CORP.	ANDERSON-PRICHARD OIL CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	09/03/46	--/--/00	--/--/00
SAMPLED	02/--/47	01/28/53	05/09/60
FORMATION	MISS-	MISS---	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2806	2770	2440
WELLHEAD PRESSURE,PSIG	820	800	800
OPEN FLOW, MCFD	5771	2310	676
COMPONENT, MOLE PCT			
METHANE	71.4	74.1	74.0
ETHANE	18.6	5.5	6.7
PROPANE	---	2.8	4.1
N-BUTANE	---	1.0	2.0
ISOBUTANE	---	0.2	0.8
N-PENTANE	---	0.3	0.7
ISOPENTANE	---	0.2	0.5
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	0.1	0.6
NITROGEN	8.9	13.7	9.9
OXYGEN	0.1	1.7	0.1
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.0	0.1
HELIUM	0.44	0.38	0.60
HEATING VALUE*	1057	989	1160
SPECIFIC GRAVITY	0.688	0.706	0.754

	INDEX 1999 SAMPLE 17197	INDEX 2000 SAMPLE 3243	INDEX 2001 SAMPLE 1381
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MARION	MARION	MCPHERSON
FIELD	LOST SPRINGS	ROBINSON	JOHNSON
WELL NAME	COTT NO. 2	ROBINSON NO. 1	ANDERSON NO. 2
LOCATION	SEC. 24, T18S, R4E	SEC. 15, T20S, R5E	SEC. 29, T18S, R2W
OWNER	R. F. WHITE	FRANK DIETER, ET AL.	MERRIMAN, REEVES & SHIDEL
COMPLETED	08/25/83	09/23/41	--/--/00
SAMPLED	02/--/84	04/01/42	04/28/27
FORMATION	PENN-SEVERY	PENN-BARTLESVILLE	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	1200	2070	2930
WELLHEAD PRESSURE,PSIG	450	700	950
OPEN FLOW, MCFD	2000	935	10300
COMPONENT, MOLE PCT			
METHANE	70.1	58.0	73.7
ETHANE	2.8	21.7	20.1
PROPANE	1.3	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	24.3	18.8	5.6
OXYGEN	TRACE	0.4	0.0
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.93	0.66	0.34
HEATING VALUE*	807	976	1107
SPECIFIC GRAVITY	0.686	0.743	0.679

	INDEX 2002 SAMPLE 1878	INDEX 2003 SAMPLE 1877	INDEX 2004 SAMPLE 3228
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MCPHERSON	MCPHERSON	MCPHERSON
FIELD	JOHNSON	RITZ-CANTON	RITZ-CANTON
WELL NAME	C. O. ANDERSON NO. 2	DECKER NO. 1	AYERS 1-B
LOCATION	SEC. 31, T18S, R2W	SEC. 11, T19S, R2W	SEC. 14, T19S, R2W
OWNER	PRAIRIE OIL & GAS CO.	MCPHERSON OIL & GAS DEV. CO.	MCPHERSON OIL & GAS DEV. CO.
COMPLETED	01/01/28	07/10/29	02/20/31
SAMPLED	09/29/29	09/24/29	03/28/42
FORMATION	MISS-CHAT	MISS-CHAT	MISS-LIME
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2972	2887	2889
WELLHEAD PRESSURE,PSIG	665	1000	42
OPEN FLOW, MCFD	3400	18000	977
COMPONENT, MOLE PCT			
METHANE	74.3	72.6	65.4
ETHANE	19.4	20.1	31.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.8	6.6	2.8
OXYGEN	0.2	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.38	0.40	0.24
HEATING VALUE*	1100	1096	1220
SPECIFIC GRAVITY	0.674	0.682	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX SAMPLE 2005 3229	INDEX SAMPLE 2006 3235	INDEX SAMPLE 2007 4563
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MCPHERSON	MCPHERSON	MCPHERSON
FIELD	RITZ-CANTON	RITZ-CANTON	RITZ-CANTON
WELL NAME	COONS NO. 1	DECKER NO. 2	GRIFFITH NO. 1
LOCATION	SEC. 13, T19S, R1W	SEC. 11, T19S, R2W	SEC. 35, T19S, R1W
OWNER	E. K. CAREY	MCPHERSON OIL & GAS DEV. CO.	DONALD T. INGLING
COMPLETED	10/21/40	--/--/00	05/20/48
SAMPLED	03/28/42	03/28/42	09/28/48
FORMATION	MISS-LIME	MISS-LIME	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	2895	2949
WELLHEAD PRESSURE,PSIG	600	158	700
OPEN FLOW, MCFD	804	4	300
COMPONENT, MOLE PCT			
METHANE	74.8	63.2	60.5
ETHANE	19.2	26.1	24.6
PROPANE	----	----	----
N-BUTANE	----	----	----
ISOBUTANE	----	----	----
N-PENTANE	----	----	----
ISOPENTANE	----	----	----
CYCLOPENTANE	----	----	----
HEXANES PLUS	----	----	----
NITROGEN	5.3	9.6	12.5
OXYGEN	0.2	0.5	2.0
ARGON	----	----	----
HYDROGEN	----	----	----
HYDROGEN SULFIDE**	----	----	----
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.39	0.45	0.25
HEATING VALUE*	1102	1108	1054
SPECIFIC GRAVITY	0.672	0.724	0.738

	INDEX SAMPLE 2008 1939	INDEX SAMPLE 2009 3219	INDEX SAMPLE 2010 1724
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MCPHERSON	MCPHERSON	MCPHERSON
FIELD	VOSHELL	VOSHELL	WEDEL
WELL NAME	KINNEY NO. 1	KRAENILL NO. 2	WEDEL NO. 1
LOCATION	SEC. 34, T20S, R3W	SEC. 4, T21S, R3W	SEC. 12, T20S, R 2W
OWNER	GYPSY OIL CO.	W. C. MCBRIDE, INC.	MCPHERSON OIL & GAS DEV. CO.
COMPLETED	12/--/29	07/--/35	02/--/29
SAMPLED	02/24/30	03/28/42	03/09/29
FORMATION	MISS-	MISS-LIME	MISS-CHERT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3072	2977	2982
WELLHEAD PRESSURE,PSIG	850	NOT GIVEN	900
OPEN FLOW, MCFD	2000	NOT GIVEN	6436
COMPONENT, MOLE PCT			
METHANE	76.4	65.8	62.9
ETHANE	17.9	29.7	25.4
PROPANE	----	----	----
N-BUTANE	----	----	----
ISOBUTANE	----	----	----
N-PENTANE	----	----	----
ISOPENTANE	----	----	----
CYCLOPENTANE	----	----	----
HEXANES PLUS	----	----	----
NITROGEN	5.0	3.6	10.6
OXYGEN	0.2	0.3	0.3
ARGON	----	----	----
HYDROGEN	----	----	----
HYDROGEN SULFIDE**	----	----	----
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.33	0.26	0.31
HEATING VALUE*	1199	1199	1092
SPECIFIC GRAVITY	0.665	0.720	0.729

	INDEX SAMPLE 2011 4005	INDEX SAMPLE 2012 4416	INDEX SAMPLE 2013 4576
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	ADAMS RANCH	ADAMS RANCH	ADAMS RANCH
WELL NAME	A. W. ADAMS NO. 1	ADAMS NO. 2	ADAMS A-1
LOCATION	SEC. 8, T35S, R30W	SEC. 36, T34S, R30W	SEC. 24, T34S, R30W
OWNER	STANOLIND OIL & GAS CO.	MELBERICH & PAYNE, INC.	WHITE EAGLE OIL CO.
COMPLETED	--/--/00	07/20/47	04/26/48
SAMPLED	--/--/00	12/30/47	10/04/48
FORMATION	MISS-LIME	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5650	5911	5891
WELLHEAD PRESSURE,PSIG	1650	1250	1125
OPEN FLOW, MCFD	1400	2860	5200
COMPONENT, MOLE PCT			
METHANE	79.3	76.4	70.9
ETHANE	18.3	21.1	26.1
PROPANE	----	----	----
N-BUTANE	----	----	----
ISOBUTANE	----	----	----
N-PENTANE	----	----	----
ISOPENTANE	----	----	----
CYCLOPENTANE	----	----	----
HEXANES PLUS	----	----	----
NITROGEN	1.4	1.9	2.1
OXYGEN	0.4	0.3	0.5
ARGON	----	----	----
HYDROGEN	----	----	----
HYDROGEN SULFIDE**	----	----	----
CARBON DIOXIDE	0.5	0.2	0.3
HELIUM	0.12	0.11	0.13
HEATING VALUE*	1131	1152	1186
SPECIFIC GRAVITY	0.657	0.670	0.698

	INDEX SAMPLE 2014 5377	INDEX SAMPLE 2015 7550	INDEX SAMPLE 2016 7587
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	ADAMS RANCH	ADAMS RANCH	ADAMS RANCH
WELL NAME	ADAMS K NO. 1	Mm. G. ADAMS NO. 1-25	ADAMS E-1
LOCATION	SEC. 11, T35S, R30W	SEC. 25, T34S, R30W	SEC. 10, T35S, R30W
OWNER	COLUMBIAN FUEL CORP.	THOMAS & BREWER OIL & GAS CO	THOMAS & BREWER OIL & GAS CO
COMPLETED	11/18/52	11/30/59	09/09/59
SAMPLED	01/12/53	05/09/60	06/23/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5760	5926	5754
WELLHEAD PRESSURE,PSIG	1375	1650	1520
OPEN FLOW, MCFD	4295	31650	20500
COMPONENT, MOLE PCT			
METHANE	84.4	83.2	87.4
ETHANE	5.7	7.4	6.0
PROPANE	3.6	4.0	3.1
N-BUTANE	1.1	1.1	0.9
ISOBUTANE	0.3	0.7	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.8	0.1
NITROGEN	3.8	2.5	1.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.13	0.10	0.10
HEATING VALUE*	1125	1165	1136
SPECIFIC GRAVITY	0.669	0.689	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2017 SAMPLE 12381	INDEX 2018 SAMPLE 7680	INDEX 2019 SAMPLE 12758
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	ADAMS RANCH	ANGELL	ANGELL
WELL NAME	SCHONLAU A NO. 1	MAMIE S. ANGELL NO. 2	J. R. COTTRELL NO. 1-V
LOCATION	SEC. 9, T34S, R30W	SEC. 30, T32S, R29W	SEC. 20, T32S, R29W
OWNER	ANADARKO PRODUCTION CO.	SINCLAIR OIL & GAS CO.	CLINTON OIL CO.
COMPLETED	06/13/69	08/01/60	02/14/71
SAMPLED	08/25/70	09/19/60	04/14/71
FORMATION	PENN-MORROW L	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5898	5570	5628
WELLHEAD PRESSURE,PSIG	1645	1486	1518
OPEN FLOW, MCFD	1492	7000	11200
COMPONENT, MOLE PCT			
METHANE	85.0	77.1	74.3
ETHANE	5.9	6.4	6.7
PROPANE	3.6	4.1	4.9
N-BUTANE	1.1	1.1	1.3
ISOBUTANE	0.5	0.8	1.0
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.7	9.3	10.3
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.12	0.20	0.16
HEATING VALUE*	1150	1101	1126
SPECIFIC GRAVITY	0.672	0.712	0.738

	INDEX 2020 SAMPLE 13090	INDEX 2021 SAMPLE 13205	INDEX 2022 SAMPLE 13479
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	ANGELL	ANGELL	ANGELL
WELL NAME	ROBERTS NO. 1	ROLLINS NO. 1	COLLINSWOOD NO. 1
LOCATION	SEC. 29, T32S, R29W	SEC. 28, T32S, R29W	SEC. 6, T33S, R29W
OWNER	LEBEN OIL CORP.	LEBEN OIL CORP.	IMPERIAL OIL CO.
COMPLETED	08/30/71	12/27/71	04/11/72
SAMPLED	10/19/71	05/--/72	11/--/72
FORMATION	PENN-MARMATON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5221	5642	5710
WELLHEAD PRESSURE,PSIG	1488	1336	1650
OPEN FLOW, MCFD	5145	4698	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.0	72.8	77.5
ETHANE	4.4	6.3	6.3
PROPANE	2.4	5.1	4.0
N-BUTANE	0.7	1.3	0.9
ISOBUTANE	0.5	1.1	0.6
N-PENTANE	0.1	0.5	0.2
ISOPENTANE	0.1	0.8	0.8
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	13.1	11.7	9.6
OXYGEN	2.0	0.7	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.5
HELIUM	0.20	0.16	0.21
HEATING VALUE*	974	1095	1066
SPECIFIC GRAVITY	0.699	0.738	0.696

	INDEX 2023 SAMPLE 13480	INDEX 2024 SAMPLE 7035	INDEX 2025 SAMPLE 15795
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	ANGELL	BARRAGREE	BORCHERS
WELL NAME	ROBERTS B. NO. 1	FLORA BARRAGREE NO. 1	HEINSON NO. 1-27
LOCATION	SEC. 33, T32S, R29W	SEC. 25, T34S, R28W	SEC. 27, T33S, R28W
OWNER	IMPERIAL OIL CO.	SKELLY OIL CO.	MESA PETROLEUM CO.
COMPLETED	04/06/72	05/19/59	--/--/00
SAMPLED	--/--/00	04/09/59	09/27/79
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5622	3066	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1600	847	1625
OPEN FLOW, MCFD	NOT GIVEN	13275	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	80.5	87.8
ETHANE	6.3	5.5	4.7
PROPANE	4.8	2.2	2.2
N-BUTANE	1.4	0.7	0.7
ISOBUTANE	0.9	0.4	0.4
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	10.1	8.7	2.6
OXYGEN	0.2	1.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.17	0.10	0.16
HEATING VALUE*	1116	1041	1105
SPECIFIC GRAVITY	0.742	0.678	0.647

	INDEX 2026 SAMPLE 7310	INDEX 2027 SAMPLE 12315	INDEX 2028 SAMPLE 7264
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	BORCHERS N	BORCHERS N	BORCHERS NW
WELL NAME	J. S. FLETCHER NO. 3	LOEWEN NO. 1-A	CARL EVANS NO. 1
LOCATION	SEC. 7, T33S, R28W	SEC. 1, T33S, R28W	SEC. 1, T33S, R29W
OWNER	SHAMROCK OIL & GAS CORP.	FERGUSON OIL CO., INC.	SKELLY OIL CO.
COMPLETED	10/21/59	--/--/00	07/13/59
SAMPLED	12/10/59	07/07/70	10/28/59
FORMATION	PENN-MARMATON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5079	5672	5612
WELLHEAD PRESSURE,PSIG	1428	1223	1709
OPEN FLOW, MCFD	5079	11351	10842
COMPONENT, MOLE PCT			
METHANE	79.1	90.8	84.3
ETHANE	5.6	4.7	5.5
PROPANE	3.6	2.2	3.1
N-BUTANE	0.8	0.6	0.7
ISOBUTANE	0.0	0.4	0.4
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	3.0	0.1	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	7.8	1.4	5.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.20	0.09	0.10
HEATING VALUE*	1154	1110	1088
SPECIFIC GRAVITY	0.721	0.630	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2029 SAMPLE 10226		INDEX 2030 SAMPLE 10754		INDEX 2031 SAMPLE 13483	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	BORCHERS NW		BORCHERS NW		BRUNO	
WELL NAME	BESSMER NO. 1		HALLOCK B NO. 1-36		GIBLER NO. 1	
LOCATION	SEC. 1, T33S, R29W		SEC. 36, T32S, R29W		SEC. 20, T33S, R30W	
OWNER	EDWIN G. BRADLEY		HORIZON OIL & GAS CO.		COTTON PETROLEUM CORP.	
COMPLETED	10/14/65		05/06/66		10/24/72	
SAMPLED	10/15/65		10/31/66		12/10/72	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5564		5611		5737	
WELLHEAD PRESSURE,PSIG	1421		1675		740	
OPEN FLOW, MCFD	NOT GIVEN		28000		2000	
COMPONENT, MOLE PCT						
METHANE	78.3		79.2		86.2	
ETHANE	5.2		6.5		5.9	
PROPANE	3.0		4.1		2.8	
N-BUTANE	0.9		1.1		0.6	
ISOBUTANE	0.5		0.6		0.4	
N-PENTANE	0.1		0.3		0.1	
ISOPENTANE	0.5		0.4		0.1	
CYCLOPENTANE	0.1		0.2		TRACE	
HEXANES PLUS	0.3		0.4		0.1	
NITROGEN	9.0		6.8		3.5	
OXYGEN	0.0		0.1		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.8		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		0.1		0.1	
HELIUM	0.17		0.16		0.14	
HEATING VALUE*	1059		1140		1099	
SPECIFIC GRAVITY	0.695		0.709		0.648	

	INDEX 2032 SAMPLE 10814		INDEX 2033 SAMPLE 10815		INDEX 2034 SAMPLE 6116	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	CHERRY		CHERRY		CIMARRON BEND	
WELL NAME	CHERRY NO. 1		CHERRY NO. 1		ADAMS RANCH NO. 1	
LOCATION	SEC. 3, T31S, R26W		SEC. 3, T31S, R26W		SEC. 1, T35S, R29W	
OWNER	BURK ROYALTY CO.		BURK ROYALTY CO.		CARTER OIL CO.	
COMPLETED	--/--/00		--/--/00		07/09/55	
SAMPLED	12/13/66		12/13/66		07/23/56	
FORMATION	PENN-KANSAS CITY		PENN-LANSING		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4886		4526		6070	
WELLHEAD PRESSURE,PSIG	1490		1389		NOT GIVEN	
OPEN FLOW, MCFD	2100		2950		3500	
COMPONENT, MOLE PCT						
METHANE	70.5		67.2		86.0	
ETHANE	6.3		5.0		5.4	
PROPANE	4.3		3.6		3.1	
N-BUTANE	1.3		1.1		0.9	
ISOBUTANE	0.5		0.5		0.5	
N-PENTANE	0.2		0.2		0.3	
ISOPENTANE	0.6		0.4		0.2	
CYCLOPENTANE	TRACE		0.1		0.2	
HEXANES PLUS	0.1		0.2		0.4	
NITROGEN	15.8		21.3		2.7	
OXYGEN	0.1		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.2	
HELIUM	0.23		0.25		0.15	
HEATING VALUE*	1039		957		1145	
SPECIFIC GRAVITY	0.738		0.747		0.669	

	INDEX 2035 SAMPLE 10505		INDEX 2036 SAMPLE 14572		INDEX 2037 SAMPLE 14573	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	CIMARRON BEND		CIMARRON BEND		CIMARRON BEND	
WELL NAME	ADAMS RANCH NO. 1		H. G. ADAMS III NO. F-4		JESSE S. ADAMS NO. F-2	
LOCATION	SEC. 1, T35S, R29W		SEC. 4, T35S, R29W		SEC. 10, T35S, R29W	
OWNER	HUMBLE OIL & REFINING CO.		R. CLAY UNDERWOOD		R. CLAY UNDERWOOD	
COMPLETED	07/11/55		05/15/75		12/15/75	
SAMPLED	04/05/66		02/03/76		02/03/76	
FORMATION	MISS-CHESTER		MISS-CHESTER		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6106		5874		5938	
WELLHEAD PRESSURE,PSIG	1006		1580		1600	
OPEN FLOW, MCFD	592		1378		1423	
COMPONENT, MOLE PCT						
METHANE	85.5		87.8		87.8	
ETHANE	5.7		3.4		5.0	
PROPANE	3.4		2.0		2.8	
N-BUTANE	1.0		0.5		0.7	
ISOBUTANE	0.5		0.3		0.5	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.4		0.1		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	2.7		5.4		2.3	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.1	
HELIUM	0.13		0.22		0.13	
HEATING VALUE*	1147		1043		1123	
SPECIFIC GRAVITY	0.671		0.632		0.650	

	INDEX 2038 SAMPLE 14574		INDEX 2039 SAMPLE 14742		INDEX 2040 SAMPLE 14743	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	CIMARRON BEND		CIMARRON BEND		CIMARRON BEND	
WELL NAME	H. G. ADAMS III NO. F-3		ADAMS NO. 1-2		BARRAGREE NO. 1-8	
LOCATION	SEC. 9, T35S, R29W		SEC. 2, T35S, R29W		SEC. 8, T35S, R28W	
OWNER	R. CLAY UNDERWOOD		MESA PETROLEUM CO.		MESA PETROLEUM CO.	
COMPLETED	05/25/75		--/--/00		--/--/00	
SAMPLED	02/03/76		08/28/76		08/28/76	
FORMATION	MISS-CHESTER		MISS-CHESTER & PENN-TORONTO		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5873		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1520		1290		1110	
OPEN FLOW, MCFD	765		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	88.6		83.3		85.8	
ETHANE	4.8		3.3		5.1	
PROPANE	2.3		2.0		2.4	
N-BUTANE	0.5		0.8		0.6	
ISOBUTANE	0.3		0.4		0.3	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.2		0.2		0.1	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	2.7		5.6		4.9	
OXYGEN	TRACE		0.6		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.1	
HELIUM	0.13		0.13		0.16	
HEATING VALUE*	1088		1063		1088	
SPECIFIC GRAVITY	0.634		0.667		0.651	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2041 SAMPLE 14744	INDEX 2042 SAMPLE 15093	INDEX 2043 SAMPLE 6193
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	CIMARRON BEND	CROOKED L	FINCHAM
WELL NAME	BARRAGREE NO. 1-8	CROOKED L RANCH NO. 1	MARION NO. 1
LOCATION	SEC. 8, T35S, R28W	SEC. 21, T32S, R28W	SEC. 14, T35S, R27W
OWNER	MESA PETROLEUM CO.	IMPERIAL OIL CO.	MONSANTO CHEMICAL CO.
COMPLETED	--/--/00	05/11/77	10/26/56
SAMPLED	08/28/76	09/--/77	11/30/56
FORMATION	PENN-MORROW	PENN-ATOKA	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5427	6257
WELLHEAD PRESSURE,PSIG	1405	1550	1660
OPEN FLOW, MCFD	NOT GIVEN	5173	30000
COMPONENT, MOLE PCT			
METHANE	85.8	69.2	89.7
ETHANE	5.8	5.7	4.4
PROPANE	2.8	5.5	2.5
N-BUTANE	0.8	2.1	0.7
ISOBUTANE	0.3	1.2	0.8
N-PENTANE	0.2	0.9	0.5
ISOPENTANE	0.1	0.7	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.7	0.3
NITROGEN	3.7	13.3	0.7
OXYGEN	0.0	0.3	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.7
HELIUM	0.16	0.22	0.12
HEATING VALUE*	1113	1169	1121
SPECIFIC GRAVITY	0.658	0.797	0.641

	INDEX 2044 SAMPLE 6452	INDEX 2045 SAMPLE 7248	INDEX 2046 SAMPLE 14741
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	HOCKETT	HORACE S	HORACE S
WELL NAME	NO. 1 FLAGEL A	M. G. ADAMS B NO. 1	ADAMS NO. 1-34
LOCATION	SEC. 20, T31S, R29W	SEC. 26, T34S, R29W	SEC. 34, T34S, R29W
OWNER	NORTHERN NATURAL GAS CO.	TEXACO INC.	MESA PETROLEUM CO.
COMPLETED	10/12/57	09/26/59	--/--/00
SAMPLED	12/02/57	10/12/59	--/--/00
FORMATION	MISS-CHESTER	PENN-TORONTO	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5545	4388	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1296	NOT GIVEN	1523
OPEN FLOW, MCFD	2033	2913	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.7	77.5	83.1
ETHANE	5.6	6.4	6.2
PROPANE	4.2	3.5	5.9
N-BUTANE	1.4	0.9	1.2
ISOBUTANE	1.0	0.5	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.4	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	10.5	10.1	3.8
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.20	0.30	0.14
HEATING VALUE*	1084	1073	1160
SPECIFIC GRAVITY	0.719	0.699	0.689

	INDEX 2047 SAMPLE 14745	INDEX 2048 SAMPLE 14746	INDEX 2049 SAMPLE 14246
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	HORACE S	HORACE S	JOHAN
WELL NAME	ADAM NO. 1-33	ADAM NO. 1-33	JOHANNSEN-BARRY NO. 1
LOCATION	SEC. 33, T34S, R29W	SEC. 33, T34S, R29W	SEC. 32, T34S, R27W
OWNER	MESA PETROLEUM CO.	MESA PETROLEUM CO.	JOHNSON-MIZEL OIL CO.
COMPLETED	--/--/00	--/--/00	07/--/74
SAMPLED	08/28/76	08/28/76	12/23/74
FORMATION	MISS-CHESTER	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5956	3896	6000
WELLHEAD PRESSURE,PSIG	1365	1360	1500
OPEN FLOW, MCFD	3200	2000	5000
COMPONENT, MOLE PCT			
METHANE	82.8	82.8	89.6
ETHANE	6.6	6.6	4.6
PROPANE	4.4	4.4	2.1
N-BUTANE	1.3	1.2	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	3.1	3.1	1.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.12	0.12	0.12
HEATING VALUE*	1181	1172	1100
SPECIFIC GRAVITY	0.696	0.689	0.632

	INDEX 2050 SAMPLE 5964	INDEX 2051 SAMPLE 10329	INDEX 2052 SAMPLE 5117
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	KISMET	KISMET	MCKINNEY
WELL NAME	W. W. LANGHOFER NO. 1	W. W. LANGHOFER NO. 1	GOODNIGHT NO. 1
LOCATION	SEC. 18, T33S, R30W	SEC. 18, T33S, R30W	SEC. 3, T34S, R26W
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	SKELLY OIL CO.
COMPLETED	08/25/59	--/--/00	05/09/51
SAMPLED	11/03/59	12/20/65	10/30/51
FORMATION	PENN-MORROW	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5654	NOT GIVEN	5816
WELLHEAD PRESSURE,PSIG	1603	NOT GIVEN	1907
OPEN FLOW, MCFD	6780	NOT GIVEN	7095
COMPONENT, MOLE PCT			
METHANE	80.6	83.7	89.2
ETHANE	5.2	6.6	4.7
PROPANE	3.3	3.5	2.1
N-BUTANE	1.6	0.9	0.1
ISOBUTANE	0.8	0.4	0.1
N-PENTANE	0.4	TRACE	0.2
ISOPENTANE	1.4	0.6	0.3
CYCLOPENTANE	0.5	TRACE	TRACE
HEXANES PLUS	1.2	TRACE	0.2
NITROGEN	4.3	4.0	1.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.7
HELIUM	0.14	0.11	0.08
HEATING VALUE*	1254	1126	1080
SPECIFIC GRAVITY	0.740	0.670	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2053 SAMPLE 5130	INDEX 2054 SAMPLE 6326	INDEX 2055 SAMPLE 6844
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	MCKINNEY	MCKINNEY	MCKINNEY
WELL NAME	THEIS B NO. 1	MCKINNEY C NO. 1	PAINTER NO. 1
LOCATION	SEC. 11, T34S, R26W	SEC. 25, T34S, R26W	SEC. 17, T34S, R26W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	J. M. HUBER CORP.
COMPLETED	07/23/51	01/02/57	10/23/59
SAMPLED	10/30/51	05/17/57	10/23/58
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5736	5815	5920
WELLHEAD PRESSURE, PSIG	2055	1660	1734
OPEN FLOW, MCFD	9783	12730	13
COMPONENT, MOLE PCT			
METHANE	80.6	78.4	84.0
ETHANE	5.6	6.6	5.9
PROPANE	3.3	4.9	3.8
N-BUTANE	1.0	1.7	1.0
ISOBUTANE	0.5	1.2	0.9
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	6.4	6.3	3.3
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	0.2	0.1
HELIUM	0.13	0.18	0.10
HEATING VALUE*	1107	1160	1155
SPECIFIC GRAVITY	0.697	0.717	0.682

	INDEX 2056 SAMPLE 7452	INDEX 2057 SAMPLE 7481	INDEX 2058 SAMPLE 7764
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	MCKINNEY	MCKINNEY	MCKINNEY
WELL NAME	C. A. ISAAC NO. 1	LIDDYE BOYD	MERKLE NO. 1
LOCATION	SEC. 18, T33S, R27W	SEC. 3, T33S, R27W	SEC. 23, T34S, R27W
OWNER	SKELLY OIL CO.	SHAMROCK OIL & GAS CORP.	J. M. HUBER CORP.
COMPLETED	01/05/60	12/03/59	09/19/60
SAMPLED	03/19/60	03/30/60	11/02/60
FORMATION	PENN-MORROW	MISS-	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5752	5612	5966
WELLHEAD PRESSURE, PSIG	1650	1585	1739
OPEN FLOW, MCFD	22982	4150	7000
COMPONENT, MOLE PCT			
METHANE	80.6	90.2	90.8
ETHANE	5.8	5.0	4.7
PROPANE	3.7	2.0	1.8
N-BUTANE	1.1	0.6	0.5
ISOBUTANE	0.8	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	6.8	0.7	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1116	1128	1111
SPECIFIC GRAVITY	0.694	0.638	0.627

	INDEX 2059 SAMPLE 15308	INDEX 2060 SAMPLE 9559	INDEX 2061 SAMPLE 15469
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	MCKINNEY	MEIERDIERKS	MEIERDIERKS SE
WELL NAME	ROSSON	MEIERDIERKS NO. 1	ROSS NO. 1
LOCATION	SEC. 32, T33S, R27W	SEC. 27, T34S, R28W	SEC. 2, T35S, R28W
OWNER	MESA PETROLEUM CO.	IMPERIAL OIL OF KANSAS, INC.	R. W. PATRICK
COMPLETED	03/21/78	--/--/00	04/25/78
SAMPLED	06/23/78	09/14/64	10/25/78
FORMATION	MISS-CHESTER	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5864	3094	2933
WELLHEAD PRESSURE, PSIG	875	830	745
OPEN FLOW, MCFD	2150	3120	3014
COMPONENT, MOLE PCT			
METHANE	85.9	84.2	78.6
ETHANE	4.8	5.6	5.6
PROPANE	2.3	2.2	2.5
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.6	5.8	10.9
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.1	0.0
HELIUM	0.19	0.31	0.43
HEATING VALUE*	1080	1074	1027
SPECIFIC GRAVITY	0.658	0.657	0.681

	INDEX 2062 SAMPLE 9788	INDEX 2063 SAMPLE 6975	INDEX 2064 SAMPLE 5691
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MEADE	MEADE
FIELD	METERS	MOHLER NE	NOVINGER
WELL NAME	THORNHOFF E NO. 1	CORDES NO. 1	NOVINGER NO. A-1
LOCATION	SEC. 4, T33S, R27W	SEC. 24, T33S, R29W	SEC. 28, T33W, R30S
OWNER	IMPERIAL OIL CO.	SHAMROCK OIL & GAS CORP.	COLUMBIAN FUEL CORP.
COMPLETED	--/--/00	10/01/58	--/--/00
SAMPLED	03/04/65	02/13/59	09/--/54
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3030	5586	5270
WELLHEAD PRESSURE, PSIG	825	1661	1259
OPEN FLOW, MCFD	9000	43000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.1	80.1	68.4
ETHANE	5.8	6.4	8.0
PROPANE	2.2	3.7	7.6
N-BUTANE	0.6	0.9	2.5
ISOBUTANE	0.5	0.6	1.2
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	0.1	0.3	0.8
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	8.0	7.0	9.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.35	0.20	0.10
HEATING VALUE*	1046	1113	1242
SPECIFIC GRAVITY	0.662	0.695	0.806

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2065 SAMPLE 11505		INDEX 2066 SAMPLE 11506		INDEX 2067 SAMPLE 6240	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	NOVINGER SW		NOVINGER SW		SANDERS	
WELL NAME	BAKER A NO. 1		FOX C NO. 1		A. D. SANDERS NO. 1	
LOCATION	SEC. 8, T34S, R30W		SEC. 17, T34S, R30W		SEC. 13, T32S, R29W	
OWNER	ANADARKO PRODUCTION CO.		ANADARKO PRODUCTION CO.		TEXAS CO.	
COMPLETED	05/04/67		11/30/67		10/25/56	
SAMPLED	05/17/68		05/14/68		01/21/57	
FORMATION	PENN-MORROW		PENN-MORROW		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5808		5802		5548	
WELLHEAD PRESSURE,PSIG	1617		1616		1650	
OPEN FLOW, MCFD	60000		43500		3208	
COMPONENT, MOLE PCT						
METHANE	82.2		83.7		89.9	
ETHANE	6.0		6.1		4.9	
PROPANE	3.6		3.3		2.1	
N-BUTANE	1.2		1.1		0.6	
ISOBUTANE	0.4		0.5		0.5	
N-PENTANE	0.3		0.3		0.1	
ISOPENTANE	0.2		0.2		0.1	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	5.1		3.7		1.0	
OXYGEN	0.4		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.1	
CARBON DIOXIDE	0.1		0.2		0.10	
HELIUM	0.18		0.15		0.21	
HEATING VALUE*	1123		1141		1121	
SPECIFIC GRAVITY	0.684		0.679		0.635	

	INDEX 2068 SAMPLE 7551		INDEX 2069 SAMPLE 10313		INDEX 2070 SAMPLE 10342	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	SINGLEY		SINGLEY		SINGLEY	
WELL NAME	BALLARD NO. 1		IDA K. HEINSON NO. 8		M. A. HOLMES	
LOCATION	SEC. 31, T33S, R29W		SEC. 28, T33S, R29W		SEC. 21, T33S, R29W	
OWNER	THOMAS E BREWER OIL & GAS CO		SHAMROCK OIL & GAS CORP.		GULF OIL CORP.	
COMPLETED	12/11/59		--/--/00		01/06/56	
SAMPLED	05/09/60		12/06/65		12/22/65	
FORMATION	PENN-MORROW		NOT GIVEN		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5841		NOT GIVEN		5729	
WELLHEAD PRESSURE,PSIG	1600		NOT GIVEN		491	
OPEN FLOW, MCFD	18250		NOT GIVEN		1419	
COMPONENT, MOLE PCT						
METHANE	85.6		79.6		78.9	
ETHANE	5.8		6.3		7.5	
PROPANE	3.2		4.2		4.4	
N-BUTANE	0.9		1.2		1.0	
ISOBUTANE	0.5		0.6		0.9	
N-PENTANE	0.1		0.3		0.3	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.3		0.2	
NITROGEN	3.2		8.9		6.1	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.2	
HELIUM	0.10		0.10		0.11	
HEATING VALUE*	1119		1129		1151	
SPECIFIC GRAVITY	0.659		0.704		0.709	

	INDEX 2071 SAMPLE 5302		INDEX 2072 SAMPLE 6192		INDEX 2073 SAMPLE 6353	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MEADE	
FIELD	STEVENS		STEVENS		STEVENS	
WELL NAME	C. E. STEVENS NO. 1		HOLMES NO. 9		BENNKE-VAIL NO. 1	
LOCATION	SEC. 32, T32S, R30W		SEC. 35, T32S, R30W		SEC. 34, T32S, R30W	
OWNER	COLUMBIAN FUEL CORP.		COLORADO OIL & GAS CORP.		CARTER OIL CO.	
COMPLETED	09/13/52		09/16/56		10/10/56	
SAMPLED	10/30/52		11/28/56		07/02/57	
FORMATION	PENN-MORROW		MISS-CHESTER		PENN-MORROW U	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	5970		5713		5625	
WELLHEAD PRESSURE,PSIG	1812		1350		650	
OPEN FLOW, MCFD	14250		14121		1020	
COMPONENT, MOLE PCT						
METHANE	83.5		83.3		86.4	
ETHANE	5.8		5.8		5.1	
PROPANE	2.5		2.1		2.2	
N-BUTANE	1.0		1.0		0.5	
ISOBUTANE	0.6		0.4		0.3	
N-PENTANE	0.3		0.0		0.1	
ISOPENTANE	0.7		0.7		0.0	
CYCLOPENTANE	0.2		0.0		0.1	
HEXANES PLUS	0.5		0.0		0.2	
NITROGEN	4.0		5.7		4.4	
OXYGEN	0.1		TRACE		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.2		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.7		0.5	
HELIUM	0.10		0.14		0.16	
HEATING VALUE*	1155		1080		1069	
SPECIFIC GRAVITY	0.690		0.668		0.645	

	INDEX 2074 SAMPLE 10311		INDEX 2075 SAMPLE 10312		INDEX 2076 SAMPLE 3198	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MEADE		MEADE		MONTGOMERY	
FIELD	STEVENS		STEVENS		BOLTON	
WELL NAME	PAULINE V. MULBURY		WELCOME A. ORR		PRATHER NO. 5	
LOCATION	SEC. 5, T33S, R30W		SEC. 33, T32S, R30W		SEC. 20, T33S, R15E	
OWNER	SHAMROCK OIL & GAS CORP.		SHAMROCK OIL & GAS CORP.		CONSOLIDATED GAS, OIL & MFG.	
COMPLETED	--/--/00		--/--/00		03/10/24	
SAMPLED	12/06/65		12/06/65		03/24/42	
FORMATION	NOT GIVEN		NOT GIVEN		PENN-BARTLESVILLE	
GEOLOGIC PROVINCE CODE	360		360		365	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		1078	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		10	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		10	
COMPONENT, MOLE PCT						
METHANE	83.2		85.8		52.6	
ETHANE	6.7		5.8		43.7	
PROPANE	3.8		2.8		---	
N-BUTANE	1.0		0.8		---	
ISOBUTANE	0.5		0.4		---	
N-PENTANE	0.2		0.1		---	
ISOPENTANE	0.5		0.2		---	
CYCLOPENTANE	0.2		0.1		---	
HEXANES PLUS	0.4		0.2		---	
NITROGEN	3.2		3.4		2.7	
OXYGEN	0.0		0.0		0.4	
ARGON	0.0		0.0		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.2		0.2		0.5	
HELIUM	0.10		0.15		0.09	
HEATING VALUE*	1170		1113		1316	
SPECIFIC GRAVITY	0.690		0.657		0.788	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2077 SAMPLE 3191	INDEX 2078 SAMPLE 3197	INDEX 2079 SAMPLE 2766
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	DEARING	INDEPENDENCE	JEFFERSON
WELL NAME	BAKER NO. 2	UNIV. ATLAS PORT. CEMENT CO.	MESTER 60
LOCATION	SEC. 6, T34S, R15E	SEC. 16, T32S, R15E	SEC. 19, T34S, R15E
OWNER	TRINITY OIL & GAS CO.	SAGAMORE OIL & GAS CO.	GREYSOLON OIL CO.
COMPLETED	07/--/41	02/05/39	--/--/18
SAMPLED	03/24/42	03/24/42	09/13/37
FORMATION	PENN-BARTLESVILLE	PENN-BARTLESVILLE	PENN-WAYSIDE
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	1000	1226	440
WELLHEAD PRESSURE,PSIG	4	120	NOT GIVEN
OPEN FLOW, MCFD	75	280	3
COMPONENT, MOLE PCT			
METHANE	93.9	97.7	12.9
ETHANE	1.4	0.0	3.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.4	0.9	82.7
OXYGEN	0.3	0.4	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.9	0.8	0.6
HELIUM	0.08	0.16	0.00
HEATING VALUE*	976	990	186
SPECIFIC GRAVITY	0.591	0.567	0.921

	INDEX 2080 SAMPLE 3192	INDEX 2081 SAMPLE 3244	INDEX 2082 SAMPLE 3261
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MONTGOMERY	MORRIS	MORRIS
FIELD	JEFFERSON	WILDE	WILDE
WELL NAME	SNELL NO. 4	MYERS NO. 2	WILDE NO. 1
LOCATION	SEC. 5, T34S, R15E	SEC. 23, T17S, R7E	SEC. 15, T17S, R7E
OWNER	CONSOLIDATED GAS, OIL & MFG.	CENTRAL WEST UTILITY	CENTRAL WEST UTILITY
COMPLETED	03/27/28	12/--/37	01/--/30
SAMPLED	03/24/42	04/02/42	04/02/42
FORMATION	PENN-BARTLESVILLE	-SANDSTONE	-LIMESTONE
GEOLOGIC PROVINCE CODE	365	370	370
DEPTH, FEET	1108	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	15	47	362
OPEN FLOW, MCFD	15	250	730
COMPONENT, MOLE PCT			
METHANE	91.6	72.0	72.2
ETHANE	5.7	12.7	13.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	14.1	13.6
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.2	0.2
HELIUM	0.08	0.69	0.63
HEATING VALUE*	1030	957	966
SPECIFIC GRAVITY	0.600	0.676	0.677

	INDEX 2083 SAMPLE 1799	INDEX 2084 SAMPLE 1800	INDEX 2085 SAMPLE 1872
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORRIS	MORRIS	MORRIS
FIELD	WILSEY	WILSEY	WILSEY
WELL NAME	MEDCALF NO. 1	MEDCALF NO. 3	HAMMER NO. 1
LOCATION	SEC. 10, T16S, R7E	SEC. 15, T16S, R7E	SEC. 14, T16S, R7E
OWNER	GENERAL UTILITIES CO.	GENERAL UTILITIES CO.	GENERAL UTILITIES CO.
COMPLETED	--/--/28	--/--/29	02/18/27
SAMPLED	06/14/29	06/14/29	09/23/29
FORMATION	PENN-OSWEGO	PENN-OSWEGO	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	370
DEPTH, FEET	1400	1400	NOT GIVEN
WELLHEAD PRESSURE,PSIG	355	355	170
OPEN FLOW, MCFD	NOT GIVEN	250	500000
COMPONENT, MOLE PCT			
METHANE	63.3	68.1	66.8
ETHANE	9.5	12.1	10.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	25.8	18.7	21.3
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.88	0.75	0.81
HEATING VALUE*	1017	907	867
SPECIFIC GRAVITY	0.707	0.692	0.697

	INDEX 2086 SAMPLE 17905	INDEX 2087 SAMPLE 7189	INDEX 2088 SAMPLE 7234
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	BEAUCHAMP S	BERRYMAN	BERRYMAN
WELL NAME	BURSON-HUTCH NO. 2-S	BERRYMAN B	BERRYMAN B
LOCATION	SEC. 5, T31S, R41W	SEC. 21, T33S, R41W	SEC. 21, T33S, R41W
OWNER	MUSTANG DRILLING & EXPL., IN	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	07/14/85	--/--/00	04/29/59
SAMPLED	11/03/85	08/--/59	10/07/59
FORMATION	PENN-MORROW	PENN-WABAUNSEE	PENN-WABAUNSEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5364	NOT GIVEN	2915
WELLHEAD PRESSURE,PSIG	1180	NOT GIVEN	495
OPEN FLOW, MCFD	2000	NOT GIVEN	1330
COMPONENT, MOLE PCT			
METHANE	76.6	77.3	64.6
ETHANE	2.8	5.5	3.2
PROPANE	2.3	3.4	3.0
N-BUTANE	1.1	1.0	0.8
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.8	TRACE	0.2
ISOPENTANE	0.2	0.5	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.6	0.1	0.3
NITROGEN	13.0	10.9	24.4
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.3
HELIUM	0.88	0.60	0.60
HEATING VALUE*	1028	1047	903
SPECIFIC GRAVITY	0.706	0.692	0.749

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2089 SAMPLE 5082	INDEX 2090 SAMPLE 5378	INDEX 2091 SAMPLE 5710
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	BOEHM	BOEHM	BOEHM
WELL NAME	GREENWOOD B NO. 1	BOEHM NO. A-1	GREENWOOD NO. B-1
LOCATION	SEC. 14, T33S, R42W	SEC. 11, T33S, R42W	SEC. 14, T33S, R42W
OWNER	CITIES SERVICE OIL CO.	AMERICAN GAS PRODUCTION CO.	CITIES SERVICE OIL CO.
COMPLETED	05/25/51	11/06/52	05/25/51
SAMPLED	06/26/51	01/20/53	10/15/54
FORMATION	MISS-	PENN-TOPEKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4872	3158	4854
WELLHEAD PRESSURE,PSIG	1030	431	1015
OPEN FLOW, MCFD	3590	6600	21699
COMPONENT, MOLE PCT			
METHANE	87.4	60.5	88.7
ETHANE	5.4	6.0	5.2
PROPANE	1.7	4.2	1.6
N-BUTANE	0.1	1.4	0.6
ISOBUTANE	0.0	0.4	0.3
N-PENTANE	TRACE	0.4	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	1.4	0.2	0.2
NITROGEN	3.4	25.7	3.9
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.5
HELIUM	0.49	0.57	0.48
HEATING VALUE*	1071	929	1059
SPECIFIC GRAVITY	0.647	0.777	0.633

	INDEX 2092 SAMPLE 5711	INDEX 2093 SAMPLE 6321	INDEX 2094 SAMPLE 15250
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	BOEHM	BOEHM	CIMARRON VALLEY
WELL NAME	GREENWOOD NO. C-1	WACKER B NO. 2	GODDARD "A" NO. 1
LOCATION	SEC. 15, T33S, R42W	SEC. 10, T33S, R42W	SEC. 9, T33S, R40W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	06/--/51	03/20/57	12/02/77
SAMPLED	10/15/54	05/07/57	04/04/78
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4966	4858	5476
WELLHEAD PRESSURE,PSIG	1012	830	1268
OPEN FLOW, MCFD	2504	11000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.1	89.1	88.0
ETHANE	3.3	3.3	3.6
PROPANE	1.7	1.7	1.8
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.2	3.4	4.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.2
HELIUM	0.53	0.47	0.20
HEATING VALUE*	1054	1056	1061
SPECIFIC GRAVITY	0.635	0.628	0.637

	INDEX 2095 SAMPLE 14774	INDEX 2096 SAMPLE 5901	INDEX 2097 SAMPLE 6046
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	DUNKLE	ELKHART	ELKHART
WELL NAME	DUNKLE "A" NO. 1	JONES NO. 1-11	JONES NO. 1-11
LOCATION	SEC. 1, T33S, R41W	SEC. 11, T33S, R43W	SEC. 11, T33S, R43W
OWNER	ANADARKO PRODUCTION CO.	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	12/03/75	06/03/55	12/02/56
SAMPLED	09/17/76	08/02/55	04/04/56
FORMATION	PENN-WABAUNSEE	PENN-KEYES U	PENN-SHAWNEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3005	4558	2884
WELLHEAD PRESSURE,PSIG	439	868	472
OPEN FLOW, MCFD	2248	2579	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.1	74.6	67.5
ETHANE	5.7	3.8	5.9
PROPANE	3.2	2.3	3.6
N-BUTANE	1.0	0.8	1.1
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	21.1	15.1	19.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0...
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.58	1.70	0.67
HEATING VALUE*	947	956	969
SPECIFIC GRAVITY	0.739	0.692	0.740

	INDEX 2098 SAMPLE 6125	INDEX 2099 SAMPLE 7790	INDEX 2100 SAMPLE 6033
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	ELKHART W	ELKHART W	GREENWOOD
WELL NAME	KENNEDY NO. 1-8	LANDRUM NO. 1-20	KNOEBER A NO. 1
LOCATION	SEC. 8, T35S, R43W	SEC. 20, T35S, R43W	SEC. 33, T32S, R42W
OWNER	PANHANDLE EASTERN PIPELINE C	ANADARKO PRODUCTION CO.	CITIES SERVICE OIL CO.
COMPLETED	07/12/56	01/27/60	12/20/55
SAMPLED	08/15/56	12/07/60	03/06/56
FORMATION	PENN-TOPEKA	PENN-MORROW U	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2854	4294	2932
WELLHEAD PRESSURE,PSIG	414	1047	413
OPEN FLOW, MCFD	1250	36964	14400
COMPONENT, MOLE PCT			
METHANE	64.8	77.0	65.8
ETHANE	6.1	6.8	6.2
PROPANE	3.4	4.1	4.0
N-BUTANE	1.1	0.9	1.2
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	22.2	9.7	20.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.65	0.40	0.49
HEATING VALUE*	948	1017	983
SPECIFIC GRAVITY	0.753	0.699	0.754

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2101 SAMPLE 6038	INDEX 2102 SAMPLE 6220	INDEX 2103 SAMPLE 6889
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	FULLERTON NO. 1	RATCLIFF NO. 1-12	NO. 4 SEAL, 2 NORTH
LOCATION	SEC. 21, T34S, R42W	SEC. 12, T34S, R42W	SEC. 6, T35S, R42W
OWNER	COLORADO OIL & GAS CORP.	PANHANDLE EASTERN PIPELINE C	MOUNTAINEER COAL CO.
COMPLETED	11/21/55	11/09/56	11/05/58
SAMPLED	02/25/56	12/31/56	12/11/58
FORMATION	PENN-TOPEKA & ELMONT	PENN-TOPEKA	PENN-ELMONT & TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2878	2920	2900
WELLHEAD PRESSURE,PSIG	415	408	376
OPEN FLOW, MCFD	5450	8	2950
COMPONENT, MOLE PCT			
METHANE	64.8	65.2	63.1
ETHANE	5.9	6.6	7.6
PROPANE	3.5	4.7	5.4
N-BUTANE	1.0	1.6	1.7
ISOBUTANE	0.3	0.8	0.8
N-PENTANE	0.2	0.8	0.4
ISOPENTANE	0.2	0.8	0.0
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	22.9	19.7	19.8
OXYGEN	0.0	0.1	0.1
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.2
HELIUM	0.61	0.52	0.60
HEATING VALUE*	919	1016	1051
SPECIFIC GRAVITY	0.744	0.766	0.782

	INDEX 2104 SAMPLE 7401	INDEX 2105 SAMPLE 7777	INDEX 2106 SAMPLE 7872
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	DUDGEON NO. 1	WALSH NO. B-1	FULKERSON NO. B-1
LOCATION	SEC. 5, T35S, R42W	SEC. 25, T33S, R42W	SEC. 6, T35S, R41W
OWNER	COLORADO OIL & GAS CORP.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	10/21/59	10/25/60	11/16/60
SAMPLED	02/16/60	11/21/60	02/25/61
FORMATION	PENN-ELMONT	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2910	3088	3096
WELLHEAD PRESSURE,PSIG	337	311	396
OPEN FLOW, MCFD	3150	2900	18500
COMPONENT, MOLE PCT			
METHANE	62.3	67.7	65.0
ETHANE	5.4	7.7	6.8
PROPANE	3.6	4.5	4.0
N-BUTANE	1.5	1.5	1.2
ISOBUTANE	0.6	0.8	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.4	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	23.7	15.8	21.0
OXYGEN	1.0	TRACE	0.0
ARGON	0.1	TRACE	0.2
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.1
HELIUM	0.60	0.50	0.60
HEATING VALUE*	945	1058	973
SPECIFIC GRAVITY	0.776	0.758	0.796

	INDEX 2107 SAMPLE 7906	INDEX 2108 SAMPLE 7918	INDEX 2109 SAMPLE 8045
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	FULKERSON NO. B-1	MCCLUNG A-1	WALSH A NO. 1-30
LOCATION	SEC. 6, T35S, R41W	SEC. 7, T35S, R41W	SEC. 30, T33S, R41W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	11/16/60	01/19/61	04/13/61
SAMPLED	03/20/61	05/24/61	06/29/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3186	3158	3018
WELLHEAD PRESSURE,PSIG	396	395	423
OPEN FLOW, MCFD	21000	9000	3500
COMPONENT, MOLE PCT			
METHANE	65.5	58.2	62.6
ETHANE	6.8	6.2	7.8
PROPANE	3.8	3.7	4.9
N-BUTANE	1.1	1.0	1.5
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	20.9	26.9	21.0
OXYGEN	0.0	2.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.60	0.50	0.50
HEATING VALUE*	964	873	1007
SPECIFIC GRAVITY	0.747	0.776	0.775

	INDEX 2110 SAMPLE 11069	INDEX 2111 SAMPLE 12911	INDEX 2112 SAMPLE 12923
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	KANSAS 2-13	MINOR NO. 1	WESTERFIELD NO. 1-B
LOCATION	SEC. 13, T34S, R43W	SEC. 31, T33S, R41W	SEC. 8, T34S, R41W
OWNER	DAVIS DRILLING, INC., ET AL.	CLINTON OIL CO.	PANHANDLE EASTERN PIPELINE C
COMPLETED	12/11/66	--/--/00	07/07/57
SAMPLED	08/9/67	07/21/71	07/21/71
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3275	NOT GIVEN	3044
WELLHEAD PRESSURE,PSIG	544	NOT GIVEN	194
OPEN FLOW, MCFD	3400	NOT GIVEN	1252
COMPONENT, MOLE PCT			
METHANE	72.2	62.3	65.9
ETHANE	7.2	6.7	7.2
PROPANE	3.7	5.1	5.1
N-BUTANE	0.9	1.6	1.4
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.2	0.4	0.5
ISOPENTANE	0.2	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	14.2	21.9	18.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.44	0.49	0.45
HEATING VALUE*	1026	1012	1050
SPECIFIC GRAVITY	0.715	0.785	0.768

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2113 SAMPLE 12930	INDEX 2114 SAMPLE 12931	INDEX 2115 SAMPLE 14773
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
WELL NAME	PAN-KANSAS NO. 1-13	PAN-INTERSTATE NO. 1-14	KANSAS REGENTS NO. 2
LOCATION	SEC. 13, T34S, R43W	SEC. 14, T34S, R43W	SEC. 15, T34S, R42W
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PAN EASTERN EXPLORATION CO.
COMPLETED	08/09/55	09/01/55	08/18/76
SAMPLED	07/21/71	07/21/71	09/22/76
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-WABAUNSEE & TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2735	2772	2612
WELLHEAD PRESSURE, PSIG	210	220	124
OPEN FLOW, MCFD	148	288	1750
COMPONENT, MOLE PCT			
METHANE	64.8	66.4	65.3
ETHANE	5.6	5.8	6.4
PROPANE	3.8	3.6	4.1
N-BUTANE	1.0	1.0	1.3
ISOBUTANE	0.6	0.5	0.8
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	22.9	21.7	20.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.0	TRACE	0.54
HELIUM	0.61	0.58	983
HEATING VALUE*	940	940	0.757
SPECIFIC GRAVITY	0.751	0.738	

	INDEX 2116 SAMPLE 4795	INDEX 2117 SAMPLE 4822	INDEX 2118 SAMPLE 4915
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	COMMISSIONERS NO. 1-A	COMMISSIONERS B NO. 1	GERBER NO. 1-9
LOCATION	SEC. 2, T34S, R41W	SEC. 15, T34S, R41W	SEC. 9, T35S, R40W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	PANHANDLE EASTERN PIPELINE C
COMPLETED	07/12/49	10/20/49	09/1/50
SAMPLED	10/10/49	01/17/50	09/19/50
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2224	2244	2529
WELLHEAD PRESSURE, PSIG	469	NOT GIVEN	419
OPEN FLOW, MCFD	8520	9980	18083
COMPONENT, MOLE PCT			
METHANE	72.0	71.9	74.8
ETHANE	6.4	6.0	6.3
PROPANE	3.7	3.4	3.5
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.3	16.0	12.9
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.41	0.42	0.37
HEATING VALUE*	1015	992	1025
SPECIFIC GRAVITY	0.722	0.717	0.708

	INDEX 2119 SAMPLE 12857	INDEX 2120 SAMPLE 12917	INDEX 2121 SAMPLE 12918
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	BECKER E-1	BLUCHER UNIT NO. 1-34	MYERS UNIT
LOCATION	SEC. 24, T34S, R41W	SEC. 34, T32S, R40W	SEC. 35, T32S, R40W
OWNER	CITIES SERVICE OIL CO.	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	--/--/00	06/05/51	06/04/51
SAMPLED	06/23/71	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2252	2243
WELLHEAD PRESSURE, PSIG	NOT GIVEN	260	271
OPEN FLOW, MCFD	NOT GIVEN	1000	1550
COMPONENT, MOLE PCT			
METHANE	74.0	74.4	74.2
ETHANE	6.0	6.0	6.0
PROPANE	3.2	3.6	3.6
N-BUTANE	1.6	1.0	1.0
ISOBUTANE	0.8	0.4	0.3
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.6	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.5	13.6	13.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.39	0.40	0.40
HEATING VALUE*	1029	1020	1019
SPECIFIC GRAVITY	0.713	0.705	0.705

	INDEX 2122 SAMPLE 12919	INDEX 2123 SAMPLE 12920	INDEX 2124 SAMPLE 12921
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	SIMMONS UNIT NO. 1-2	EVANS NO. 1-3	LOU NO. 1
LOCATION	SEC. 2, T33S, R40W	SEC. 3, T33S, R40W	SEC. 18, T33S, R40W
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	06/10/54	07/20/53	08/10/53
SAMPLED	07/21/71	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2241	2257	2272
WELLHEAD PRESSURE, PSIG	296	279	251
OPEN FLOW, MCFD	974	754	476
COMPONENT, MOLE PCT			
METHANE	73.4	74.5	71.7
ETHANE	6.0	6.0	5.6
PROPANE	3.5	3.6	3.4
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.5	13.7	17.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.40	0.35	0.48
HEATING VALUE*	999	1025	981
SPECIFIC GRAVITY	0.705	0.707	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2125 SAMPLE 12922	INDEX 2126 SAMPLE 12924	INDEX 2127 SAMPLE 12925
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	EAGLET NO. 1-23	BARKER NO. 2-24	KNELLER NO. 1-30
LOCATION	SEC. 23, T33S, R41W	SEC. 24, T33S, R41W	SEC. 30, T33S, R40W
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	06/21/56	12/19/66	06/07/55
SAMPLED	07/21/71	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2114	2186	2252
WELLHEAD PRESSURE,PSIG	248	253	255
OPEN FLOW, MCFD	461	529	724
COMPONENT, MOLE PCT			
METHANE	71.0	70.5	73.5
ETHANE	5.6	5.8	5.6
PROPANE	3.4	4.1	3.3
N-BUTANE	1.0	1.1	0.8
ISOBUTANE	0.4	0.7	0.4
N-PENTANE	0.2	0.5	0.2
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.4	TRACE
HEXANES PLUS	0.1	0.9	0.1
NITROGEN	17.6	15.1	15.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.51	0.76	0.44
HEATING VALUE*	973	1072	985
SPECIFIC GRAVITY	0.716	0.751	0.702

	INDEX 2128 SAMPLE 12926	INDEX 2129 SAMPLE 12927	INDEX 2130 SAMPLE 13002
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	KNELLER NO. 1-31	BOHN NO. 1	WHITE C-1
LOCATION	SEC. 31, T33S, R40W	SEC. 28, T34S, R40W	SEC. 25, T32S, R40W
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	AMOCO PRODUCTION CO.
COMPLETED	03/26/54	05/19/53	--/--/00
SAMPLED	07/21/71	07/21/71	08/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2300	2531	NOT GIVEN
WELLHEAD PRESSURE,PSIG	264	230	NOT GIVEN
OPEN FLOW, MCFD	637	1029	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.8	75.4	73.4
ETHANE	5.9	6.0	5.9
PROPANE	3.5	3.6	3.5
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	13.4	12.8	15.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.39	0.37	0.41
HEATING VALUE*	1024	1030	993
SPECIFIC GRAVITY	0.703	0.701	0.704

	INDEX 2131 SAMPLE 13003	INDEX 2132 SAMPLE 13004	INDEX 2133 SAMPLE 5453
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	HUGOTON	HUGOTON	INTERSTATE
WELL NAME	DREW C-1	TILLETT G.U. NO. 1	INTERSTATE NO. A-1
LOCATION	SEC. 28, T32S, R39W	SEC. 19, T32S, R39W	SEC. 19, T34S, R43W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	--/--/00	05/02/53
SAMPLED	08/24/71	08/24/71	04/29/53
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4238
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1148
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8150
COMPONENT, MOLE PCT			
METHANE	72.9	72.6	72.2
ETHANE	6.0	5.9	6.1
PROPANE	3.6	3.5	4.9
N-BUTANE	0.9	0.9	1.1
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	15.4	15.9	13.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.41	0.41	0.70
HEATING VALUE*	1001	994	1062
SPECIFIC GRAVITY	0.710	0.711	0.732

	INDEX 2134 SAMPLE 5709	INDEX 2135 SAMPLE 5729	INDEX 2136 SAMPLE 6221
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	INTERSTATE	INTERSTATE	INTERSTATE
WELL NAME	INTERSTATE NO. A-1	U.S.A. NO. 1	LEWIS NO. 1-5
LOCATION	SEC. 19, T34S, R43W	SEC. 29, T34S, R43W	SEC. 5, T35S, R43W
OWNER	CITIES SERVICE OIL CO.	STANOLIND OIL & GAS CO., ET	PANHANDLE EASTERN PIPELINE C
COMPLETED	05/02/53	09/04/54	10/10/56
SAMPLED	10/15/54	11/13/54	12/31/56
FORMATION	PENN-MORROW	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4328	2838	2771
WELLHEAD PRESSURE,PSIG	1185	405	417
OPEN FLOW, MCFD	7385	3615	1335
COMPONENT, MOLE PCT			
METHANE	73.0	66.4	68.3
ETHANE	5.8	6.1	5.7
PROPANE	4.5	5.4	1.7
N-BUTANE	1.0	1.0	1.3
ISOBUTANE	0.5	0.4	0.1
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.1	0.1	0.9
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.7	21.5	20.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.73	0.46	0.64
HEATING VALUE*	1037	935	930
SPECIFIC GRAVITY	0.717	0.736	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX SAMPLE 2137 7717	INDEX SAMPLE 2138 8541	INDEX SAMPLE 2139 8810
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	INTERSTATE	INTERSTATE	INTERSTATE
WELL NAME	SCHWEIZER NO. 1	INTERSTATE	INTERSTATE F
LOCATION	SEC. 6, T35S, R43W	SEC. 21, T34S, R43W	SEC. 20, T34S, R43W
OWNER	VICKERS PETROLEUM CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	07/27/60	02/13/62	06/07/62
SAMPLED	10/05/60	05/02/62	12/18/62
FORMATION	PENN-TOPEKA	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2747	1184	1210
WELLHEAD PRESSURE, PSIG	346	335	318
OPEN FLOW, MCFD	3900	3480	1875
COMPONENT, MOLE PCT			
METHANE	61.7	51.9	53.2
ETHANE	6.2	2.0	2.1
PROPANE	3.8	1.1	1.3
N-BUTANE	1.2	0.6	0.6
ISOBUTANE	0.5	0.2	0.3
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	25.2	41.4	40.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.7	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.60	1.15	0.94
HEATING VALUE*	919	646	678
SPECIFIC GRAVITY	0.764	0.765	0.767

	INDEX SAMPLE 2140 9241	INDEX SAMPLE 2141 9732	INDEX SAMPLE 2142 12910
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	INTERSTATE	INTERSTATE	INTERSTATE
WELL NAME	HUMBLE A NO. 5	INTERSTATE I -2	U-S-A NO. D-2
LOCATION	SEC. 17, T34S, R43W	SEC. 10, T34S, R43W	SEC. 29, T34S, R43W
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	CLINTON OIL CO.
COMPLETED	12/31/63	11/13/64	04/20/66
SAMPLED	02/19/64	02/12/65	07/19/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1264	1281	NOT GIVEN
WELLHEAD PRESSURE, PSIG	333	338	130
OPEN FLOW, MCFD	647	1190	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	52.5	49.7	50.8
ETHANE	1.9	1.6	1.8
PROPANE	1.1	0.9	1.5
N-BUTANE	0.7	0.3	0.7
ISOBUTANE	0.1	0.6	0.5
N-PENTANE	0.2	2.0	0.9
ISOPENTANE	0.3	0.8	0.0
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	2.6	0.8
NITROGEN	41.5	38.6	42.6
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.4	0.4	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.90	0.87	1.08
HEATING VALUE*	658	885	663
SPECIFIC GRAVITY	0.770	0.879	0.785

	INDEX SAMPLE 2143 7333	INDEX SAMPLE 2144 7660	INDEX SAMPLE 2145 7933
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	KINSLER	KINSLER	KINSLER
WELL NAME	OSBORNE GAS UNIT B NO. 2	SHARP E.U. NO. 1	G. L. HAYWARD B
LOCATION	SEC. 33, T31S, R40W	SEC. 29, T31S, R40W	SEC. 35, T31S, R40W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	11/02/59	07/14/60	12/21/61
SAMPLED	01/05/60	08/29/60	04/18/61
FORMATION	MISS-ST. LOUIS	PENN-DES MOINES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5556	4370	5322
WELLHEAD PRESSURE, PSIG	1258	840	1330
OPEN FLOW, MCFD	8400	802	17500
COMPONENT, MOLE PCT			
METHANE	79.2	69.1	76.7
ETHANE	4.5	6.2	8.1
PROPANE	2.6	4.3	4.8
N-BUTANE	0.7	1.1	1.0
ISOBUTANE	0.3	0.5	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	10.3	17.8	7.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.3
HELIUM	1.20	0.30	0.10
HEATING VALUE*	1007	1008	1126
SPECIFIC GRAVITY	0.666	0.740	0.710

	INDEX SAMPLE 2146 7934	INDEX SAMPLE 2147 7935	INDEX SAMPLE 2148 7936
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	KINSLER	KINSLER	KINSLER
WELL NAME	FIDELITY SAVINGS B	ATKINSON B	COWAN B
LOCATION	SEC. 23, T32S, R40W	SEC. 15, T31S, R40W	SEC. 34, T31S, R40W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	11/10/60	11/19/60	11/27/60
SAMPLED	04/18/61	04/18/61	04/18/61
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5684	5400	5310
WELLHEAD PRESSURE, PSIG	1320	1275	1090
OPEN FLOW, MCFD	27000	8112	1150
COMPONENT, MOLE PCT			
METHANE	90.6	78.1	77.6
ETHANE	3.9	6.1	6.6
PROPANE	1.3	3.0	3.5
N-BUTANE	0.3	0.8	0.8
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.8	10.8	10.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.5
HELIUM	0.30	0.50	0.20
HEATING VALUE*	1057	1045	1054
SPECIFIC GRAVITY	0.617	0.687	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2149 SAMPLE 8026	INDEX 2150 SAMPLE 13005	INDEX 2151 SAMPLE 7376
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	KINSLER	KINSLER	NOT GIVEN
WELL NAME	DREW GAS UNIT D NO. 1	TILLETT B	A. C. SPARKS NO. 1
LOCATION	SEC. 20, T32S, R39W	SEC. 19, T32S, R39W	NOT GIVEN
OWNER	PAN AMERICAN PETROLEUM CORP.	AMOCO PRODUCTION CO.	PIONEER NATURAL GAS CO.
COMPLETED	04/12/61	--/--/00	--/--/00
SAMPLED	06/14/61	08/24/71	--/--/00
FORMATION	PENN-MORROW	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5504	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1263	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.9	86.9	73.6
ETHANE	6.0	3.7	8.2
PROPANE	3.9	1.9	4.3
N-BUTANE	0.9	0.4	1.1
ISOBUTANE	0.5	0.2	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	17.5	6.3	11.0
OXYGEN	0.2	0.0	0.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.2
CARBON DIOXIDE	0.9	0.0	0.0
HELIUM	0.30	0.25	0.40
HEATING VALUE*	981	1033	1077
SPECIFIC GRAVITY	0.727	0.634	0.720

	INDEX 2152 SAMPLE 7931	INDEX 2153 SAMPLE 14798	INDEX 2154 SAMPLE 11504
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	PANOMA	PANOMA	PANOMA GAS AREA
WELL NAME	BREEDING C	KREY "A" NO. 1	REPUBLIC B NO. 1
LOCATION	SEC. 19, T31S, R39W	SEC. 6, T33S, R40W	SEC. 18, T33S, R40W
OWNER	PAN AMERICAN PETROLEUM CORP.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	10/29/60	05/10/76	06/14/67
SAMPLED	04/17/61	10/06/76	05/16/68
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PENN-MORROW G
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2602	5445
WELLHEAD PRESSURE,PSIG	NOT GIVEN	203	1266
OPEN FLOW, MCFD	547	2136	1736
COMPONENT, MOLE PCT			
METHANE	67.6	68.0	87.1
ETHANE	6.6	6.0	3.5
PROPANE	3.3	3.3	1.6
N-BUTANE	1.0	1.0	0.6
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.4	19.3	5.5
OXYGEN	0.1	0.7	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.50	0.47	0.46
HEATING VALUE*	965	948	1053
SPECIFIC GRAVITY	0.738	0.729	0.640

	INDEX 2155 SAMPLE 12909	INDEX 2156 SAMPLE 13710	INDEX 2157 SAMPLE 16484
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	PANOMA GAS AREA	PANOMA GAS AREA	PANOMA GAS AREA
WELL NAME	REPUBLIC B NO. 1	LOW C NO. 4	THRASH "A" NO. 1
LOCATION	SEC. 18, T33S, R40W	SEC. 17, T33S, R40W	SEC. 8, T33S, R39W
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	06/14/67	04/10/72	--/--/81
SAMPLED	07/21/71	08/27/73	04/12/82
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5445	5388	5949
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1159	1410
OPEN FLOW, MCFD	NOT GIVEN	8900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.0	87.5	92.7
ETHANE	3.3	3.4	2.7
PROPANE	1.6	1.6	1.1
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	5.2	5.1	2.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.41	0.41	0.16
HEATING VALUE*	1034	1055	1059
SPECIFIC GRAVITY	0.629	0.640	0.609

	INDEX 2158 SAMPLE 6303	INDEX 2159 SAMPLE 6515	INDEX 2160 SAMPLE 6342
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	PATSY	REYER	RICHFIELD
WELL NAME	PATSY RUTH MURPHY NO. 1	DREYER NO. 1	KANSAS UNIV. G.U.E. NO. 1
LOCATION	SEC. 16, T31S, R41W	SEC. 17, T32S, R43W	SEC. 23, T32S, R41W
OWNER	PAN AMERICAN PETROLEUM CORP.	J. M. HUBER CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	02/19/57	11/18/58	04/25/57
SAMPLED	04/15/57	02/27/58	06/12/57
FORMATION	PENN-MORROW BASAL	PENN-MARMATON	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5362	3993	5200
WELLHEAD PRESSURE,PSIG	1110	745	1070
OPEN FLOW, MCFD	5200	2402	4810
COMPONENT, MOLE PCT			
METHANE	82.2	58.4	84.1
ETHANE	3.4	4.7	4.3
PROPANE	1.7	3.0	2.1
N-BUTANE	0.6	0.8	0.9
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.2	0.5
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	9.6	31.0	6.3
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	1.01	0.70	0.30
HEATING VALUE*	1007	825	1130
SPECIFIC GRAVITY	0.656	0.768	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2161 SAMPLE 6343	INDEX 2162 SAMPLE 6350	INDEX 2163 SAMPLE 11659
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	BOWKER GAS UNIT NO. 2	BOWKER UNIT NO. 1	JOHNS NO. 1-3
LOCATION	SEC. 35, T32S, R41W	SEC. 27, T32S, R41W	SEC. 3, T32S, R41W
OWNER	PAN AMERICAN PETROLEUM CORP.	VICKERS PETROLEUM CO.	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	04/04/57	05/17/57	07/05/68
SAMPLED	06/12/57	07/02/57	09/30/68
FORMATION	PENN-MORROW	NOT GIVEN	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5200	NOT GIVEN	5224
WELLHEAD PRESSURE, PSIG	1152	1094	715
OPEN FLOW, MCFD	58500	NOT GIVEN	6680
COMPONENT, MOLE PCT			
METHANE	76.6	75.7	87.7
ETHANE	6.6	6.5	3.9
PROPANE	3.3	3.5	2.0
N-BUTANE	1.1	1.2	0.6
ISOBUTANE	0.7	0.7	0.3
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	10.2	9.9	4.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.38	0.37	0.25
HEATING VALUE*	1085	1050	1072
SPECIFIC GRAVITY	0.712	0.707	0.639

	INDEX 2164 SAMPLE 11678	INDEX 2165 SAMPLE 11679	INDEX 2166 SAMPLE 11686
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	MURPHY GAS UNIT C NO. 1	LEMON GAS UNIT E NO. 1	MURPHY A NO. 2
LOCATION	SEC. 14, T32S, R41W	SEC. 27, T32S, R41W	SEC. 15, T32S, R41W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	ANADARKO PRODUCTION CO.
COMPLETED	03/21/62	12/07/56	05/22/62
SAMPLED	11/06/68	11/06/68	11/27/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW G
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5179	5259	NOT GIVEN
WELLHEAD PRESSURE, PSIG	517	449	581
OPEN FLOW, MCFD	2047	12591	496
COMPONENT, MOLE PCT			
METHANE	90.2	88.9	85.4
ETHANE	3.2	5.1	5.1
PROPANE	1.6	3.2	1.6
N-BUTANE	0.5	1.1	0.5
ISOBUTANE	0.2	0.5	0.2
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	3.1	1.5	6.8
OXYGEN	0.0	0.0	0.9
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.28	0.37	0.28
HEATING VALUE*	1065	1089	1021
SPECIFIC GRAVITY	0.624	0.685	0.647

	INDEX 2167 SAMPLE 11701	INDEX 2168 SAMPLE 11702	INDEX 2169 SAMPLE 11732
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	GOING NO. 1-26	GOING NO. 1-35	JENSEN GAS UNIT NO. 1
LOCATION	SEC. 26, T32S, R41W	SEC. 35, T32S, R41W	SEC. 29, T32S, R41W
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PAN AMERICAN PETROLEUM CORP.
COMPLETED	10/09/56	07/11/57	05/08/57
SAMPLED	12/11/68	12/11/68	01/15/69
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5200	5191	5280
WELLHEAD PRESSURE, PSIG	457	458	467
OPEN FLOW, MCFD	14740	3405	1047
COMPONENT, MOLE PCT			
METHANE	75.8	78.0	81.5
ETHANE	6.3	5.9	4.6
PROPANE	4.1	3.8	3.5
N-BUTANE	1.1	1.1	1.2
ISOBUTANE	1.1	1.0	0.9
N-PENTANE	0.6	0.5	0.8
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.4	0.4	0.9
NITROGEN	9.6	8.3	5.5
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.38	0.35	0.25
HEATING VALUE*	1115	1115	1166
SPECIFIC GRAVITY	0.724	0.711	0.712

	INDEX 2170 SAMPLE 11733	INDEX 2171 SAMPLE 11739	INDEX 2172 SAMPLE 17822
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD	RICHFIELD	RICHFIELD
WELL NAME	DANIEL GAS UNIT NO. 1	KREY A NO. 1	GOING NO. B-1
LOCATION	SEC. 23, T32S, R41W	SEC. 36, T32S, R41W	SEC. 35, T32S, R41W
OWNER	PAN AMERICAN PETROLEUM CORP.	NATIONAL COOP. REFINERY ASSN	ANADARKO PETROLEUM CORP.
COMPLETED	03/01/57	--/--/00	12/01/84
SAMPLED	01/15/69	01/16/69	08/28/85
FORMATION	PENN-MORROW	PENN-MORROW	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5185	5187	3464
WELLHEAD PRESSURE, PSIG	524	553	563
OPEN FLOW, MCFD	7461	895	1500
COMPONENT, MOLE PCT			
METHANE	90.2	90.5	62.4
ETHANE	3.1	3.1	3.5
PROPANE	1.5	1.3	1.6
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.2	0.2	0.1
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	3.1	3.1	28.9
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.28	0.45	0.55
HEATING VALUE*	1068	1052	803
SPECIFIC GRAVITY	0.628	0.617	0.731

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2173 SAMPLE 8257	INDEX 2174 SAMPLE 8445	INDEX 2175 SAMPLE 8447
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD W	RICHFIELD W	RICHFIELD W
WELL NAME	E. C. DEAN NO. 1-2	L. D. RUSSELL NO. 1-1	L. D. RUSSELL NO. 1-1
LOCATION	SEC. 2, T32S, R42W	SEC. 1, T32S, R42W	SEC. 1, T32S, R42W
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	10/16/61	02/12/62	02/12/62
SAMPLED	12/27/61	03/07/62	03/07/62
FORMATION	PENN-KEYES	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5050	4924	5004
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1060	994
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.4	91.5	71.7
ETHANE	4.6	3.0	4.7
PROPANE	2.8	1.3	3.2
N-BUTANE	1.0	0.4	1.1
ISOBUTANE	0.7	0.1	0.5
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	16.8	2.5	16.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.3	0.8
HELIUM	0.62	0.29	0.59
HEATING VALUE*	976	1045	987
SPECIFIC GRAVITY	0.730	0.609	0.726

	INDEX 2176 SAMPLE 8458	INDEX 2177 SAMPLE 5961	INDEX 2178 SAMPLE 6226
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	RICHFIELD W	SPARKS	SPARKS
WELL NAME	E. C. DEAN NO. 1-2	HANNA UNIT NO. 1	COLLINGWOOD NO. 1
LOCATION	SEC. 2, T32S, R42W	SEC. 5, T31S, R42W	SEC. 11, T31S, R42W
OWNER	HAMILTON BROS., INC.	SUPERIOR OIL CO.	J. M. HUBER CORP.
COMPLETED	11/07/62	11/24/54	06/18/56
SAMPLED	03/07/62	10/27/55	01/14/57
FORMATION	PENN-MORROW G	PENN-TOPEKA	PENN-MORROW BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4974	3174	5207
WELLHEAD PRESSURE,PSIG	980	417	1103
OPEN FLOW, MCFD	NOT GIVEN	1617	2900
COMPONENT, MOLE PCT			
METHANE	91.0	50.3	83.3
ETHANE	3.1	5.7	3.8
PROPANE	1.4	3.6	2.3
N-BUTANE	0.5	1.2	0.5
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.7	27.1	7.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	1.3
HELIUM	0.30	0.62	0.75
HEATING VALUE*	1054	892	1025
SPECIFIC GRAVITY	0.620	0.766	0.659

	INDEX 2179 SAMPLE 6548	INDEX 2180 SAMPLE 7924	INDEX 2181 SAMPLE 6034
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	SPARKS	SPARKS	SPARKS SW
WELL NAME	HAYWARD	HARRISON NO. 1	BOYD NO. 1
LOCATION	SEC. 23, T31S, R42W	SEC. 20, T31S, R41W	SEC. 33, T31S, R42W
OWNER	COLORADO OIL & GAS CORP.	THOMAS & BREWER OIL & GAS CO	SUPERIOR OIL CO.
COMPLETED	04/11/57	--/--/00	12/11/55
SAMPLED	07/25/57	04/04/61	06/19/56
FORMATION	PENN-MORROW	PENN-WABAUNSEE	PENN-WABAUNSEE & ELMONT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5196	2897	2800
WELLHEAD PRESSURE,PSIG	1265	NOT GIVEN	437
OPEN FLOW, MCFD	10617	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.6	0.3	64.6
ETHANE	3.5	8.6	6.1
PROPANE	1.8	6.1	3.6
N-BUTANE	0.5	1.9	1.3
ISOBUTANE	0.3	1.1	0.4
N-PENTANE	0.1	0.4	0.3
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	6.2	78.7	22.4
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	3.1	0.3	0.2
HELIUM	0.66	2.00	0.55
HEATING VALUE*	997	444	954
SPECIFIC GRAVITY	0.661	1.036	0.760

	INDEX 2182 SAMPLE 6275	INDEX 2183 SAMPLE 10745	INDEX 2184 SAMPLE 6021
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	SPARKS SW	SPARKS SW	TALOGA
WELL NAME	JACKSON NO. 1-34	CLANCY A UNIT NO. 1	RILEY 1-27
LOCATION	SEC. 34, T31S, R42W	SEC. 27, T31S, R42W	SEC. 27, T34S, R42W
OWNER	COLORADO OIL & GAS CORP.	EDWIN L. COX & D. J. STONE	PANHANDLE EASTERN PIPELINE C
COMPLETED	01/24/57	08/17/66	12/21/55
SAMPLED	03/04/57	10/20/66	02/07/56
FORMATION	PENN-TOPEKA	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2803	4860	4501
WELLHEAD PRESSURE,PSIG	415	939	891
OPEN FLOW, MCFD	6400	3902	61387
COMPONENT, MOLE PCT			
METHANE	58.5	61.6	72.5
ETHANE	6.3	4.5	4.8
PROPANE	3.7	3.6	4.4
N-BUTANE	1.1	1.2	2.8
ISOBUTANE	0.5	0.6	1.3
N-PENTANE	0.2	0.2	1.4
ISOPENTANE	0.2	0.4	1.3
CYCLOPENTANE	TRACE	TRACE	0.6
HEXANES PLUS	0.1	0.2	2.1
NITROGEN	28.3	21.3	6.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.6	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.4	0.7
HELIUM	0.71	2.82	0.85
HEATING VALUE*	878	895	1319
SPECIFIC GRAVITY	0.772	0.766	0.829

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2185 SAMPLE 6056		INDEX 2186 SAMPLE 6196		INDEX 2187 SAMPLE 6419	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MORTON		MORTON		MORTON	
FIELD	TALOGA		TALOGA		TALOGA	
WELL NAME	CENTRAL LIFE 1-34		WATSON NO. D2-35		FOWLER NO. 1-3	
LOCATION	SEC. 34, T34S, R42W		SEC. 35, T34S, R42W		SEC. 3, T35S, R42W	
OWNER	COLORADO OIL & GAS CORP.		PANHANDLE EASTERN PIPELINE C		PANHANDLE EASTERN PIPELINE C	
COMPLETED	09/11/55		10/22/56		07/19/57	
SAMPLED	05/--/56		12/03/56		10/16/57	
FORMATION	PENN-KEYES		PENN-MORROW U		PENN-KEYES	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4424		4182		4559	
WELLHEAD PRESSURE,PSIG	817		1250		4487	
OPEN FLOW, MCFD	NOT GIVEN		25000		236	
COMPONENT, MOLE PCT						
METHANE	80.9		81.6		78.0	
ETHANE	3.9		7.0		4.3	
PROPANE	2.5		2.5		2.6	
N-BUTANE	0.8		1.2		0.8	
ISOBUTANE	0.3		0.5		0.7	
N-PENTANE	0.4		0.4		0.3	
ISOPENTANE	0.3		0.4		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.3	
NITROGEN	9.8		4.9		11.1	
OXYGEN	TRACE		0.1		TRACE	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.2		0.2		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.8		0.4	
HELIUM	1.08		0.19		1.10	
HEATING VALUE*	1041		1122		1026	
SPECIFIC GRAVITY	0.673		0.689		0.689	

	INDEX 2188 SAMPLE 7409		INDEX 2189 SAMPLE 12898		INDEX 2190 SAMPLE 11154	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MORTON		MORTON		MORTON	
FIELD	TALOGA		TALOGA		TALOGA N	
WELL NAME	STEWART A-1		KANSAS NO. 2-13		GOVT. NO. 1-9	
LOCATION	SEC. 29, T34S, R41W		SEC. 13, T34S, R43W		SEC. 9, T34S, R42W	
OWNER	CITIES SERVICE OIL CO.		DAVIS DRILLING, INC.		COLORADO OIL CO.	
COMPLETED	02/11/59		12/11/68		09/28/67	
SAMPLED	02/15/60		07/21/71		10/09/67	
FORMATION	PENN-MORROW L		PENN-LANSING		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4822		NOT GIVEN		4280	
WELLHEAD PRESSURE,PSIG	1325		NOT GIVEN		1233	
OPEN FLOW, MCFD	52000		NOT GIVEN		2130	
COMPONENT, MOLE PCT						
METHANE	82.7		72.9		73.2	
ETHANE	7.0		6.7		5.8	
PROPANE	3.9		4.1		4.0	
N-BUTANE	0.9		1.0		0.9	
ISOBUTANE	0.6		0.4		0.8	
N-PENTANE	0.3		0.3		0.2	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	4.0		13.8		14.3	
OXYGEN	TRACE		0.0		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.0		0.2	
HELIUM	0.20		0.96		0.40	
HEATING VALUE*	1133		1043		1015	
SPECIFIC GRAVITY	0.676		0.720		0.712	

	INDEX 2191 SAMPLE 15521		INDEX 2192 SAMPLE 6144		INDEX 2193 SAMPLE 7705	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MORTON		MORTON		MORTON	
FIELD	TALOGA NE		TALOGA-RILEY		WILBURTON	
WELL NAME	E. P. LEWIS "B" NO. 1		RILEY C D1		HOOPINGARNER B-1	
LOCATION	SEC. 18, T34S, R41W		SEC. 26, T34S, R42W		SEC. 5, T35S, R41W	
OWNER	ANADARKO PRODUCTION CO.		PANHANDLE EASTERN PIPELINE C		CITIES SERVICE OIL CO.	
COMPLETED	04/10/78		07/19/56		06/24/60	
SAMPLED	11/17/78		10/03/56		10/14/60	
FORMATION	PENN-CHEROKEE		PENN-TOPEKA		PENN-TOPEKA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4390		2861		3090	
WELLHEAD PRESSURE,PSIG	969		429		415	
OPEN FLOW, MCFD	2300		3076		24000	
COMPONENT, MOLE PCT						
METHANE	74.6		65.1		64.8	
ETHANE	5.9		6.4		7.7	
PROPANE	4.8		3.5		8.5	
N-BUTANE	1.3		1.0		1.4	
ISOBUTANE	0.4		0.7		0.6	
N-PENTANE	0.3		0.2		0.3	
ISOPENTANE	0.3		0.2		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	11.6		21.8		19.5	
OXYGEN	0.0		0.1		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		0.1	
HELIUM	0.31		0.59		0.50	
HEATING VALUE*	1078		954		1018	
SPECIFIC GRAVITY	0.720		0.749		0.766	

	INDEX 2194 SAMPLE 7778		INDEX 2195 SAMPLE 7905		INDEX 2196 SAMPLE 14287	
STATE	KANSAS		KANSAS		KANSAS	
COUNTY	MORTON		MORTON		MORTON	
FIELD	WILBURTON		WILBURTON		WILBURTON	
WELL NAME	WEBB NO. A-2		WEBB A-3		GORE NO. D-2	
LOCATION	SEC. 28, T34S, R41W		SEC. 28, T34S, R41W		SEC. 4, T35S, R41W	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.	
COMPLETED	10/26/60		01/11/61		01/07/74	
SAMPLED	11/21/60		05/01/61		03/03/75	
FORMATION	PENN-MORROW		PENN-TOPEKA		PENN-TOPEKA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4930		3096		3216	
WELLHEAD PRESSURE,PSIG	1250		384		160	
OPEN FLOW, MCFD	5000		5000		2505	
COMPONENT, MOLE PCT						
METHANE	80.0		69.9		62.6	
ETHANE	6.9		7.8		6.8	
PROPANE	4.3		4.5		6.7	
N-BUTANE	1.0		1.5		2.1	
ISOBUTANE	0.6		0.6		0.8	
N-PENTANE	0.2		0.4		0.5	
ISOPENTANE	0.2		0.2		0.5	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	6.0		14.3		17.4	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	0.20		0.40		0.47	
HEATING VALUE*	1122		1071		1112	
SPECIFIC GRAVITY	0.690		0.746		0.804	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2197 SAMPLE 11554	INDEX 2198 SAMPLE 15563	INDEX 2199 SAMPLE 4856
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	PAWNEE
FIELD	WILBURTON SE	WINTER	ASH CREEK
WELL NAME	SIDES A NO. 2	WINTER NO. C-2	BIRMINGHAM-BARTLEY,WISE NO.1
LOCATION	SEC. 10, T35S, R41W	SEC. 30, T33S, R42W	SEC. 1, T21S, R16W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE CO.	A. R. JONES OIL & OPER. CO.
COMPLETED	07/17/57	--/--/00	--/--/00
SAMPLED	03/06/68	02/02/79	05/05/50
FORMATION	PENN-MORROW U	PENN-MORROW	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	360	360	385
DEPTH, FEET	9462	9559	3767
WELLHEAD PRESSURE,PSIG	1256	1258	NOT GIVEN
OPEN FLOW, MCFD	7100	3247	620
COMPONENT, MOLE PCT			
METHANE	81.5	68.2	86.0
ETHANE	7.3	4.8	3.9
PROPANE	4.4	3.9	1.6
N-BUTANE	1.2	0.9	0.5
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.9	20.4	5.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.6
HELIUM	0.17	0.55	0.79
HEATING VALUE*	1166	957	1031
SPECIFIC GRAVITY	0.695	0.736	0.637

	INDEX 2200 SAMPLE 4860	INDEX 2201 SAMPLE 4295	INDEX 2202 SAMPLE 8054
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ASH CREEK	BENSON	BENSON
WELL NAME	ANDERSON PRICHARD, WISE NO.1	BECKER B NO. 1	BAUMANN NO. 1
LOCATION	SEC. 1, T21S, R16W	SEC. 32, T23S, R15W	SEC. 32, T23S, R15W
OWNER	A. R. JONES OIL & OPER. CO.	CITIES SERVICE OIL CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	--/--/00	12/29/46	--/--/00
SAMPLED	05/05/50	04/21/47	07/01/61
FORMATION	CAMO-ARBUCKLE	CAMO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4021	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1210	NOT GIVEN
OPEN FLOW, MCFD	475	23800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.0	19.5	81.5
ETHANE	3.6	69.1	3.3
PROPANE	1.5	---	1.3
N-BUTANE	0.5	---	0.5
ISOBUTANE	0.1	---	0.4
N-PENTANE	0.2	---	0.2
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	5.5	9.9	11.6
OXYGEN	0.1	0.3	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.6	0.2
HELIUM	0.79	0.55	0.50
HEATING VALUE*	1036	1436	967
SPECIFIC GRAVITY	0.628	0.942	0.653

	INDEX 2203 SAMPLE 8522	INDEX 2204 SAMPLE 8523	INDEX 2205 SAMPLE 8528
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BENSON
WELL NAME	PETRO NO. 1	PETRO NO. 1	HALL NO. 1
LOCATION	SEC. 29, T23S, R15W	SEC. 29, T23S, R15W	SEC. 30, T23S, R15W
OWNER	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/24/62	04/25/62	05/03/62
FORMATION	PENN-TARKIO	PENN-TARKIO	PENN-TARKIO
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3020	3060	3000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2830	437	1140
COMPONENT, MOLE PCT			
METHANE	82.2	79.5	81.5
ETHANE	3.1	3.1	3.2
PROPANE	1.4	1.3	1.4
N-BUTANE	0.5	0.6	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	11.1	14.0	11.9
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.49	0.50	0.53
HEATING VALUE*	983	943	973
SPECIFIC GRAVITY	0.656	0.661	0.658

	INDEX 2206 SAMPLE 8529	INDEX 2207 SAMPLE 8553	INDEX 2208 SAMPLE 8554
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BENSON
WELL NAME	HALL NO. 1	PETRO NO. 1	BAUMANN NO. 1
LOCATION	SEC. 30, T23S, R15W	SEC. 29, T23S, R15W	SEC. 32, T23S, R15W
OWNER	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	04/29/62	04/28/62
FORMATION	PERM-COUNCIL GROVE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2610	4027	4069
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1100
OPEN FLOW, MCFD	3310	7120	7120
COMPONENT, MOLE PCT			
METHANE	86.8	62.4	62.8
ETHANE	2.8	4.5	4.5
PROPANE	1.0	2.2	2.2
N-BUTANE	0.3	0.8	0.7
ISOBUTANE	0.1	0.5	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	8.2	25.5	26.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.5
HELIUM	0.40	2.79	2.23
HEATING VALUE*	977	849	832
SPECIFIC GRAVITY	0.621	0.733	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2209 SAMPLE 8572	INDEX 2210 SAMPLE 8573	INDEX 2211 SAMPLE 8574
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BENSON
WELL NAME	HILL	HALL NO. 5	PETRO NO. 1
LOCATION	SEC. 1, T23S, R15W	SEC. 30, T23S, R15W	SEC. 29, T23S, R15W
OWNER	LESTER WILKINSON	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	--/--/00	05/25/62	05/26/62
SAMPLED	06/04/62	06/04/62	06/04/62
FORMATION	PENN-HOWARD	PENN-TARKIO	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1032	1110
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.4	82.0	60.9
ETHANE	3.2	3.2	3.4
PROPANE	1.4	1.4	2.2
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.2	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.2	11.3	27.0
OXYGEN	0.1	0.1	0.5
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.51	0.51	2.72
HEATING VALUE*	956	973	815
SPECIFIC GRAVITY	0.650	0.652	0.734

	INDEX 2212 SAMPLE 9389	INDEX 2213 SAMPLE 15372	INDEX 2214 SAMPLE 7902
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BENSON	BENSON	BOW
WELL NAME	WILES NO. 1	WURM A NO. 1	BARSTOW NO. 2-A
LOCATION	SEC. 19, T23S, R15W	SEC. 19, T23S, R15W	SEC. 32, T22S, R15W
OWNER	TOM ALLAN OIL CO.	ALPINE DRILLING CO.	HELLAR DRILLING CO.
COMPLETED	06/08/64	10/19/77	03/15/61
SAMPLED	06/08/64	09/11/78	03/11/61
FORMATION	PENN-HOWARD	CAMO-CONGLOMERATE	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3021	4036	3537
WELLHEAD PRESSURE,PSIG	1079	1000	1270
OPEN FLOW, MCFD	1930	120	295000
COMPONENT, MOLE PCT			
METHANE	75.6	63.9	68.4
ETHANE	2.8	4.1	2.7
PROPANE	1.4	1.8	1.4
N-BUTANE	0.7	0.6	0.4
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	17.7	25.3	25.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.2	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.56	2.89	1.00
HEATING VALUE*	913	820	811
SPECIFIC GRAVITY	0.683	0.713	0.698

	INDEX 2215 SAMPLE 8012	INDEX 2216 SAMPLE 8066	INDEX 2217 SAMPLE 8181
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	BURDETT	BURDETT	BURDETT
WELL NAME	DITUS	DITUS	JONES
LOCATION	SEC. 4, T22S, R20W	SEC. 4, T22S, R20W	SEC. 9, T22S, R20W
OWNER	D. R. LAUCK OIL CO., INC.	D. R. LAUCK OIL CO., INC.	D. R. LAUCK OIL CO., INC.
COMPLETED	05/19/61	06/26/61	08/13/61
SAMPLED	05/27/61	07/07/61	08/21/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4335	4306	4345
WELLHEAD PRESSURE,PSIG	1240	1240	1180
OPEN FLOW, MCFD	NOT GIVEN	3	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.8	57.5	55.8
ETHANE	3.8	4.0	3.9
PROPANE	1.6	1.6	1.6
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	31.6	32.7	34.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	2.80	2.70	2.90
HEATING VALUE*	746	740	721
SPECIFIC GRAVITY	0.729	0.737	0.743

	INDEX 2218 SAMPLE 8607	INDEX 2219 SAMPLE 10795	INDEX 2220 SAMPLE 10817
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	CARPENTER	CARPENTER	CARPENTER
WELL NAME	BARSTOW NO. 1	PARAMORE NO. 1	PARAMORE NO. 1-X
LOCATION	SEC. 24, T23S, R17W	SEC. 11, T23S, R17W	SEC. 13, T23S, R17W
OWNER	PICKRELL DRILLING CO.	MESSMAN-RINEHART OIL CO.	KEWANEE OIL CO.
COMPLETED	--/--/00	12/02/65	06/28/66
SAMPLED	06/17/62	11/23/66	12/14/66
FORMATION	MISS----	CAMO-CONGLOMERATE X	CAMO-CONGLOMERATE X
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4140	4067	4106
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	1230
OPEN FLOW, MCFD	NOT GIVEN	2500	6300
COMPONENT, MOLE PCT			
METHANE	86.4	86.7	87.4
ETHANE	3.5	3.9	3.4
PROPANE	1.3	1.9	1.4
N-BUTANE	0.9	0.4	0.4
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	6.8	6.4	6.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.80	0.71	0.71
HEATING VALUE*	1014	1027	1028
SPECIFIC GRAVITY	0.631	0.633	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2221 SAMPLE 12767	INDEX 2222 SAMPLE 13060	INDEX 2223 SAMPLE 15571
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	CARPENTER	CARPENTER	CARPENTER
WELL NAME	BERSCHEIDT NO. 1	PARAMORE NO. 2	WURM B NO. 1
LOCATION	SEC. 32, T23S, R16W	SEC. 7, T23S, R16W	SEC. 32, T23S, R16W
OWNER	LEBEN OIL CORP.	KEWANEE OIL CO.	ALPINE DRILLING CO.
COMPLETED	10/05/70	06/10/77	07/19/77
SAMPLED	04/14/71	07/27/77	09/11/78
FORMATION	MISS---	PENN-CONGLOMERATE	MISS---
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4182	4076	4183
WELLHEAD PRESSURE,PSIG	1250	1030	1000
OPEN FLOW, MCFD	2765	4146	275
COMPONENT, MOLE PCT			
METHANE	88.4	82.3	87.7
ETHANE	3.6	3.7	3.8
PROPANE	1.4	1.5	1.5
N-BUTANE	0.5	0.6	0.5
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	4.8	9.6	5.0
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.9	0.2
HELIUM	0.50	1.06	0.49
HEATING VALUE*	1047	987	1037
SPECIFIC GRAVITY	0.627	0.649	0.629

	INDEX 2224 SAMPLE 5471	INDEX 2225 SAMPLE 8402	INDEX 2226 SAMPLE 5734
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	EVERS NE	EVERS S	GARFIELD
WELL NAME	MAUSER NO. 1	BOYD NO. 1	L. J. SMARTZ NO. 1
LOCATION	SEC. 31, T21S, R15W	SEC. 12, T22S, R16W	SEC. 8, T23S, R17W
OWNER	PETROLEUM, INC.	MESSMAN-RINEHART OIL CO.	HILTON DRILLING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/12/53	02/21/62	10/23/54
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3915	3920	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1175	1145	NOT GIVEN
OPEN FLOW, MCFD	500	1180	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.6	86.4	85.3
ETHANE	4.0	3.5	3.3
PROPANE	1.6	1.4	1.2
N-BUTANE	0.4	0.4	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	6.0	6.5	9.8
OXYGEN	0.1	0.3	TRACE
ARGON	0.1	TRACE	0.2
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.1
HELIUM	0.69	0.61	0.97
HEATING VALUE*	1027	1012	979
SPECIFIC GRAVITY	0.642	0.632	0.645

	INDEX 2227 SAMPLE 5735	INDEX 2228 SAMPLE 5736	INDEX 2229 SAMPLE 5741
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GARFIELD	GARFIELD	GARFIELD
WELL NAME	HUTCHINSON NO. B-5	FERGIS NO. 1	FERGUS B NO. 1
LOCATION	SEC. 17, T23S, R17W	SEC. 16, T23, R17	SEC. 16, T23S, R17W
OWNER	MILTON DRILLING CO.	MILTON DRLG. CO. & SUNRAY DX	MILTON DRILLING CO., ET AL.
COMPLETED	--/--/00	--/--/00	10/11/54
SAMPLED	11/06/54	10/27/54	11/23/54
FORMATION	CAMO-CONGLOMERATE	MISS-	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4248
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	82.6	76.8	84.9
ETHANE	5.3	3.5	2.4
PROPANE	2.0	1.3	0.5
N-BUTANE	0.6	0.4	0.2
ISOBUTANE	0.3	0.3	TRACE
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	8.2	15.8	10.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.32	1.78	1.09
HEATING VALUE*	1041	929	928
SPECIFIC GRAVITY	0.663	0.686	0.616

	INDEX 2230 SAMPLE 5743	INDEX 2231 SAMPLE 6328	INDEX 2232 SAMPLE 6602
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GARFIELD	GARFIELD	GARFIELD
WELL NAME	BOYD NO. 1	SHOEMAKE NO. 8	HUTCHINSON E LEASE
LOCATION	SEC. 35, T22, R17W	SEC. 19, T23W, R19S	SEC. 9, T23S, R17W
OWNER	COLORADO OIL & GAS CORP.	MILTON DRILLING CO.	COLORADO OIL & GAS CORP.
COMPLETED	11/11/54	--/--/00	--/--/00
SAMPLED	12/16/54	05/20/57	05/18/58
FORMATION	NOT GIVEN	MISS-	PENN-& MISS
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4131	4265	4200
WELLHEAD PRESSURE,PSIG	1100	1100	NOT GIVEN
OPEN FLOW, MCFD	3682	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.4	83.9	80.7
ETHANE	3.2	3.3	6.4
PROPANE	1.1	1.0	3.1
N-BUTANE	0.4	0.3	1.3
ISOBUTANE	0.2	0.2	0.7
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	TRACE	0.6
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	9.2	9.8	5.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.96	1.01	0.43
HEATING VALUE*	975	966	1138
SPECIFIC GRAVITY	0.632	0.635	0.699

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2233 SAMPLE 6603	INDEX 2234 SAMPLE 11802	INDEX 2235 SAMPLE 11803
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GARFIELD	GIVENS	GIVENS
WELL NAME	J. A. BOYD NO. 1	E. J. GIVENS NO. 1	E. J. GIVENS NO. 2
LOCATION	SEC. 35, T22S, R17W	SEC. 19, T22S, R19W	SEC. 19, T22S, 19W
OWNER	COLORADO OIL & GAS CORP.	G & L OIL CO.	G & L OIL CO.
COMPLETED	04/--/58	12/10/68	12/10/68
SAMPLED	05/18/58	05/26/69	05/26/69
FORMATION	PENN-L	MISS-	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4131	4444	4444
WELLHEAD PRESSURE,PSIG	550	1180	1180
OPEN FLOW, MCFD	5210	1250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.7	62.8	62.2
ETHANE	1.1	3.4	3.3
PROPANE	0.1	1.4	1.4
N-BUTANE	0.1	0.6	0.5
ISOBUTANE	TRACE	0.3	0.3
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	14.4	28.3	29.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	1.16	2.38	2.37
HEATING VALUE*	852	1252	780
SPECIFIC GRAVITY	0.618	0.716	0.722

	INDEX 2236 SAMPLE 8733	INDEX 2237 SAMPLE 9373	INDEX 2238 SAMPLE 9374
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	GODFREY	GODFREY	GODFREY
WELL NAME	EDDY NO. 1	EDDY NO. 1	FAIRCHILD NO. 1
LOCATION	SEC. 13, T22S, R18W	SEC. 13, T22S, R18W	SEC. 13, T22S, R18W
OWNER	BELL BROTHERS	BELL BROTHERS	BELL BROTHERS
COMPLETED	--/--/00	11/08/62	09/26/63
SAMPLED	11/15/62	04/21/64	04/21/64
FORMATION	CAMO-CONGLOMERATE	PENN-CHEROKEE	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4084	4084	4110
WELLHEAD PRESSURE,PSIG	963	1280	1264
OPEN FLOW, MCFD	2310	2675	4325
COMPONENT, MOLE PCT			
METHANE	82.0	81.4	81.5
ETHANE	3.3	3.5	3.6
PROPANE	1.2	1.9	1.4
N-BUTANE	0.4	0.6	0.6
ISOBUTANE	0.2	TRACE	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	10.6	11.1	11.0
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.32	1.32	1.32
HEATING VALUE*	963	962	960
SPECIFIC GRAVITY	0.640	0.645	0.642

	INDEX 2239 SAMPLE 5584	INDEX 2240 SAMPLE 8570	INDEX 2241 SAMPLE 15370
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	HEARN	HEARN	HEARN N
WELL NAME	HEARN NO. 1	HEARN NO.1	IRMA SMITH NO. 1
LOCATION	SEC. 35, T23S, R15W	SEC. 35, T23S, R15W	SEC. 26, T23S, R15W
OWNER	NATURAL GAS & OIL CORP.	NATURAL GAS & OIL CORP.	ALPINE DRILLING CO.
COMPLETED	10/14/53	--/--/00	04/28/78
SAMPLED	12/28/53	06/04/62	09/11/78
FORMATION	PENN-LANSING	DROO-VIOLA	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3833	NOT GIVEN	4121
WELLHEAD PRESSURE,PSIG	990	790	1060
OPEN FLOW, MCFD	5500	NOT GIVEN	205
COMPONENT, MOLE PCT			
METHANE	79.5	81.7	72.4
ETHANE	3.2	4.3	4.4
PROPANE	1.6	2.0	2.3
N-BUTANE	0.6	0.7	0.8
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	12.7	8.9	15.8
OXYGEN	TRACE	0.2	0.6
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	1.56	1.06	1.97
HEATING VALUE*	946	1012	961
SPECIFIC GRAVITY	0.649	0.657	0.702

	INDEX 2242 SAMPLE 4710	INDEX 2243 SAMPLE 14322	INDEX 2244 SAMPLE 16332
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	LARNED	LUCAS	MASSEY W
WELL NAME	CORA BROWN NO. 1	FINGER NO. 1	ALDRICH "B" NO 1-32
LOCATION	SEC. 28, T21S, R16W	SEC. 31, T20S, R16W	SEC. 32, T23S, R17W
OWNER	SUNRAY DX OIL CO.	FRONTIER OIL CO.	F. G. HOLL
COMPLETED	06/18/49	09/06/74	12/12/80
SAMPLED	07/26/49	04/23/74	08/--/81
FORMATION	CAMO-	CAMO-ARBUCKLE	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3863	3811	4318
WELLHEAD PRESSURE,PSIG	1075	1000	1035
OPEN FLOW, MCFD	4256	10000	2081
COMPONENT, MOLE PCT			
METHANE	4.5	22.8	82.6
ETHANE	1.9	3.2	3.5
PROPANE	0.5	1.3	1.3
N-BUTANE	0.5	0.8	0.4
ISOBUTANE	0.4	0.6	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	86.1	66.0	10.2
OXYGEN	0.1	0.0	0.0
ARGON	0.3	0.2	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.1
HELIUM	4.92	3.98	1.00
HEATING VALUE*	137	391	976
SPECIFIC GRAVITY	0.934	0.876	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2245 SAMPLE 6156	INDEX 2246 SAMPLE 5624	INDEX 2247 SAMPLE 6619
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	NEWSOM	NOT GIVEN	ORANGE
WELL NAME	NEWSOM NO. 1	SIEGFRIED NO. 1	MILLER NO. 1
LOCATION	SEC. 25, T20S, R20W	NOT GIVEN	SEC. 33, T23S, R17W
OWNER	HONAKER DAVIS DRILLING CO.	KANSAS-NEBRASKA NATURAL GAS	HONAKER DAVIS DRILLING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/30/56	06/17/54	05/29/58
FORMATION	PENN-CHEROKEE	NOT GIVEN	CAMO-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4250	NOT GIVEN	4260
WELLHEAD PRESSURE,PSIG	1200	NOT GIVEN	1300
OPEN FLOW, MCFD	5000	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	26.2	52.9	75.7
ETHANE	3.4	6.5	4.1
PROPANE	3.0	4.8	1.6
N-BUTANE	1.0	2.1	0.6
ISOBUTANE	0.7	1.5	0.4
N-PENTANE	0.3	0.8	0.1
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.8	0.2
NITROGEN	60.7	26.6	15.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.2	0.2	0.1
HYDROGEN	1.1	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.9	0.2
HELIUM	3.46	2.09	1.40
HEATING VALUE*	503	1002	942
SPECIFIC GRAVITY	0.886	0.849	0.680

	INDEX 2248 SAMPLE 3054	INDEX 2249 SAMPLE 3055	INDEX 2250 SAMPLE 3094
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	M. L. BATES NO. 3	NELLIE BELT NO. 3	NELSON NO. 1
LOCATION	SEC. 13, T20S, R16W	SEC. 13, T20S, R16W	SEC. 14, T20S, R16W
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	CONTINENTAL OIL CO.
COMPLETED	05/15/41	01/27/41	--/--/00
SAMPLED	12/17/41	12/17/41	02/27/42
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3792	3801	3772
WELLHEAD PRESSURE,PSIG	975	850	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	54.7	80.7	73.5
ETHANE	40.8	11.5	18.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.3	6.1	6.5
OXYGEN	0.2	0.1	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.7	0.6	0.5
HELIUM	0.34	1.02	1.30
HEATING VALUE*	1285	1024	1083
SPECIFIC GRAVITY	0.777	0.639	0.672

	INDEX 2251 SAMPLE 3095	INDEX 2252 SAMPLE 3096	INDEX 2253 SAMPLE 3097
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	BOWYER NO. 3	BOWYER NO. 1	S. P. SMITH 2-8
LOCATION	SEC. 12, T20S, R16W	SEC. 12, T20S, R16W	SEC. 13, T20S, R16W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	09/09/41	07/21/41	02/03/42
SAMPLED	02/27/42	02/27/42	02/27/42
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3732	3757	3747
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.4	77.0	85.8
ETHANE	9.9	16.3	3.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.9	5.0	8.8
OXYGEN	0.7	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.0	0.4	0.1
HELIUM	0.14	0.85	1.35
HEATING VALUE*	1063	1072	932
SPECIFIC GRAVITY	0.615	0.658	0.605

	INDEX 2254 SAMPLE 3105	INDEX 2255 SAMPLE 3117	INDEX 2256 SAMPLE 4499
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	S. P. SMITH NO. 1	M. G. BIXBY NO. 2	STERLING CLINSON NO. 3
LOCATION	SEC. 13, T20S, R16W	SEC. 24, T20S, R16W	SEC. 12, T20N, R16W
OWNER	MID-CONTINENT PETROLEUM CORP	MID-CONTINENT PETROLEUM CORP	STERLING DRILLING CO.
COMPLETED	12/10/37	07/19/41	10/15/47
SAMPLED	02/26/42	02/26/42	06/--/48
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3762	3796	3643
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	712
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	82.7	77.9	78.2
ETHANE	9.2	13.6	13.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.3	7.1	6.5
OXYGEN	0.5	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.6
HELIUM	0.99	0.90	0.92
HEATING VALUE*	1003	1033	1036
SPECIFIC GRAVITY	0.627	0.650	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2257 SAMPLE 4814	INDEX 2258 SAMPLE 4874	INDEX 2259 SAMPLE 4875
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	STERLING CLEMSON NO. 3	NO. 1 & 2, DIRKS LEASE	UNRUH NO. 1
LOCATION	SEC. 12, T20S, R16W	SEC. 23, T20S, R16W	SEC. 23, T20S, R16W
OWNER	KANSAS-NEBRASKA NATURAL GAS	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.
COMPLETED	--/--/00	09/09/49	09/01/49
SAMPLED	01/10/50	04/25/50	04/25/50
FORMATION	NOT GIVEN	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3744	3746
WELLHEAD PRESSURE,PSIG	NOT GIVEN	990	1200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.1	58.5	64.8
ETHANE	4.1	8.4	13.1
PROPANE	1.7	6.7	7.0
N-BUTANE	0.6	2.5	1.9
ISOBUTANE	0.3	0.0	1.5
N-PENTANE	0.1	0.0	0.5
ISOPENTANE	0.4	2.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.0	0.3	0.4
NITROGEN	7.2	18.7	8.9
OXYGEN	0.2	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.7	1.2
HELIUM	0.98	1.80	0.33
HEATING VALUE*	1020	1109	1237
SPECIFIC GRAVITY	0.648	0.829	0.813

	INDEX 2260 SAMPLE 4907	INDEX 2261 SAMPLE 5215	INDEX 2262 SAMPLE 5216
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	DIRKS A NO. 1	UNRUH B	UNRUH A
LOCATION	SEC. 23, T20S, R16W	SEC. 23, T20S, R16W	SEC. 23, T20S, R16W
OWNER	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.
COMPLETED	08/02/49	--/--/00	--/--/00
SAMPLED	06/01/50	06/12/52	06/10/52
FORMATION	CAMO-ARBUCKLE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3775	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	990	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.3	64.7	65.3
ETHANE	3.6	3.7	4.3
PROPANE	1.8	1.9	3.2
N-BUTANE	0.7	0.8	1.2
ISOBUTANE	0.2	0.4	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	30.7	24.2	21.4
OXYGEN	0.3	0.1	0.1
ARGON	0.2	0.1	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.6	0.6
HELIUM	3.24	2.65	2.36
HEATING VALUE*	755	848	917
SPECIFIC GRAVITY	0.733	0.723	0.737

	INDEX 2263 SAMPLE 5217	INDEX 2264 SAMPLE 5243	INDEX 2265 SAMPLE 5388
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
WELL NAME	DIRKS B	DIRKS A	WILDCAT
LOCATION	SEC. 23, T20S, R16W	SEC. 20, T20S, R15W	SEC. 14, T20S, R16W
OWNER	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO.	JAYHAWK DRILLING CO.
COMPLETED	--/--/00	--/--/00	02/02/53
SAMPLED	06/10/52	06/18/52	02/05/53
FORMATION	NOT GIVEN	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3793
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1080
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	69.0	55.8	36.6
ETHANE	4.1	4.8	3.2
PROPANE	2.3	3.3	1.7
N-BUTANE	1.0	1.3	0.5
ISOBUTANE	0.5	0.9	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	19.0	29.3	52.3
OXYGEN	0.1	0.1	0.0
ARGON	0.1	0.2	0.2
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.5	0.7
HELIUM	2.42	3.06	4.10
HEATING VALUE*	927	842	520
SPECIFIC GRAVITY	0.716	0.774	0.817

	INDEX 2266 SAMPLE 6163	INDEX 2267 SAMPLE 4068	INDEX 2268 SAMPLE 5050
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	RYAN	RYAN
WELL NAME	MANSON NO. 1	NELSON NO. 3	HABERMAN NO. 1
LOCATION	SEC. 15, T20S, R16W	SEC. 2, T20S, R16W	SEC. 4, T20S, R16W
OWNER	ROACH & LICHTY DRILLING INC.	GULF OIL CORP.	BRACK OIL CO.
COMPLETED	10/23/56	06/30/45	--/--/00
SAMPLED	10/22/56	09/21/45	04/18/51
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3750	3736	3700
WELLHEAD PRESSURE,PSIG	1070	800	900
OPEN FLOW, MCFD	1000	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	56.6	74.2	44.6
ETHANE	3.9	16.0	3.5
PROPANE	2.0	---	1.9
N-BUTANE	0.7	---	0.8
ISOBUTANE	0.4	---	0.9
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	33.8	8.3	43.6
OXYGEN	0.1	0.0	1.1
ARGON	0.2	---	0.2
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.3	0.7
HELIUM	3.47	1.19	3.69
HEATING VALUE*	739	1038	631
SPECIFIC GRAVITY	0.754	0.666	0.796

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2269 SAMPLE 5053	INDEX 2270 SAMPLE 5428	INDEX 2271 SAMPLE 5526
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	RYAN	RYAN	SWEENEY
WELL NAME	MAGERMAN A	A. FLESKE NO. 1	SWEENEY NO. 1
LOCATION	SEC. 4, T20S, R16W	SEC. 3, T20S, R16W	SEC. 8, T21S, R15W
OWNER	BRACK OIL CO.	BEN F. BRACK OIL CO.	VICKERS EXPLORATION, LTD.
COMPLETED	03/18/51	03/14/53	--/--/00
SAMPLED	05/05/51	03/25/53	07/25/53
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3700	3700	3716
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	654	
COMPONENT, MOLE PCT			
METHANE	44.6	69.3	82.9
ETHANE	3.5	4.0	3.8
PROPANE	1.9	2.0	1.3
N-BUTANE	0.6	0.8	0.7
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.3	0.4	0.5
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.2	0.6
NITROGEN	44.0	19.2	8.4
OXYGEN	0.1	TRACE	TRACE
ARGON	0.2	0.5	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.2
HELIUM	3.62	2.35	1.01
HEATING VALUE*	626	898	1032
SPECIFIC GRAVITY	0.793	0.706	0.661

	INDEX 2272 SAMPLE 5527	INDEX 2273 SAMPLE 5597	INDEX 2274 SAMPLE 5612
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	SWEENEY	SWEENEY	SWEENEY
WELL NAME	SWEENEY NO. 1	DUFFORD NO. A-1	M. BIRD NO. 1
LOCATION	SEC. 8, T21S, R15W	SEC. 7, T21S, R15W	SEC. 19, T21S, R15W
OWNER	VICKERS EXPLORATION, LTD.	GRAHAM-MESSMAN-RINEHART OIL	NADEL & GUSSMAN OIL CO.
COMPLETED	08/25/53	03/02/54	11/04/53
SAMPLED	07/29/53	03/15/54	04/28/54
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3792	3808	3910
WELLHEAD PRESSURE,PSIG	11500	1220	12
OPEN FLOW, MCFD	6160	5000	3700
COMPONENT, MOLE PCT			
METHANE	86.1	87.0	87.0
ETHANE	4.0	3.6	3.7
PROPANE	1.6	1.4	1.5
N-BUTANE	0.5	0.4	0.5
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	6.1	5.9	5.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	0.78	0.78	0.68
HEATING VALUE*	1038	1023	1037
SPECIFIC GRAVITY	0.637	0.629	0.632

	INDEX 2275 SAMPLE 5882	INDEX 2276 SAMPLE 6214	INDEX 2277 SAMPLE 6620
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	SWEENEY	SWEENEY	SWEENEY
WELL NAME	SPRUILL NO. 1	SPRETER NO. 2	UNRUH NO. 1
LOCATION	SEC. 25, T21S, R16W	SEC. 5, T21S, R15W	SEC. 30, T21S, R15W
OWNER	HARMS-BURT DRLG. CO. & ASSOC	ALKAY OIL CO.	JOHN W. MCKNAB
COMPLETED	07/05/55	12/01/56	04/--/58
SAMPLED	07/15/55	12/03/56	05/27/58
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3870	3769	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1000	847	NOT GIVEN
OPEN FLOW, MCFD	375	4735	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	68.7	81.9
ETHANE	4.2	2.6	TRACE
PROPANE	1.6	1.1	TRACE
N-BUTANE	0.7	0.6	TRACE
ISOBUTANE	0.3	TRACE	0.0
N-PENTANE	0.4	0.0	0.1
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.0	TRACE
NITROGEN	4.9	24.0	15.3
OXYGEN	TRACE	1.2	0.8
ARGON	TRACE	0.3	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.52	0.66	1.50
HEATING VALUE*	1058	805	834
SPECIFIC GRAVITY	0.639	0.700	0.618

	INDEX 2278 SAMPLE 7029	INDEX 2279 SAMPLE 6601	INDEX 2280 SAMPLE 8345
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	SWEENEY	SWEENEY W	SWEENEY W
WELL NAME	UNRUH NO. 1	HANEY NO. 1	HANEY NO. 2
LOCATION	SEC. 24, T21S, R16W	SEC. 13, T21S, R16W	SEC. 13, T21S, R16W
OWNER	ANSCHUTZ DRILLING CO., INC.	D. R. LAUCK OIL CO., INC.	STICKLE DRILLING CO.
COMPLETED	--/--/55	04/--/58	12/13/61
SAMPLED	04/29/59	05/18/58	12/21/61
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3847	3817	3807
WELLHEAD PRESSURE,PSIG	1090	1060	1100
OPEN FLOW, MCFD	7000	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.1	81.0	86.2
ETHANE	3.8	0.1	3.7
PROPANE	1.4	0.1	1.5
N-BUTANE	0.5	0.1	0.5
ISOBUTANE	0.2	TRACE	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	6.3	15.6	5.6
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.4
HELIUM	0.80	2.60	1.32
HEATING VALUE*	1018	828	1023
SPECIFIC GRAVITY	0.635	0.612	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2281 SAMPLE 5590	INDEX 2282 SAMPLE 5878	INDEX 2283 SAMPLE 3736
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	WILDCAT	WILDCAT	ZOOK
WELL NAME	DE ROO NO. 1	DI NO. 1	MCKENE SMITH NO. 1
LOCATION	SEC. 17, T21S, R16W	SEC. 21, T21S, R15W	SEC. 16, T23S, R16W
OWNER	TRANS-ERA PETROLEUM CO.	CITIES SERVICE OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	05/12/55	12/15/43
SAMPLED	01/26/54	07/18/55	03/02/44
FORMATION	CAMO-ARBUCKLE	PENN-BASAL	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3798	3741	4060
WELLHEAD PRESSURE,PSIG	1160	1158	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4410	14950
COMPONENT, MOLE PCT			
METHANE	1.4	84.7	86.6
ETHANE	1.7	3.3	7.1
PROPANE	0.8	1.2	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.7	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	87.7	8.6	5.3
OXYGEN	TRACE	TRACE	0.5
ARGON	0.2	0.1	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.3	0.0
HELIUM	5.84	1.02	0.53
HEATING VALUE*	132	982	1004
SPECIFIC GRAVITY	0.947	0.634	0.612

	INDEX 2284 SAMPLE 3740	INDEX 2285 SAMPLE 8692	INDEX 2286 SAMPLE 8401
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ZOOK	ZOOK	ZOOK
WELL NAME	C. M. GILKISON NO. 1	SCHARTZ NO. 1	SCHARTZ NO. 1
LOCATION	SEC. 15, T23S, R16W	SEC. 14, T22S, R16W	SEC. 14, T22S, R16W
OWNER	STANOLIND OIL & GAS CO.	DUNNE-GARDNER PETROLEUM CO.	DUNNE-GARDNER PETROLEUM CO.
COMPLETED	12/15/43	02/27/55	--/--/00
SAMPLED	03/02/44	07/18/61	02/21/62
FORMATION	CAMO-ARBUCKLE	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4063	4045	4020
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1167	1167
OPEN FLOW, MCFD	6600	NOT GIVEN	1880
COMPONENT, MOLE PCT			
METHANE	82.2	86.3	83.4
ETHANE	11.1	4.0	3.4
PROPANE	---	1.4	1.5
N-BUTANE	---	0.5	0.4
ISOBUTANE	---	0.5	0.2
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.1
NITROGEN	5.8	6.1	9.9
OXYGEN	0.2	0.0	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	0.53	0.30	0.73
HEATING VALUE*	1032	1031	992
SPECIFIC GRAVITY	0.634	0.642	0.643

	INDEX 2287 SAMPLE 10759	INDEX 2288 SAMPLE 11211	INDEX 2289 SAMPLE 11529
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ZOOK	ZOOK	ZOOK
WELL NAME	IRMA NO. 1	SHARTZ NO. 1	HARRIS NO. 1
LOCATION	SEC. 15, T23S, R16W	SEC. 8, T23S, R16W	SEC. 34, T22S, R16W
OWNER	KEYANET OIL CO.	HALLIBURTON OIL PRODUCING CO	HALLIBURTON OIL PRODUCING CO
COMPLETED	07/01/66	08/31/67	12/01/67
SAMPLED	10/23/66	10/25/67	06/04/68
FORMATION	CAMO-ARBUCKLE	MISS-NOT GIVEN	PENN-& MISS
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4061	4130	4028
WELLHEAD PRESSURE,PSIG	1185	1170	1137
OPEN FLOW, MCFD	8000	4180	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	86.7	85.8
ETHANE	3.5	3.4	3.7
PROPANE	1.5	1.1	1.3
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.3	TRACE	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	0.5	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	4.6	6.1	7.1
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.9	0.2
HELIUM	0.52	0.73	0.73
HEATING VALUE*	1044	1007	1013
SPECIFIC GRAVITY	0.623	0.631	0.634

	INDEX 2290 SAMPLE 12204	INDEX 2291 SAMPLE 13747	INDEX 2292 SAMPLE 15369
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ZOOK	ZOOK	ZOOK
WELL NAME	CAUBLE UNIT NO. 1	GILKINSON NO. 1	JOYCE ZOOK NO. 1
LOCATION	SEC. 22, T23S, R16W	SEC. 15, T23S, R16W	SEC. 9, T23S, R16W
OWNER	ROBERT F. WHITE	ALPINE DRILLING CO.	ALPINE DRILLING CO.
COMPLETED	01/03/70	07/20/73	06/08/78
SAMPLED	02/20/70	10/08/73	09/11/78
FORMATION	ORDO-SIMPSON	CAMO-CONGLOMERATE	CAMO-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4044	4040	4023
WELLHEAD PRESSURE,PSIG	1300	1163	1000
OPEN FLOW, MCFD	3000	1320	300
COMPONENT, MOLE PCT			
METHANE	88.6	85.1	86.6
ETHANE	3.5	3.7	3.4
PROPANE	1.4	1.5	1.3
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	4.7	7.7	6.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.51	0.74	0.84
HEATING VALUE*	1039	1009	1010
SPECIFIC GRAVITY	0.623	0.634	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2293 SAMPLE 17198	INDEX 2294 SAMPLE 3217	INDEX 2295 SAMPLE 16358
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PHILLIPS	PRATT
FIELD	ZOOK	RAE	A & W
WELL NAME	KELLEMS NO. 3	NOEL NO. 2	HEALY FAMILY FARMS NO. 1
LOCATION	SEC. 7, T23S, R16W	SEC. 29, T5S, R20W	SEC. 5, T28S, R15W
OWNER	WHITE & ELLIS DRILLING, INC.	CITIES SERVICE OIL CO.	BRUNSON-SPINES, INC.
COMPLETED	02/27/84	10/30/41	07/16/81
SAMPLED	02/27/84	03/23/42	10/20/81
FORMATION	NOT GIVEN	CAMB-REAGAN	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3576	4576
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1360
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3500
COMPONENT, MOLE PCT			
METHANE	84.1	4.2	79.7
ETHANE	3.1	14.5	3.8
PROPANE	1.1	---	1.8
N-BUTANE	0.6	---	0.8
ISOBUTANE	0.5	---	0.6
N-PENTANE	0.9	---	0.6
ISOPENTANE	1.0	---	0.5
CYCLOPENTANE	0.5	---	0.2
HEXANES PLUS	1.2	---	0.7
NITROGEN	6.2	76.7	10.1
OXYGEN	0.1	0.2	0.6
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	1.7	0.1
HELIUM	0.72	2.74	0.37
HEATING VALUE*	1134	302	1060
SPECIFIC GRAVITY	0.697	0.949	0.700

	INDEX 2296 SAMPLE 8737	INDEX 2297 SAMPLE 15545	INDEX 2298 SAMPLE 16735
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	BARNES	BRANT	CHANCE
WELL NAME	BARNES NO. 1	BRANT NO. A-1	MCGUIRE NO. 1
LOCATION	SEC. 25, T27S, R12W	SEC. 31, T28S, R11W	SEC. 5, T27S, R13W
OWNER	D.R. LAUCK DRILLING CO., INC	RAYMOND OIL CO., INC.	EAGLE EXPLORATION, INC.
COMPLETED	--/--/00	06/22/78	05/26/82
SAMPLED	10/30/62	12/23/78	12/14/82
FORMATION	ORDO-SIMPSON	PERM-INDIAN CAVE	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4373	2624	4236
WELLHEAD PRESSURE,PSIG	NOT GIVEN	840	1080
OPEN FLOW, MCFD	1450	2060	2300
COMPONENT, MOLE PCT			
METHANE	48.1	74.8	64.7
ETHANE	8.6	3.8	6.1
PROPANE	5.2	2.2	4.2
N-BUTANE	1.7	0.6	1.5
ISOBUTANE	0.8	0.1	0.7
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.5	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	31.9	16.9	19.9
OXYGEN	0.4	0.4	TRACE
ARGON	0.2	TRACE	0.1
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	1.37	0.41	1.55
HEATING VALUE*	918	935	996
SPECIFIC GRAVITY	0.646	0.690	0.760

	INDEX 2299 SAMPLE 3683	INDEX 2300 SAMPLE 3715	INDEX 2301 SAMPLE 3913
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CHITWOOD	CHITWOOD	CHITWOOD
WELL NAME	CHITWOOD NO. 1	CHITWOOD NO. 5	BARKER NO. 2
LOCATION	SEC. 23, T28S, R12W	SEC. 23, T28S, R12W	SEC. 23, T28S, R12W
OWNER	LION OIL & REFINING CO.	LION OIL CO.	CITIS SERVICE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/06/43	--/--/00	10/11/44
FORMATION	ORDO-SIMPSON	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4396	NOT GIVEN	4200
WELLHEAD PRESSURE,PSIG	1490	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	286
COMPONENT, MOLE PCT			
METHANE	61.6	73.6	72.9
ETHANE	27.9	15.9	17.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.0	7.4	8.2
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	1.9	0.3
HELIUM	0.82	0.86	0.89
HEATING VALUE*	1124	1029	1049
SPECIFIC GRAVITY	0.732	0.681	0.675

	INDEX 2302 SAMPLE 3959	INDEX 2303 SAMPLE 3960	INDEX 2304 SAMPLE 4060
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CHITWOOD	CHITWOOD	CHITWOOD
WELL NAME	BROSSWOOD NO. 1	MANDSLEY NO. 1	CHITWOOD NO. 5
LOCATION	SEC. 23, T28S, R12W	SEC. 22, T28S, R12W	SEC. 23, T28S, R12W
OWNER	LION OIL CO.	LION OIL CO.	LION OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/44
SAMPLED	10/11/44	10/11/44	06/01/45
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4200	4200	4500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1400
OPEN FLOW, MCFD	319	846	6495
COMPONENT, MOLE PCT			
METHANE	69.5	74.4	69.4
ETHANE	15.2	15.5	20.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.4	8.5	9.1
OXYGEN	1.9	0.5	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.69	0.85	0.87
HEATING VALUE*	991	1031	1070
SPECIFIC GRAVITY	0.691	0.667	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2305 SAMPLE 4061	INDEX 2306 SAMPLE 4062	INDEX 2307 SAMPLE 4063
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CHITWOOD	CHITWOOD	CHITWOOD
WELL NAME	CHITWOOD B-1	EVANS NO. 2	EVANS NO. 1
LOCATION	SEC. 27, T28S, R12W	SEC. 27, T28S, R12W	SEC. 27, T28S, R12W
OWNER	LION OIL CO.	GULF OIL CORP.	SKELLY OIL CO.
COMPLETED	--/--/45	--/--/44	10/--/44
SAMPLED	06/01/45	06/01/45	06/01/45
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4500	4500	4323
WELLHEAD PRESSURE,PSIG	1400	1400	1400
OPEN FLOW, MCFD	9000	NOT GIVEN	15075
COMPONENT, MOLE PCT			
METHANE	74.3	69.1	74.4
ETHANE	17.0	21.0	17.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.9	9.0	7.4
OXYGEN	0.0	0.0	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.74	0.77	0.79
HEATING VALUE*	1057	1076	1062
SPECIFIC GRAVITY	0.669	0.693	0.668

	INDEX 2308 SAMPLE 4084	INDEX 2309 SAMPLE 4091	INDEX 2310 SAMPLE 14494
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CHITWOOD	CHITWOOD	CHITWOOD
WELL NAME	FISSEL NO. 3	CHITWOOD B-2	CHITWOOD NO. S-1
LOCATION	SEC. 22, T28S, R12W	SEC. 27, T28S, R12W	SEC. 23, T28S, R12W
OWNER	CITIES SERVICE OIL CO.	LION OIL CO.	RAYMOND OIL CO., INC.
COMPLETED	--/--/45	--/--/45	05/02/75
SAMPLED	06/01/45	06/01/45	10/10/75
FORMATION	ORDO-VIOLA	ORDO-VIOLA	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4429	4500	2646
WELLHEAD PRESSURE,PSIG	922	1400	880
OPEN FLOW, MCFD	14782	9370	3300
COMPONENT, MOLE PCT			
METHANE	71.3	71.6	83.8
ETHANE	17.4	19.0	9.2
PROPANE	---	---	1.4
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	10.1	8.5	10.8
OXYGEN	0.1	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.1	0.3
HELIUM	0.82	0.84	0.43
HEATING VALUE*	1034	1066	956
SPECIFIC GRAVITY	0.682	0.681	0.638

	INDEX 2311 SAMPLE 8461	INDEX 2312 SAMPLE 6069	INDEX 2313 SAMPLE 5799
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	COATS W	CULLISON	CULLISON W
WELL NAME	MOSS NO. 1	JOHNSON NO. 1	N. ROBBINS NO. 1
LOCATION	SEC. 23, T29S, R14W	SEC. 25, T28S, R15W	SEC. 21, T27S, R15W
OWNER	WILKINSON DRILLING, INC.	BANKOFF OIL CO.	NATIONAL COOP. REFINERY ASSN
COMPLETED	--/--/00	01/19/56	12/22/54
SAMPLED	03/08/62	05/22/56	03/29/55
FORMATION	ORDO-SIMPSON	MISS-CHAT	PENN-BASAL
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4522	4558	4472
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1325	1320
OPEN FLOW, MCFD	NOT GIVEN	875	7600
COMPONENT, MOLE PCT			
METHANE	57.5	59.4	88.6
ETHANE	8.1	5.8	3.1
PROPANE	3.2	1.5	1.3
N-BUTANE	0.9	1.1	0.4
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	26.9	17.7	5.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	1.84	1.03	0.45
HEATING VALUE*	886	988	1026
SPECIFIC GRAVITY	0.766	0.730	0.619

	INDEX 2314 SAMPLE 2897	INDEX 2315 SAMPLE 2911	INDEX 2316 SAMPLE 2925
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	C. H. LAKIN NO. 1	BOWERS NO. 1	STEFFEN C NO. 1
LOCATION	SEC. 36, T27S, R11W	SEC. 2, T28S, R11W	SEC. 35, T27S, R11W
OWNER	SKELLY OIL CO.	DRILLERS GAS CO.	SKELLY OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/04/41	10/06/41	10/25/41
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.5	62.8	62.2
ETHANE	19.7	22.2	23.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	13.2	13.5	13.3
OXYGEN	0.2	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	1.11	1.10	1.07
HEATING VALUE*	1017	1034	1046
SPECIFIC GRAVITY	0.706	0.718	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2317 SAMPLE 2926	INDEX 2318 SAMPLE 2927	INDEX 2319 SAMPLE 2928
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	LUNT A NO. 1	C. D. GOYEN C NO. 1	KREMBIEL B NO. 1
LOCATION	SEC. 19, T28S, R11W	SEC. 8S, T28S, R11W	SEC. 1, T28S, R11W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/25/41	10/25/41	10/25/41
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.4	68.2	64.9
ETHANE	17.7	19.3	21.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.7	11.1	12.4
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.82	1.00	1.05
HEATING VALUE*	1051	1037	1039
SPECIFIC GRAVITY	0.678	0.695	0.708

	INDEX 2320 SAMPLE 2929	INDEX 2321 SAMPLE 2933	INDEX 2322 SAMPLE 2934
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
WELL NAME	GILCHRIST NO. 1	ARMITSTEAD A NO. 1	C. D. GOYEN B NO. 1
LOCATION	SEC. 7, T28S, R11W	SEC. 2, T28S, R11W	SEC. 17, T28S, R11W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/25/41	10/25/41	10/25/41
FORMATION	ORDO-VIOLA	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.6	65.2	68.2
ETHANE	17.2	21.0	19.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.1	12.3	10.5
OXYGEN	0.0	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.85	1.05	0.97
HEATING VALUE*	1034	1037	1044
SPECIFIC GRAVITY	0.679	0.708	0.692

	INDEX 2323 SAMPLE 2936	INDEX 2324 SAMPLE 3056	INDEX 2325 SAMPLE 16409
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	CUNNINGHAM	CUNNINGHAM	EMMA
WELL NAME	MORRISON NO. 1	SOUTH MAKEDON NO. 3	LEMON NO. 4-7
LOCATION	SEC. 9, T28S, R11W	SEC. 25, T27S, R11W	SEC. 7, T27S, R15W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	IMPERIAL OIL CO.
COMPLETED	--/--/00	05/11/40	10/22/81
SAMPLED	10/25/41	12/04/41	01/15/82
FORMATION	ORDO-VIOLA	ORDO-VIOLA	MISS-KINDERHOOK
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4000	4500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1375
OPEN FLOW, MCFD	NOT GIVEN	57000	2000
COMPONENT, MOLE PCT			
METHANE	66.5	47.7	84.9
ETHANE	21.2	38.2	3.7
PROPANE	---	---	1.4
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.3
NITROGEN	10.9	12.7	7.6
OXYGEN	0.1	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE*	---	---	0.0
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.96	1.01	0.99
HEATING VALUE*	1054	1168	1011
SPECIFIC GRAVITY	0.704	0.795	0.636

	INDEX 2326 SAMPLE 12936	INDEX 2327 SAMPLE 8276	INDEX 2328 SAMPLE 16239
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	PRISBIE NE	GEREKE N	HARDING
WELL NAME	GRIFFITH A NO. 1	PARKS NO. 1	COSS A NO. 1
LOCATION	SEC. 10, T26S, R13W	SEC. 1, T26S, R15W	SEC. 31, T29S, R11W
OWNER	VINCENT OIL CORP.	SCHERMERHORN OIL CORP.	ANADARKO PRODUCTION CO.
COMPLETED	05/13/71	--/--/00	--/--/00
SAMPLED	07/19/71	11/10/61	04/21/81
FORMATION	MISS-	PENN-LANSING	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4132	3807	2748
WELLHEAD PRESSURE,PSIG	1210	1550	700
OPEN FLOW, MCFD	4300	4000	1500
COMPONENT, MOLE PCT			
METHANE	66.0	79.5	87.0
ETHANE	5.2	4.0	5.6
PROPANE	2.5	2.1	1.3
N-BUTANE	0.8	0.8	0.5
ISOBUTANE	0.3	0.9	0.1
N-PENTANE	0.4	0.2	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	21.5	11.8	3.0
OXYGEN	1.3	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	1.39	0.40	0.25
HEATING VALUE*	895	1003	1007
SPECIFIC GRAVITY	0.731	0.676	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2329 SAMPLE 3594	INDEX 2330 SAMPLE 3601	INDEX 2331 SAMPLE 3605
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	IUKA-CARMI	IUKA-CARMI	IUKA-CARMI
WELL NAME	TRITSCH NO. 1	HARRELL NO. B-1	HELMKE-GETTY NO. 1
LOCATION	SEC. 11, T27S, R13W	SEC. 2, T27S, R13W	SEC. 1, T27S, R13W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	SKELLY OIL CO.
COMPLETED	--/--/00	06/30/41	--/--/00
SAMPLED	09/11/42	09/11/42	09/11/42
FORMATION	ORDO-SIMPSON	ORDO-SIMPSON	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4304	4255	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.0	61.8	24.9
ETHANE	24.7	21.8	43.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.5	15.3	25.5
OXYGEN	0.4	0.5	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.7	2.4
HELIUM	0.17	1.20	3.30
HEATING VALUE*	1121	1009	1028
SPECIFIC GRAVITY	0.711	0.725	0.887

	INDEX 2332 SAMPLE 15024	INDEX 2333 SAMPLE 7869	INDEX 2334 SAMPLE 3632
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	IUKA-CARMI	JEM	NOT GIVEN
WELL NAME	ALBERT MOEME NO. 1	MOORE NO. 1	FORD NO. 1
LOCATION	SEC. 25, T26S, R12W	SEC. 29, T29S, R13W	SEC. 12, T26S, R12W
OWNER	W. L. KIRKMAN, INC.	KENWOOD OIL CO.	MONSANTO CO.
COMPLETED	10/31/76	02/17/61	--/--/00
SAMPLED	06/09/77	02/13/61	04/07/43
FORMATION	PENN-HOWARD & SEVERY	ORDO-VIOLA	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4453	NOT GIVEN
WELLHEAD PRESSURE,PSIG	947	780	NOT GIVEN
OPEN FLOW, MCFD	4800	1100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.7	74.9	55.4
ETHANE	4.5	8.6	32.0
PROPANE	4.1	3.7	---
N-BUTANE	1.5	1.3	---
ISOBUTANE	0.5	0.5	---
N-PENTANE	0.4	0.3	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	23.1	9.3	11.8
OXYGEN	0.0	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.46	0.60	0.13
HEATING VALUE*	1009	1109	1135
SPECIFIC GRAVITY	0.764	0.717	0.767

	INDEX 2335 SAMPLE 14636	INDEX 2336 SAMPLE 7685	INDEX 2337 SAMPLE 17631
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	ROLLINGSON	SAWYER	TATLOCK EXTENSION E
WELL NAME	MOORE "A" NO. 1	J. W. COMBS NO. 1	KELL NO. 1
LOCATION	SEC. 35, T27S, R13W	SEC. 26, T29S, R13W	SEC. 35, T26S, R15W
OWNER	RAYMOND OIL CO., INC.	AMERADA PETROLEUM CORP.	ZENITH DRILLING CORP.
COMPLETED	10/07/75	09/25/60	10/22/84
SAMPLED	04/10/76	09/12/60	03/27/85
FORMATION	PERM-RED EAGLE	PENN-LANSING	MISS-KINDERHOOK
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2592	4130	4408
WELLHEAD PRESSURE,PSIG	820	NOT GIVEN	966
OPEN FLOW, MCFD	2800	NOT GIVEN	9000
COMPONENT, MOLE PCT			
METHANE	68.7	75.5	83.2
ETHANE	5.8	6.0	4.2
PROPANE	2.1	3.1	1.7
N-BUTANE	0.5	1.0	0.5
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	23.6	12.7	8.2
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.63	0.30	0.98
HEATING VALUE*	854	1034	1008
SPECIFIC GRAVITY	0.706	0.704	0.645

	INDEX 2338 SAMPLE 14633	INDEX 2339 SAMPLE 3250	INDEX 2340 SAMPLE 15983
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	UNNAMED	WARD	WIL
WELL NAME	BUCKLIN ESTATE NO. 1	WARD NO. B-1	STAMBAUGH "A" NO. 1
LOCATION	SEC. 17, T25S, R12W	SEC. 11, T26S, R12W	SEC. 8, T26S, R15W
OWNER	D. R. BUCK OIL CO., INC.	N. APPLEMAN CO.	CITIES SERVICE CO.
COMPLETED	04/11/75	09/15/41	03/18/80
SAMPLED	04/15/76	04/01/42	06/09/80
FORMATION	PERM-INDIAN CAVE	ORDO-VIOLA	MISS-CHERT
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2684	4105	4357
WELLHEAD PRESSURE,PSIG	937	1130	1040
OPEN FLOW, MCFD	959	3700	4260
COMPONENT, MOLE PCT			
METHANE	72.1	60.5	88.0
ETHANE	2.4	17.9	3.8
PROPANE	0.8	---	1.4
N-BUTANE	0.2	---	0.5
ISOBUTANE	0.2	---	0.2
N-PENTANE	TRACE	---	0.2
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	TRACE	---	0.2
NITROGEN	23.6	19.5	4.9
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.56	1.46	0.62
HEATING VALUE*	808	934	1051
SPECIFIC GRAVITY	0.676	0.722	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2341 SAMPLE 16138	INDEX 2342 SAMPLE 16361	INDEX 2343 SAMPLE 13787
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PRATT	PRATT	PRATT
FIELD	WIL	WIL	WOOLFOLK
WELL NAME	DOGGETT NO. 4	WOOD NO. 2	WOOLFOLK NO. 7
LOCATION	SEC. 17, T26S, R5W	SEC. 18, T26S, R15W	SEC. 15, T28S, R14W
OWNER	MULL DRILLING CO., INC.	BEREN CORP.	TEXAS ENERGIES, INC.
COMPLETED	05/23/80	08/20/80	--/--/00
SAMPLED	12/04/80	10/20/81	10/12/73
FORMATION	MISS---	MISS-	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4350	4352	3954
WELLHEAD PRESSURE,PSIG	950	1070	1462
OPEN FLOW, MCFD	9000	3650	411
COMPONENT, MOLE PCT			
METHANE	88.3	87.9	69.9
ETHANE	3.7	4.0	3.8
PROPANE	1.5	1.6	2.3
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	4.7	4.6	21.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.58	0.55	0.51
HEATING VALUE*	1046	1049	895
SPECIFIC GRAVITY	0.627	0.628	0.711

	INDEX 2344 SAMPLE 2237	INDEX 2345 SAMPLE 2316	INDEX 2346 SAMPLE 2486
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	BURRTON	BURRTON	BURRTON
WELL NAME	HAURY NO. 1	BLAKE NO. 1	NO. 1
LOCATION	SEC. 1, T23, R4W	SEC. 23, T23S, R4W	SEC. 26, T23S, R4W
OWNER	CITIES SERVICE OIL CO.	CONTINENTAL OIL & SHELL PET.	OLSEN OIL CO. & SHELL OIL
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/07/30	04/23/31	04/11/32
FORMATION	MISS-	MISS-	MISS-BURRTON
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3303	3271	3237
WELLHEAD PRESSURE,PSIG	1200	1100	1180
OPEN FLOW, MCFD	23000	8500	86600
COMPONENT, MOLE PCT			
METHANE	80.1	78.8	76.3
ETHANE	16.0	12.8	15.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.5	7.9	7.1
OXYGEN	0.0	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.31	0.33	0.34
HEATING VALUE*	1098	1028	1054
SPECIFIC GRAVITY	0.648	0.650	0.665

	INDEX 2347 SAMPLE 10338	INDEX 2348 SAMPLE 8464	INDEX 2349 SAMPLE 8612
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	FRIENDSHIP	HUNTSVILLE	HUNTSVILLE TOWNSITE
WELL NAME	W. R. BLOCKER NO. 1	SMITH NO. 1	LAVIELLE NO. 1
LOCATION	SEC. 19, T25S, R4W	SEC. 20, T23S, R9W	SEC. 8, T23S, R9W
OWNER	TESORO PETROLEUM CORP.	MULL DRILLING CO., INC.	MULL DRILLING CO., INC.
COMPLETED	02/02/62	--/--/00	08/05/62
SAMPLED	12/21/65	03/20/62	08/04/62
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3554	3680	3573
WELLHEAD PRESSURE,PSIG	720	NOT GIVEN	1320
OPEN FLOW, MCFD	520	240	750
COMPONENT, MOLE PCT			
METHANE	70.1	73.7	74.0
ETHANE	7.4	6.2	7.4
PROPANE	5.0	3.1	3.7
N-BUTANE	3.1	1.0	1.1
ISOBUTANE	1.0	0.5	0.5
N-PENTANE	1.1	0.3	0.2
ISOPENTANE	1.8	0.3	0.3
CYCLOPENTANE	1.0	0.1	0.1
HEXANES PLUS	2.0	0.2	0.1
NITROGEN	6.8	13.3	11.4
OXYGEN	0.2	0.2	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.28	0.95	0.78
HEATING VALUE*	1175	1028	1062
SPECIFIC GRAVITY	0.857	0.712	0.711

	INDEX 2350 SAMPLE 8613	INDEX 2351 SAMPLE 10392	INDEX 2352 SAMPLE 10393
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	HUNTSVILLE TOWNSITE	LERADO	LERADO
WELL NAME	LAVIELLE NO. 1	MONTFORD C. NO. 1	MURPHY NO. 2
LOCATION	SEC. 8, T23S, R9W	SEC. 18, T26S, R9W	SEC. 14, T26W, R9S
OWNER	MULL DRILLING CO., INC.	MESSMAN-RINEHART OIL CO.	MESSMAN-RINEHART OIL CO.
COMPLETED	08/05/62	05/10/58	09/17/65
SAMPLED	08/04/62	02/10/66	02/10/66
FORMATION	MISS-	MISS-	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3573	3888	2203
WELLHEAD PRESSURE,PSIG	1320	1100	780
OPEN FLOW, MCFD	750	6000	1000
COMPONENT, MOLE PCT			
METHANE	74.0	76.0	76.4
ETHANE	6.5	6.6	6.0
PROPANE	3.8	3.7	2.7
N-BUTANE	0.9	1.2	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	13.5	10.1	12.6
OXYGEN	0.2	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.78	0.68	0.93
HEATING VALUE*	1001	1082	1020
SPECIFIC GRAVITY	0.699	0.709	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2353 SAMPLE 10786	INDEX 2354 SAMPLE 2046	INDEX 2355 SAMPLE 3224
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	LERADO	NOT GIVEN	PEACE CREEK NE
WELL NAME	COLE-JUSTUS NO. 1	TREMBLY NO. 1	MCMURREY
LOCATION	SEC. 14, T26S, R9W	SEC. 34, T24, R7W	SEC. 10, T23S, R10W
OWNER	MESSMAN-RINEHART OIL CO.	SKELLY OIL CO.	LEADER OIL CO.
COMPLETED	06/25/66	--/--/00	01/15/42
SAMPLED	11/22/66	06/13/30	03/30/42
FORMATION	PERM-FORAKER	NOT GIVEN	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2002	2075	3767
WELLHEAD PRESSURE,PSIG	735	NOT GIVEN	840
OPEN FLOW, MCFD	9000	1800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.3	52.8	32.3
ETHANE	5.1	5.3	57.7
PROPANE	2.3	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	23.6	40.2	9.1
OXYGEN	0.1	0.5	0.4
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.65	0.85	0.17
HEATING VALUE*	956	630	1361
SPECIFIC GRAVITY	0.712	0.749	0.882

	INDEX 2356 SAMPLE 10711	INDEX 2357 SAMPLE 8719	INDEX 2358 SAMPLE 14525
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	SHUFF	WILDCAT	WISBY NW
WELL NAME	SHUFF NO. 1	FRENCH NO. 1	PROFFITT NO. 1
LOCATION	SEC. 34, T23S, R9W	SEC. 34, T26S, R6W	SEC. 12, T22S, R10W
OWNER	SIERRA PETROLEUM CO., INC.	NULL DRILLING CO., INC.	SHIELDS OIL PRODUCERS, INC.
COMPLETED	06/12/66	--/--/00	04/20/75
SAMPLED	09/06/66	10/17/62	11/05/75
FORMATION	MISS-	MISS-	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3762	3709	3120
WELLHEAD PRESSURE,PSIG	1225	NOT GIVEN	1200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	77.8	75.3	70.8
ETHANE	6.4	4.9	4.1
PROPANE	3.3	2.4	2.0
N-BUTANE	1.1	0.9	0.5
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.5	12.8	21.0
OXYGEN	0.0	2.2	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.85	0.18	0.91
HEATING VALUE*	1072	991	883
SPECIFIC GRAVITY	0.690	0.705	0.697

	INDEX 2359 SAMPLE 3230	INDEX 2360 SAMPLE 3237	INDEX 2361 SAMPLE 3238
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RENO
FIELD	YODER	YODER	ZENITH-PEACE CREEK
WELL NAME	SKOWALTER NO. 1	MATRES NO. 1	HOLLENBACK NO. 1
LOCATION	SEC. 34, T24S, R5W	SEC. 33, T24S, R5W	SEC. 28, T23S, R10W
OWNER	DRILLERS GAS CO.	DRILLERS GAS CO.	SIMPSON OIL CO.
COMPLETED	11/09/37	03/26/38	01/12/42
SAMPLED	03/30/42	03/30/42	03/30/42
FORMATION	MISS-LIME	MISS-LIME	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3393	3408	3798
WELLHEAD PRESSURE,PSIG	750	1025	1170
OPEN FLOW, MCFD	4723	2322	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.2	80.2	10.3
ETHANE	17.6	16.1	78.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.6	3.0	9.5
OXYGEN	0.1	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	1.5
HELIUM	0.30	0.29	0.15
HEATING VALUE*	1118	1101	1506
SPECIFIC GRAVITY	0.653	0.648	0.996

	INDEX 2362 SAMPLE 8266	INDEX 2363 SAMPLE 16453	INDEX 2364 SAMPLE 3225
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RENO	RENO	RICE
FIELD	ZENITH-PEACE CREEK	ZENITH-PEACE CREEK	ALDEN
WELL NAME	HINSHAW NO. 1	BURNS NO. 1	SMALL NO. 1
LOCATION	SEC. 16, T23S, R10W	SEC. T, T23S, R9W	SEC. 22, T21S, R9W
OWNER	WILKINSON DRILLING, INC.	ZENITH DRILLING CORP., INC.	SHARON DRILLING CO.
COMPLETED	--/--/00	03/15/82	04/--/41
SAMPLED	11/01/61	03/15/82	03/25/42
FORMATION	ORDO-VIOLA	MISS---	DEVO-MISENER
GEOLOGIC PROVINCE CODE	375	375	385
DEPTH, FEET	3596	3574	3317
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1139	773
OPEN FLOW, MCFD	802	2794	3962
COMPONENT, MOLE PCT			
METHANE	69.5	74.1	65.3
ETHANE	7.1	6.8	22.4
PROPANE	3.6	3.0	---
N-BUTANE	1.0	1.1	---
ISOBUTANE	0.5	0.4	---
N-PENTANE	0.2	0.4	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	21.4	12.7	11.1
OXYGEN	TRACE	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	1.17	0.77	0.76
HEATING VALUE*	947	1049	1063
SPECIFIC GRAVITY	0.741	0.714	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2365 SAMPLE 3239	INDEX 2366 SAMPLE 8660	INDEX 2367 SAMPLE 15037
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	ALDEN	BELL	BELL
WELL NAME	FAIR NO. 1	BOY NO. 1	L. BOY NO. 2
LOCATION	SEC. 28, T21S, R9W	SEC. 21, T21S, R10W	SEC. 17, T21S, R10W
OWNER	INGLING & PARKER	ICER ADDIS CO.	LEBSACK OIL PRODUCTION, INC.
COMPLETED	03/09/41	--/--/00	--/--/76
SAMPLED	03/25/42	08/27/62	06/28/77
FORMATION	DEVO-MISENER	PENN-SEVERY	PENN-SEVERY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3313	2530	2500
WELLHEAD PRESSURE,PSIG	681	NOT GIVEN	800
OPEN FLOW, MCFD	8619	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	61.9	61.0	62.2
ETHANE	23.7	1.9	1.9
PROPANE	---	0.8	0.7
N-BUTANE	---	0.2	0.2
ISOBUTANE	---	TRACE	0.1
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	TRACE	0.1
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	TRACE
NITROGEN	12.8	34.8	33.7
OXYGEN	0.5	0.3	0.0
ARGON	---	0.1	0.1
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.76	0.74	1.00
HEATING VALUE*	1052	679	697
SPECIFIC GRAVITY	0.727	0.720	0.715

	INDEX 2368 SAMPLE 15045	INDEX 2369 SAMPLE 10251	INDEX 2370 SAMPLE 14137
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	BELL	CANZONERI	CENTENNIAL
WELL NAME	FLORA NO. 2	CANZONERI NO. 1	ENGELLAND NO. 1
LOCATION	SEC. 21, T21S, R10W	SEC. 10, T21S, R9W	SEC. 3, T20S, R7W
OWNER	LEBSACK OIL PRODUCTION, INC.	LEBSACK OIL PRODUCTION, INC.	MESSMAN-RINEHART OIL CO.
COMPLETED	--/--/00	08/17/65	09/12/73
SAMPLED	06/28/77	10/22/65	08/26/74
FORMATION	PENN-SEVERY	MISS-KINDERHOOK	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2525	3271	3278
WELLHEAD PRESSURE,PSIG	800	997	1080
OPEN FLOW, MCFD	2500	2500	6200
COMPONENT, MOLE PCT			
METHANE	61.9	73.2	65.8
ETHANE	1.8	5.9	6.5
PROPANE	0.7	2.8	4.7
N-BUTANE	0.2	0.5	1.4
ISOBUTANE	0.1	0.3	0.9
N-PENTANE	0.0	TRACE	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	34.1	16.7	19.1
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.96	0.45	0.99
HEATING VALUE*	692	949	1009
SPECIFIC GRAVITY	0.716	0.691	0.757

	INDEX 2371 SAMPLE 3226	INDEX 2372 SAMPLE 3248	INDEX 2373 SAMPLE 3249
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	CHASE-SILICA	CHASE-SILICA	CHASE-SILICA
WELL NAME	DOLL NO. 1	DIPPEL NO. 1 B	WEINS NO. 1
LOCATION	SEC. 19, T19S, R10W	SEC. 26, T19S, R10W	SEC. 6, T19S, R9W
OWNER	CITIES SERVICE OIL CO.	DUWE & FARRIS	DUWE & FARRIS
COMPLETED	12/11/41	05/24/40	04/14/39
SAMPLED	03/25/42	03/30/42	03/30/42
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3030	3018	2978
WELLHEAD PRESSURE,PSIG	1039	800	1071
OPEN FLOW, MCFD	3330	7000	3208
COMPONENT, MOLE PCT			
METHANE	59.8	47.2	45.8
ETHANE	19.5	19.9	22.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.3	31.2	30.1
OXYGEN	0.3	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.88	1.10	1.01
HEATING VALUE*	955	835	867
SPECIFIC GRAVITY	0.730	0.782	0.790

	INDEX 2374 SAMPLE 4290	INDEX 2375 SAMPLE 4291	INDEX 2376 SAMPLE 15884
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	CHASE-SILICA	CHASE-SILICA	FITZPATRICK
WELL NAME	DINSMORE NO.1	LOWREY NO. 1	DILL NO. 1
LOCATION	SEC. 36, T19S, R9W	SEC. 36, T19S, R9W	SEC. 24, T21S, R9W
OWNER	DRILLERS GAS CO.	DRILLERS GAS CO.	LEBSACK OIL PRODUCTION, INC.
COMPLETED	02/16/47	02/25/47	--/--/00
SAMPLED	04/07/47	04/07/47	01/24/80
FORMATION	PENN-	PENN-	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2117	2114	3319
WELLHEAD PRESSURE,PSIG	697	693	1025
OPEN FLOW, MCFD	3445	7100	4518
COMPONENT, MOLE PCT			
METHANE	58.1	55.8	65.7
ETHANE	4.0	4.6	15.3
PROPANE	---	---	9.7
N-BUTANE	---	---	3.3
ISOBUTANE	---	---	1.6
N-PENTANE	---	---	1.0
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	35.7	37.6	1.3
OXYGEN	0.4	0.6	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.4	0.0
HELIUM	1.03	1.01	0.29
HEATING VALUE*	660	648	1402
SPECIFIC GRAVITY	0.727	0.735	0.846

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2377 SAMPLE 8236	INDEX 2378 SAMPLE 8555	INDEX 2379 SAMPLE 9294
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	GENESEO-EDWARDS	GENESEO-EDWARDS	KEPLEY
WELL NAME	KALINA NO. 5	PULLIAM NO. 1	KEPLEY
LOCATION	SEC. 3, T18S, R8W	SEC. 35, T18S, R8W	SEC. 5, T19S, R7W
OWNER	LEE PHILLIPS OIL CO.	KANSAS PETROLEUM, INC.	IMPERIAL OIL OF KANSAS, INC.
COMPLETED	--/--/00	--/--/00	03/25/64
SAMPLED	10/06/61	05/03/62	03/24/64
FORMATION	NOT GIVEN	CAMO-ARBUCKLE	MISS-KINDERHOOK
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3204	3290
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.0	43.9	65.1
ETHANE	9.7	7.8	5.1
PROPANE	2.5	7.3	2.9
N-BUTANE	0.6	2.6	1.0
ISOBUTANE	0.4	1.6	0.4
N-PENTANE	0.1	0.5	0.1
ISOPENTANE	0.1	0.4	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	23.3	33.4	23.4
OXYGEN	0.2	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	19.1	0.3	0.1
HELIUM	0.80	1.83	0.95
HEATING VALUE*	683	968	917
SPECIFIC GRAVITY	0.905	0.888	0.744

	INDEX 2380 SAMPLE 2368	INDEX 2381 SAMPLE 2369	INDEX 2382 SAMPLE 2901
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	LITTLE RIVER	LITTLE RIVER	LYONS
WELL NAME	JENNINGS NO. 1	JENNINGS NO. 2	PULLIAM A
LOCATION	SEC. 29, T16S, R6W	SEC. 29, T16S, R6W	SEC. 35, T19S, R8W
OWNER	MCFADDEN & SHELL OIL CO.	MCFADDEN & SHELL OIL CO.	ATLANTIC REFINING CO.
COMPLETED	06/16/31	08/03/31	--/--/00
SAMPLED	08/03/31	08/03/31	10/03/41
FORMATION	PERM-	PERM-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	1115	1156	NOT GIVEN
WELLHEAD PRESSURE,PSIG	265	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	26	33	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.7	74.5	34.6
ETHANE	7.9	9.5	29.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	34.0	14.6	34.2
OXYGEN	0.0	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	1.39	0.87	1.78
HEATING VALUE*	715	925	870
SPECIFIC GRAVITY	0.728	0.861	0.835

	INDEX 2383 SAMPLE 2904	INDEX 2384 SAMPLE 2905	INDEX 2385 SAMPLE 9282
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	LYONS	LYONS	LYONS
WELL NAME	WILLIAMS NO. 1	LYON NO. 1	HUTCHINS NO. 1
LOCATION	SEC. 14, T20S, R8W	SEC. 2, T20S, R8W	SEC. 21, T20S, R8W
OWNER	DERBY OIL CO.	DRILLERS GAS CO.	BEN C. W. HYDE, JR.
COMPLETED	--/--/00	--/--/00	03/20/64
SAMPLED	10/03/41	10/03/41	03/20/64
FORMATION	ORDO-SIMPSON	CAMO-ARBUCKLE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3275
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1050
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.2	25.4	58.2
ETHANE	28.2	38.6	15.8
PROPANE	---	---	12.7
N-BUTANE	---	---	4.1
ISOBUTANE	---	---	1.8
N-PENTANE	---	---	0.7
ISOPENTANE	---	---	1.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	26.5	33.7	4.8
OXYGEN	0.3	0.2	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	1.45	1.78	0.07
HEATING VALUE*	943	999	1498
SPECIFIC GRAVITY	0.902	0.881	0.916

	INDEX 2386 SAMPLE 9281	INDEX 2387 SAMPLE 9283	INDEX 2388 SAMPLE 3227
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	LYONS W	MCCLINTOCK	ORTH
WELL NAME	WILKINS NO. 1	MCCLINTOCK NO. 1	CULBERTSON NO. 1
LOCATION	SEC. 31, T19S, R8W	SEC. 18, T21S, R8W	SEC. 26, T18S, R10W
OWNER	BEN C. W. HYDE, JR.	BEN C. W. HYDE, JR.	CITIES SERVICE OIL CO.
COMPLETED	03/20/64	05/28/62	06/06/41
SAMPLED	03/20/64	03/20/64	03/25/42
FORMATION	MISS-KINDERHOOK	DEVO-RISENER	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3206	3280	2873
WELLHEAD PRESSURE,PSIG	1000	1050	1050
OPEN FLOW, MCFD	5000	750	2630
COMPONENT, MOLE PCT			
METHANE	46.0	45.6	52.5
ETHANE	5.2	5.8	21.2
PROPANE	1.3	4.3	---
N-BUTANE	1.0	1.3	---
ISOBUTANE	0.4	0.6	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	42.2	39.9	24.9
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	1.19	1.41	0.97
HEATING VALUE*	714	776	912
SPECIFIC GRAVITY	0.814	0.833	0.761

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2389 SAMPLE 10958	INDEX 2390 SAMPLE 2702	INDEX 2391 SAMPLE 8269
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	ORTH	RICKARD	TOBIAS
WELL NAME	ROELFS NO. 4	GOULDNER NO. 1	SCHUTLER NO. 1
LOCATION	SEC. 26, T18S, R10W	SEC. 16, T18S, R9W	SEC. 3, T21S, R9W
OWNER	SUNRAY DX OIL CO.	VICKERS PETROLEUM CO.	RENFRO DRILLING CO.
COMPLETED	05/10/67	--/--/00	--/--/00
SAMPLED	05/17/67	05/17/35	11/06/61
FORMATION	PENN-LANSING-KANSAS CITY	NOT GIVEN	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2882	2965	2948
WELLHEAD PRESSURE,PSIG	645	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2000	1960	1500
COMPONENT, MOLE PCT			
METHANE	61.2	41.0	66.6
ETHANE	6.5	24.1	5.7
PROPANE	3.5	---	3.0
N-BUTANE	1.2	---	1.0
ISOBUTANE	0.9	---	0.6
N-PENTANE	0.5	---	0.2
ISOPENTANE	0.4	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	24.6	33.3	21.5
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.5	0.2
HELIUM	0.95	1.08	0.78
HEATING VALUE*	925	847	936
SPECIFIC GRAVITY	0.770	0.811	0.737

	INDEX 2392 SAMPLE 8669	INDEX 2393 SAMPLE 4926	INDEX 2394 SAMPLE 7693
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RUSH
FIELD	TOBIAS	UNION	BASGALL
WELL NAME	LIPP NO. 1	GRAHAM NO. 1	BASGALL NO. 1
LOCATION	SEC. 11, T21S, R9W	SEC. 28, T20S, R8W	SEC. 5, T16S, R17W
OWNER	D. MILLER	BRUNSON DRILLING CO., INC.	LARIO OIL & GAS CO.
COMPLETED	--/--/00	07/10/50	--/--/00
SAMPLED	08/23/62	08/16/50	09/27/60
FORMATION	PENN-KANSAS CITY	PENN-SOOY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2923	3278	2967
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1130	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1327	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.5	70.4	66.1
ETHANE	5.8	7.0	2.3
PROPANE	3.4	3.8	1.0
N-BUTANE	1.1	1.1	0.6
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	24.2	15.3	26.2
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.82	0.90	2.40
HEATING VALUE*	920	1015	798
SPECIFIC GRAVITY	0.754	0.725	0.705

	INDEX 2395 SAMPLE 12194	INDEX 2396 SAMPLE 7835	INDEX 2397 SAMPLE 8619
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BASGALL	BASGALL-REICHEL	BASGALL-REICHEL
WELL NAME	BASGALL C NO. 1	BASGALL NO. 1	KANSAS STATE NO. 1
LOCATION	SEC. 10, T16S, R17W	SEC. 5, T16S, R17W	SEC. 6, T16S, R17W
OWNER	FRONTIER OIL CO.	LARIO OIL & GAS CO.	FRONTIER OIL CO.
COMPLETED	--/--/69	10/26/60	--/--/00
SAMPLED	02/16/70	01/30/61	07/23/62
FORMATION	PENN-TOPEKA	CAMO-ARBUCKLE	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3556	3240
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.8	12.0	61.8
ETHANE	2.0	2.3	3.1
PROPANE	0.8	0.4	1.5
N-BUTANE	0.3	0.2	0.8
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	30.5	77.2	29.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.2	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	1.86	6.50	1.70
HEATING VALUE*	733	207	796
SPECIFIC GRAVITY	0.706	0.882	0.737

	INDEX 2398 SAMPLE 8838	INDEX 2399 SAMPLE 6414	INDEX 2400 SAMPLE 6920
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BASGALL-REICHEL	BISON	BISON
WELL NAME	HARTMAN	CARL REINHARDT NO. 1	ROBINSON WELL NO. 1
LOCATION	SEC. 7, T16S, R17W	SEC. 3, T18S, R17W	SEC. 2, T18S, R17W
OWNER	FRONTIER OIL CO.	ATLWARD DRILLING CO.	ATLWARD DRILLING CO.
COMPLETED	--/--/00	09/30/57	01/11/59
SAMPLED	01/16/63	09/29/57	01/14/59
FORMATION	PENN-KANSAS CITY	CAMO-CONGLOMERATE	PENN-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3564	3588
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	881
OPEN FLOW, MCFD	NOT GIVEN	7340	12852
COMPONENT, MOLE PCT			
METHANE	68.9	76.9	78.4
ETHANE	2.6	3.7	3.6
PROPANE	1.3	1.3	1.4
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	24.2	14.5	13.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.73	1.90	1.70
HEATING VALUE*	816	932	937
SPECIFIC GRAVITY	0.691	0.663	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2401 SAMPLE 7078	INDEX 2402 SAMPLE 14550	INDEX 2403 SAMPLE 17654
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BISON	DYER	FICKEN EXTENSION
WELL NAME	RHEINHARDT NO. 2	DYER NO. 1	WILSON "A" NO. 1
LOCATION	SEC. 3, T18S, R17W	SEC. 12, T19S, R16W	SEC. 14, T17S, R18W
OWNER	AYLWARD DRILLING CO.	ICER ADDIS	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	03/03/84
SAMPLED	05/20/59	12/--/75	04/24/85
FORMATION	CAMO-SANDY CONGLOMERATE	NOT GIVEN	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3564	NOT GIVEN	3678
WELLHEAD PRESSURE,PSIG	960	NOT GIVEN	600
OPEN FLOW, MCFD	9500	NOT GIVEN	40000
COMPONENT, MOLE PCT			
METHANE	76.0	81.4	76.5
ETHANE	3.7	4.0	3.6
PROPANE	1.3	1.7	1.4
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	15.3	10.1	14.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.80	1.54	1.74
HEATING VALUE*	927	980	933
SPECIFIC GRAVITY	0.668	0.646	0.668

	INDEX 2404 SAMPLE 5264	INDEX 2405 SAMPLE 12583	INDEX 2406 SAMPLE 4024
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	HUNGRY HOLLOW	LIEBENTHAL	LORETTO
WELL NAME	MARIE WILLIAMS NO. 1	DECHANT NO. 2	URBAN NO. 1
LOCATION	SEC. 6, T16S, R17W	SEC. 23, T16S, R18W	SEC. 21, T16S, R17W
OWNER	NORTH AMERICAN PETROLEUM CO.	J. A. ALLISON	ELDORADO REFINING CO.
COMPLETED	06/--/52	--/--/00	09/--/45
SAMPLED	09/10/52	12/--/70	09/18/45
FORMATION	CAMO-ARBUCKLE	PENN-LANSING	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3460	3326	3537
WELLHEAD PRESSURE,PSIG	953	1292	950
OPEN FLOW, MCFD	1360	2320	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	14.6	64.8	13.1
ETHANE	2.3	2.5	7.7
PROPANE	0.6	0.9	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	74.9	28.8	71.0
OXYGEN	TRACE	0.0	0.6
ARGON	0.3	0.1	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.1	0.9
HELIUM	5.75	2.49	6.74
HEATING VALUE*	243	771	271
SPECIFIC GRAVITY	0.881	0.705	0.870

	INDEX 2407 SAMPLE 4025	INDEX 2408 SAMPLE 12195	INDEX 2409 SAMPLE 12197
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	LORETTO	LORETTO	LORETTO NE
WELL NAME	URBAN NO. 1	HOFFMAN NO. 2	URBAN J NO. 3
LOCATION	SEC. 21, T16S, R17W	SEC. 29, T16S, R17W	SEC. 14, T16S, R17W
OWNER	ELDORADO REFINING CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	09/--/45	01/21/70	01/26/70
SAMPLED	09/05/45	02/16/70	02/16/70
FORMATION	CAMO-ARBUCKLE	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3537	3267	3161
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2510	2890
COMPONENT, MOLE PCT			
METHANE	11.0	70.4	65.0
ETHANE	8.8	4.0	2.1
PROPANE	---	2.2	0.9
N-BUTANE	---	0.9	0.3
ISOBUTANE	---	0.7	0.3
N-PENTANE	---	0.5	0.2
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.2	TRACE
HEXANES PLUS	---	0.4	0.2
NITROGEN	73.9	18.3	29.0
OXYGEN	0.1	0.0	0.0
ARGON	---	0.1	0.1
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.8	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	7.02	2.05	1.85
HEATING VALUE*	269	946	758
SPECIFIC GRAVITY	0.872	0.710	0.704

	INDEX 2410 SAMPLE 2962	INDEX 2411 SAMPLE 2963	INDEX 2412 SAMPLE 2965
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	BUTNERUS NO. 1	MOHR NO. 1	MOHR-BUTNERUS NO. 1
LOCATION	SEC. 15, T18S, R16W	SEC. 10, T18S, R16W	SEC. 15, T18S, R16W
OWNER	SCHERMERHORN OIL CORP.	INTERSTATE PRODUCTION CO.	INTERSTATE PRODUCTION CO.
COMPLETED	12/29/33	01/29/35	10/24/34
SAMPLED	11/07/41	11/07/41	11/07/41
FORMATION	CAMB-REAGAN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3460	3480	3464
WELLHEAD PRESSURE,PSIG	1020	995	1030
OPEN FLOW, MCFD	39000	42000	43000
COMPONENT, MOLE PCT			
METHANE	75.3	71.8	76.5
ETHANE	11.2	13.9	10.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.4	12.2	11.2
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	1.57	1.62	1.64
HEATING VALUE*	963	976	958
SPECIFIC GRAVITY	0.659	0.671	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2413 SAMPLE 2966	INDEX 2414 SAMPLE 2968	INDEX 2415 SAMPLE 2970
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	SCHMIDT NO. 1	HARTMAN NO. 1	CROWELL NO. 1
LOCATION	SEC. 9, T18S, R16W	SEC. 4, T18S, R16W	SEC. 23, T18S, R16W
OWNER	O. F. FLYNN, ET AL.	SCHERMERHORN OIL CORP.	INTERSTATE-FLYNN
COMPLETED	07/03/36	09/18/35	11/19/35
SAMPLED	11/07/41	11/07/41	11/08/41
FORMATION	PENN-SOOT	PENN-SOOT	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3498	3510	3483
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	973
OPEN FLOW, MCFD	5600	13000	37000
COMPONENT, MOLE PCT			
METHANE	72.1	74.1	73.7
ETHANE	14.4	10.1	13.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.8	13.8	11.3
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	1.54	1.70	1.52
HEATING VALUE*	988	932	980
SPECIFIC GRAVITY	0.669	0.656	0.663

	INDEX 2416 SAMPLE 2973	INDEX 2417 SAMPLE 2979	INDEX 2418 SAMPLE 2996
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	PHILLIP J. BRACK NO. 1	SCHERMERHORN-MAULER NO. 1	CROWELL NO. 1
LOCATION	SEC. 24, T18S, R16W	SEC. 14, T18S, R16W	SEC. 23, T18S, R16W
OWNER	HERNDON DRILLING CO.	SCHERMERHORN OIL CORP.	INTERSTATE-FLYNN
COMPLETED	11/09/36	07/18/36	11/19/35
SAMPLED	11/06/41	11/06/41	11/08/41
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3466	3493	3483
WELLHEAD PRESSURE,PSIG	960	NOT GIVEN	973
OPEN FLOW, MCFD	38000	48000	37000
COMPONENT, MOLE PCT			
METHANE	74.4	75.5	74.4
ETHANE	12.1	10.9	12.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.5	11.8	11.0
OXYGEN	0.2	0.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	1.59	1.39	1.53
HEATING VALUE*	971	960	978
SPECIFIC GRAVITY	0.658	0.652	0.660

	INDEX 2419 SAMPLE 3002	INDEX 2420 SAMPLE 3007	INDEX 2421 SAMPLE 3008
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	MANETH NO. 3	MAULER NO. 1	SCHEURMAN NO. 1
LOCATION	SEC. 22, T18S, R16W	SEC. 12, T18S, R16W	SEC. 5, T18S, R16W
OWNER	KENWOOD OIL CO.	OHIO OIL CO.	SINCLAIR-PRAIRIE OIL CO.
COMPLETED	01/26/40	--/--/00	--/--/00
SAMPLED	11/08/41	--/--/00	--/--/00
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3550	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	17000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.0	74.4	73.2
ETHANE	12.8	10.8	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.1	12.7	11.8
OXYGEN	0.2	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	1.53	1.61	1.54
HEATING VALUE*	979	967	978
SPECIFIC GRAVITY	0.662	0.658	0.665

	INDEX 2422 SAMPLE 3010	INDEX 2423 SAMPLE 3016	INDEX 2424 SAMPLE 3025
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	AYLWARD REIDL NO. 1	HAGELGANTZ	J. J. DIRKS NO. 1
LOCATION	SEC. 13, T18S, R16W	SEC. 11, T18S, R16W	SEC. 25, T18S, R16W
OWNER	KANSAS-NEBRASKA NATURAL GAS	KENWOOD OIL CO.	OHIO OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	NOT GIVEN	NOT GIVEN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.2	73.1	74.7
ETHANE	13.2	11.9	11.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.6	12.9	11.5
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	1.56	1.58	1.55
HEATING VALUE*	968	954	966
SPECIFIC GRAVITY	0.669	0.664	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2425 SAMPLE 8431	INDEX 2426 SAMPLE 8609	INDEX 2427 SAMPLE 8610
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS	OTIS	OTIS
WELL NAME	HUENERGARDT NO. 1	HUENERGARDT NO. 2	HUENERGARDT NO. 2
LOCATION	SEC. 18, T16S, R18W	SEC. 18, T16S, R18W	SEC. 18, T16S, R18W
OWNER	HALLIBURTON OIL CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/26/62	06/13/62	06/13/62
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3543	3538
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.7	77.0	77.1
ETHANE	10.0	3.7	3.7
PROPANE	5.9	1.4	1.4
N-BUTANE	2.3	0.5	0.5
ISOBUTANE	1.7	0.4	0.3
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	0.6	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	5.3	14.9	14.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.31	1.85	1.84
HEATING VALUE*	1270	939	937
SPECIFIC GRAVITY	0.778	0.666	0.662

	INDEX 2428 SAMPLE 6172	INDEX 2429 SAMPLE 6173	INDEX 2430 SAMPLE 6175
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS-ALBERT	OTIS-ALBERT	OTIS-ALBERT
WELL NAME	HANBARDT NO. 1	MILLER NO. 1	MONSON NO. 2
LOCATION	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W
OWNER	SOLAR OIL CO.	SOLAR OIL CO.	SOLAR OIL CO.
COMPLETED	05/10/56	01/10/56	--/--/55
SAMPLED	11/01/56	11/01/56	11/01/56
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3608	3575	3610
WELLHEAD PRESSURE,PSIG	970	893	NOT GIVEN
OPEN FLOW, MCFD	200	3	100
COMPONENT, MOLE PCT			
METHANE	79.1	78.3	79.3
ETHANE	3.6	3.4	4.2
PROPANE	0.6	0.5	0.6
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.8	0.4	0.4
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.2	0.5	0.8
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	13.1	14.4	12.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	1.38	1.83	1.09
HEATING VALUE*	948	909	949
SPECIFIC GRAVITY	0.659	0.649	0.656

	INDEX 2431 SAMPLE 6188	INDEX 2432 SAMPLE 6189	INDEX 2433 SAMPLE 6190
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS-ALBERT	OTIS-ALBERT	OTIS-ALBERT
WELL NAME	HANHARDT NO. 3	MONSON NO. 1	MONSON NO. 3
LOCATION	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W
OWNER	SOLAR OIL CO.	SOLAR OIL CO.	SOLAR OIL CO.
COMPLETED	10/15/56	11/04/55	05/--/56
SAMPLED	11/01/56	11/01/56	11/01/56
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3601	3600	3572
WELLHEAD PRESSURE,PSIG	690	650	650
OPEN FLOW, MCFD	500	100	100
COMPONENT, MOLE PCT			
METHANE	78.1	77.2	76.6
ETHANE	5.6	4.8	5.1
PROPANE	0.7	1.2	1.3
N-BUTANE	0.3	0.7	0.9
ISOBUTANE	0.3	0.7	1.0
N-PENTANE	0.0	0.1	0.4
ISOPENTANE	0.3	0.5	0.5
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	14.0	12.5	12.0
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	1.82	1.45	1.26
HEATING VALUE*	923	990	1021
SPECIFIC GRAVITY	0.655	0.682	0.696

	INDEX 2434 SAMPLE 6209	INDEX 2435 SAMPLE 6210	INDEX 2436 SAMPLE 6211
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS-ALBERT	OTIS-ALBERT	OTIS-ALBERT
WELL NAME	L. MILLER NO. 1	L. MILLER NO. 3	L. MILLER NO. 4
LOCATION	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	04/01/56	06/06/56	06/14/56
SAMPLED	--/--/00	12/31/56	12/31/56
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3562	3578	3582
WELLHEAD PRESSURE,PSIG	710	800	860
OPEN FLOW, MCFD	35	200	900
COMPONENT, MOLE PCT			
METHANE	77.4	76.2	75.9
ETHANE	5.5	4.4	4.8
PROPANE	1.4	1.1	1.3
N-BUTANE	1.0	1.2	1.2
ISOBUTANE	0.9	0.8	0.8
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.6	0.9	0.8
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	11.1	12.6	12.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.5
HELIUM	0.89	1.47	1.42
HEATING VALUE*	1025	1015	1036
SPECIFIC GRAVITY	0.691	0.699	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2437 SAMPLE 6212	INDEX 2438 SAMPLE 6213	INDEX 2439 SAMPLE 6599
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS-ALBERT	OTIS-ALBERT	OTIS-ALBERT
WELL NAME	DYER NO. 2	DYER NO. 3	BETZ NO. 1
LOCATION	SEC. 21, T18S, R16W	SEC. 21, T18S, R16W	SEC. 8, T18S, R16W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SOLAR OIL CO.
COMPLETED	02/28/56	04/24/56	12/12/57
SAMPLED	12/31/56	12/31/56	05/21/58
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3544	3558	3529
WELLHEAD PRESSURE,PSIG	945	770	600
OPEN FLOW, MCFD	1500	400	3
COMPONENT, MOLE PCT			
METHANE	75.6	76.3	78.5
ETHANE	4.8	4.2	4.1
PROPANE	1.3	1.2	1.5
N-BUTANE	1.1	1.2	0.6
ISOBUTANE	0.9	0.5	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.8	2.2	0.3
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.5	11.8	12.6
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.1
HELIUM	1.50	1.40	1.60
HEATING VALUE*	1019	1055	972
SPECIFIC GRAVITY	0.702	0.714	0.668

	INDEX 2440 SAMPLE 7792	INDEX 2441 SAMPLE 8952	INDEX 2442 SAMPLE 8953
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS-ALBERT	OTIS-ALBERT	OTIS-ALBERT
WELL NAME	BETZ NO. 1	HUENGARDT NO. 1	HUENGARDT X NO. 2
LOCATION	SEC. 8, T18S, R16W	SEC. 18, T18S, R16W	SEC. 18, T18S, R16W
OWNER	SOLAR OIL CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/27/60	05/10/63	05/10/63
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3520	NOT GIVEN	3529
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	874
OPEN FLOW, MCFD	5000	NOT GIVEN	4500
COMPONENT, MOLE PCT			
METHANE	78.3	73.6	77.7
ETHANE	4.1	5.2	3.4
PROPANE	1.5	3.2	1.3
N-BUTANE	0.5	2.1	0.6
ISOBUTANE	0.5	0.7	0.2
N-PENTANE	0.2	0.7	0.1
ISOPENTANE	0.1	0.9	0.3
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	0.7	0.2
NITROGEN	12.7	11.2	14.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	1.70	1.40	1.80
HEATING VALUE*	962	1128	936
SPECIFIC GRAVITY	0.664	0.748	0.661

	INDEX 2443 SAMPLE 8954	INDEX 2444 SAMPLE 8956	INDEX 2445 SAMPLE 8618
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	OTIS-ALBERT	OTIS-ALBERT	PECHANEC
WELL NAME	DIRKS NO. 1	SCHNEIDER NO. 1	PECHANEC NO. 1
LOCATION	SEC. 7, T18S, R16W	SEC. 17, T18S, R16W	SEC. 18, T18S, R16W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/10/63	05/10/63	07/24/62
FORMATION	CAMB-REAGAN	CAMB-REAGAN	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3505	3508	3539
WELLHEAD PRESSURE,PSIG	825	840	915
OPEN FLOW, MCFD	3500	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.5	78.3	75.7
ETHANE	3.6	3.6	3.8
PROPANE	1.4	1.3	1.5
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	13.0	13.3	15.3
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	1.90	1.80	1.74
HEATING VALUE*	954	953	934
SPECIFIC GRAVITY	0.663	0.665	0.675

	INDEX 2446 SAMPLE 8738	INDEX 2447 SAMPLE 12196	INDEX 2448 SAMPLE 4810
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	PECHANEC	PLEASANT VIEW	REICHEL
WELL NAME	SCHNEIDER NO. 1	BURGARDT A NO. 4	MAGNOLIA THALHEIM NO. 1
LOCATION	SEC. 17, T18S, R16W	SEC. 15, T18S, R17W	SEC. 28, T19S, R16W
OWNER	MORRISON PRODUCING CO.	FRONTIER OIL CO.	KANSAS-NEBRASKA NATURAL GAS
COMPLETED	10/29/62	11/24/69	--/--/00
SAMPLED	10/29/62	02/16/70	01/10/50
FORMATION	CAMB-REAGAN	PENN-TOPEKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3519	3206	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	4500	15900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.0	66.0	52.8
ETHANE	3.7	2.1	3.6
PROPANE	1.4	0.9	1.7
N-BUTANE	0.5	0.3	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	15.1	27.6	36.6
OXYGEN	0.3	0.0	0.1
ARGON	0.1	0.1	0.2
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.4
HELIUM	1.69	1.95	3.31
HEATING VALUE*	934	782	690
SPECIFIC GRAVITY	0.675	0.763	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2449 SAMPLE 5389	INDEX 2450 SAMPLE 5406	INDEX 2451 SAMPLE 5413
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	REICHEL NO. 1	KLEWENO NO. 1
LOCATION	SEC. 23, T17S, R17W	SEC. 23, T17S, R17W	SEC. 23, T17S, R17W
OWNER	R. E. MORRISON, JR.	R. E. MORRISON, JR.	MORRISON PRODUCING CO.
COMPLETED	02/04/53	02/04/53	--/--/00
SAMPLED	02/04/53	02/22/53	03/11/53
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3445
WELLHEAD PRESSURE,PSIG	1150	1150	NOT GIVEN
OPEN FLOW, MCFD	29000	29000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.3	69.3	61.9
ETHANE	3.1	2.9	3.1
PROPANE	1.5	1.0	1.6
N-BUTANE	0.6	0.4	0.7
ISOBUTANE	0.3	1.3	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	22.9	22.3	29.2
OXYGEN	0.4	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	1.88	1.95	1.88
HEATING VALUE*	844	861	798
SPECIFIC GRAVITY	0.704	0.704	0.733

	INDEX 2452 SAMPLE 5496	INDEX 2453 SAMPLE 5553	INDEX 2454 SAMPLE 5561
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	THIELENHAUS NO. 1	GILLIG NO. 1	THIELENHAUS NO. 1
LOCATION	SEC. 14, T17S, R17W	SEC. 24, T17S, R17W	SEC. 14, T17S, R17W
OWNER	MORRISON PRODUCING CO.	MORRISON DRILLING CO.	MORRISON PRODUCING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/15/53	09/10/53	11/03/53
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3000	3028	3000
WELLHEAD PRESSURE,PSIG	930	NOT GIVEN	930
OPEN FLOW, MCFD	2400	NOT GIVEN	2400
COMPONENT, MOLE PCT			
METHANE	72.8	70.0	73.3
ETHANE	3.4	3.3	3.2
PROPANE	1.2	1.2	1.2
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.1	21.7	18.8
OXYGEN	0.1	0.4	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	2.03	2.04	2.04
HEATING VALUE*	875	842	876
SPECIFIC GRAVITY	0.677	0.687	0.674

	INDEX 2455 SAMPLE 5562	INDEX 2456 SAMPLE 5733	INDEX 2457 SAMPLE 5738
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	BIENER NO. 1	BIEBER NO. 1
LOCATION	SEC. 23, T17S, R17W	SEC. 15, T17S, R17W	SEC. 15, T17S, R17W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	02/04/53	--/--/00	--/--/00
SAMPLED	11/03/53	11/08/54	11/23/54
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3308	3330
WELLHEAD PRESSURE,PSIG	1150	1110	NOT GIVEN
OPEN FLOW, MCFD	29000	6500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.9	70.6	77.2
ETHANE	3.3	3.2	3.6
PROPANE	1.6	1.1	1.4
N-BUTANE	0.7	0.4	0.5
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	28.3	21.5	14.6
OXYGEN	0.1	TRACE	0.8
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	1.86	2.11	1.74
HEATING VALUE*	791	842	928
SPECIFIC GRAVITY	0.724	0.680	0.661

	INDEX 2458 SAMPLE 5739	INDEX 2459 SAMPLE 5740	INDEX 2460 SAMPLE 5745
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	THIELENHAUS NO. 1	ROTHE NO. 1
LOCATION	SEC. 23, T17S, R17W	SEC. 14, T17S, R17W	SEC. 31, T17S, R16W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.
COMPLETED	02/04/53	--/--/00	12/19/54
SAMPLED	12/22/54	12/20/54	12/20/54
FORMATION	PENN-KANSAS CITY	PENN-TOPEKA	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3444
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1125
OPEN FLOW, MCFD	29000	2400	3500
COMPONENT, MOLE PCT			
METHANE	68.0	74.1	76.4
ETHANE	3.4	3.3	3.3
PROPANE	1.6	1.2	1.3
N-BUTANE	0.6	0.4	0.5
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	23.3	18.0	15.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.84	2.00	1.84
HEATING VALUE*	855	870	903
SPECIFIC GRAVITY	0.707	0.666	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2461 SAMPLE 5746	INDEX 2462 SAMPLE 6191	INDEX 2463 SAMPLE 6585
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ROTHE NO. 1	LOHRET NO. 1	OBORHT NO. 1
LOCATION	SEC. 31, T17S, R16W	SEC. 35, T17S, R17W	SEC. 34, T17, R17W
OWNER	MORRISON PRODUCING CO.	AYLWARD DRILLING CO.	SUN OIL CO.
COMPLETED	12/19/54	11/20/56	03/11/57
SAMPLED	12/05/54	11/26/56	05/--/58
FORMATION	PENN-TOPEKA	PENN-BASAL	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2965	3574	NOT GIVEN
WELLHEAD PRESSURE,PSIG	970	1140	1003
OPEN FLOW, MCFD	396	8802	1693
COMPONENT, MOLE PCT			
METHANE	58.9	78.1	77.8
ETHANE	1.7	3.4	3.7
PROPANE	0.6	1.6	1.4
N-BUTANE	0.1	0.8	0.5
ISOBUTANE	0.1	TRACE	0.4
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	36.1	12.8	13.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.7
HELIUM	1.85	1.68	1.65
HEATING VALUE*	667	952	944
SPECIFIC GRAVITY	0.721	0.664	0.666

	INDEX 2464 SAMPLE 6586	INDEX 2465 SAMPLE 6587	INDEX 2466 SAMPLE 6926
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	LOHRET NO. 1	TIMKEN EST. NO. 1	ROTHMEILER NO. 1
LOCATION	SEC. 35, T18S, R17W	SEC. 3, T18S, R17W	SEC. 11, T18S, R17W
OWNER	ALYWARD DRILLING CO.	ALYWARD DRILLING CO.	AYLWARD DRILLING CO.
COMPLETED	11/26/56	11/30/57	01/18/59
SAMPLED	05/--/58	05/--/58	01/20/59
FORMATION	NOT GIVEN	NOT GIVEN	PENN-BASAL
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3564
WELLHEAD PRESSURE,PSIG	1012	970	NOT GIVEN
OPEN FLOW, MCFD	8826	13034	4600
COMPONENT, MOLE PCT			
METHANE	78.2	78.4	77.5
ETHANE	3.8	3.8	3.7
PROPANE	1.3	1.2	1.3
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	13.2	13.3	13.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.2
HELIUM	1.63	1.66	1.70
HEATING VALUE*	947	950	943
SPECIFIC GRAVITY	0.665	0.664	0.665

	INDEX 2467 SAMPLE 7273	INDEX 2468 SAMPLE 7278	INDEX 2469 SAMPLE 8004
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	GILLIG NO. 1	KLEWENO NO. 1	IMOLMEIM NO. 1
LOCATION	SEC. 25, T17S, R17W	SEC. 23, T17S, R17W	SEC. 26, T17S, R17W
OWNER	MORRISON PRODUCING CO.	MORRISON PRODUCING CO.	FRONTIER OIL CO.
COMPLETED	11/01/59	11/07/59	--/--/00
SAMPLED	11/02/59	11/09/59	05/25/61
FORMATION	PERM-GRANITE WASH	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	3000	3036
WELLHEAD PRESSURE,PSIG	900	700	NOT GIVEN
OPEN FLOW, MCFD	4800	750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.3	63.0	60.7
ETHANE	3.5	2.6	2.5
PROPANE	1.2	0.9	0.9
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	14.3	30.1	32.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.80	2.10	2.20
HEATING VALUE*	908	742	717
SPECIFIC GRAVITY	0.646	0.708	0.719

	INDEX 2470 SAMPLE 8010	INDEX 2471 SAMPLE 8052	INDEX 2472 SAMPLE 8053
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KLEWENO NO. 1	BIEBER NO. 1	BIEBER NO. 1
LOCATION	SEC. 23, T17S, R17W	SEC. 15, T17S, R17W	SEC. 15, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	06/31/51	--/--/00	--/--/00
SAMPLED	05/14/61	07/05/61	07/04/61
FORMATION	PENN-TOPEKA	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3028	3397	3340
WELLHEAD PRESSURE,PSIG	710	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.9	76.4	74.2
ETHANE	2.7	3.7	3.8
PROPANE	1.0	1.4	1.4
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	31.0	14.8	16.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	2.20	1.90	1.90
HEATING VALUE*	736	934	912
SPECIFIC GRAVITY	0.715	0.669	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2473 SAMPLE 8056	INDEX 2474 SAMPLE 8065	INDEX 2475 SAMPLE 8108
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	BIEBER NO. 1	BIEBER NO. 1	REICHEL NO. 1
LOCATION	SEC. 15, T17S, R17W	SEC. 15, T17S, R17W	SEC. 22, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/02/61	07/07/61	08/04/61
FORMATION	PENN-TOPEKA	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3055	3516	3336
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.8	76.2	75.9
ETHANE	3.2	3.9	3.9
PROPANE	1.2	1.4	1.4
N-BUTANE	0.4	0.5	0.4
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	24.7	15.0	15.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	2.30	1.90	1.90
HEATING VALUE*	816	935	919
SPECIFIC GRAVITY	0.700	0.671	0.666

	INDEX 2476 SAMPLE 8109	INDEX 2477 SAMPLE 8115	INDEX 2478 SAMPLE 8172
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	REICHEL NO. 1	SCHNEIDER NO. 1	MANHARDT NO. 1
LOCATION	SEC. 22, T17S, R17W	SEC. 13, T17S, R17W	SEC. 24, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/02/61	08/09/61	08/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3032	3036	3427
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.2	70.5	75.5
ETHANE	2.7	3.5	3.7
PROPANE	0.9	1.2	1.4
N-BUTANE	0.3	0.4	0.5
ISOBUTANE	0.3	0.4	0.9
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	32.9	21.0	15.9
OXYGEN	0.0	0.5	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	2.20	1.80	1.90
HEATING VALUE*	811	849	925
SPECIFIC GRAVITY	0.718	0.685	0.673

	INDEX 2479 SAMPLE 8173	INDEX 2480 SAMPLE 8174	INDEX 2481 SAMPLE 8175
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	MANHARDT NO. 1	SCHNEIDER NO. 1	MANHARDT NO. 1
LOCATION	SEC. 24, T17S, R17W	SEC. 13, T17S, R17W	SEC. 24, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/13/61	08/11/61	08/13/61
FORMATION	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3320	3365	2998
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.2	71.8	63.8
ETHANE	3.4	3.4	2.8
PROPANE	1.3	1.6	1.0
N-BUTANE	0.5	0.6	0.3
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	17.7	19.8	29.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.1	0.1	2.20
HELIUM	1.90	1.90	756
HEATING VALUE*	980	890	0.706
SPECIFIC GRAVITY	0.676	0.690	

	INDEX 2482 SAMPLE 8176	INDEX 2483 SAMPLE 8237	INDEX 2484 SAMPLE 8239
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SCHNEIDER NO. 1	REICHEL NO. 1	SCHNEIDER NO. 1
LOCATION	SEC. 13, T17S, R17W	SEC. 22, T17S, R17W	SEC. 13, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/10/61	09/28/61	10/02/61
FORMATION	PENN-LANSING-KANSAS CITY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3330	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	691
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2901
COMPONENT, MOLE PCT			
METHANE	69.9	62.1	73.0
ETHANE	3.5	2.4	3.3
PROPANE	1.2	0.9	1.2
N-BUTANE	0.5	0.3	0.4
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	19.9	31.4	19.4
OXYGEN	1.5	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	2.20	2.10	2.00
HEATING VALUE*	859	726	867
SPECIFIC GRAVITY	0.692	0.713	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2485 SAMPLE 8240	INDEX 2486 SAMPLE 8248	INDEX 2487 SAMPLE 8344
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	HANHARDT NO. 1	BIEBER NO. 1	HONDERICK A NO. 1
LOCATION	SEC. 24, T17S, R17W	SEC. 15, T17S, R17W	SEC. 10, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	NORTHERN NATURAL GAS PROD. C
COMPLETED	--/--/00	--/--/00	01/07/62
SAMPLED	10/03/61	10/--/61	12/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-LANSING
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	920
OPEN FLOW, MCFD	1960	NOT GIVEN	1020
COMPONENT, MOLE PCT			
METHANE	63.9	78.0	75.1
ETHANE	2.6	3.6	3.5
PROPANE	0.9	1.3	1.3
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.5	14.0	16.6
OXYGEN	0.0	TRACE	0.3
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	2.19	1.70	1.41
HEATING VALUE*	749	937	902
SPECIFIC GRAVITY	0.707	0.660	0.674

	INDEX 2488 SAMPLE 8380	INDEX 2489 SAMPLE 8385	INDEX 2490 SAMPLE 8430
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SCHNEIDER K. NO. 1	GRUMBEIN NO. 1	ROTHE A NO. 1
LOCATION	SEC. 13, T17S, R17W	SEC. 9, T17S, R17W	SEC. 30, T17S, R16W
OWNER	PETROLEUM, INC.	NORTHERN NATURAL GAS PROD. C	NORTHERN NATURAL GAS PROD. C
COMPLETED	01/23/62	03/01/62	--/--/00
SAMPLED	01/24/62	01/26/62	02/24/62
FORMATION	PENN-TOPEKA	PENN-GRANITE WASH	-QUARTZ WASH
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3018	3594	3532
WELLHEAD PRESSURE,PSIG	760	1125	1130
OPEN FLOW, MCFD	1450	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.4	74.9	76.8
ETHANE	3.1	3.0	1.6
PROPANE	1.3	2.4	1.4
N-BUTANE	0.4	0.5	0.6
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	18.8	16.4	14.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	2.06	1.89	1.66
HEATING VALUE*	865	909	937
SPECIFIC GRAVITY	0.672	0.673	0.668

	INDEX 2491 SAMPLE 8433	INDEX 2492 SAMPLE 8497	INDEX 2493 SAMPLE 8498
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	APPL NO. 1	ERBER NO. 1	ROTHE A NO. 1
LOCATION	SEC. 10, T17S, R17W	SEC. 26, T17S, R17W	SEC. 30, T17S, R16W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	NORTHERN NATURAL GAS PROD. C
COMPLETED	--/--/00	--/--/00	04/10/62
SAMPLED	02/10/62	03/30/62	04/02/62
FORMATION	PENN-TOPEKA	PENN-GRANITE WASH	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3033	3559	3011
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.6	74.5	60.3
ETHANE	2.8	2.6	1.8
PROPANE	1.0	0.8	0.7
N-BUTANE	0.4	0.3	0.2
ISOBUTANE	0.3	0.2	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	33.1	18.8	34.4
OXYGEN	5.7	TRACE	0.1
ARGON	0.3	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.28	1.92	1.87
HEATING VALUE*	691	866	665
SPECIFIC GRAVITY	0.752	0.666	0.718

	INDEX 2494 SAMPLE 8501	INDEX 2495 SAMPLE 8502	INDEX 2496 SAMPLE 8503
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	FOOS NO. 1	FOOS NO. 1	STEITZ NO. 1
LOCATION	SEC. 25, T17S, R17W	SEC. 25, T17S, R17W	SEC. 11, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/27/62	03/26/62	04/07/62
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3470	3292	3084
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.3	69.0	75.3
ETHANE	3.4	1.4	3.5
PROPANE	1.4	1.2	1.3
N-BUTANE	0.6	0.6	0.4
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	19.3	24.1	16.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.88	2.03	1.96
HEATING VALUE*	886	836	908
SPECIFIC GRAVITY	0.685	0.703	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2497 SAMPLE 8504	INDEX 2498 SAMPLE 8507	INDEX 2499 SAMPLE 8508
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ERBER NO. 1	FOOS NO. 1	FOOS NO. 1
LOCATION	SEC. 26, T17S, R17W	SEC. 25, T17S, R17W	SEC. 25, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/30/62	03/25/62	03/27/62
FORMATION	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3475	3230	3500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.3	66.6	77.3
ETHANE	2.7	2.6	3.6
PROPANE	0.9	1.1	1.4
N-BUTANE	0.3	0.4	0.5
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	18.9	26.4	13.7
OXYGEN	0.1	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.91	1.91	2.13
HEATING VALUE*	871	791	942
SPECIFIC GRAVITY	0.672	0.699	0.662

	INDEX 2500 SAMPLE 8524	INDEX 2501 SAMPLE 8525	INDEX 2502 SAMPLE 8526
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ERNIE A NO. 1	ERNIE NO. 1	BEAHM NO. 1
LOCATION	SEC. 14, T17S, R17W	SEC. 12, T17S, R17W	SEC. 36, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	04/21/62
SAMPLED	04/24/62	04/24/62	04/21/62
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3032	3084	3495
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	75.6	73.7
ETHANE	3.4	3.5	3.4
PROPANE	1.2	1.3	1.3
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	17.2	16.2	18.1
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	2.04	1.94	1.73
HEATING VALUE*	896	911	899
SPECIFIC GRAVITY	0.670	0.668	0.679

	INDEX 2503 SAMPLE 8527	INDEX 2504 SAMPLE 8551	INDEX 2505 SAMPLE 8552
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	BEAHM NO. 1	BEIBER NO. 1	BEAHM NO. 1
LOCATION	SEC. 36, T17S, R17W	SEC. 15, T17S, R17W	SEC. 36, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/20/62	05/15/62	05/15/62
FORMATION	PENN-KANSAS CITY	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3451	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.8	72.7	76.2
ETHANE	3.5	3.5	3.6
PROPANE	1.3	1.3	1.3
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.7	19.0	15.3
OXYGEN	0.2	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	1.82	1.96	1.83
HEATING VALUE*	919	894	921
SPECIFIC GRAVITY	0.669	0.686	0.664

	INDEX 2506 SAMPLE 8556	INDEX 2507 SAMPLE 8557	INDEX 2508 SAMPLE 8568
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ERNIE A NO. 1	ERNIE A NO. 1	KANSAS STATE NO. 1
LOCATION	SEC. 14, T17S, R17W	SEC. 14, T17S, R17W	SEC. 6, T16S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/26/62	04/--/62	05/28/62
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	CAMD-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3358	3450	3467
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	73.0	16.9
ETHANE	3.6	3.6	2.3
PROPANE	1.5	1.4	0.5
N-BUTANE	0.6	0.5	0.2
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	17.9	18.5	72.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.9
HELIUM	1.88	1.90	5.87
HEATING VALUE*	910	889	256
SPECIFIC GRAVITY	0.685	0.678	0.866

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2509 SAMPLE 8575	INDEX 2510 SAMPLE 8576	INDEX 2511 SAMPLE 8577
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KANSAS STATE NO. 1	KANSAS STATE NO. 1	KANSAS STATE NO. 1
LOCATION	SEC. 6, T16S, R17W	SEC. 6, T16S, R17W	SEC. 6, T16S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/26/62	05/24/62	05/25/62
FORMATION	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3267	3152	3220
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.6	62.6	60.0
ETHANE	3.3	2.7	3.0
PROPANE	2.0	1.8	1.6
N-BUTANE	1.1	0.6	0.6
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	31.8	29.6	31.9
OXYGEN	0.5	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.80	1.96	1.73
HEATING VALUE*	801	784	759
SPECIFIC GRAVITY	0.768	0.728	0.738

	INDEX 2512 SAMPLE 8608	INDEX 2513 SAMPLE 8653	INDEX 2514 SAMPLE 8686
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	MCGILL NO. 2	BECKER NO. 2	BEAMP NO. 1
LOCATION	SEC. 3, T17S, R17W	SEC. 2, T17S, R17W	SEC. 36, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/05/62	08/23/62	09/17/62
FORMATION	PENN-TOPEKA	NOT GIVEN	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3062	3097	3457
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.0	73.2	76.7
ETHANE	3.4	3.3	3.8
PROPANE	1.2	1.2	1.4
N-BUTANE	0.4	0.4	0.6
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.6	18.9	14.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	2.23	2.17	1.74
HEATING VALUE*	867	873	937
SPECIFIC GRAVITY	0.678	0.673	0.666

	INDEX 2515 SAMPLE 8718	INDEX 2516 SAMPLE 8720	INDEX 2517 SAMPLE 8734
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KEISER NO. 1	REICHEL NO. 1	FRYE NO. 1
LOCATION	SEC. 2, T17S, R17W	SEC. 22, T17S, R17W	SEC. 4, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/10/62	10/18/62	10/22/62
FORMATION	PENN-TOPEKA	PENN-GR.WASH&PENN-KAN. CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3060	NOT GIVEN	3342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.5	76.4	77.0
ETHANE	3.1	3.6	3.6
PROPANE	1.6	1.4	1.4
N-BUTANE	0.4	0.6	0.6
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	21.1	15.0	14.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	2.01	1.81	1.79
HEATING VALUE*	845	937	946
SPECIFIC GRAVITY	0.685	0.671	0.669

	INDEX 2518 SAMPLE 8735	INDEX 2519 SAMPLE 8836	INDEX 2520 SAMPLE 8837
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	FRYE NO. 1	ODELL NO. 1	DECKER NO. 1
LOCATION	SEC. 9, T17S, R17W	SEC. 34, T16S, R17W	SEC. 28, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/20/62	01/16/63	01/16/63
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3057	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.9	72.0	73.5
ETHANE	3.4	3.0	3.2
PROPANE	1.2	1.0	1.0
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.2	0.1
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	19.5	20.3	19.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	2.18	2.31	2.19
HEATING VALUE*	875	855	864
SPECIFIC GRAVITY	0.684	0.677	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2521 SAMPLE 8839	INDEX 2522 SAMPLE 8840	INDEX 2523 SAMPLE 8841
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	KAISER A NO. 1	MCGILL NO. 1	HONDERICK
LOCATION	SEC. 1, T17S, R17W	SEC. 3, T17S, R17W	SEC. 6, T17S, R16W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	--/--/60	--/--/60	--/--/60
SAMPLED	01/17/63	01/17/63	01/20/63
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.1	69.4	58.0
ETHANE	2.9	4.1	2.8
PROPANE	1.0	1.6	0.9
N-BUTANE	0.4	1.1	0.4
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	0.6	TRACE
ISOPENTANE	0.2	1.0	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	1.0	TRACE
NITROGEN	21.4	18.4	32.9
OXYGEN	TRACE	TRACE	1.7
ARGON	0.1	0.1	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	2.29	2.09	2.44
HEATING VALUE*	829	982	686
SPECIFIC GRAVITY	0.678	0.737	0.728

	INDEX 2524 SAMPLE 9255	INDEX 2525 SAMPLE 9256	INDEX 2526 SAMPLE 9257
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SHERWOOD NO. 1	HARTMAN A	BRACK NO. 1
LOCATION	SEC. 28, T16S, R17W	SEC. 17, T16S, R17W	SEC. 5, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	10/26/63	06/28/63	04/22/63
SAMPLED	03/17/64	03/17/64	03/17/64
FORMATION	PENN-TOPEKA	PENN-LANSING-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2996	3492	3336
WELLHEAD PRESSURE,PSIG	955	1000	870
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.1	70.3	60.2
ETHANE	1.8	3.3	3.0
PROPANE	0.5	1.4	1.5
N-BUTANE	0.3	0.6	0.8
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	27.1	21.2	31.5
OXYGEN	0.0	0.0	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.67	2.18	1.91
HEATING VALUE*	755	862	759
SPECIFIC GRAVITY	0.692	0.690	0.734

	INDEX 2527 SAMPLE 9258	INDEX 2528 SAMPLE 9259	INDEX 2529 SAMPLE 9261
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	SCHLITTER NO. 1	PFEIFFER A NO. 2	KLEWENO A NO. 1
LOCATION	SEC. 18, T16S, R17W	SEC. 6, T16S, R17W	SEC. 16, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	03/01/63	02/09/63	06/20/63
SAMPLED	03/17/64	03/17/64	03/17/64
FORMATION	PENN-TOPEKA & LANSING-KC	PENN-LANSING-KANSAS CITY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2990	3274	3064
WELLHEAD PRESSURE,PSIG	1005	990	810
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	67.5	61.5
ETHANE	3.1	2.8	2.7
PROPANE	1.2	1.0	1.0
N-BUTANE	0.5	0.7	0.3
ISOBUTANE	0.1	0.4	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	18.9	25.3	31.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	2.28	1.48	2.22
HEATING VALUE*	879	815	740
SPECIFIC GRAVITY	0.675	0.704	0.716

	INDEX 2530 SAMPLE 9262	INDEX 2531 SAMPLE 9264	INDEX 2532 SAMPLE 9406
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	LIPPERT NO. 2	BASSALL NO. 1	KAISER NO. 1
LOCATION	SEC. 19, T16S, R17W	SEC. 5, T16S, R17W	SEC. 2, T17S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	06/01/63	03/21/63	11/02/62
SAMPLED	03/17/64	03/17/64	06/15/64
FORMATION	PENN-LANSING-KANSAS CITY	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3260	2988	3060
WELLHEAD PRESSURE,PSIG	1010	960	860
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	928
COMPONENT, MOLE PCT			
METHANE	73.1	64.5	74.1
ETHANE	3.4	2.3	3.4
PROPANE	1.3	0.8	1.5
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	18.2	28.0	17.7
OXYGEN	TRACE	0.4	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	2.25	2.47	2.07
HEATING VALUE*	889	760	892
SPECIFIC GRAVITY	0.677	0.704	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2533 SAMPLE 9412	INDEX 2534 SAMPLE 9416	INDEX 2535 SAMPLE 10473
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	FRYE NO. 1	GIESICK NO. 3	ALLEN A NO. 1
LOCATION	SEC. 4, T17S, R17W	SEC. 19, T17S, R16W	SEC. 33, T16S, R16W
OWNER	FRONTIER OIL CO.	PETROLEUM, INC.	FRONTIER OIL CO.
COMPLETED	11/09/62	04/18/62	01/26/66
SAMPLED	06/15/64	06/25/64	03/17/66
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3957	2986	2984
WELLHEAD PRESSURE,PSIG	900	640	1000
OPEN FLOW, MCFD	3500	255	4090
COMPONENT, MOLE PCT			
METHANE	71.9	66.7	68.0
ETHANE	5.3	2.8	2.6
PROPANE	1.2	1.1	1.4
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	19.8	25.8	25.0
OXYGEN	0.0	0.8	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	2.26	2.20	2.08
HEATING VALUE*	860	801	801
SPECIFIC GRAVITY	0.677	0.700	0.690

	INDEX 2536 SAMPLE 11287	INDEX 2537 SAMPLE 12584	INDEX 2538 SAMPLE 12585
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
WELL NAME	ALLEN NO. A-1	ALLEN NO. C-1	LEGLITER NO. 2
LOCATION	SEC. 33, T16S, R16W	SEC. 11, T17S, R17W	SEC. 18, T16S, R17W
OWNER	FRONTIER OIL CO.	FRONTIER OIL CO.	FRONTIER OIL CO.
COMPLETED	01/24/66	10/30/70	10/10/70
SAMPLED	02/12/68	12/15/70	12/15/70
FORMATION	PENN-TOPEKA	PENN-TOPEKA	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2985	3103	3261
WELLHEAD PRESSURE,PSIG	700	600	1000
OPEN FLOW, MCFD	1500	3285	3550
COMPONENT, MOLE PCT			
METHANE	59.4	74.8	68.7
ETHANE	2.4	3.6	3.8
PROPANE	0.9	1.5	1.7
N-BUTANE	0.2	0.5	0.6
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	32.1	16.7	21.5
OXYGEN	2.3	0.0	0.0
ARGON	0.2	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	1.82	1.83	2.39
HEATING VALUE*	699	909	878
SPECIFIC GRAVITY	0.729	0.671	0.705

	INDEX 2539 SAMPLE 17652	INDEX 2540 SAMPLE 4069	INDEX 2541 SAMPLE 4497
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL W	RYAN	RYAN
WELL NAME	HENDERICK "D" NO. 1	HAGERMAN NO. 2	F. NAGLE NO. 1
LOCATION	SEC. 12, T17S, R18W	SEC. 34, T19S, R16W	SEC. 34, T19S, R16W
OWNER	FRONTIER OIL CO.	GULF OIL CORP.	ALKAY OIL CO.
COMPLETED	11/30/83	--/--/00	--/--/00
SAMPLED	04/24/85	09/21/45	06/--/48
FORMATION	PENN-CONGLOMERATE	CAMO-ARBUCKLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3712	3724	NOT GIVEN
WELLHEAD PRESSURE,PSIG	600	800	NOT GIVEN
OPEN FLOW, MCFD	1300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.7	72.8	73.7
ETHANE	3.7	15.0	12.0
PROPANE	1.5	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	14.8	10.3	11.7
OXYGEN	TRACE	0.0	0.1
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	0.7
HELIUM	1.72	1.56	1.78
HEATING VALUE*	936	1006	962
SPECIFIC GRAVITY	0.668	0.667	0.662

	INDEX 2542 SAMPLE 4580	INDEX 2543 SAMPLE 4808	INDEX 2544 SAMPLE 4804
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	RYAN	RYAN	RYAN
WELL NAME	BRACK RANKIN NO. 1	ALKAY W. NAGLE NO. 1	W. H. DIRKS NO. 3
LOCATION	SEC. 27, T19S, R16W	SEC. 33, T19S, R16W	SEC. 27, T19S, R16W
OWNER	BEN F. BRACK OIL CO.	KANSAS-NEBRASKA NATURAL GAS	TEXAS CO.
COMPLETED	--/--/00	--/--/00	01/29/50
SAMPLED	06/--/48	01/09/50	04/21/50
FORMATION	NOT GIVEN	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3814
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	68.6	46.6	51.1
ETHANE	19.4	9.5	3.8
PROPANE	---	1.7	2.1
N-BUTANE	---	0.6	0.8
ISOBUTANE	---	0.3	0.5
N-PENTANE	---	0.5	0.4
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	TRACE
NITROGEN	10.0	42.9	37.1
OXYGEN	0.2	0.1	0.1
ARGON	---	0.2	0.2
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.5	0.5
HELIUM	1.03	3.60	3.29
HEATING VALUE*	1043	633	704
SPECIFIC GRAVITY	0.696	0.780	0.770

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2545 SAMPLE 5051	INDEX 2546 SAMPLE 5052	INDEX 2547 SAMPLE 5209
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	RYAN	RYAN	RYAN
WELL NAME	TAMMEN NO. 1	PETERSON NO. 1	THALHEIM NO. 2
LOCATION	SEC. 26, T19S, R16W	SEC. 35, T19S, R16W	T19S, R16W
OWNER	ALKAY OIL CO.	INLAND OIL CO., INC.	CONTINENTAL-DAVIS OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/08/51	04/18/51	05/22/52
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3700	3700	NOT GIVEN
WELLHEAD PRESSURE,PSIG	275	350	NOT GIVEN
OPEN FLOW, MCFD	200	2250	843
COMPONENT, MOLE PCT			
METHANE	76.8	80.2	52.1
ETHANE	1.1	1.5	4.0
PROPANE	2.2	1.9	2.2
N-BUTANE	0.8	0.6	0.8
ISOBUTANE	0.5	0.2	0.6
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	15.6	9.8	35.4
OXYGEN	0.1	0.2	0.1
ARGON	0.1	0.2	0.2
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.8	0.9	0.5
HELIUM	1.38	1.32	3.06
HEATING VALUE*	927	992	748
SPECIFIC GRAVITY	0.687	0.666	0.778

	INDEX 2548 SAMPLE 5244	INDEX 2549 SAMPLE 8361	INDEX 2550 SAMPLE 6177
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	RYAN	RYAN	SHAEFFER
WELL NAME	W. H. DIRKS	CHRISTIANSEN NO. 1	MONSON NO. 4
LOCATION	SEC. 27, T19S, R16W	SEC. 33, T19S, R16W	SEC. 21, T18S, R16W
OWNER	TEXAS CO.	HELLAR DRILLING CO.	SOLAR OIL CO.
COMPLETED	--/--/00	--/--/00	06/--/56
SAMPLED	06/18/52	12/29/61	11/01/56
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMB-REAGAN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3800	3730	3587
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	820
OPEN FLOW, MCFD	NOT GIVEN	350	100
COMPONENT, MOLE PCT			
METHANE	49.5	23.3	78.6
ETHANE	3.8	2.4	2.8
PROPANE	2.1	1.4	0.4
N-BUTANE	0.9	0.5	0.2
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.3	0.1	0.5
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	38.1	63.3	15.1
OXYGEN	0.1	4.3	0.1
ARGON	0.2	0.4	0.1
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.6	0.4	0.1
HELIUM	3.35	3.33	1.78
HEATING VALUE*	702	356	892
SPECIFIC GRAVITY	0.780	0.877	0.645

	INDEX 2551 SAMPLE 8955	INDEX 2552 SAMPLE 10835	INDEX 2553 SAMPLE 906
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSSELL	RUSSELL
FIELD	SHAEFFER	DRISCOLL	FAIRPORT
WELL NAME	PECHANEC NO. 1	KAUFMAN NO. 1	OSWALD NO. 1
LOCATION	SEC. 18, T18S, R16W	SEC. 13, T15S, R12W	SEC. 8, T12S, R15W
OWNER	MORRISON PRODUCING CO.	R. P. NIXON	STEARNS & STREETER
COMPLETED	--/--/00	11/01/66	--/--/00
SAMPLED	05/10/63	01/12/67	--/--/00
FORMATION	CAMB-REAGAN	PENN-TORONTO	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	2915	2461
WELLHEAD PRESSURE,PSIG	NOT GIVEN	525	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3000	7000
COMPONENT, MOLE PCT			
METHANE	76.7	66.3	33.7
ETHANE	3.6	4.0	11.7
PROPANE	1.4	1.6	---
N-BUTANE	0.8	0.6	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.6	0.1	---
NITROGEN	13.8	25.4	52.6
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	1.73	1.05	1.80
HEATING VALUE*	971	833	551
SPECIFIC GRAVITY	0.681	0.715	0.822

	INDEX 2554 SAMPLE 7524	INDEX 2555 SAMPLE 8038	INDEX 2556 SAMPLE 10110
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSSELL	RUSSELL	SCOTT
FIELD	MAHONEY	TRAPP	ARY PROSPECT
WELL NAME	MAHONEY NO. 1	SELLENS NO. 3	ORVAL EITEL NO. 1
LOCATION	SEC. 5, T14S, R12W	SEC. 15, T15S, R13W	SEC. 23, T18S, R31W
OWNER	MESSMAN-RINEHART OIL CO.	ISERN-WELLS	OIL & GAS PROPERTY MGMT., IN
COMPLETED	--/--/00	05/20/61	03/18/65
SAMPLED	04/26/60	04/15/61	09/10/65
FORMATION	PENN-TARKIO	PENN-TARKIO	UNKN-KINDER
GEOLOGIC PROVINCE CODE	385	385	360
DEPTH, FEET	2430	2501	2751
WELLHEAD PRESSURE,PSIG	NOT GIVEN	490	448
OPEN FLOW, MCFD	734000	2100	2951
COMPONENT, MOLE PCT			
METHANE	56.7	60.0	42.4
ETHANE	2.3	1.9	2.7
PROPANE	1.3	0.9	1.9
N-BUTANE	0.6	0.1	0.7
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	37.3	35.3	50.1
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	1.20	1.20	1.27
HEATING VALUE*	598	680	579
SPECIFIC GRAVITY	0.751	0.722	0.813

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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2557 SAMPLE 14855	INDEX 2558 SAMPLE 10416	INDEX 2559 SAMPLE 14856
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	GRUBEN	HUGOTON N	NOT GIVEN
WELL NAME	GRUBEN NO. 1	SMITH NO. 1	MUSHAW NO. 1
LOCATION	SEC. 1, T20S, R34W	SEC. 35, T19, R33	SEC. 12, T19S, R33W
OWNER	M. L. BROWN	SATURN OIL & GAS CO., INC.	M. L. BROWN
COMPLETED	09/01/76	01/15/65	01/21/76
SAMPLED	11/02/76	02/23/66	11/02/76
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2670	2630	2721
WELLHEAD PRESSURE,PSIG	350	425	525
OPEN FLOW, MCFD	700	1790	700
COMPONENT, MOLE PCT			
METHANE	48.7	50.9	24.2
ETHANE	3.9	3.7	1.4
PROPANE	2.6	1.9	1.4
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.3	1.3	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	0.5	TRACE
HEXANES PLUS	0.1	3.2	0.1
NITROGEN	41.9	36.3	70.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.94	0.90	1.43
HEATING VALUE*	698	907	352
SPECIFIC GRAVITY	0.801	0.868	0.881

	INDEX 2560 SAMPLE 17676	INDEX 2561 SAMPLE 3858	INDEX 2562 SAMPLE 2371
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEDGWICK	SEDGWICK	SEDGWICK
FIELD	BARTHOLOMEW	DERBY	GLADYS SW
WELL NAME	LENTZ NO. 1	PARRISH NO. 1	PENDELUM NO. 1
LOCATION	SEC. 20, T27S, R4W	SEC. 29, T28S, R2E	SEC. 31, T28S, R1W
OWNER	MARTIN OIL PRODUCERS, INC.	BEECH AIRCRAFT CORP.	MAGNOLIA PETROLEUM CO.
COMPLETED	07/09/83	05/--/44	--/--/00
SAMPLED	05/16/85	06/14/44	08/07/31
FORMATION	MISS----	PENN-STALNAKER	NOT GIVEN
GEOLOGIC PROVINCE CODE	376	375	375
DEPTH, FEET	3716	2043	2548
WELLHEAD PRESSURE,PSIG	1179	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3284	1200	2000
COMPONENT, MOLE PCT			
METHANE	70.6	70.0	22.1
ETHANE	6.6	9.6	38.9
PROPANE	3.4	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	16.2	19.0	34.8
OXYGEN	0.1	0.6	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.54	0.74	0.82
HEATING VALUE*	1020	881	921
SPECIFIC GRAVITY	0.733	0.682	0.876

	INDEX 2563 SAMPLE 2528	INDEX 2564 SAMPLE 2538	INDEX 2565 SAMPLE 2686
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEDGWICK	SEDGWICK	SEDGWICK
FIELD	ROBBINS	ROBBINS	ROBBINS
WELL NAME	NO. 1	SCHWEITER NO. 1	SEELEY NO. 1
LOCATION	SEC. 27, T27S, R1E	SEC. 27, T27S, R1E	SEC. 17, T28S, R1E
OWNER	WILL SCHWEITER	WILL SCHWEITER	ALADDIN PETROLEUM CORP.
COMPLETED	08/03/32	08/13/32	--/--/00
SAMPLED	08/03/32	08/13/32	11/29/34
FORMATION	MISS-	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	1490	1490	3280
WELLHEAD PRESSURE,PSIG	400	700	NOT GIVEN
OPEN FLOW, MCFD	750	2570	968
COMPONENT, MOLE PCT			
METHANE	35.5	33.0	12.6
ETHANE	9.0	10.6	20.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	53.7	54.4	65.1
OXYGEN	0.2	0.4	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	1.64	1.59	1.64
HEATING VALUE*	321	524	497
SPECIFIC GRAVITY	0.815	0.827	0.919

	INDEX 2566 SAMPLE 2674	INDEX 2567 SAMPLE 7158	INDEX 2568 SAMPLE 16141
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEDGWICK	SEWARD	SEWARD
FIELD	SCHULTE	ADAMSON	ADAMSON
WELL NAME	GILLESPIE NO. 1	ADAMSON NO. 2	HACKER UNIT NO. 2-1
LOCATION	SEC. 6, T28S, R1W	SEC. 11, T34S, R34W	SEC. 1, T34S, R34W
OWNER	D. R. LAUCK OIL CO., INC., E	CABOT CARBON CO.	CABOT CORP.
COMPLETED	--/--/00	09/22/58	08/01/80
SAMPLED	06/08/34	07/31/59	12/08/80
FORMATION	MISS-CHERT	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	375	360	360
DEPTH, FEET	3333	6390	6028
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1725	1620
OPEN FLOW, MCFD	684	25000	5000
COMPONENT, MOLE PCT			
METHANE	39.3	82.1	83.4
ETHANE	19.5	5.1	5.1
PROPANE	---	2.4	3.4
N-BUTANE	---	0.8	1.2
ISOBUTANE	---	0.4	0.6
N-PENTANE	---	0.1	0.3
ISOPENTANE	---	0.4	0.4
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	39.6	8.3	5.1
OXYGEN	0.3	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	1.15	0.14	0.18
HEATING VALUE*	748	1052	1129
SPECIFIC GRAVITY	0.812	0.670	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2569 SAMPLE 13691	INDEX 2570 SAMPLE 17645	INDEX 2571 SAMPLE 12786
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	ADOBE	ANG N	ARCHER
WELL NAME	RUSSELL NO. 1	BA. M. LEMERT C NO. 1	DUNLAP NO. 1
LOCATION	SEC. 19, T35S, R31W	SEC. 27, T31S, R33W	SEC. 16, T34S, R34W
OWNER	MICKERSON OIL CO.	AMOCO PRODUCTION CO.	LEBEN OIL CORP.
COMPLETED	04/30/73	04/28/84	03/18/71
SAMPLED	08/29/73	04/12/85	04/--/71
FORMATION	PENN-MORROW	PENN-MARMATON	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6013	4911	5144
WELLHEAD PRESSURE,PSIG	1545	706	1350
OPEN FLOW, MCFD	3400	956	1552
COMPONENT, MOLE PCT			
METHANE	84.8	61.8	66.0
ETHANE	4.8	10.7	5.2
PROPANE	2.9	9.6	3.4
N-BUTANE	0.7	2.6	0.9
ISOBUTANE	0.6	1.2	0.7
N-PENTANE	0.1	0.5	TRACE
ISOPENTANE	0.3	0.8	0.3
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.4	TRACE
NITROGEN	4.5	11.9	22.8
OXYGEN	0.6	0.1	0.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.14	0.12	0.30
HEATING VALUE*	1095	1278	917
SPECIFIC GRAVITY	0.664	0.850	0.739

	INDEX 2572 SAMPLE 12787	INDEX 2573 SAMPLE 15905	INDEX 2574 SAMPLE 17923
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	ARCHER	ARCHER	ARCHER N
WELL NAME	FINCHAM NO. 1	POWELL "D" NO. 1	PACKER NO. 7-1
LOCATION	SEC. 3, T34S, R34W	SEC. 26, T34S, R34W	SEC. 7, T34S, R34W
OWNER	LEBEN OIL CORP.	ANADARKO PRODUCTION CO.	FLYNN ENERGY CORP.
COMPLETED	02/02/71	12/21/79	08/19/85
SAMPLED	04/--/71	02/21/80	11/30/85
FORMATION	PENN-MORROW & MISS-CHESTER	PENN-MORROW	MISS-CHESTER LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5978	6098	6072
WELLHEAD PRESSURE,PSIG	450	NOT GIVEN	1558
OPEN FLOW, MCFD	2122	4260	3582
COMPONENT, MOLE PCT			
METHANE	82.4	80.3	75.9
ETHANE	5.2	4.6	5.3
PROPANE	3.3	2.6	4.4
N-BUTANE	1.0	0.8	1.9
ISOBUTANE	0.7	0.4	0.6
N-PENTANE	0.3	0.3	1.1
ISOPENTANE	0.6	0.4	0.5
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.3	0.3	1.2
NITROGEN	5.8	9.9	7.8
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.4
HELIUM	0.16	0.17	0.20
HEATING VALUE*	1089	1053	1207
SPECIFIC GRAVITY	0.689	0.685	0.764

	INDEX 2575 SAMPLE 7781	INDEX 2576 SAMPLE 9249	INDEX 2577 SAMPLE 9392
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	ARKALON	ARKALON	ARKALON
WELL NAME	F. M. MASSONI B NO. 1	DAVIES C NO. 1	ROBERT DAVIES NO. 2
LOCATION	SEC. 20, T33S, R31W	SEC. 31, T33S, R31W	SEC. 6, T34S, R31W
OWNER	CABOT CORP.	ANADARKO PRODUCTION CO.	GULF OIL CORP.
COMPLETED	09/29/60	10/24/63	04/12/64
SAMPLED	11/23/60	03/05/64	06/12/64
FORMATION	MISS-CHESTER	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5770	5636	5672
WELLHEAD PRESSURE,PSIG	1591	1569	1555
OPEN FLOW, MCFD	1750	32500	22900
COMPONENT, MOLE PCT			
METHANE	88.6	88.9	86.6
ETHANE	5.1	5.1	5.2
PROPANE	2.4	2.2	2.4
N-BUTANE	0.6	0.9	0.7
ISOBUTANE	0.4	0.1	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.3	1.7	2.3
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.11	0.13
HEATING VALUE*	1101	1118	1112
SPECIFIC GRAVITY	0.638	0.642	0.645

	INDEX 2578 SAMPLE 12258	INDEX 2579 SAMPLE 16556	INDEX 2580 SAMPLE 11503
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	ARKALON	ARKALON	CONDIT
WELL NAME	JOHNSON NO. 1	HAYS NO. 1	ALEXANDER B NO. 1
LOCATION	SEC. 9, T34S, R32W	SEC. 9, T34S, R31W	SEC. 4, T34S, R32W
OWNER	PETRODYNAMICS, INC.	INCA OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	12/31/69	02/10/82	06/15/67
SAMPLED	05/13/70	06/25/82	05/16/68
FORMATION	PENN-MORROW	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5825	5606	5863
WELLHEAD PRESSURE,PSIG	1152	1562	1521
OPEN FLOW, MCFD	4237	4200	13556
COMPONENT, MOLE PCT			
METHANE	88.8	78.1	85.0
ETHANE	4.7	5.3	5.8
PROPANE	2.6	3.2	3.1
N-BUTANE	0.6	0.9	1.0
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.2	5.4	3.7
OXYGEN	0.0	0.5	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	5.1	0.1
HELIUM	0.12	0.12	0.12
HEATING VALUE*	1115	1052	1120
SPECIFIC GRAVITY	0.644	0.724	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES -

	INDEX 2581 SAMPLE 8455	INDEX 2582 SAMPLE 9508	INDEX 2583 SAMPLE 9531
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	EVALYN-CONDIT	EVALYN-CONDIT	EVALYN-CONDIT
WELL NAME	SANTA FE A NO. 1	WORTHINGTON A NO. 1	BRYANT A NO. 1
LOCATION	SEC. 9, T33S, R33W	SEC. 12, T34S, R33W	SEC. 8, T33S, R33W
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	CABOT CORP.
COMPLETED	08/27/61	05/14/64	05/12/64
SAMPLED	03/13/62	07/28/64	08/04/64
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5548	6255	5680
WELLHEAD PRESSURE,PSIG	1530	1625	1486
OPEN FLOW, MCFD	16382	11410	5800
COMPONENT, MOLE PCT			
METHANE	83.2	79.0	82.2
ETHANE	5.3	3.3	5.4
PROPANE	3.3	1.5	3.5
N-BUTANE	1.0	0.5	1.0
ISOBUTANE	0.4	0.3	0.6
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	5.6	14.2	6.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.17	0.45	0.17
HEATING VALUE*	1101	948	1115
SPECIFIC GRAVITY	0.673	0.668	0.685

	INDEX 2584 SAMPLE 12198	INDEX 2585 SAMPLE 13195	INDEX 2586 SAMPLE 5054
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	EVALYN-CONDIT	EVALYN-CONDIT E	HANKS
WELL NAME	FREEMAN NO. 1	COPPER NO. 1	LOFLAND-HANKS NO. 1
LOCATION	SEC. 18, T33S, R33W	SEC. 21, T34S, R32W	SEC. 18, T35S, R31W
OWNER	FERGUSON OIL CO., INC.	THUNDERBIRD DRILLING CO.	J. M. HUBER CORP.
COMPLETED	01/14/70	09/30/71	06/10/51
SAMPLED	02/17/70	04/10/72	07/12/51
FORMATION	PENN-MORROW	PENN-MORROW U	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5692	5894	5995
WELLHEAD PRESSURE,PSIG	1036	206	1553
OPEN FLOW, MCFD	11500	877	3549
COMPONENT, MOLE PCT			
METHANE	83.2	84.6	81.6
ETHANE	5.2	6.2	7.1
PROPANE	3.5	4.2	4.8
N-BUTANE	0.9	1.3	1.3
ISOBUTANE	0.6	1.1	0.3
N-PENTANE	0.3	0.9	0.4
ISOPENTANE	TRACE	0.7	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	TRACE	0.0
NITROGEN	5.6	1.6	3.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.19	0.10	0.12
HEATING VALUE*	1110	1192	1164
SPECIFIC GRAVITY	0.676	0.688	0.697

	INDEX 2587 SAMPLE 6397	INDEX 2588 SAMPLE 14715	INDEX 2589 SAMPLE 4950
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	MOLT	MOLT	HUGOTON
WELL NAME	HITCH F NO. 2	HITCH F-3	BAUGHMAN H NO. 1
LOCATION	SEC. 27, T32S, R34W	SEC. 27, T32S, R34W	SEC. 30, T32S, R32W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	AMERICAN GAS PRODUCTION CO.
COMPLETED	06/06/57	04/01/76	07/08/50
SAMPLED	08/29/57	06/02/76	09/27/50
FORMATION	PENN-TORONTO	PERM-COUNCIL GROVE	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4182	2986	2532
WELLHEAD PRESSURE,PSIG	1024	262	430
OPEN FLOW, MCFD	18000	1648	6540
COMPONENT, MOLE PCT			
METHANE	74.3	73.0	73.8
ETHANE	5.3	5.9	4.0
PROPANE	2.6	3.3	1.8
N-BUTANE	0.8	0.9	0.4
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	15.2	15.4	17.7
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	1.0
HELIUM	0.33	0.46	0.60
HEATING VALUE*	998	1001	902
SPECIFIC GRAVITY	0.707	0.710	0.692

	INDEX 2590 SAMPLE 4965	INDEX 2591 SAMPLE 5604	INDEX 2592 SAMPLE 5617
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	GASKILL NO. 1	HOLT B NO. 1	MYRA ATWELL NO. 1
LOCATION	SEC. 36, T32S, R33W	SEC. 28, T32S, R34W	SEC. 9, T33S, R31W
OWNER	CITIES SERVICE OIL CO.	TERMINAL FACILITIES, INC.	COLUMBIAN FUEL CORP.
COMPLETED	08/26/50	03/27/54	--/--/00
SAMPLED	11/30/50	05/30/54	05/11/54
FORMATION	PERM-CHASE GROUP	PENN-TORONTO	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2430	4184	2775
WELLHEAD PRESSURE,PSIG	428.5	1060	NOT GIVEN
OPEN FLOW, MCFD	600	27800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.5	74.1	76.7
ETHANE	6.1	5.1	4.1
PROPANE	3.3	2.8	1.8
N-BUTANE	0.9	0.9	0.5
ISOBUTANE	0.2	0.4	0.1
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	14.6	15.4	15.7
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.45	0.34	0.61
HEATING VALUE*	1007	994	931
SPECIFIC GRAVITY	0.711	0.707	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2593 SAMPLE 5620	INDEX 2594 SAMPLE 5637	INDEX 2595 SAMPLE 12870
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	MYRA ATWELL NO. 1	MYRA ATWELL NO. 1	LAHEY NO. 1
LOCATION	SEC. 9, T33S, R31W	SEC. 9, T33S, R31W	SEC. 21, T31S, R34W
OWNER	COLUMBIAN FUEL CORP.	COLUMBIAN FUEL CORP.	NORTHERN NATURAL GAS PROD. C
COMPLETED	--/--/00	--/--/00	05/11/50
SAMPLED	05/22/54	06/05/54	06/22/71
FORMATION	PENN-TORONTO	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4300	5069	2473
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	250
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2042
COMPONENT, MOLE PCT			
METHANE	69.0	82.6	74.1
ETHANE	5.6	5.4	5.5
PROPANE	4.4	3.3	3.0
N-BUTANE	1.3	0.9	0.8
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	17.0	6.5	15.4
OXYGEN	0.9	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.30	0.22	0.48
HEATING VALUE*	1006	1095	980
SPECIFIC GRAVITY	0.743	0.675	0.697

	INDEX 2596 SAMPLE 12903	INDEX 2597 SAMPLE 12904	INDEX 2598 SAMPLE 12597
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	IRIS
WELL NAME	GRIFFITH NO. 1	MITCH NO. 1	GENE BLACK NO. 1
LOCATION	SEC. 19, T32S, R33W	SEC. 25, T32S, R34W	SEC. 11, T34S, R31W
OWNER	CABOT CORP.	CABOT CORP.	VENUS OIL CO.
COMPLETED	--/--/00	--/--/00	06/11/70
SAMPLED	07/20/71	07/20/71	12/22/70
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PENN-TORONTO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4314
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1150
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	510
COMPONENT, MOLE PCT			
METHANE	74.2	74.7	71.8
ETHANE	5.8	5.5	5.7
PROPANE	3.4	3.1	4.3
N-BUTANE	1.0	0.9	1.3
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	14.1	14.5	15.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.44	0.45	0.32
HEATING VALUE*	1018	1007	1040
SPECIFIC GRAVITY	0.707	0.704	0.734

	INDEX 2599 SAMPLE 12598	INDEX 2600 SAMPLE 5994	INDEX 2601 SAMPLE 5995
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	IRIS	KISMET	KISMET
WELL NAME	GENE BLACK NO. 1	MASSONI NO. 1	MASSONI NO. 1
LOCATION	SEC. 11, T34S, R31W	SEC. 11, T33N, R31W	SEC. 5, T33N, R31W
OWNER	VENUS OIL CO.	CABOT CARBON CO.	CABOT CARBON CO.
COMPLETED	06/11/70	12/05/55	12/05/55
SAMPLED	12/22/70	01/14/56	01/14/56
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW	PENN-TORONTO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3100	5590	4270
WELLHEAD PRESSURE,PSIG	600	1588	1200
OPEN FLOW, MCFD	1608	2250	1500
COMPONENT, MOLE PCT			
METHANE	68.5	88.9	88.3
ETHANE	4.3	5.2	5.1
PROPANE	2.5	2.3	2.2
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.5	0.2	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	22.1	1.8	2.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.63	0.13	0.14
HEATING VALUE*	912	1111	1097
SPECIFIC GRAVITY	0.726	0.638	0.639

	INDEX 2602 SAMPLE 9784	INDEX 2603 SAMPLE 9857	INDEX 2604 SAMPLE 10344
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	KISMET	KISMET	KISMET
WELL NAME	RINEHART NO. 1	E. L. RICHARDSON	MASSONI NO. 1
LOCATION	SEC. 15, T33S, R31W	SEC. 26, T32S, R31W	SEC. 5, T33S, R31W
OWNER	J. M. HUBER CORP.	AMBASSADOR OIL CORP.	CABOT CORP.
COMPLETED	06/05/62	03/14/65	12/05/55
SAMPLED	03/01/65	04/23/65	12/29/65
FORMATION	PENN-MARMATON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5060	5565	5556
WELLHEAD PRESSURE,PSIG	1314	1560	910
OPEN FLOW, MCFD	2138	16800	847
COMPONENT, MOLE PCT			
METHANE	81.7	84.6	87.0
ETHANE	5.6	5.2	5.8
PROPANE	3.8	2.6	2.7
N-BUTANE	0.9	0.7	0.7
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	6.0	5.6	2.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.20	0.23	0.12
HEATING VALUE*	1124	1082	1127
SPECIFIC GRAVITY	0.690	0.658	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2605 SAMPLE 10345	INDEX 2606 SAMPLE 10906	INDEX 2607 SAMPLE 11050
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	KISMET	KISMET	KISMET
WELL NAME	MASSONI NO. 1	SIMONSON NO. 2	FREDERICK NO. 1
LOCATION	SEC. 5, T33S, R31W	SEC. 26, T33S, R31W	SEC. 26, T33S, R31W
OWNER	CABOT CORP.	A. L. ABERCROMBIE, INC.	HUMBLE OIL & REFINING CO.
COMPLETED	12/05/55	11/01/60	05/--/67
SAMPLED	12/29/65	03/22/67	08/04/67
FORMATION	PENN-TORONTO	PERM-COUNCIL GROVE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4340	3200	5524
WELLHEAD PRESSURE,PSIG	750	498	911
OPEN FLOW, MCFD	NOT GIVEN	574	855
COMPONENT, MOLE PCT			
METHANE	74.4	70.5	86.2
ETHANE	5.3	4.7	5.5
PROPANE	3.5	2.7	2.5
N-BUTANE	0.9	1.0	0.6
ISOBUTANE	0.6	0.5	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	14.1	19.2	3.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.30	0.57	0.18
HEATING VALUE*	1022	948	1098
SPECIFIC GRAVITY	0.712	0.719	0.651

	INDEX 2608 SAMPLE 11625	INDEX 2609 SAMPLE 12326	INDEX 2610 SAMPLE 12327
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	KISMET	KISMET	KISMET
WELL NAME	HIGGINS NO. 1	MANKA NO. 1	MANKA NO. 1
LOCATION	SEC. 35, 33S, 31W	SEC. 25, T32S, R31W	SEC. 25, T32S, R31W
OWNER	A. L. ABERCROMBIE, INC.	LEBEN DRILLING, INC.	LEBEN DRILLING, INC.
COMPLETED	12/22/51	06/09/70	06/09/70
SAMPLED	08/14/68	07/14/70	07/14/70
FORMATION	PENN-TORONTO	PENN-LANSING	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4300	4402	4160
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1107	1150
OPEN FLOW, MCFD	NOT GIVEN	2400	18850
COMPONENT, MOLE PCT			
METHANE	65.4	75.9	67.1
ETHANE	9.4	5.2	4.7
PROPANE	10.1	3.5	2.9
N-BUTANE	3.8	0.8	0.7
ISOBUTANE	1.5	0.6	0.6
N-PENTANE	0.7	0.2	0.3
ISOPENTANE	0.7	0.3	TRACE
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.6	0.2	0.2
NITROGEN	7.2	12.5	21.6
OXYGEN	0.0	0.3	1.5
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.10	0.26	0.30
HEATING VALUE*	1339	1056	906
SPECIFIC GRAVITY	0.861	0.704	0.736

	INDEX 2611 SAMPLE 15902	INDEX 2612 SAMPLE 14492	INDEX 2613 SAMPLE 4921
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	KNEELAND SW	LEMERT	LIBERAL SE
WELL NAME	YORK NO. 1	EDNA SCOTT NO. 1	WARDEN NO. 1
LOCATION	SEC. 27, T34S, R31W	SEC. 15, T32S, R33W	SEC. 13, T35S, R33W
OWNER	KANSAS ENERGY INVESTMENT	AMOCO PRODUCTION CO.	WHITE EAGLE OIL CO.
COMPLETED	--/--/00	08/18/75	07/26/50
SAMPLED	02/15/80	10/03/75	09/19/50
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW & MISS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5516	6060
WELLHEAD PRESSURE,PSIG	1575	719	1375
OPEN FLOW, MCFD	3664	4500	6493
COMPONENT, MOLE PCT			
METHANE	85.3	86.5	86.1
ETHANE	4.8	5.0	4.0
PROPANE	2.5	2.8	2.2
N-BUTANE	0.7	0.7	1.0
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.2	0.1	0.7
ISOPENTANE	0.1	0.1	0.8
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.8
NITROGEN	3.1	4.1	3.9
OXYGEN	0.1	0.0	0.7
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.7	0.1	0.0
HELIUM	0.13	0.13	0.11
HEATING VALUE*	1067	1089	1119
SPECIFIC GRAVITY	0.666	0.648	0.678

	INDEX 2614 SAMPLE 10330	INDEX 2615 SAMPLE 14556	INDEX 2616 SAMPLE 5073
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	LIBERAL SE	LIBERAL SE	LIBERAL-LIGHT
WELL NAME	FEATHER G. U. NO. 1	HOWLAND NO. 1	FEASE NO. 1
LOCATION	SEC. 19, T35S, R33W	SEC. 10, T35S, R33W	SEC. 14, T35S, R32W
OWNER	PAN AMERICAN PETROLEUM CORP.	BEREN CORP.	J. M. HUBER CORP.
COMPLETED	01/24/47	12/11/75	05/29/51
SAMPLED	12/18/65	12/26/75	06/18/51
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6156	6155	5942
WELLHEAD PRESSURE,PSIG	633	422	1580
OPEN FLOW, MCFD	3557	3644	55235
COMPONENT, MOLE PCT			
METHANE	88.1	87.5	86.4
ETHANE	5.0	4.9	6.1
PROPANE	2.3	2.8	3.2
N-BUTANE	0.9	0.7	0.7
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.2	0.9
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.0	2.5	2.3
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.16	0.15	0.13
HEATING VALUE*	1125	1106	1130
SPECIFIC GRAVITY	0.650	0.645	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2617 SAMPLE 5132	INDEX 2618 SAMPLE 12325	INDEX 2619 SAMPLE 7247
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	LIBERAL-LIGHT	NASSONI	PLAINS W
WELL NAME	LIGHT NO. A-1	BEERS NO. 1	COLLINS NO. 1
LOCATION	SEC. 10, T35S, R32W	SEC. 24, T34S, R32W	SEC. 16, T32S, R31W
OWNER	J. M. HUBER CORP.	LEBEN DRILLING, INC.	COLORADO OIL & GAS CORP., ET
COMPLETED	08/25/51	05/19/70	11/09/56
SAMPLED	--/--/00	07/14/70	10/15/59
FORMATION	PENN-MORROW	PENN-LANSING	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6089	4549	5608
WELLHEAD PRESSURE,PSIG	1270	1200	1570
OPEN FLOW, MCFD	1367	3360	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	72.2	68.7
ETHANE	4.1	5.7	5.2
PROPANE	1.8	4.2	3.7
N-BUTANE	0.5	1.0	1.1
ISOBUTANE	0.2	0.5	0.7
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.0	0.2	0.6
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.1	15.2	16.8
OXYGEN	0.0	0.2	2.1
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.09	0.30	0.10
HEATING VALUE*	1053	1029	994
SPECIFIC GRAVITY	0.617	0.727	0.750

	INDEX 2620 SAMPLE 16282	INDEX 2621 SAMPLE 6848	INDEX 2622 SAMPLE 14472
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	PLAINS W	SALLEY	SALLEY
WELL NAME	BECK NO. 1-9	SALLEY C NO. 2	STEVESSEN NO. A-2
LOCATION	SEC. 9, T32S, R31W	SEC. 16, T33S, R33W	SEC. 20, T34S, R33W
OWNER	MESA PETROLEUM CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	03/14/81	08/01/58	06/12/75
SAMPLED	06/16/81	11/03/58	09/--/75
FORMATION	PENN-MORROW	PENN-TORONTO	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5564	4338	5044
WELLHEAD PRESSURE,PSIG	1500	1144	1590
OPEN FLOW, MCFD	1000	2	49152
COMPONENT, MOLE PCT			
METHANE	79.0	54.2	86.3
ETHANE	5.8	3.9	4.9
PROPANE	3.6	4.9	3.0
N-BUTANE	1.1	5.8	0.8
ISOBUTANE	0.6	3.4	0.5
N-PENTANE	0.3	4.8	0.1
ISOPENTANE	0.3	3.8	0.4
CYCLOPENTANE	0.1	1.1	0.1
HEXANES PLUS	0.2	4.5	0.2
NITROGEN	8.6	12.8	3.1
OXYGEN	TRACE	1.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.19	0.20	0.16
HEATING VALUE*	1095	1161	1119
SPECIFIC GRAVITY	0.698	1.101	0.661

	INDEX 2623 SAMPLE 5868	INDEX 2624 SAMPLE 12581	INDEX 2625 SAMPLE 16531
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	SHUCK	SHUCK	SHUCK
WELL NAME	SHUCK NO. 2-20	FULLER A NO. 1	KOCH "A" NO. 3
LOCATION	SEC. 20, T33S, R34W	SEC. 30, T33S, R34W	SEC. 15, T33S, R34W
OWNER	PANHANDLE EASTERN PIPELINE C	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	03/27/55	09/19/69	01/09/82
SAMPLED	07/05/55	11/03/70	06/02/82
FORMATION	PENN-MORROW	PENN-MORROW L	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5987	6028	5936
WELLHEAD PRESSURE,PSIG	1575	1218	1879
OPEN FLOW, MCFD	4823	1242	1200
COMPONENT, MOLE PCT			
METHANE	85.0	85.5	85.9
ETHANE	5.6	5.2	4.6
PROPANE	3.0	3.2	2.9
N-BUTANE	1.0	0.8	1.1
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	4.2	3.9	3.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.14	0.15	0.17
HEATING VALUE*	1114	1117	1111
SPECIFIC GRAVITY	0.666	0.663	0.669

	INDEX 2626 SAMPLE 16532	INDEX 2627 SAMPLE 12788	INDEX 2628 SAMPLE 17814
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	SHUCK	SHUCK N	SHUCK N
WELL NAME	GROSSARDT "A" NO. 1	MITCH NO. 1	MITCH "B" NO. 1
LOCATION	SEC. 10, T33S, R34W	SEC. 6, T33S, R34W	SEC. 28, T32S, R34W
OWNER	ANADARKO PRODUCTION CO.	LEBEN OIL CORP.	CITIES SERVICE OIL & GAS COR
COMPLETED	02/04/82	03/12/71	06/28/85
SAMPLED	06/02/82	04/--/71	08/19/85
FORMATION	MISS-CHESTER	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6157	5876	6136
WELLHEAD PRESSURE,PSIG	1406	NOT GIVEN	1588
OPEN FLOW, MCFD	3046	NOT GIVEN	1489
COMPONENT, MOLE PCT			
METHANE	85.5	82.8	56.5
ETHANE	4.3	4.8	7.3
PROPANE	1.9	2.5	9.6
N-BUTANE	0.9	0.9	6.9
ISOBUTANE	0.3	0.3	3.3
N-PENTANE	0.3	0.1	4.3
ISOPENTANE	0.2	0.6	2.4
CYCLOPENTANE	0.2	TRACE	0.9
HEXANES PLUS	0.3	0.1	4.6
NITROGEN	5.5	7.1	2.9
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.20	0.20	0.07
HEATING VALUE*	1078	1065	1911
SPECIFIC GRAVITY	0.659	0.670	1.142

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2629 SAMPLE 17260	INDEX 2630 SAMPLE 16180	INDEX 2631 SAMPLE 7690
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	SILVERMAN	THIRTY-ONE	THIRTY-TWO
WELL NAME	HOFFMAN NO. R-1	SATTERFIELD NO. 2	DOLVEN NO. 1
LOCATION	SEC. 12, T32S, R34W	SEC. 13, T31S, R32W	SEC. 1, T32S, R32W
OWNER	CITIES SERVICE OIL & GAS COR	NORTHERN PUMP CO.	PETROLEUM, INC.
COMPLETED	10/06/83	06/16/80	07/02/60
SAMPLED	04/17/84	01/27/81	09/19/60
FORMATION	PENN-MORROW	PENN-MORROW & MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5362	5465	5568
WELLHEAD PRESSURE, PSIG	1243	1324	1180
OPEN FLOW, MCFD	7390	2617	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.8	80.3	79.0
ETHANE	4.7	5.7	5.6
PROPANE	1.8	3.0	2.5
N-BUTANE	0.6	0.8	0.7
ISOBUTANE	0.3	0.5	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.2	TRACE	0.2
HEXANES PLUS	0.3	0.2	0.4
NITROGEN	3.7	8.5	9.8
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.25	0.16	0.20
HEATING VALUE*	1090	1065	1059
SPECIFIC GRAVITY	0.645	0.683	0.696

	INDEX 2632 SAMPLE 6932	INDEX 2633 SAMPLE 6933	INDEX 2634 SAMPLE 6934
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	THREE STAR	THREE STAR	THREE STAR
WELL NAME	C. M. LIGHT, JR. NO. 1	C. M. LIGHT, JR. NO. 1	C. M. LIGHT, JR. NO. 1
LOCATION	SEC. 17, T35S, R32W	SEC. 17, T35S, R32W	SEC. 17, T35S, R32W
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	07/17/58	07/17/58	07/17/58
SAMPLED	01/28/59	01/28/59	01/28/59
FORMATION	PENN-LANSING-KANSAS CITY	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4545	6066	6192
WELLHEAD PRESSURE, PSIG	1213	1240	1522
OPEN FLOW, MCFD	11500	2200	4500
COMPONENT, MOLE PCT			
METHANE	89.0	89.9	90.2
ETHANE	4.7	4.6	4.5
PROPANE	2.1	2.2	2.1
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	2.1	1.4	0.4
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1102	1110	1127
SPECIFIC GRAVITY	0.634	0.632	0.635

	INDEX 2635 SAMPLE 7582	INDEX 2636 SAMPLE 10400	INDEX 2637 SAMPLE 11519
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	THREE STAR	WIDE AWAKE	WIDE AWAKE
WELL NAME	THOMPSON UNIT NO. 1	DOWDY NO. 1-6	DOWDY NO. 1-7
LOCATION	SEC. 16, T35S, R32W	SEC. 6, T35S, R34W	SEC. 7, T35S, R34W
OWNER	PETROLEUM, INC.	AMARILLO NATURAL GAS CO.	AMARILLO NATURAL GAS CO.
COMPLETED	02/21/60	12/17/65	12/15/67
SAMPLED	06/11/60	02/09/66	05/24/68
FORMATION	PENN-LANSING-KANSAS CITY	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4532	6231	6272
WELLHEAD PRESSURE, PSIG	1095	1656	1556
OPEN FLOW, MCFD	2850	12750	4279
COMPONENT, MOLE PCT			
METHANE	80.0	90.8	83.2
ETHANE	7.4	0.0	4.9
PROPANE	3.2	0.0	2.8
N-BUTANE	1.1	0.0	1.0
ISOBUTANE	0.3	0.0	0.5
N-PENTANE	0.4	0.0	0.3
ISOPENTANE	0.3	0.0	0.5
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	0.2
NITROGEN	6.3	8.9	6.2
OXYGEN	TRACE	0.0	0.8
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.2
HELIUM	0.30	0.30	0.23
HEATING VALUE*	1123	920	1095
SPECIFIC GRAVITY	0.695	0.590	0.675

	INDEX 2638 SAMPLE 13883	INDEX 2639 SAMPLE 5585	INDEX 2640 SAMPLE 14490
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	WIDE AWAKE	WILDCAT	WILDCAT
WELL NAME	BOLES NO. 1-17	ALEXANDER NO. 1	EDNA SCOTT NO. 1
LOCATION	SEC. 17, T35S, R34W	SEC. 14, T33S, R32W	SEC. 15, T32S, R33W
OWNER	MORIZON OIL & GAS CO.	WICKERS EXPLORATION, LTD.	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	12/23/83	08/18/75
SAMPLED	01/05/74	12/20/83	10/14/75
FORMATION	PENN-LANSING-KANSAS CITY	MISS-CHESTER	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4548	5868	4810
WELLHEAD PRESSURE, PSIG	695	1800	705
OPEN FLOW, MCFD	1000	NOT GIVEN	196
COMPONENT, MOLE PCT			
METHANE	77.3	89.0	51.5
ETHANE	6.2	4.9	13.1
PROPANE	3.8	2.2	16.6
N-BUTANE	0.8	0.7	5.1
ISOBUTANE	0.5	0.2	2.6
N-PENTANE	0.2	0.2	0.9
ISOPENTANE	0.3	0.2	0.9
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	11.1	1.9	8.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.28	0.11	0.09
HEATING VALUE*	1047	1108	1547
SPECIFIC GRAVITY	0.693	0.636	0.983

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2641 SAMPLE 14681	INDEX 2642 SAMPLE 3215	INDEX 2643 SAMPLE 16850
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SHERMAN	SHERMAN
FIELD	WILDCAT	GOODLAND	GOODLAND
WELL NAME	BLACK NO. 1	TOMPKINS NO. 2	WALLACE NO. 1-16
LOCATION	SEC. 15, T34S, R31W	SEC. 18, T8S, R39W	SEC. 16, T8S, R39W
OWNER	INCA OIL CO.	INGLING & PARKER	CENTENNIAL ENERGY CO.
COMPLETED	05/27/76	10/03/41	04/06/82
SAMPLED	09/26/76	03/23/42	03/29/83
FORMATION	PENN-MORROW & MISS-CHESTER	CRET-PIERRE	CRET-NIOBRARA
GEOLOGIC PROVINCE CODE	360	450	450
DEPTH, FEET	5679	993	972
WELLHEAD PRESSURE,PSIG	1866	55	61
OPEN FLOW, MCFD	9800	6	298
COMPONENT, MOLE PCT			
METHANE	87.4	96.9	93.4
ETHANE	5.2	0.0	0.9
PROPANE	3.0	---	0.2
N-BUTANE	0.6	---	0.1
ISOBUTANE	0.4	---	0.0
N-PENTANE	0.2	---	TRACE
ISOPENTANE	0.3	---	TRACE
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	2.1	2.1	2.9
OXYGEN	0.0	0.5	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.3
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.6	1.9
HELIUM	0.13	0.07	0.06
HEATING VALUE*	1132	982	981
SPECIFIC GRAVITY	0.655	0.570	0.595

	INDEX 2644 SAMPLE 3937	INDEX 2645 SAMPLE 8395	INDEX 2646 SAMPLE 8396
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	BEDFORD	BOW	BOW
WELL NAME	ADA BEAN NO. 1	BAUMAN NO. 1	BARSTOW NO. 1
LOCATION	SEC. 21, T23S, R12W	SEC. 32, T23S, R15W	SEC. 32, T22S, R15W
OWNER	SHELL OIL CO.	DUNNE-GARDNER PETROLEUM CO.	HELLAR DRILLING CO.
COMPLETED	12/18/44	--/--/00	--/--/00
SAMPLED	01/17/45	02/27/62	--/--/00
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	PENN-LANSING
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3505	2999	3540
WELLHEAD PRESSURE,PSIG	1090	1175	1008
OPEN FLOW, MCFD	3121	4080	1200
COMPONENT, MOLE PCT			
METHANE	69.0	61.3	67.8
ETHANE	9.8	4.4	2.6
PROPANE	---	2.2	1.5
N-BUTANE	---	0.8	0.7
ISOBUTANE	---	0.5	0.4
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.1
NITROGEN	19.9	26.5	25.1
OXYGEN	0.2	0.2	0.1
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.90	2.95	1.24
HEATING VALUE*	875	832	831
SPECIFIC GRAVITY	0.684	0.734	0.711

	INDEX 2647 SAMPLE 8400	INDEX 2648 SAMPLE 5331	INDEX 2649 SAMPLE 5366
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	BOW	FARMINGTON	FARMINGTON
WELL NAME	BAUMAN	WESTGATE NO. 1	SEIBERT NO. 1
LOCATION	SEC. 32, T23S, R15W	SEC. 6, T25S, R15W	SEC. 31, T24S, R15W
OWNER	DUNNE-GARDNER PETROLEUM CO.	CITIES SERVICE OIL CO.	JOHN LINDAS OIL, INC.
COMPLETED	--/--/00	06/20/52	10/10/52
SAMPLED	02/21/62	09/15/52	12/29/52
FORMATION	PENN-TARKIO	PENN-BASAL	PENN---
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4169	4177
WELLHEAD PRESSURE,PSIG	1175	1293	1193
OPEN FLOW, MCFD	4080	4190	1300
COMPONENT, MOLE PCT			
METHANE	81.4	89.7	89.6
ETHANE	3.1	3.7	3.6
PROPANE	1.4	1.3	1.3
N-BUTANE	0.6	0.4	0.4
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	12.0	3.6	3.8
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.49	0.40	0.41
HEATING VALUE*	973	1052	1044
SPECIFIC GRAVITY	0.659	0.619	0.616

	INDEX 2650 SAMPLE 10818	INDEX 2651 SAMPLE 8037	INDEX 2652 SAMPLE 5451
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	FARMINGTON	GERMAN VALLEY	HILL
WELL NAME	DORAN NO. 1	SITTNER NO. 1	HILL NO. 1
LOCATION	SEC. 33, T24S, R15W	SEC. 4, T22S, R12W	SEC. 11, T23S, R12W
OWNER	KEWANEE OIL CO.	WESTERN PETROLEUM CO.	ALPINE OIL CO.
COMPLETED	07/19/66	06/22/61	10/09/52
SAMPLED	12/14/66	06/18/61	04/29/53
FORMATION	PENN-TARKIO	PENN-KANSAS CITY	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	2923	3416	3448
WELLHEAD PRESSURE,PSIG	950	NOT GIVEN	1100
OPEN FLOW, MCFD	3600	NOT GIVEN	4
COMPONENT, MOLE PCT			
METHANE	85.8	66.5	60.9
ETHANE	2.5	4.2	5.1
PROPANE	0.7	2.5	3.5
N-BUTANE	0.4	0.9	1.6
ISOBUTANE	0.0	0.7	0.8
N-PENTANE	0.0	0.2	0.4
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	0.0	TRACE	0.2
HEXANES PLUS	0.0	0.1	0.4
NITROGEN	10.1	23.4	25.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.34	1.00	0.78
HEATING VALUE*	946	890	943
SPECIFIC GRAVITY	0.622	0.727	0.784

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2653 SAMPLE 15601	INDEX 2654 SAMPLE 15518	INDEX 2655 SAMPLE 5085
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	HITZ	KIPP SW	KNOCHE S
WELL NAME	KOHRS UNIT NO. 1	KIPP "A" NO. 2	KNOCHE NO. 1
LOCATION	SEC. 4, T24S, R12W	SEC. 27, T25S, R14W	SEC. 8, T24S, R12W
OWNER	WARREN-AMERICAN OIL CO.	EARL M. KNIGHTON	NORTHERN ORDNANCE, INC.
COMPLETED	11/05/78	06/09/77	01/14/51
SAMPLED	04/22/79	11/16/78	07/20/51
FORMATION	ORDO-VIOLA	PERM-CHASE GROUP	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3815	1970	3809
WELLHEAD PRESSURE,PSIG	840	NOT GIVEN	1154
OPEN FLOW, MCFD	NOT GIVEN	2057	10835
COMPONENT, MOLE PCT			
METHANE	59.7	71.9	64.9
ETHANE	4.1	1.7	3.9
PROPANE	3.3	0.6	3.1
N-BUTANE	1.0	0.2	0.9
ISOBUTANE	0.4	TRACE	0.6
N-PENTANE	0.2	TRACE	0.3
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	29.6	24.4	24.6
OXYGEN	0.0	0.0	0.2
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.9
HELIUM	1.22	0.97	1.31
HEATING VALUE*	829	781	877
SPECIFIC GRAVITY	0.754	0.669	0.737

	INDEX 2656 SAMPLE 15631	INDEX 2657 SAMPLE 15632	INDEX 2658 SAMPLE 7675
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	KNOCHE S	KNOCHE S	MACKSVILLE
WELL NAME	VIRGIL KNOCHE NO. 1	VERLE KNOCHE NO. 1	NAGEL
LOCATION	SEC. 9, T24S, R12W	SEC. 5, T24S, R12W	SEC. 3, T24S, R15W
OWNER	DONALD D. ASH	DONALD D. ASH	TOMLINSON KATHOL, INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/05/79	06/05/79	09/07/60
FORMATION	NOT GIVEN	NOT GIVEN	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4023
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1245
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.4	65.6	88.6
ETHANE	4.5	4.5	3.6
PROPANE	3.8	3.8	1.2
N-BUTANE	1.3	1.2	0.4
ISOBUTANE	0.6	0.6	0.3
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	22.3	22.3	4.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.26	1.24	0.70
HEATING VALUE*	932	931	1036
SPECIFIC GRAVITY	0.744	0.742	0.621

	INDEX 2659 SAMPLE 8088	INDEX 2660 SAMPLE 8090	INDEX 2661 SAMPLE 8394
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	LUCUS NO. 1	CORNWELL NO. 1	O'CONNOR NO. 1
LOCATION	SEC. 21, T24S, R15W	SEC. 3, T24S, R15W	SEC. 8, T24S, R15W
OWNER	DUNNE-GARDNER PETROLEUM CO.	VALLINGFORD, INC.	REX & MORRIS DRILLING CO.
COMPLETED	--/--/00	067--/61	--/--/00
SAMPLED	07/12/61	07/12/61	02/--/62
FORMATION	NOT GIVEN	ORDO---	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	4024	4035
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1169	1320
OPEN FLOW, MCFD	NOT GIVEN	2000	13300
COMPONENT, MOLE PCT			
METHANE	86.2	87.2	70.6
ETHANE	3.9	3.9	4.7
PROPANE	1.4	1.4	2.2
N-BUTANE	0.4	0.4	0.8
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.2	5.0	17.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.5
HELIUM	1.00	0.71	2.28
HEATING VALUE*	1017	1027	927
SPECIFIC GRAVITY	0.627	0.627	0.701

	INDEX 2662 SAMPLE 8403	INDEX 2663 SAMPLE 8530	INDEX 2664 SAMPLE 13102
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE
WELL NAME	LUCAS NO. 1	LUCAS NO. 1	NAGEL NO. 1
LOCATION	SEC. 9, T24S, R15W	SEC. 4, T24S, R15W	SEC. 3, T24S, R15W
OWNER	DUNNE-GARDNER PETROLEUM CO.	WILKINSON DRILLING, INC.	TOMLINSON OIL CO., INC.
COMPLETED	--/--/00	--/--/00	08/23/71
SAMPLED	02/27/62	04/18/62	--/--/00
FORMATION	ORDO-VIOLA	NOT GIVEN	PENN-HOWARD
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3951	NOT GIVEN	3814
WELLHEAD PRESSURE,PSIG	1315	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	9000	NOT GIVEN	10800
COMPONENT, MOLE PCT			
METHANE	85.8	87.0	77.5
ETHANE	3.7	3.7	2.8
PROPANE	1.4	1.4	1.4
N-BUTANE	0.5	0.4	0.3
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	6.6	5.6	16.5
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.98	0.85	0.53
HEATING VALUE*	1017	1026	908
SPECIFIC GRAVITY	0.633	0.627	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2665 SAMPLE 13211	INDEX 2666 SAMPLE 13212	INDEX 2667 SAMPLE 7597
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE	MACKSVILLE	MACKSVILLE E
WELL NAME	O'CONNER NO. 1	O'CONNOR NO. 1	BROWN NO. 1
LOCATION	SEC. 4, T24S, R15W	SEC. 4, T24S, R15W	SEC. 11, T24S, R15W
OWNER	HALLIBURTON OIL PRODUCING CO	HALLIBURTON OIL PRODUCING CO	REX & MORRIS DRILLING CO.
COMPLETED	09/27/71	09/27/71	--/--/00
SAMPLED	05/16/72	05/16/72	07/11/60
FORMATION	PENN-HOWARD	PENN-RED EAGLE	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3040	2593	NOT GIVEN
WELLHEAD PRESSURE,PSIG	985	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5200	3450	4
COMPONENT, MOLE PCT			
METHANE	77.6	78.2	87.1
ETHANE	3.0	2.8	3.8
PROPANE	1.6	1.4	1.5
N-BUTANE	0.6	0.4	0.5
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	15.5	15.6	5.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.55	0.56	0.80
HEATING VALUE*	942	925	1031
SPECIFIC GRAVITY	0.676	0.666	0.627

	INDEX 2668 SAMPLE 7602	INDEX 2669 SAMPLE 7618	INDEX 2670 SAMPLE 7827
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE E	MACKSVILLE E	MACKSVILLE E
WELL NAME	BROWN NO. 1	BROWN NO. 1	HARDIEN NO. 1
LOCATION	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W
OWNER	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.
COMPLETED	--/--/00	--/--/00	01/29/61
SAMPLED	07/13/60	07/25/60	01/22/61
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4089
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2530
COMPONENT, MOLE PCT			
METHANE	82.7	83.0	74.7
ETHANE	4.2	4.1	3.4
PROPANE	1.6	1.7	1.1
N-BUTANE	0.6	0.6	0.3
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	9.1	9.1	17.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	1.10	1.10	1.80
HEATING VALUE*	999	1013	880
SPECIFIC GRAVITY	0.643	0.648	0.668

	INDEX 2671 SAMPLE 7957	INDEX 2672 SAMPLE 8397	INDEX 2673 SAMPLE 8439
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE E	MACKSVILLE E	MACKSVILLE E
WELL NAME	HARKNESS NO. 3	BROWN NO. 3	HARKNESS NO. 3
LOCATION	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W
OWNER	WILKINSON DRILLING, INC.	REX & MORRIS DRILLING CO.	WILKINSON DRILLING, INC.
COMPLETED	05/11/61	--/--/00	--/--/00
SAMPLED	05/10/61	02/--/62	02/12/62
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4111	4016	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1188	NOT GIVEN
OPEN FLOW, MCFD	8	20750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	82.8	84.5
ETHANE	4.3	3.8	3.8
PROPANE	1.7	1.7	1.5
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	7.5	9.4	7.6
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	1.10	1.09	1.09
HEATING VALUE*	1026	1005	1009
SPECIFIC GRAVITY	0.652	0.652	0.642

	INDEX 2674 SAMPLE 8571	INDEX 2675 SAMPLE 8605	INDEX 2676 SAMPLE 9332
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE E	MACKSVILLE E	MACKSVILLE E
WELL NAME	HARKNESS	HARKNESS NO. 4	NAGEL
LOCATION	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W	SEC. 11, T24S, R15W
OWNER	WILKINSON DRILLING, INC.	WILKINSON DRILLING, INC.	HELLAR DRILLING CO.
COMPLETED	--/--/00	--/--/00	10/--/63
SAMPLED	06/04/62	07/--/62	04/21/64
FORMATION	CAMO-ARBUCKLE	NOT GIVEN	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4054
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7120
COMPONENT, MOLE PCT			
METHANE	84.1	83.0	81.3
ETHANE	3.9	3.7	4.0
PROPANE	1.6	1.5	1.6
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.2	0.3	TRACE
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.3	7.4	10.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.5
HELIUM	1.07	0.77	0.70
HEATING VALUE*	1013	1015	987
SPECIFIC GRAVITY	0.642	0.639	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2677 SAMPLE 13568	INDEX 2678 SAMPLE 7920	INDEX 2679 SAMPLE 7937
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE E	MACKSVILLE TOWNSITE	MACKSVILLE TOWNSITE
WELL NAME	HARKNESS NO. 5	SUITER NO. 1-B	NAGEL NO. 3
LOCATION	SEC. 11, T24S, R15W	SEC. 10, T24S, R15W	SEC. 10, T24S, R15W
OWNER	TOMLINSON OIL CO., INC.	WILKINSON DRILLING, INC.	WILKINSON DRILLING, INC.
COMPLETED	09/25/72	04/05/61	04/17/61
SAMPLED	03/15/72	04/04/61	04/16/61
FORMATION	PENN-NEVA	CAMO-ARBUCKLE	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3019	4053	4030
WELLHEAD PRESSURE,PSIG	825	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6500	6230	1020
COMPONENT, MOLE PCT			
METHANE	78.8	80.7	88.2
ETHANE	3.0	4.4	3.9
PROPANE	1.1	1.7	1.2
N-BUTANE	0.2	0.5	0.4
ISOBUTANE	0.2	0.8	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.8	10.1	4.8
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.49	1.40	0.70
HEATING VALUE*	903	989	1032
SPECIFIC GRAVITY	0.654	0.657	0.620

	INDEX 2680 SAMPLE 8106	INDEX 2681 SAMPLE 8398	INDEX 2682 SAMPLE 8275
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	MACKSVILLE TOWNSITE	MACKSVILLE TOWNSITE	MORNING STAR
WELL NAME	NAGEL NO. 3	NAGEL NO. 1	BOWKER NO. 1
LOCATION	SEC. 10, T24S, R15W	SEC. 10, T24S, R15W	SEC. 2, T25S, R14W
OWNER	WALT WILKINSON	WILKINSON DRILLING, INC.	TOMLINSON RAYMOND, INC.
COMPLETED	05/--/61	--/--/00	09/--/60
SAMPLED	07/25/61	02/--/62	11/08/61
FORMATION	ORDO-VIOLA	ORDO-VIOLA	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4080	3974	4816
WELLHEAD PRESSURE,PSIG	1225	1225	1248
OPEN FLOW, MCFD	3000	3550	3
COMPONENT, MOLE PCT			
METHANE	87.8	87.9	79.0
ETHANE	3.9	3.6	4.1
PROPANE	1.3	1.4	1.8
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	5.0	4.9	12.8
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.70	0.64	0.96
HEATING VALUE*	1029	1037	965
SPECIFIC GRAVITY	0.624	0.628	0.664

	INDEX 2683 SAMPLE 8438	INDEX 2684 SAMPLE 8317	INDEX 2685 SAMPLE 7676
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	NEWELL	NOT GIVEN	O'CONNER
WELL NAME	RUNDELL NO. 2	WILSON NO. 1	PETRO NO. 1
LOCATION	SEC. 12, T25S, R12W	SEC. 24, T25S, R15W	SEC. 9, T24S, R15W
OWNER	C. N. NEWELL	D. R. LAUCK OIL CO., INC.	REX & MORRIS DRILLING CO.
COMPLETED	--/--/00	--/--/00	08/31/60
SAMPLED	02/08/62	12/01/61	08/31/60
FORMATION	PENN-KANSAS CITY	MISS-	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3537	NOT GIVEN	4096
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1280
OPEN FLOW, MCFD	NOT GIVEN	5000	10
COMPONENT, MOLE PCT			
METHANE	51.0	76.9	77.9
ETHANE	7.6	4.2	4.3
PROPANE	6.4	1.8	1.9
N-BUTANE	3.3	0.6	0.6
ISOBUTANE	1.5	0.3	0.4
N-PENTANE	1.0	0.1	0.1
ISOPENTANE	0.8	0.2	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	25.1	14.0	11.5
OXYGEN	1.7	0.1	TRACE
ARGON	0.1	0.1	0.7
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.70	1.46	1.40
HEATING VALUE*	1091	950	976
SPECIFIC GRAVITY	0.893	0.669	0.675

	INDEX 2686 SAMPLE 8036	INDEX 2687 SAMPLE 8057	INDEX 2688 SAMPLE 8058
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	O'CONNER	O'CONNER	O'CONNER
WELL NAME	PETRO NO. 2	O'CONNER NO. 1	O'CONNER NO. 1
LOCATION	SEC. 9, T24S, R15W	SEC. 8, T24S, R15W	SEC. 8, T24S, R15W
OWNER	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.	REX & MORRIS DRILLING CO.
COMPLETED	06/18/61	06/29/61	06/29/61
SAMPLED	06/18/61	06/29/61	06/29/61
FORMATION	CAMO-ARBUCKLE	CAMO-ARBUCKLE	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4105	4050	4075
WELLHEAD PRESSURE,PSIG	1360	1320	1320
OPEN FLOW, MCFD	6250	13300	12350
COMPONENT, MOLE PCT			
METHANE	78.6	70.5	69.8
ETHANE	4.2	5.0	5.1
PROPANE	1.9	2.2	2.4
N-BUTANE	0.6	0.8	0.9
ISOBUTANE	0.4	0.6	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	11.4	17.9	17.5
OXYGEN	0.3	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.5
HELIUM	1.60	2.30	2.10
HEATING VALUE*	981	935	955
SPECIFIC GRAVITY	0.671	0.702	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2689 SAMPLE 8399	INDEX 2690 SAMPLE 8267	INDEX 2691 SAMPLE 6573
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	OPCONNER	RUGAN	SEEVERS NW
WELL NAME	PETRO NO. 2	RUGAN NO. 1	SEEVERS NO. 2
LOCATION	SEC. 9, T24S, R15W	SEC. 2, T21S, R11W	SEC. 6, T25S, R13W
OWNER	REX & MORRIS DRILLING CO.	F. G. HOLL	NATURAL GAS & OIL CORP.
COMPLETED	--/--/00	--/--/00	05/12/58
SAMPLED	02/--/61	10/--/61	04/19/58
FORMATION	CAMO-ARBUCKLE	PENN-DOUGLAS	MISS-
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4053	3009	4000
WELLHEAD PRESSURE,PSIG	1197	NOT GIVEN	1395
OPEN FLOW, MCFD	2175	3300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	65.8	91.3
ETHANE	4.2	3.0	4.0
PROPANE	1.9	1.2	1.4
N-BUTANE	0.7	0.4	0.2
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	10.4	27.8	1.9
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.4
HELIUM	1.37	1.03	0.10
HEATING VALUE*	999	792	1066
SPECIFIC GRAVITY	0.667	0.711	0.615

	INDEX 2692 SAMPLE 8249	INDEX 2693 SAMPLE 8499	INDEX 2694 SAMPLE 8500
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	SEEVERS NW	SNIDER S	SNIDER S
WELL NAME	HARTER NO. 1	FAIR NO. 1	SMITH ESTATE NO. 5
LOCATION	SEC. 31, T24S, R13W	SEC. 15, T21S, R11W	SEC. 16, T21S, R11W
OWNER	REX & MORRIS DRILLING CO.	WESTERN PETROLEUM CO.	DUKE DRILLING CO.
COMPLETED	11/19/61	--/--/00	03/24/62
SAMPLED	10/15/61	03/27/62	03/23/62
FORMATION	MISS-CHERT	PENN-LANSING-KANSAS CITY	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	4044	3222	3370
WELLHEAD PRESSURE,PSIG	1530	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2310	897	2000
COMPONENT, MOLE PCT			
METHANE	77.5	60.6	41.1
ETHANE	4.1	6.9	10.0
PROPANE	1.7	3.5	5.8
N-BUTANE	0.6	1.2	1.5
ISOBUTANE	0.9	0.5	0.9
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.8	23.4	37.1
OXYGEN	TRACE	TRACE	1.6
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	1.34	1.02	0.63
HEATING VALUE*	950	920	867
SPECIFIC GRAVITY	0.665	0.769	0.879

	INDEX 2695 SAMPLE 8505	INDEX 2696 SAMPLE 8506	INDEX 2697 SAMPLE 8767
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	SNIDER S	SNIDER S	ST. JOHN NW
WELL NAME	FAIR NO. 1	FAIR NO. 1	AITKENS NO. 3
LOCATION	SEC. 15, T21S, R11W	SEC. 15, T21S, R11W	SEC. 16, T23S, R13W
OWNER	WESTERN PETROLEUM CO.	WESTERN PETROLEUM CO.	HENRY INGER OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/26/62	03/27/62	11/09/62
FORMATION	PENN-KANSAS CITY	PENN-KANSAS CITY	PENN-KANSAS CITY
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	3098	3194	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1500	2190	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.9	62.1	68.9
ETHANE	5.2	6.7	3.1
PROPANE	2.5	3.8	1.8
N-BUTANE	0.8	1.2	0.6
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	26.4	23.6	23.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.04	1.07	1.11
HEATING VALUE*	967	994	852
SPECIFIC GRAVITY	0.741	0.763	0.705

	INDEX 2698 SAMPLE 8359	INDEX 2699 SAMPLE 17302	INDEX 2700 SAMPLE 7360
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STANTON
FIELD	ST. JOHN SW	WILDCAT	BEAUCHAMP
WELL NAME	TREGALLAS NO. 1	COPELAND NO. 1	ARMSTRONG NO. 1
LOCATION	SEC. 25, T24S, R13W	SEC. 29, T24S, R13W	SEC. 24, T30S, R41W
OWNER	DUNNE-GARDNER PETROLEUM CO.	RAINS & WILLIAMSON OIL CO.**	WESTERN NATURAL GAS CO.
COMPLETED	--/--/00	01/24/83	05/04/59
SAMPLED	01/02/62	05/24/84	01/26/60
FORMATION	PENN-WABAUNSEE	MISS-CONGLOMERATE	PENN-MORROW
GEOLOGIC PROVINCE CODE	385	385	360
DEPTH, FEET	2940	3942	5018
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1250
OPEN FLOW, MCFD	310000	4350	11500
COMPONENT, MOLE PCT			
METHANE	70.1	72.4	64.0
ETHANE	1.6	4.5	4.9
PROPANE	1.0	2.3	4.1
N-BUTANE	0.5	0.7	0.7
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.0	17.3	23.5
OXYGEN	0.4	TRACE	1.6
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.50	1.57	0.30
HEATING VALUE*	808	933	897
SPECIFIC GRAVITY	0.698	0.691	0.731

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2701 SAMPLE 10356	INDEX 2702 SAMPLE 3964	INDEX 2703 SAMPLE 4823
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STANTON	STANTON
FIELD	BEAUCHAMP	HUGOTON	HUGOTON
WELL NAME	BEAUCHAMP NO. 1-19	COLLMAC NO. 1	CAMPBELL NO. 1
LOCATION	SEC. 19, T30, R40W	SEC. 32, T30S, R39W	SEC. 31, T28S, R39W
OWNER	GRAHAM-MICHAELIS DRILLING CO	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	12/22/65	09/08/44	03/25/45
SAMPLED	04/26/66	01/20/45	05/15/45
FORMATION	PENN-MORROW	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5222	2396	2351
WELLHEAD PRESSURE,PSIG	1123	325	420
OPEN FLOW, MCFD	7390	8000	4887
COMPONENT, MOLE PCT			
METHANE	70.7	57.8	65.3
ETHANE	4.5	23.2	18.2
PROPANE	3.2	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	17.7	18.6	15.7
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.0	0.0
HELIUM	0.92	0.43	0.42
HEATING VALUE*	977	1001	988
SPECIFIC GRAVITY	0.726	0.744	0.710

	INDEX 2704 SAMPLE 4180	INDEX 2705 SAMPLE 4470	INDEX 2706 SAMPLE 4827
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STANTON	STANTON
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	FEGAN NO. 1	HARRY TRUSSELL	SPECK NO. 1
LOCATION	SEC. 3, T27S, R39W	SEC. 28, T26S, R39W	SEC. 32, T28S, R40W
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	KANSAS NATURAL GAS, INC.
COMPLETED	05/01/45	--/--/00	10/10/49
SAMPLED	12/07/46	04/21/48	12/28/49
FORMATION	PERM---	PERM---	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2380	NOT GIVEN	2290
WELLHEAD PRESSURE,PSIG	420	NOT GIVEN	464
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5400
COMPONENT, MOLE PCT			
METHANE	65.8	63.5	45.9
ETHANE	18.8	19.4	3.8
PROPANE	---	---	2.5
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.0
NITROGEN	14.8	15.9	44.3
OXYGEN	0.1	0.4	0.6
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.41	0.20	0.97
HEATING VALUE*	1003	991	657
SPECIFIC GRAVITY	0.708	0.720	0.810

	INDEX 2707 SAMPLE 7982	INDEX 2708 SAMPLE 13578	INDEX 2709 SAMPLE 13800
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STANTON	STANTON
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	NICHOLAS C	ALLER B NO. 2	FARM MORTGAGE NO. 2
LOCATION	SEC. 15, T30S, R39W	SEC. 22, T30S, R39W	SEC. 16, T30S, R39W
OWNER	PAN AMERICAN PETROLEUM CORP.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	04/01/61	--/--/00	--/--/00
SAMPLED	05/18/61	04/18/73	11/06/73
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5234	2638	2608
WELLHEAD PRESSURE,PSIG	1225	262	240
OPEN FLOW, MCFD	9230	2700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.6	71.1	70.0
ETHANE	5.3	6.6	6.5
PROPANE	3.5	3.8	3.9
N-BUTANE	1.2	1.0	1.0
ISOBUTANE	0.9	0.6	0.5
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	12.9	16.0	17.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	1.40	0.42	0.41
HEATING VALUE*	1038	1009	1000
SPECIFIC GRAVITY	0.717	0.723	0.731

	INDEX 2710 SAMPLE 5677	INDEX 2711 SAMPLE 10301	INDEX 2712 SAMPLE 10302
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STANTON	STEVENS	STEVENS
FIELD	SPARKS	CUTTER	CUTTER
WELL NAME	SPARKS NO. 1	CUTTER NO. 1	M. F. BROWN NO. 2
LOCATION	SEC. 34, T30S, R42W	SEC. 14, T31S, R35W	SEC. 1, T31S, R35W
OWNER	W. M. HUBER CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	07/16/54	04/08/61	08/26/62
SAMPLED	08/11/54	11/02/65	12/02/65
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5277	5313	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1125	425	380
OPEN FLOW, MCFD	20000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.4	65.3	76.8
ETHANE	3.7	6.9	6.1
PROPANE	2.0	4.8	3.4
N-BUTANE	0.7	1.7	0.9
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.5	0.2
ISOPENTANE	0.2	0.7	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	7.5	18.4	11.4
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.2	0.1
HELIUM	0.86	0.35	0.27
HEATING VALUE*	1031	1056	1047
SPECIFIC GRAVITY	0.669	0.781	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2713 SAMPLE 13089	INDEX 2714 SAMPLE 15249	INDEX 2715 SAMPLE 15354
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	GENTZLER	GENTZLER	GENTZLER
WELL NAME	GENTZLER A NO. 1	RATLIFF "B" NO. 1	MILLER "M" NO. 1
LOCATION	SEC. 7, T33S, R37W	SEC. 18, T33S, R37W	SEC. 11, T33S, R38W
OWNER	SATURN OIL & GAS CO., INC.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	07/07/71	05/30/77	05/12/78
SAMPLED	10/21/71	06/06/78	08/30/78
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5990	5991	6006
WELLHEAD PRESSURE,PSIG	1965	1196	1495
OPEN FLOW, MCFD	1775	5540	1041
COMPONENT, MOLE PCT			
METHANE	86.3	86.2	85.1
ETHANE	4.2	4.5	4.2
PROPANE	2.3	2.5	2.3
N-BUTANE	0.7	0.9	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	5.0	4.2	5.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.6	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.30	0.35	0.25
HEATING VALUE*	1069	1192	1070
SPECIFIC GRAVITY	0.646	0.660	0.657

	INDEX 2716 SAMPLE 16537	INDEX 2717 SAMPLE 10185	INDEX 2718 SAMPLE 1866
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	GENTZLER	GOOCH	HUGOTON
WELL NAME	SCHMIDT "C" NO. 1	STREETER GAS UNIT NO. 1-15	HAHN NO. 1
LOCATION	SEC. 30, T32S, R37W	SEC. 15, T35S, R35W	SEC. 10, T33S, R38W
OWNER	ANADARKO PRODUCTION CO.	MESA PETROLEUM CO.	W. R. MCKNAB
COMPLETED	01/12/82	07/07/65	02/--/29
SAMPLED	06/04/82	08/01/65	09/18/29
FORMATION	PENN-MORROW	PENN-MORROW	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5980	6290	2600
WELLHEAD PRESSURE,PSIG	1470	1627	450
OPEN FLOW, MCFD	7522	15500	12000
COMPONENT, MOLE PCT			
METHANE	84.6	89.0	64.5
ETHANE	3.9	4.3	21.3
PROPANE	2.0	2.2	---
N-BUTANE	0.6	0.8	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	7.3	2.2	13.6
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.21	0.16	0.39
HEATING VALUE*	1035	1110	1035
SPECIFIC GRAVITY	0.652	0.642	0.717

	INDEX 2719 SAMPLE 6184	INDEX 2720 SAMPLE 7493	INDEX 2721 SAMPLE 7941
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	HANKE NO. 1	CURTIS NO. 2A	EARL D. DAVIS NO. 2
LOCATION	SEC. 6, T35S, R36W	SEC. 28, T31S, R39W	SEC. 12, T31S, R35W
OWNER	REPUBLIC NATURAL GAS CO.	KINNEY-COASTAL-KUHN	MOBIL OIL CO.
COMPLETED	04/29/56	01/07/60	10/29/60
SAMPLED	11/19/56	04/19/60	04/25/61
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6263	2689	2564
WELLHEAD PRESSURE,PSIG	1631	405	344
OPEN FLOW, MCFD	9800	NOT GIVEN	7330
COMPONENT, MOLE PCT			
METHANE	86.4	70.5	74.3
ETHANE	4.1	7.0	5.4
PROPANE	1.8	3.8	2.7
N-BUTANE	0.8	1.1	0.7
ISOBUTANE	0.0	0.4	0.5
N-PENTANE	1.3	0.2	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	5.1	16.0	15.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.20	0.40	0.50
HEATING VALUE*	1076	1011	974
SPECIFIC GRAVITY	0.652	0.724	0.694

	INDEX 2722 SAMPLE 12912	INDEX 2723 SAMPLE 12913	INDEX 2724 SAMPLE 12914
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	HUGOTON	HUGOTON	HUGOTON
WELL NAME	NEU NO. 1-9	HOWELL-RINEHART NO. 1-22	HOWELL-RINEHART NO. 3-23
LOCATION	SEC. 9, T33S, R37W	SEC. 22, T32S, R39W	SEC. 23, T32S, R39W
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	05/21/69	04/05/31	11/09/64
SAMPLED	07/21/72	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2581	2415	2362
WELLHEAD PRESSURE,PSIG	258	218	223
OPEN FLOW, MCFD	3916	4556	2806
COMPONENT, MOLE PCT			
METHANE	77.2	73.2	74.5
ETHANE	6.0	6.0	6.1
PROPANE	3.5	3.6	3.6
N-BUTANE	0.9	1.0	0.8
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	11.2	14.9	13.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.36	0.40	0.40
HEATING VALUE*	1042	1007	1005
SPECIFIC GRAVITY	0.692	0.709	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2725 SAMPLE 12916	INDEX 2726 SAMPLE 12928	INDEX 2727 SAMPLE 6732
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	HUGOTON	HUGOTON	PANOMA
WELL NAME	STONE NO. 1-34	HAYWARD NO. 1	GREY NO. 2
LOCATION	SEC. 34, T32S, R39W	SEC. 1, T35S, R39W	SEC. 11, T31S, R38W
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	HUGOTON PRODUCTION CO.
COMPLETED	03/04/31	01/27/47	01/17/57
SAMPLED	07/21/71	07/21/71	07/16/58
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2518	2628	2752
WELLHEAD PRESSURE,PSIG	212	237	405
OPEN FLOW, MCFD	3185	4524	15860
COMPONENT, MOLE PCT			
METHANE	74.4	76.6	51.0
ETHANE	6.1	6.0	8.6
PROPANE	3.6	3.6	4.6
N-BUTANE	0.9	0.9	1.3
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	13.6	11.5	22.0
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.39	0.37	0.50
HEATING VALUE*	1022	1032	991
SPECIFIC GRAVITY	0.704	0.695	0.780

	INDEX 2728 SAMPLE 7311	INDEX 2729 SAMPLE 7429	INDEX 2730 SAMPLE 7845
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	LARRABEE	PERRILL	YOUNGREN NO. 1-35
LOCATION	SEC. 23, T31S, R39W	SEC. 7, T31S, R37W	SEC. 35, T31S, R39W
OWNER	HUGOTON PRODUCTION CO.	PANHANDLE EASTERN PIPELINE C	ANADARKO PRODUCTION CO.
COMPLETED	09/10/59	01/02/59	10/30/60
SAMPLED	12/14/59	03/09/60	02/09/61
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2691	2720	2768
WELLHEAD PRESSURE,PSIG	392	NOT GIVEN	327
OPEN FLOW, MCFD	16535	NOT GIVEN	1550
COMPONENT, MOLE PCT			
METHANE	66.1	56.5	68.7
ETHANE	6.9	9.0	7.0
PROPANE	3.9	5.2	3.9
N-BUTANE	1.0	1.9	1.1
ISOBUTANE	0.5	1.0	0.5
N-PENTANE	0.3	0.9	0.2
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.1	1.0	0.1
NITROGEN	20.0	22.6	17.6
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.40	0.60	0.50
HEATING VALUE*	964	1084	999
SPECIFIC GRAVITY	0.738	0.845	0.734

	INDEX 2731 SAMPLE 7846	INDEX 2732 SAMPLE 12915	INDEX 2733 SAMPLE 13341
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	PANOMA	PANOMA	PANOMA
WELL NAME	SIMMONS B 1-25	MOWELL-RINEHART NO. 2-25	MARGARET PRICHARD NO. 2-A
LOCATION	SEC. 25, T31S, R39W	SEC. 23, T32S, R39W	SEC. 22, T31S, R39W
OWNER	ANADARKO PRODUCTION CO.	PANHANDLE EASTERN PIPELINE C	AMOCO PRODUCTION CO.
COMPLETED	03/23/60	03/09/59	06/22/72
SAMPLED	02/09/61	07/21/71	07/31/72
FORMATION	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2772	2684	2714
WELLHEAD PRESSURE,PSIG	313	237	1316
OPEN FLOW, MCFD	1500	120	8250
COMPONENT, MOLE PCT			
METHANE	68.3	68.9	66.9
ETHANE	7.4	6.5	6.9
PROPANE	4.1	4.2	4.5
N-BUTANE	1.2	1.0	1.1
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.3	0.4	0.5
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	17.2	17.9	18.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.50	0.41	0.49
HEATING VALUE*	1019	1001	1014
SPECIFIC GRAVITY	0.742	0.736	0.752

	INDEX 2734 SAMPLE 13669	INDEX 2735 SAMPLE 17664	INDEX 2736 SAMPLE 9682
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	PANOMA	SKI SE	VOORHEES
WELL NAME	MABELLE SPEAKMAN UNIT NO. 1	BONSALL NO. A-2	PEACHEY NO. 1 UNIT NO. 2
LOCATION	SEC. 2, T32S, R38W	SEC. 22, T34S, R35W	SEC. 24, T34S, R37W
OWNER	MOBIL OIL CORP.	CITIES SERVICE OIL & GAS COR	MOBIL OIL CO.
COMPLETED	02/20/73	10/24/84	09/30/64
SAMPLED	07/24/73	05/07/85	01/08/65
FORMATION	PERM-COUNCIL GROVE	MISS-CHESTER	MISS-ST. LOUIS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2848	6214	6711
WELLHEAD PRESSURE,PSIG	239	1504	1665
OPEN FLOW, MCFD	3880	2420	15500
COMPONENT, MOLE PCT			
METHANE	65.2	84.3	71.0
ETHANE	7.2	5.2	7.5
PROPANE	4.0	3.0	4.4
N-BUTANE	1.1	1.1	1.5
ISOBUTANE	0.6	0.4	0.8
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	20.8	4.6	12.6
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.53	0.19	0.72
HEATING VALUE*	973	1117	1094
SPECIFIC GRAVITY	0.752	0.673	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2737 SAMPLE 9683	INDEX 2738 SAMPLE 7355	INDEX 2739 SAMPLE 7746
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	STEVENS
FIELD	VOORHEES	WALKEMEYER	WALKEMEYER
WELL NAME	PEACHEY NO. 1 UNIT NO. 2	MEGER B NO. 2	WALKEMEYER NO. 1-35
LOCATION	SEC. 24, T34S, R37W	SEC. 26, T33S, R36W	SEC. 35, T33S, R36W
OWNER	MOBIL OIL CO.	NORTHERN NATURAL GAS PROD. C	SMELL OIL CO., ET AL.
COMPLETED	09/30/64	10/16/59	08/25/59
SAMPLED	01/08/65	01/21/60	10/26/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6317	6098	6145
WELLHEAD PRESSURE,PSIG	1562	1540	1625
OPEN FLOW, MCFD	5300	6848	3580
COMPONENT, MOLE PCT			
METHANE	72.9	87.9	88.9
ETHANE	7.6	0.1	4.8
PROPANE	4.0	0.0	2.1
N-BUTANE	1.2	0.0	0.6
ISOBUTANE	0.7	0.0	0.4
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	12.5	11.2	2.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.4
HELIUM	0.72	0.50	0.10
HEATING VALUE*	1054	898	1097
SPECIFIC GRAVITY	0.717	0.601	0.637

	INDEX 2740 SAMPLE 15338	INDEX 2741 SAMPLE 15837	INDEX 2742 SAMPLE 4610
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STEVENS	STEVENS	SUMNER
FIELD	WALKEMEYER N	WILDCAT	ANSON
WELL NAME	LEHERT UNIT NO. 2	MOLT NO. 1	BATES NO. 1
LOCATION	SEC. 4, T33S, R36W	SEC. 20, T32S, R37W	SEC. 26, T30S, R2W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	ANDERSON-PRICHARD OIL CORP.
COMPLETED	12/28/77	04/09/79	08/19/48
SAMPLED	08/28/78	11/15/79	11/04/48
FORMATION	PENN-MORROW	PENN-MORROW	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	375
DEPTH, FEET	6044	5639	3745
WELLHEAD PRESSURE,PSIG	1076	1253	1200
OPEN FLOW, MCFD	3300	18229	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.1	82.2	16.1
ETHANE	4.6	4.7	36.4
PROPANE	2.5	2.8	---
N-BUTANE	0.8	0.9	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	2.4	7.6	46.1
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.15	0.28	1.07
HEATING VALUE*	1116	1069	815
SPECIFIC GRAVITY	0.649	0.673	0.923

	INDEX 2743 SAMPLE 9772	INDEX 2744 SAMPLE 4955	INDEX 2745 SAMPLE 12699
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	CORASTONE	FALL CREEK	KERSCHEN
WELL NAME	NUSZ NO. 1	HOBBISIEFKIN NO. 1	KERSCHEN NO. 6
LOCATION	SEC. 23, T31S, R3W	SEC. 31, T35S, R3W	SEC. 18, T31S, R3W
OWNER	BEARDMORE DRILLING CO.	TEXAS CO.	RAYMOND OIL CO., INC.
COMPLETED	12/19/64	08/31/50	07/30/70
SAMPLED	02/27/65	11/10/50	03/03/71
FORMATION	PENN-WHITE CLOUD	ORDO-SIMPSON	PENN---
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2061	4746	2000
WELLHEAD PRESSURE,PSIG	905	390	1025
OPEN FLOW, MCFD	13	NOT GIVEN	1650
COMPONENT, MOLE PCT			
METHANE	83.8	48.0	75.1
ETHANE	4.7	19.6	4.2
PROPANE	2.9	16.6	2.5
N-BUTANE	0.8	4.1	0.7
ISOBUTANE	0.4	1.1	0.7
N-PENTANE	0.2	0.8	0.4
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	6.8	8.4	15.5
OXYGEN	TRACE	0.3	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.4	TRACE
HELIUM	0.26	0.08	0.55
HEATING VALUE*	1052	1508	979
SPECIFIC GRAVITY	0.659	0.966	0.697

	INDEX 2746 SAMPLE 1552	INDEX 2747 SAMPLE 1553	INDEX 2748 SAMPLE 1677
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	LATTA	LATTA	LATTA
WELL NAME	LATTA NO. 2	LOVE NO. 1	LOVE NO. 2
LOCATION	SEC. 9, T30S, R2W	SEC. 9, T30S, R2W	SEC. 9, T30S, R2W
OWNER	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.
COMPLETED	11/--/27	11/--/27	--/--/28
SAMPLED	12/15/27	12/15/27	09/18/28
FORMATION	-LIME	-LIME	-STRAY
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2010	2011	2432
WELLHEAD PRESSURE,PSIG	700	800	110
OPEN FLOW, MCFD	8000	5250	3100
COMPONENT, MOLE PCT			
METHANE	36.9	71.4	41.2
ETHANE	15.3	18.2	18.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	46.2	9.3	39.2
OXYGEN	0.5	0.6	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	1.05	0.34	0.77
HEATING VALUE*	648	1049	740
SPECIFIC GRAVITY	0.820	0.587	0.807

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2749 SAMPLE 15725	INDEX 2750 SAMPLE 12599	INDEX 2751 SAMPLE 12600
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	LATTA SW	LOVE-THREE	LOVE-THREE
WELL NAME	REIN BECK NO. 1	RUTH NO. 1	RUTH NO. 1
LOCATION	SEC. 20, T30S, R2W	SEC. 13, T32S, R4W	SEC. 13, T32S, R4W
OWNER	SANDERS OIL CO.	OASIS PETROLEUM, INC.	OASIS PETROLEUM, INC.
COMPLETED	--/--/00	09/15/70	09/15/70
SAMPLED	08/08/79	12/17/70	12/17/70
FORMATION	PENN-STALNAKER	PENN-STALNAKER	PENN-WHITE CLOUD
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2871	2978	2042
WELLHEAD PRESSURE,PSIG	960	1125	950
OPEN FLOW, MCFD	5000	7200	1720
COMPONENT, MOLE PCT			
METHANE	85.1	86.8	85.9
ETHANE	4.8	4.7	4.6
PROPANE	2.6	2.5	2.5
N-BUTANE	0.9	0.7	0.8
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	5.0	3.9	4.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.16	0.19
HEATING VALUE*	1098	1101	1093
SPECIFIC GRAVITY	0.663	0.653	0.657

	INDEX 2752 SAMPLE 12601	INDEX 2753 SAMPLE 1750	INDEX 2754 SAMPLE 14156
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	LOVE-THREE	MURPHY	MURPHY
WELL NAME	RUTH NO. 1	S. W. MORTON NO. 1	STALNAKER NO. 1
LOCATION	SEC. 13, T32S, R4W	SEC. 17, T35S, R2E	SEC. 11, T33S, R2E
OWNER	OASIS PETROLEUM, INC.	TIDAL OIL CO.	MERNDON DRILLING CO.
COMPLETED	10/14/70	02/19/29	04/11/74
SAMPLED	12/17/70	04/22/29	09/25/74
FORMATION	MISS-	MISS---	PENN-LAYTON
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3939	3281	2775
WELLHEAD PRESSURE,PSIG	1400	725	920
OPEN FLOW, MCFD	2700	4252	3260
COMPONENT, MOLE PCT			
METHANE	66.7	57.0	70.3
ETHANE	6.8	25.0	5.6
PROPANE	3.6	---	3.0
N-BUTANE	1.0	---	0.8
ISOBUTANE	0.6	---	0.5
N-PENTANE	0.3	---	0.2
ISOPENTANE	0.2	---	0.3
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	19.9	16.8	18.7
OXYGEN	0.0	0.3	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.60	0.67	0.30
HEATING VALUE*	980	1025	964
SPECIFIC GRAVITY	0.746	0.748	0.723

	INDEX 2755 SAMPLE 1059	INDEX 2756 SAMPLE 1186	INDEX 2757 SAMPLE 10293
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	PADGETT	PADGETT	PADGETT NW
WELL NAME	NO. 1	PADGETT NO. 1	TURNER NO. 1
LOCATION	SEC. 23, T34S, R2E	SEC. 23, T34S, R2E	SEC. 30, T34S, R2E
OWNER	GYPSY OIL CO.	MARLAND OIL CO.	CARTER & NANDEL CO.
COMPLETED	04/--/25	12/--/24	--/--/00
SAMPLED	05/14/25	12/09/25	11/19/65
FORMATION	-SAND	PENN-BURBANK	PENN-CATTLEMAN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	3445	3455	3428
WELLHEAD PRESSURE,PSIG	1250	1200	1380
OPEN FLOW, MCFD	40600	30000	6000
COMPONENT, MOLE PCT			
METHANE	59.9	61.5	52.9
ETHANE	23.6	21.4	7.6
PROPANE	---	---	4.7
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.8
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	15.5	15.4	31.8
OXYGEN	0.2	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.6	0.2
HELIUM	0.57	0.57	0.82
HEATING VALUE*	1030	1006	861
SPECIFIC GRAVITY	0.734	0.729	0.799

	INDEX 2758 SAMPLE 15627	INDEX 2759 SAMPLE 15911	INDEX 2760 SAMPLE 12481
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SUMNER	SUMNER	SUMNER
FIELD	STUHLSATZ	STUHLSATZ	YANNELL NE
WELL NAME	HIRTH NO. 1	JORDAN TRUST NO. 1	PHILLIPS NO. 1
LOCATION	SEC. 21, T30S, R2W	SEC. 29, T30S, R2W	SEC. 26, T32S, R4W
OWNER	TEXAS OIL & GAS CORP.	STELBAR OIL CORP.	ATLAS MINERALS
COMPLETED	11/11/78	05/18/79	--/--/00
SAMPLED	05/29/79	02/01/80	09/03/70
FORMATION	PENN-STALNAKER	PENN-STALNAKER	MISS-CHAT
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	2830	2812	3948
WELLHEAD PRESSURE,PSIG	938	991	1215
OPEN FLOW, MCFD	NOT GIVEN	4451	800
COMPONENT, MOLE PCT			
METHANE	85.3	83.5	67.3
ETHANE	4.8	4.8	6.6
PROPANE	2.6	2.5	3.6
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.4	0.3	0.9
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	5.2	6.5	19.9
OXYGEN	0.0	0.5	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.20	0.20	0.61
HEATING VALUE*	1085	1069	960
SPECIFIC GRAVITY	0.655	0.666	0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2761 SAMPLE 3626	INDEX 2762 SAMPLE 6159	INDEX 2763 SAMPLE 3836
STATE	KANSAS	KANSAS	KANSAS
COUNTY	WABAUNSEE	WALLACE	WALLACE
FIELD	ALMA	SEXSON	WILDCAT
WELL NAME	DAGENHART NO. 1	SEXSON NO. 1	GLAD & BRACK NO. 1
LOCATION	SEC. 9, T12S, R10E	SEC. 19, T13S, R42W	SEC. 19, T13S, R42W
OWNER	ALVA B. OATBOUT	SKELLY OIL CO.	SINCLAIR-PRAIRIE OIL CO.
COMPLETED	02/01/43	08/18/56	--/--/00
SAMPLED	03/14/43	10/09/56	05/--/44
FORMATION	NOT GIVEN	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	360	360
DEPTH, FEET	279	5008	2460
WELLHEAD PRESSURE,PSIG	90	911	250
OPEN FLOW, MCFD	NOT GIVEN	14034	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	8.7	31.0	0.0
ETHANE	2.3	2.9	0.0
PROPANE	---	2.3	0.0
N-BUTANE	---	0.5	0.0
ISOBUTANE	---	0.4	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.3	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	83.3	59.2	99.6
OXYGEN	1.2	TRACE	0.2
ARGON	---	0.1	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.0	0.5	0.1
HELIUM	3.48	2.26	0.08
HEATING VALUE*	129	491	0
SPECIFIC GRAVITY	0.911	0.862	0.967

	INDEX 2764 SAMPLE 199	INDEX 2765 SAMPLE 1809	INDEX 2766 SAMPLE 3181
STATE	KANSAS	KANSAS	KANSAS
COUNTY	WILSON	WILSON	WOODSON
FIELD	BUXTON	NEODES CREEK	IOLA W
WELL NAME	LANTRY NO. 2	HYDE NO. 2	PERCELL NO. 2
LOCATION	SEC. 25, T30S, R13E	SEC. 31, T29S, R16E	SEC. 3, T25S, R17E
OWNER	C. C. ROTH	PRAIRIE OIL & GAS CO.	OKLAHOMA NATURAL GAS CO.
COMPLETED	--/--/00	09/08/29	03/23/23
SAMPLED	04/02/20	07/07/29	03/23/42
FORMATION	-STRAY	MISS-	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	365	365	365
DEPTH, FEET	316	671	900
WELLHEAD PRESSURE,PSIG	125	200	290
OPEN FLOW, MCFD	NOT GIVEN	92	9000
COMPONENT, MOLE PCT			
METHANE	75.1	94.4	93.6
ETHANE	0.0	0.3	1.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	22.8	4.5	3.3
OXYGEN	1.0	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.8	0.8
HELIUM	0.91	0.05	0.11
HEATING VALUE*	761	962	980
SPECIFIC GRAVITY	0.652	0.585	0.587

	INDEX 2767 SAMPLE 2583	INDEX 2768 SAMPLE 7621	INDEX 2769 SAMPLE 17048
STATE	KANSAS	KENTUCKY	KENTUCKY
COUNTY	WOODSON	BARREN	BELL
FIELD	WINTERSCHEID	BLACK RIDGE	GREASY BRUSH
WELL NAME	SHAFFER NO. 7	GLASS FARM NO. 2	GREASY BRUSH NO. 8
LOCATION	SEC. 31, T23S, R14E	3 MI. NW GLASGOW, KY.	CARTER COORDINATE 12-CN-68E
OWNER	THETA OIL CO.	MID-CONTINENT OIL & GAS CORP	WISER OIL CO.
COMPLETED	--/--/32	06/06/60	08/03/81
SAMPLED	--/--/00	07/25/60	09/02/83
FORMATION	NOT GIVEN	DEVO-LAUREL	MISS-MAXTON
GEOLOGIC PROVINCE CODE	365	300	160
DEPTH, FEET	NOT GIVEN	380	1972
WELLHEAD PRESSURE,PSIG	NOT GIVEN	85	430
OPEN FLOW, MCFD	NOT GIVEN	400	3000
COMPONENT, MOLE PCT			
METHANE	82.5	68.3	82.1
ETHANE	6.3	11.9	5.8
PROPANE	---	7.9	3.4
N-BUTANE	---	1.8	1.1
ISOBUTANE	---	0.6	0.3
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.5	0.4
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.1
NITROGEN	9.4	7.1	5.5
OXYGEN	0.4	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.2	0.4
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	1.0	0.1
HELIUM	0.95	0.20	0.43
HEATING VALUE*	959	931	1107
SPECIFIC GRAVITY	0.626	0.784	0.674

	INDEX 2770 SAMPLE 16420	INDEX 2771 SAMPLE 14310	INDEX 2772 SAMPLE 9275
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	BELL	BELL	BOYD
FIELD	HATFIELD GAP	WILDCAT	ASHLAND
WELL NAME	THACKER COAL NO. 1	AMERICAN ASSOCIATION NO. 1	NO. K-106
LOCATION	CARTER COORDINATE 21-B-67	CARTER COORDINATE 5-B-70	W-K106
OWNER	WISER OIL CO.	SAN JUAN OIL CO.	INLAND GAS CO., INC.
COMPLETED	11/04/79	11/08/74	05/28/63
SAMPLED	01/29/82	04/04/75	04/07/64
FORMATION	MISS-BIG LIME	MISS-BIG LIME	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2930	2928	2931
WELLHEAD PRESSURE,PSIG	735	1050	910
OPEN FLOW, MCFD	1374	11000	926
COMPONENT, MOLE PCT			
METHANE	79.1	98.1	94.8
ETHANE	9.7	0.2	1.8
PROPANE	2.7	0.1	0.3
N-BUTANE	0.6	0.0	0.1
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	7.1	1.0	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.6	TRACE
HELIUM	0.09	0.05	0.14
HEATING VALUE*	1087	1000	1013
SPECIFIC GRAVITY	0.675	0.567	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2773 SAMPLE 10064	INDEX 2774 SAMPLE 1033	INDEX 2775 SAMPLE 8654
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	BOYD	BOYD	CHRISTIAN
FIELD	ASHLAND	SUMMIT	PENNYRILE
WELL NAME	WADSWORTH NO. K-30	NO. 14	NO. 7
LOCATION	KEYES CREEK	NOT GIVEN	NOT GIVEN
OWNER	INLAND GAS CO., INC.	AMERICAN ROLLING MILL CO.	RYAN OIL CO.
COMPLETED	06/01/27	04/01/25	08/--/62
SAMPLED	08/13/65	04/23/25	08/23/62
FORMATION	DEVO-	MISS-BEREA	MISS-PAINT CREEK
GEOLOGIC PROVINCE CODE	160	160	315
DEPTH, FEET	2157	1330	1409
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	510
OPEN FLOW, MCFD	NOT GIVEN	250	2000
COMPONENT, MOLE PCT			
METHANE	86.2	81.0	97.5
ETHANE	5.9	13.9	0.4
PROPANE	2.4	---	0.1
N-BUTANE	0.5	---	TRACE
ISOBUTANE	0.2	---	TRACE
N-PENTANE	TRACE	---	TRACE
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	TRACE	---	0.0
NITROGEN	4.1	4.7	1.7
OXYGEN	0.2	0.1	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.3	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.14	0.14	0.10
HEATING VALUE*	1070	1070	1002
SPECIFIC GRAVITY	0.636	0.646	0.565

	INDEX 2776 SAMPLE 3505	INDEX 2777 SAMPLE 3511	INDEX 2778 SAMPLE 3508
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	CLAY	CLAY	CLAY
FIELD	BURNING SPRINGS	BURNING SPRINGS	ONEIDA
WELL NAME	RAWLINGS	J. M. CLARK NO. 3	HENRY B. HENSLEY NO. 3
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.
COMPLETED	--/--/00	--/--/00	--/--/80
SAMPLED	06/04/42	06/04/42	06/04/42
FORMATION	MISS-BIG LIME	MISS-BIG LIME	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	200	200	200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.4	77.4	71.4
ETHANE	27.7	20.5	26.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.5	1.9	1.0
OXYGEN	0.2	0.4	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.18	0.09	0.08
HEATING VALUE*	1153	1153	1202
SPECIFIC GRAVITY	0.703	0.665	0.696

	INDEX 2779 SAMPLE 3509	INDEX 2780 SAMPLE 3517	INDEX 2781 SAMPLE 16899
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	CLAY	CLAY	CLAY
FIELD	ONEIDA	ONEIDA	WILDCAT
WELL NAME	W. J. LEDFORD NO. 1	W. M. RAWLINGS NO. 1	HERBERT BYRD ET AL. NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	CARTER COORDINATE 10-J-70
OWNER	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.	TENNESSEE LAND & EXPL. CO.
COMPLETED	--/--/00	--/--/00	11/01/81
SAMPLED	06/04/42	06/03/42	04/20/83
FORMATION	DEVO-CORNIFEROUS	MISS-BIG LIME	ORDO-KNOX
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3570
WELLHEAD PRESSURE,PSIG	200	NOT GIVEN	1140
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	250
COMPONENT, MOLE PCT			
METHANE	71.7	71.8	85.5
ETHANE	25.8	25.9	5.4
PROPANE	---	---	2.1
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	1.7	1.7	4.4
OXYGEN	0.5	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.3
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.14	0.13	0.15
HEATING VALUE*	1189	1191	1095
SPECIFIC GRAVITY	0.693	0.692	0.654

	INDEX 2782 SAMPLE 16900	INDEX 2783 SAMPLE 16901	INDEX 2784 SAMPLE 17429
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	CLAY	CLAY	DAVIESS
FIELD	WILDCAT	WILDCAT	OWENSBORO W
WELL NAME	FLOYD FROST ET AL. NO. 1	HERBERT BYRD ET AL. NO. 1	DONALD FISHER NO. 1
LOCATION	CARTER COORDINATE 1-J-70	CARTER COORDINATE 10-J-70	CARTER COORDINATE 7-O-29
OWNER	TENNESSEE LAND & EXPL. CO.	TENNESSEE LAND & EXPL. CO.	JAMES S. COLLINS
COMPLETED	01/01/83	11/01/81	11/--/80
SAMPLED	04/20/83	04/20/83	09/22/84
FORMATION	ORDO-TRENTON	MISS-BIG LIME	MISS-WALTERSBURG
GEOLOGIC PROVINCE CODE	160	160	315
DEPTH, FEET	2623	850	1170
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	10
OPEN FLOW, MCFD	NOT GIVEN	200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.6	85.2	4.2
ETHANE	7.6	5.7	0.1
PROPANE	2.6	2.2	TRACE
N-BUTANE	0.7	0.7	0.0
ISOBUTANE	0.2	0.4	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.3	0.4	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	3.3	4.3	89.9
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	1.1
HYDROGEN	0.3	0.3	4.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.15	0.14	0.04
HEATING VALUE*	1118	1087	59
SPECIFIC GRAVITY	0.656	0.648	0.913

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2785 SAMPLE 4279		INDEX 2786 SAMPLE 8658		INDEX 2787 SAMPLE 9882	
STATE	KENTUCKY		KENTUCKY		KENTUCKY	
COUNTY	DAVIESS		ESTILL		FLOYD	
FIELD	STANLEY		FLYNN		MUD CREEK	
WELL NAME	PRESLEY SAUER NO. 1		NO. 1		WM. HAMILTON NO. 6835	
LOCATION	SEC. 1, TP., R27		NOT GIVEN		CARTER COORDINATE 7-K-83	
OWNER	SOHIO PETROLEUM CO.		LOUISA FLYNN		KENTUCKY WEST VIRGINIA GAS C	
COMPLETED	09/01/45		06/01/54		01/18/65	
SAMPLED	01/09/47		08/27/62		04/30/65	
FORMATION	MISS-		DEVO-CORNIFEROUS		PENN-SALT SAND & MISS-MAXTON	
GEOLOGIC PROVINCE CODE	315		160		160	
DEPTH, FEET	1120		360		1838	
WELLHEAD PRESSURE,PSIG	534		86		440	
OPEN FLOW, MCFD	591		1200		641	
COMPONENT, MOLE PCT						
METHANE	98.8		81.8		83.9	
ETHANE	0.0		0.8		1.6	
PROPANE	---		1.9		3.4	
N-BUTANE	---		1.5		0.8	
ISOBUTANE	---		0.3		0.4	
N-PENTANE	---		0.4		0.1	
ISOPENTANE	---		0.2		0.2	
CYCLOPENTANE	---		0.1		TRACE	
HEXANES PLUS	---		0.2		0.1	
NITROGEN	0.0		0.0		3.1	
OXYGEN	0.3		TRACE		TRACE	
ARGON	---		0.0		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE	---		TRACE		0.0	
CARBON DIOXIDE	0.9		12.7		0.1	
HELIUM	0.04		0.04		0.23	
HEATING VALUE*	1011		993		1133	
SPECIFIC GRAVITY	0.565		0.746		0.665	

	INDEX 2788 SAMPLE 3492		INDEX 2789 SAMPLE 3503		INDEX 2790 SAMPLE 11641	
STATE	KENTUCKY		KENTUCKY		KENTUCKY	
COUNTY	FLOYD		FLOYD		GARRARD	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	W. B. STUMBO		ALICE ENDICOTT		LEONARD KIRBY NO. 1	
LOCATION	12 1/2 MI. S OF PRESTONBURG		6 MI. SE OF PRESTONBURG		CARTER COORDINATE 8-0-59	
OWNER	KENTUCKY WEST VIRGINIA GAS C		KENTUCKY WEST VIRGINIA GAS C		TEXACO INC.	
COMPLETED	06/15/29		11/12/31		10/29/68	
SAMPLED	06/02/42		06/03/42		09/--/68	
FORMATION	DEVO-SHALE		DEVO-SHALE		NOT GIVEN	
GEOLOGIC PROVINCE CODE	160		160		300	
DEPTH, FEET	1940		1915		4546	
WELLHEAD PRESSURE,PSIG	385		420		NOT GIVEN	
OPEN FLOW, MCFD	302		990		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	67.7		74.5		14.1	
ETHANE	31.6		24.6		2.0	
PROPANE	---		---		0.5	
N-BUTANE	---		---		0.4	
ISOBUTANE	---		---		0.0	
N-PENTANE	---		---		0.2	
ISOPENTANE	---		---		0.0	
CYCLOPENTANE	---		---		0.1	
HEXANES PLUS	---		---		0.2	
NITROGEN	0.1		0.3		80.3	
OXYGEN	0.4		0.3		0.1	
ARGON	---		---		0.4	
HYDROGEN	---		---		0.1	
HYDROGEN SULFIDE	---		---		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.06		0.06		1.69	
HEATING VALUE*	1252		1196		228	
SPECIFIC GRAVITY	0.714		0.681		0.916	

	INDEX 2791 SAMPLE 11642		INDEX 2792 SAMPLE 11643		INDEX 2793 SAMPLE 11644	
STATE	KENTUCKY		KENTUCKY		KENTUCKY	
COUNTY	GARRARD		GARRARD		GARRARD	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	LEONARD KIRBY NO. 1		LEONARD KIRBY NO. 1		LEONARD KIRBY NO. 1	
LOCATION	CARTER COORDINATE 8-0-59		CARTER COORDINATE 8-0-59		CARTER COORDINATE 8-0-59	
OWNER	TEXACO INC.		TEXACO INC.		TEXACO INC.	
COMPLETED	10/29/68		10/29/68		10/29/68	
SAMPLED	09/--/68		09/--/68		09/--/68	
FORMATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	300		300		300	
DEPTH, FEET	4546		4546		4574	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	14.1		13.6		14.5	
ETHANE	2.0		2.2		2.2	
PROPANE	0.6		0.7		0.6	
N-BUTANE	0.3		0.3		0.3	
ISOBUTANE	0.0		TRACE		0.0	
N-PENTANE	0.3		0.2		0.4	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	80.0		80.9		79.3	
OXYGEN	0.1		0.1		0.1	
ARGON	0.9		0.5		0.4	
HYDROGEN	0.1		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		TRACE	
HELIUM	1.92		1.24		1.81	
HEATING VALUE*	228		224		240	
SPECIFIC GRAVITY	0.911		0.920		0.911	

	INDEX 2794 SAMPLE 13286		INDEX 2795 SAMPLE 3522		INDEX 2796 SAMPLE 4113	
STATE	KENTUCKY		KENTUCKY		KENTUCKY	
COUNTY	GARRARD		HART		HENDERSON	
FIELD	WILDCAT		MAGNOLIA		DIXIE	
WELL NAME	ANDREW BURDETT UNIT NO. 1		ALONZO DAVIS NO. 2		C. T. ARNETT NO. 1	
LOCATION	3 MI. W OF LANCASTER		NOT GIVEN		4 MI. S OF CORYDON	
OWNER	PETER WIDNER		CUMBERLAND PETROLEUM CO.		KENTUCKY NATURAL GAS CORP.	
COMPLETED	06/27/72		--/--/37		12/31/45	
SAMPLED	06/27/72		05/21/42		09/24/46	
FORMATION	CAMB-ROME		DEVO-CORNIFEROUS		PENN-	
GEOLOGIC PROVINCE CODE	300		300		315	
DEPTH, FEET	4450		530		1042	
WELLHEAD PRESSURE,PSIG	1300		180		452	
OPEN FLOW, MCFD	500		2500		1500	
COMPONENT, MOLE PCT						
METHANE	19.3		81.3		95.3	
ETHANE	4.5		4.1		---	
PROPANE	0.7		---		---	
N-BUTANE	0.5		---		---	
ISOBUTANE	0.3		---		---	
N-PENTANE	0.2		---		---	
ISOPENTANE	0.1		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.1		---		---	
NITROGEN	70.7		13.7		4.0	
OXYGEN	0.0		0.3		0.3	
ARGON	0.5		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	1.8		0.2		0.2	
HELIUM	1.32		0.35		0.16	
HEATING VALUE*	339		897		965	
SPECIFIC GRAVITY	0.912		0.633		0.574	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2797 SAMPLE 13294	INDEX 2798 SAMPLE 10032	INDEX 2799 SAMPLE 11637
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	HOPKINS	HOPKINS	HOPKINS
FIELD	DIAMOND E	NEW HOPE	SISK SCHOOL
WELL NAME	HARNED NO. 1	JOSEPH A. KANE NO. 1	WEST KENTUCKY COAL NO. 2
LOCATION	CARTER COORDINATE 12-J-25	CARTER COORDINATE 5-J-21	CARTER COORDINATE 12-I-24
OWNER	AMES OIL & GAS	L & M DRILLING CO.	TEXAS GAS EXPLORATION CORP.
COMPLETED	08/12/71	06/18/65	12/05/67
SAMPLED	07/03/72	08/02/65	--/--/00
FORMATION	MISS-BETHEL	MISS-HARDINSBURG	MISS-BETHEL
GEOLOGIC PROVINCE CODE	315	315	315
DEPTH, FEET	2100	1529	2271
WELLHEAD PRESSURE,PSIG	1000	710	NOT GIVEN
OPEN FLOW, MCFD	5000	7800	4200
COMPONENT, MOLE PCT			
METHANE	97.5	94.8	96.6
ETHANE	0.4	0.6	2.0
PROPANE	TRACE	0.4	0.5
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	1.2	3.8	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	TRACE	0.3
HELIUM	0.06	0.29	0.04
HEATING VALUE*	995	985	1027
SPECIFIC GRAVITY	0.567	0.577	0.575

	INDEX 2800 SAMPLE 13470	INDEX 2801 SAMPLE 16721	INDEX 2802 SAMPLE 3489
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	HOPKINS	HOPKINS	JACKSON
FIELD	ST. CHARLES S	WHITE PLAINS	BRADSHAW AREA
WELL NAME	GANNON NO. 1	HUNT-CRICK NO. 1	IKE ADDISSON NO. 1
LOCATION	CARTER COORDINATE 20-I-24	CARTER COORDINATE 4-H-26	NOT GIVEN
OWNER	HAR-KEN OIL CO.	HAR-KEN OIL CO.	THOMAS WHITTMER ESTATE
COMPLETED	05/17/71	04/26/80	--/--/37
SAMPLED	11/08/72	12/01/82	05/30/42
FORMATION	MISS-TAR SPRINGS	MISS-TAR SPRINGS	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	315	315	160
DEPTH, FEET	1493	1222	975
WELLHEAD PRESSURE,PSIG	NOT GIVEN	520	142
OPEN FLOW, MCFD	3000	2480	350
COMPONENT, MOLE PCT			
METHANE	84.9	91.0	81.2
ETHANE	1.8	0.1	12.9
PROPANE	2.0	TRACE	---
N-BUTANE	0.7	0.0	---
ISOBUTANE	0.4	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	9.5	8.2	5.2
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.24	0.26	0.15
HEATING VALUE*	995	924	1054
SPECIFIC GRAVITY	0.644	0.588	0.642

	INDEX 2803 SAMPLE 3488	INDEX 2804 SAMPLE 4530	INDEX 2805 SAMPLE 10062
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	JACKSON	JACKSON	JOHNSON
FIELD	GRAY HAWK AREA	PUNCHEON	JOHNSON COUNTY
WELL NAME	ROBERT WELCH NO. 1	NO. 858	MATTIE DAVIS NO. 272
LOCATION	NOT GIVEN	NOT GIVEN	ROCKHOUSE CREEK
OWNER	THOMAS WHITTMER ESTATE	KENTUCKY WEST VIRGINIA GAS C	INLAND GAS CO., INC.
COMPLETED	--/--/37	09/04/45	09/13/45
SAMPLED	05/30/42	06/30/48	08/12/65
FORMATION	DEVO-CORNIFEROUS	DEVO-BLACK SHALE	SILU-BIG SIX
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1025	2985	2386
WELLHEAD PRESSURE,PSIG	142	345	NOT GIVEN
OPEN FLOW, MCFD	1000	146	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.1	70.8	89.3
ETHANE	16.4	28.5	2.5
PROPANE	---	---	0.8
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.9	1.2	5.8
OXYGEN	0.4	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.7
HELIUM	0.12	0.03	0.26
HEATING VALUE*	1115	1220	990
SPECIFIC GRAVITY	0.646	0.703	0.613

	INDEX 2806 SAMPLE 10063	INDEX 2807 SAMPLE 3506	INDEX 2808 SAMPLE 9933
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	JOHNSON	JOHNSON	KNOTT
FIELD	JOHNSON COUNTY	PAINTSVILLE	CANEY
WELL NAME	ELSIE SPRADLIN	TOPSY RATLIFF	ALEX FRANCIS NO. 6858
LOCATION	ROCKHOUSE CREEK	NOT GIVEN	CARTER COORDINATE 13-K-78
OWNER	CRATE RICE, TRUSTEE	OLIVER JENKINS	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	09/15/43	03/--/42	02/12/65
SAMPLED	08/12/65	06/03/42	06/15/65
FORMATION	MISS-BIG INJUN	SILU-BIG SIX	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	726	2368	1704
WELLHEAD PRESSURE,PSIG	NOT GIVEN	640	560
OPEN FLOW, MCFD	NOT GIVEN	581	424
COMPONENT, MOLE PCT			
METHANE	79.2	88.4	85.8
ETHANE	8.5	5.2	5.1
PROPANE	4.1	---	2.6
N-BUTANE	1.1	---	0.8
ISOBUTANE	0.5	---	0.3
N-PENTANE	0.5	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	5.1	3.9	5.2
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.4	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	2.0	0.1
HELIUM	0.12	0.18	0.40
HEATING VALUE*	1147	989	1075
SPECIFIC GRAVITY	0.698	0.617	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2809 SAMPLE 3490	INDEX 2810 SAMPLE 3491	INDEX 2811 SAMPLE 4529
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	KNOTT	KNOTT	KNOTT
FIELD	NOT GIVEN	NOT GIVEN	PUNCHEON
WELL NAME	J. G. SUTTON	J. G. SUTTON	NO. 888
LOCATION	9 MI. NE OF HINDMAN	9 MI. NE OF HINDMAN	NOT GIVEN
OWNER	P. E. DUFENDACH	P. E. DUFENDACH	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	02/24/42	12/21/41	03/19/48
SAMPLED	06/02/42	06/02/42	--/--/00
FORMATION	DEVO-SHALE	MISS-BIG LIME	DEVO-BLACK SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1900	1349	2567
WELLHEAD PRESSURE,PSIG	NOT GIVEN	225	410
OPEN FLOW, MCFD	94	1905	63
COMPONENT, MOLE PCT			
METHANE	72.6	62.6	78.3
ETHANE	26.7	36.2	21.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.5	0.1
OXYGEN	0.4	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.05	0.06	0.03
HEATING VALUE*	1214	1283	1177
SPECIFIC GRAVITY	0.690	0.739	0.662

	INDEX 2812 SAMPLE 11658	INDEX 2813 SAMPLE 13632	INDEX 2814 SAMPLE 3513
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	KNOX	KNOX	KNOX
FIELD	CAMPBELL CHURCH N	GRAY	HIMYAR
WELL NAME	R. E. VIALL NO. 2	MEDDLIN NO. 1	ELIZ. GREY NO. 1
LOCATION	CARTER COORDINATE 19-F-67	CARTER COORDINATE 11-F-66	NOT GIVEN
OWNER	PETROLEUM EXPLORATION, INC.	WISER OIL CO.	PETROLEUM EXPLORATION CORP.
COMPLETED	01/15/68	04/04/72	--/--/00
SAMPLED	10/01/68	06/20/73	06/05/42
FORMATION	MISS-BIG LIME & WAVERLY	MISS-BIG LIME	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1599	1365	NOT GIVEN
WELLHEAD PRESSURE,PSIG	300	285	300
OPEN FLOW, MCFD	4290	32000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	80.0	75.4
ETHANE	10.8	11.8	23.4
PROPANE	3.9	4.6	---
N-BUTANE	0.8	0.8	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	8.5	1.7	0.5
OXYGEN	1.5	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.5	0.5	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.08	0.08	0.11
HEATING VALUE*	1087	1186	1183
SPECIFIC GRAVITY	0.710	0.682	0.676

	INDEX 2815 SAMPLE 3514	INDEX 2816 SAMPLE 3512	INDEX 2817 SAMPLE 10427
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	KNOX	KNOX	LAUREL
FIELD	INDIAN CREEK AREA	KNOX COUNTY	RACCOON MOUNTAIN
WELL NAME	NORTH GELLICO NO. 1	PURSIFUL COAL CO. NO. 1	LUCAS NO. 1
LOCATION	NOT GIVEN	HOG PEN HOLLOW	NOT GIVEN
OWNER	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.	O. O. ROBERTS, ET AL.
COMPLETED	--/--/00	--/--/00	11/29/55
SAMPLED	06/05/42	06/05/42	02/23/66
FORMATION	MISS-BIG LIME	DEVO-CORNIFEROUS	CAMO-KNOX
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3462
WELLHEAD PRESSURE,PSIG	NOT GIVEN	320	800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	488
COMPONENT, MOLE PCT			
METHANE	70.0	76.0	81.4
ETHANE	28.9	22.6	5.5
PROPANE	---	---	3.0
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	0.3	0.7	7.8
OXYGEN	0.4	0.4	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.18	0.14	0.20
HEATING VALUE*	1227	1175	1076
SPECIFIC GRAVITY	0.702	0.673	0.678

	INDEX 2818 SAMPLE 7679	INDEX 2819 SAMPLE 10065	INDEX 2820 SAMPLE 10067
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LAWRENCE	LAWRENCE	LAWRENCE
FIELD	BIG SANDY	BLEVINS	BLEVINS
WELL NAME	MARTIN L. MOORE NO. 1124	CORDELL, GARTIN ET AL.	CAROLINE CORDELL
LOCATION	NOT GIVEN	BRUSHY FORK	BRUSHY CREEK
OWNER	KENTUCKY WEST VIRGINIA GAS C	CREST OIL CO.	CREST OIL CO.
COMPLETED	07/01/60	01/01/60	06/06/61
SAMPLED	05/08/62	08/12/65	08/12/65
FORMATION	DEVO-CORNIFEROUS L	MISS-BEREA	SILU-BIG SIX
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2698	1100	2635
WELLHEAD PRESSURE,PSIG	350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	273	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.6	81.1	80.6
ETHANE	5.3	6.4	7.8
PROPANE	1.1	3.1	3.5
N-BUTANE	0.3	0.8	0.8
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.2	7.1	6.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.20	0.18	0.20
HEATING VALUE*	999	1077	1098
SPECIFIC GRAVITY	0.630	0.673	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2821 SAMPLE 10046	INDEX 2822 SAMPLE 10048	INDEX 2823 SAMPLE 10162
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LAWRENCE	LAWRENCE	LAWRENCE
FIELD	LITTLE BLAINE	LITTLE BLAINE	LITTLE BLAINE
WELL NAME	NO. 1107	OLIVER SAUL NO. 1116	STELLA MOORE NO. 1213
LOCATION	NOT GIVEN	LITTLE BLAINE CREEK	LITTLE BLAINE CREEK
OWNER	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	12/12/58	02/02/60	01/22/63
SAMPLED	08/03/65	08/03/65	09/23/65
FORMATION	MISS-BEREA	DEVO-	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1148	1831	2621
WELLHEAD PRESSURE,PSIG	400	420	700
OPEN FLOW, MCFD	292	163	1054
COMPONENT, MOLE PCT			
METHANE	81.0	82.0	85.3
ETHANE	6.6	6.3	2.9
PROPANE	3.5	2.8	1.0
N-BUTANE	0.9	0.7	0.5
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	6.8	6.9	9.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.6
HELIUM	0.17	0.16	0.23
HEATING VALUE*	1089	1062	981
SPECIFIC GRAVITY	0.676	0.661	0.639

	INDEX 2824 SAMPLE 2547	INDEX 2825 SAMPLE 16679	INDEX 2826 SAMPLE 10733
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LAWRENCE	LESLIE	LESLIE
FIELD	NOT GIVEN	CUTSHIN	HAZARD
WELL NAME	MINKLE	WILLIAM CRESS NO. 7302	FORDSON COAL CO.
LOCATION	NOT GIVEN	CARTER COORDINATE 2-G-75	NOT GIVEN
OWNER	J. W. MINKLE	KENTUCKY WEST VIRGINIA GAS C	UNITED FUEL GAS CO.
COMPLETED	10/04/30	01/09/80	01/25/55
SAMPLED	09/01/32	10/05/82	09/29/66
FORMATION	NOT GIVEN	MISS-BIG LIME	MISS-GREENBRIER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2165	2801	2046
WELLHEAD PRESSURE,PSIG	NOT GIVEN	620	460
OPEN FLOW, MCFD	75	1100	1245
COMPONENT, MOLE PCT			
METHANE	80.0	77.9	79.9
ETHANE	14.4	9.0	10.6
PROPANE	---	3.3	3.9
N-BUTANE	---	0.8	1.0
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	4.8	6.1	3.1
OXYGEN	0.3	0.9	0.1
ARGON	---	0.1	TRACE
HYDROGEN	---	0.9	0.5
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.0
HELIUM	0.1	0.14	0.22
HEATING VALUE*	1068	1098	1169
SPECIFIC GRAVITY	0.651	0.686	0.690

	INDEX 2827 SAMPLE 17188	INDEX 2828 SAMPLE 14031	INDEX 2829 SAMPLE 17902
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LESLIE	LESLIE	LESLIE
FIELD	HAZARD	LESLIE COUNTY	NOT GIVEN
WELL NAME	WILLIAM CRESS NO. K69-7323	C. A. DIXON NO. 2	HUBER NO. 1
LOCATION	CARTER COORDINATES 12-G-75	CARTER COORDINATE 2-H-73	CARTER COORDINATES 22-GH-74E
OWNER	KEPCO, INC.	WISER OIL CO.	WISER OIL CO.
COMPLETED	01/01/80	06/10/72	06/20/82
SAMPLED	02/22/84	06/26/74	11/13/85
FORMATION	MISS-BIG LIME	MISS-BIG LIME	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3360	2208	2820
WELLHEAD PRESSURE,PSIG	690	425	655
OPEN FLOW, MCFD	119	5603	1164
COMPONENT, MOLE PCT			
METHANE	84.9	81.1	84.5
ETHANE	8.1	10.4	6.3
PROPANE	1.6	3.9	3.0
N-BUTANE	0.6	0.8	1.1
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	0.3	0.1	0.5
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	3.5	2.5	3.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.4	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.24	0.15	0.27
HEATING VALUE*	1098	1165	1138
SPECIFIC GRAVITY	0.645	0.677	0.669

	INDEX 2830 SAMPLE 11717	INDEX 2831 SAMPLE 11532	INDEX 2832 SAMPLE 12150
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	LETCHER	LETCHER	LETCHER
FIELD	BULL CREEK	MAYTOWN	MAYTOWN
WELL NAME	JOHN B. CORNETT NO. 7015	GEORGE W. FIELDS NO. 6990	JOHN B. CORNETT NO. 1
LOCATION	CARTER COORDINATE 8-H-78	CARTER COORDINATE 21-I-78	CARTER COORDINATE 8-H-78
OWNER	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	05/09/68	01/26/68	07/31/69
SAMPLED	12/26/68	06/10/68	12/15/69
FORMATION	MISS-BIG LIME	MISS-BIG LIME	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2993	3171	3002
WELLHEAD PRESSURE,PSIG	450	640	510
OPEN FLOW, MCFD	6433	3038	1850
COMPONENT, MOLE PCT			
METHANE	78.6	79.9	83.4
ETHANE	12.9	11.4	11.0
PROPANE	4.6	4.3	2.8
N-BUTANE	1.1	1.1	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.4	1.8	2.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.4	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.06	0.10	0.07
HEATING VALUE*	1217	1196	1115
SPECIFIC GRAVITY	0.700	0.691	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2833 SAMPLE 10066	INDEX 2834 SAMPLE 4533	INDEX 2835 SAMPLE 4536
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MAGOFFIN	MAGOFFIN	MAGOFFIN
FIELD	BEE TREE	LICKING RIVER	LICKING RIVER
WELL NAME	MORGAN ROWE	NO. 5756	NO. 5799
LOCATION	BEE TREE BRANCH	NOT GIVEN	NOT GIVEN
OWNER	W. D. COMPTON	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	01/01/48	10/29/47	--/--/00
SAMPLED	08/12/65	04/29/48	05/07/48
FORMATION	SILU-BIG SIX	SILU-	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2510	2309	2110
WELLHEAD PRESSURE,PSIG	98	610	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2768	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	80.5	73.3
ETHANE	8.3	10.6	20.4
PROPANE	3.7	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	5.7	7.9	5.6
OXYGEN	0.0	0.2	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.21	0.31	0.18
HEATING VALUE	1125	1005	1108
SPECIFIC GRAVITY	0.689	0.644	0.682

	INDEX 2836 SAMPLE 7065	INDEX 2837 SAMPLE 10068	INDEX 2838 SAMPLE 3608
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MAGOFFIN	MAGOFFIN	MAGOFFIN
FIELD	LICKING RIVER	ROYALTON	TICK LICK
WELL NAME	NO. 6457	J. W. HOWARD NO. 305	JOHNNIE BLANTON NO. 1-A
LOCATION	LAT. 37D6. 32FT. 10IN.	LICKING RIVER AT ROYALTON	NOT GIVEN
OWNER	KENTUCKY WEST VIRGINIA GAS C	INLAND GAS CO., INC.	A. W. MOENIG
COMPLETED	08/19/58	05/31/47	09/14/42
SAMPLED	05/02/59	--/--/00	10/16/42
FORMATION	PENN-SALT SAND	SILU-BIG SIX	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1400	2259	268
WELLHEAD PRESSURE,PSIG	348	85	55
OPEN FLOW, MCFD	684	NOT GIVEN	130
COMPONENT, MOLE PCT			
METHANE	81.1	87.4	70.3
ETHANE	11.4	3.4	0.0
PROPANE	4.5	1.5	---
N-BUTANE	1.0	0.8	---
ISOBUTANE	0.5	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.1	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.7	5.4	28.5
OXYGEN	0.0	0.0	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.4	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.05	0.25	0.47
HEATING VALUE	1206	1061	712
SPECIFIC GRAVITY	0.685	0.643	0.675

	INDEX 2839 SAMPLE 3487	INDEX 2840 SAMPLE 3500	INDEX 2841 SAMPLE 3502
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MARTIN	MARTIN	MARTIN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	S. A. D. WARD	L. T. MILLS	T. J. WARD
LOCATION	1 MI. SW OF INEZ	4 MI. W OF INEZ	1/2 MI. SW OF INEZ
OWNER	WARFIELD NATURAL GAS CO.	KENTUCKY WEST VIRGINIA GAS C	WARFIELD NATURAL GAS CO.
COMPLETED	09/--/17	06/16/30	01/16/32
SAMPLED	06/02/42	06/02/42	06/02/42
FORMATION	MISS-MAXTON	-SALT SAND	DEVO-CORNIFEROUS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1140	408	1901
WELLHEAD PRESSURE,PSIG	112	180	215
OPEN FLOW, MCFD	3000	719	169
COMPONENT, MOLE PCT			
METHANE	74.2	83.4	76.4
ETHANE	23.2	13.3	8.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.9	2.0	1.3
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.8	13.5
HELIUM	0.10	0.13	0.09
HEATING VALUE	1167	1083	923
SPECIFIC GRAVITY	0.681	0.638	0.734

	INDEX 2842 SAMPLE 9764	INDEX 2843 SAMPLE 8688	INDEX 2844 SAMPLE 321
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MARTIN	MCLEAN	MEADE
FIELD	TOMAHAWK	NOT GIVEN	BARTNS
WELL NAME	NO. 6808	ROSIE BATES NO. 1	NO. 56
LOCATION	CARTER COORDINATE 15-D-84	NOT GIVEN	J. PERRY FARM
OWNER	KENTUCKY WEST VIRGINIA GAS C	MAR-KEN OIL CO.	LOUISVILLE GAS & ELEC. CO.
COMPLETED	09/10/64	--/--/00	--/--/00
SAMPLED	02/23/65	10/04/62	06/05/20
FORMATION	MISS-BIG LIME	MISS-PAINT CREEK	DEVO-
GEOLOGIC PROVINCE CODE	160	315	300
DEPTH, FEET	1523	1674	368
WELLHEAD PRESSURE,PSIG	515	575	28
OPEN FLOW, MCFD	671	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	79.0	2.7	91.1
ETHANE	11.0	0.1	0.0
PROPANE	5.0	0.1	---
N-BUTANE	1.1	0.1	---
ISOBUTANE	0.5	TRACE	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	TRACE	---
NITROGEN	2.5	84.3	6.9
OXYGEN	0.1	TRACE	1.0
ARGON	0.0	1.0	---
HYDROGEN	0.2	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	TRACE	11.5	1.1
HELIUM	0.08	TRACE	TRACE
HEATING VALUE	1205	55	923
SPECIFIC GRAVITY	0.703	1.025	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2845 SAMPLE 3498	INDEX 2846 SAMPLE 3525	INDEX 2847 SAMPLE 17672
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	MENIFEE	MENIFEE	MUHLENBERG
FIELD	RED RIVER AREA	RED RIVER AREA	BEVIER CONSOLIDATED EXT.
WELL NAME	SKIDMORE NO. 2	DANA NO. 3	DRAKE HEIRS NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	CARTER COORDINATE 8-I-30
OWNER	T. J. GILBERT	T. J. GILBERT	MAR-KEN OIL CO.
COMPLETED	04/--/40	05/--/41	06/07/84
SAMPLED	05/29/42	05/29/42	05/14/85
FORMATION	MISS-CHATTANOOGA	DEVO-CORNIFEROUS	PENN-SAND
GEOLOGIC PROVINCE CODE	160	160	315
DEPTH, FEET	440	585	1090
WELLHEAD PRESSURE,PSIG	NOT GIVEN	140	485
OPEN FLOW, MCFD	25	743	1828
COMPONENT, MOLE PCT			
METHANE	89.3	86.8	97.7
ETHANE	7.2	7.8	0.0
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	2.6	4.8	2.0
OXYGEN	0.5	0.4	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	0.06	0.13	0.06
HEATING VALUE*	1038	1019	990
SPECIFIC GRAVITY	0.607	0.616	0.564

	INDEX 2848 SAMPLE 3515	INDEX 2849 SAMPLE 3518	INDEX 2850 SAMPLE 9688
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	OWSLEY	OWSLEY	PERRY
FIELD	OWSLEY COUNTY	OWSLEY COUNTY	CANEY
WELL NAME	MARION BRADENBURG NO. 3	ALEX BOND NO. 1	NO. 6818
LOCATION	WILD DOG CREEK AREA	NOT GIVEN	CARTER COORDINATE 16-I-77
OWNER	PETROLEUM EXPLORATION CORP.	PETROLEUM EXPLORATION CORP.	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	--/--/00	--/--/00	07/29/64
SAMPLED	06/06/42	06/06/42	01/04/65
FORMATION	MISS-BIG LIME	DEVO-CORNIFEROUS	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2983
WELLHEAD PRESSURE,PSIG	25	25	513
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	231
COMPONENT, MOLE PCT			
METHANE	69.6	70.2	78.7
ETHANE	26.7	25.6	11.2
PROPANE	---	---	4.3
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	3.1	3.4	1.8
OXYGEN	0.4	0.5	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.13	0.18	0.03
HEATING VALUE*	1184	1170	1204
SPECIFIC GRAVITY	0.702	0.698	0.696

	INDEX 2851 SAMPLE 9887	INDEX 2852 SAMPLE 10007	INDEX 2853 SAMPLE 16139
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PERRY	PERRY	PERRY
FIELD	CANEY	CANEY	COCKEREL
WELL NAME	W. C. BRASHEAR NO. 6840	WM. G. BRASHEAR NO. 6856	N. CLAIBOURNE NO. 7309
LOCATION	CARTER COORDINATE 23-101-78E	CARTER COORDINATE 23-I-78	CARTER COORDINATE 7-K-76
OWNER	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	01/14/65	03/11/65	05/14/80
SAMPLED	05/03/65	07/16/65	11/26/80
FORMATION	MISS-GREENBRIER	MISS-MAXTON	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2531	2176	1756
WELLHEAD PRESSURE,PSIG	610	710	525
OPEN FLOW, MCFD	984	782	4169
COMPONENT, MOLE PCT			
METHANE	80.2	82.9	81.1
ETHANE	12.0	6.6	8.9
PROPANE	3.8	3.0	3.2
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	2.0	5.4	5.1
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.07	0.35	0.35
HEATING VALUE*	1169	1092	1108
SPECIFIC GRAVITY	0.679	0.665	0.669

	INDEX 2854 SAMPLE 16777	INDEX 2855 SAMPLE 11795	INDEX 2856 SAMPLE 8702
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PERRY	PERRY	PIKE
FIELD	CUTSHIN	HAZARD	BIG SANDY
WELL NAME	SAMUEL COUCH NO. K343-7296	JOE EVERSOLE NO. 1382	NO. 9001
LOCATION	CARTER COORDINATE 16-J-75	CARTER COORDINATE 23-H-77	NOT GIVEN
OWNER	KEPCO, INC.	KENTUCKY WEST VIRGINIA GAS C	UNITED FUEL GAS CO.
COMPLETED	08/07/81	10/30/68	06/20/62
SAMPLED	02/23/83	03/13/69	10/08/62
FORMATION	MISS-BIG LIME	MISS-MAXTON	MISS-RAVENCLIFF
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1980	2471	2231
WELLHEAD PRESSURE,PSIG	740	905	640
OPEN FLOW, MCFD	2477	2844	959
COMPONENT, MOLE PCT			
METHANE	80.3	80.1	89.2
ETHANE	8.8	7.8	4.6
PROPANE	3.5	3.2	1.9
N-BUTANE	0.9	0.7	0.6
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.2	0.6	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.2	0.5	TRACE
HEXANES PLUS	0.3	1.3	0.1
NITROGEN	4.3	4.3	2.1
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.34	0.32	0.23
HEATING VALUE*	1144	1202	1095
SPECIFIC GRAVITY	0.686	0.720	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2857 SAMPLE 9738	INDEX 2858 SAMPLE 10041	INDEX 2859 SAMPLE 10042
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PIKE	PIKE	PIKE
FIELD	BIG SANDY	BIG SANDY	BIG SANDY
WELL NAME	V. FLETCHER, ET AL, NO. 9317	8860	9330
LOCATION	CARTER COORDINATE 5-L-88	CARTER COORDINATE 18-L-89	CARTER COORDINATE 18-L-87
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	08/05/64	07/21/58	09/08/64
SAMPLED	02/10/65	08/03/65	08/03/65
FORMATION	MISS-BEREA	MISS-GREENSBRIER	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3837	2354	4251
WELLHEAD PRESSURE,PSIG	585	800	705
OPEN FLOW, MCFD	822	7925	1299
COMPONENT, MOLE PCT			
METHANE	89.1	91.4	94.4
ETHANE	7.7	3.8	4.4
PROPANE	1.7	1.3	0.5
N-BUTANE	0.3	0.4	0.2
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.6	1.9	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	TRACE
HELIUM	TRACE	0.19	0.05
HEATING VALUE*	1115	1071	1055
SPECIFIC GRAVITY	0.625	0.616	0.585

	INDEX 2860 SAMPLE 4532	INDEX 2861 SAMPLE 4534	INDEX 2862 SAMPLE 3495
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PIKE	PIKE	PIKE
FIELD	JOHNS CREEK	JOHNS CREEK	NOT GIVEN
WELL NAME	NO. 891	NO. 5773	JIM HAMILTON
LOCATION	NOT GIVEN	NOT GIVEN	S. MT. SE OF PIKEVILLE
OWNER	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C	UNITED CARBON CO.
COMPLETED	03/24/48	02/06/48	07/06/40
SAMPLED	05/03/48	04/30/48	06/03/42
FORMATION	DEVO-BLACK SHALE	MISS-	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2261	1701	2885
WELLHEAD PRESSURE,PSIG	460	525	675
OPEN FLOW, MCFD	2523	1212	1750
COMPONENT, MOLE PCT			
METHANE	76.2	80.3	87.0
ETHANE	22.5	18.5	12.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.7	0.4	TRACE
OXYGEN	0.2	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.1
HELIUM	0.08	0.06	0.08
HEATING VALUE*	1175	1145	1104
SPECIFIC GRAVITY	0.674	0.653	0.619

	INDEX 2863 SAMPLE 3496	INDEX 2864 SAMPLE 6264	INDEX 2865 SAMPLE 6265
STATE	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY	PIKE	PIKE	PIKE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	D. C. POLLY	NO. 6204	NO. 6212
LOCATION	7 MI. SE OF PIKEVILLE	BEEFHIDE CREEK	ELKINS FORK OF BIG CREEK
OWNER	UNITED CARBON CO.	KENTUCKY WEST VIRGINIA GAS C	KENTUCKY WEST VIRGINIA GAS C
COMPLETED	12/01/39	07/23/54	07/15/54
SAMPLED	06/05/42	02/28/57	02/28/57
FORMATION	MISS-WEIR	MISS-BIG LIME	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2270	2651	3291
WELLHEAD PRESSURE,PSIG	730	650	500
OPEN FLOW, MCFD	2	7557	1917
COMPONENT, MOLE PCT			
METHANE	85.0	77.9	76.2
ETHANE	14.4	14.4	15.2
PROPANE	---	4.5	5.4
N-BUTANE	---	1.2	1.2
ISOBUTANE	---	0.5	0.3
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	TRACE	0.4	0.5
OXYGEN	0.4	0.2	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.3
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.08	0.08	0.04
HEATING VALUE*	1119	1244	1254
SPECIFIC GRAVITY	0.628	0.709	0.716

	INDEX 2866 SAMPLE 4531	INDEX 2867 SAMPLE 3516	INDEX 2868 SAMPLE 12883
STATE	KENTUCKY	KENTUCKY	LOUISIANA
COUNTY	PIKE	POWELL	ACADIA
FIELD	RACCOON	ROSSLYN	BOSCO S
WELL NAME	NO. 879	RUBIN CROW NO. 1	E. B. HAWKS NO. 1
LOCATION	NOT GIVEN	NEAR COMPRESSOR STA.	SEC. 34, T8S, R3E
OWNER	KENTUCKY WEST VIRGINIA GAS C	PETROLEUM EXPLORATION CORP.	CHEVRON OIL CO.
COMPLETED	02/06/48	--/--/00	09/18/70
SAMPLED	05/03/48	06/06/42	06/17/71
FORMATION	DEVO-BLACK SHALE	DEVO-CORNIFEROUS	OLIG-NODOSARIA A
GEOLOGIC PROVINCE CODE	160	160	220
DEPTH, FEET	2825	NOT GIVEN	13307
WELLHEAD PRESSURE,PSIG	295	NOT GIVEN	8845
OPEN FLOW, MCFD	82	NOT GIVEN	6100
COMPONENT, MOLE PCT			
METHANE	76.5	71.0	83.5
ETHANE	21.4	25.7	4.5
PROPANE	---	---	1.5
N-BUTANE	---	---	1.5
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	1.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.6	2.5	5.4
OXYGEN	0.2	0.4	1.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.3	1.3
HELIUM	0.05	0.07	0.01
HEATING VALUE*	1158	1180	1069
SPECIFIC GRAVITY	0.669	0.697	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2869 SAMPLE 6491	INDEX 2870 SAMPLE 14015	INDEX 2871 SAMPLE 13629
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ACADIA
FIELD	CHURCH POINT	CROWLEY S	DUSON
WELL NAME	M. THIBODEAUX NO. 1	DAVID BREAUX EST. NO. 1	FRANCES PREJEAN NO. 1
LOCATION	SEC. 83, T8S, R2E	SEC. 17, T10S, R1E	SEC. 20, T9S, R3E
OWNER	TIDEWATER OIL CO.	DAMSON OIL CORP.	SUN OIL CO.
COMPLETED	04/--/57	05/30/74	01/17/73
SAMPLED	01/29/58	05/30/74	06/15/73
FORMATION	OLIG-FRIO	OLIG-HAYES	OLIG-FRIO NON UNION STRUMA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14400	11952	13900
WELLHEAD PRESSURE,PSIG	12135	2350	7077
OPEN FLOW, MCFD	16000	2000	1700
COMPONENT, MOLE PCT			
METHANE	92.1	89.6	81.6
ETHANE	3.8	3.9	8.0
PROPANE	1.0	0.8	5.3
N-BUTANE	0.3	0.2	1.9
ISOBUTANE	0.3	0.3	1.7
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.9	4.2	0.5
OXYGEN	0.2	1.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.7	1.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1062	1008	1230
SPECIFIC GRAVITY	0.615	0.619	0.715

	INDEX 2872 SAMPLE 4482	INDEX 2873 SAMPLE 4681	INDEX 2874 SAMPLE 4895
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ACADIA
FIELD	EGAN	IOTA	MAXIE
WELL NAME	KOLLITZ UNIT NO.1, WELL NO.1	HAYES LECKELT MOODY NO. 1	S. W. ROBINSON NO. 1
LOCATION	SEC. 7, T10S, R1W	SEC. 13, T8S, R2W	SEC. 31, T8S, R1E
OWNER	SUN OIL CO.	SOMIO PETROLEUM CO.	MASSIE HUNT TRUST
COMPLETED	01/11/48	09/08/48	01/20/50
SAMPLED	04/10/48	01/17/49	05/13/50
FORMATION	OLIG-FRIO	EOCE-MOODYS BRANCH	OLIG-MARTEX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10856	9092	10562
WELLHEAD PRESSURE,PSIG	5100	3100	4775
OPEN FLOW, MCFD	NOT GIVEN	15000	1000
COMPONENT, MOLE PCT			
METHANE	84.7	89.7	91.9
ETHANE	12.5	5.8	4.7
PROPANE	---	2.3	1.7
N-BUTANE	---	0.5	0.4
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	TRACE	0.2
ISOPENTANE	---	0.2	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.0	0.2
NITROGEN	2.1	0.9	0.0
OXYGEN	0.3	TRACE	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1082	1110	1106
SPECIFIC GRAVITY	0.630	0.629	0.618

	INDEX 2875 SAMPLE 13926	INDEX 2876 SAMPLE 14493	INDEX 2877 SAMPLE 4038
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ACADIA
FIELD	MIDLAND	RAYNE	TEPETATE N
WELL NAME	WALTON GUIDRY NO. 1	E. E. PETITJEAN NO. 1	KLUMPP NO. 1
LOCATION	SEC. 53, T10S, R2W	SEC. 13, T9S, R2E	SEC. 13, T7S, R2W
OWNER	GOLDKING-SERIO-TIPCO-DILLON	CONTINENTAL OIL CO.	ATLANTIC REFINING CO.
COMPLETED	08/29/73	07/18/75	10/09/38
SAMPLED	02/18/74	10/17/75	06/11/45
FORMATION	OLIG-DISCORBIS	OLIG-NODOSARIA	MIOC-KLUMPP
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9704	16079	7960
WELLHEAD PRESSURE,PSIG	1425	10600	2900
OPEN FLOW, MCFD	2000	9500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.7	85.7	91.3
ETHANE	12.7	7.7	8.5
PROPANE	12.2	2.3	---
N-BUTANE	4.4	0.4	---
ISOBUTANE	5.3	0.6	---
N-PENTANE	1.4	0.1	---
ISOPENTANE	2.4	0.1	---
CYCLOPENTANE	0.4	TRACE	---
HEXANES PLUS	1.9	0.1	---
NITROGEN	0.1	0.4	0.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	2.6	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1740	1113	1077
SPECIFIC GRAVITY	1.018	0.669	0.598

	INDEX 2878 SAMPLE 4039	INDEX 2879 SAMPLE 4040	INDEX 2880 SAMPLE 17779
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ACADIA	ACADIA	ALLEN
FIELD	TEPETATE N	TEPETATE N	CASTOR CREEK
WELL NAME	KLUMPP NO. 5	KLUMPP NO. 2	HARVEY ADAMS ET AL NO. 1
LOCATION	SEC. 13, T7W, R2W	SEC. 13, T7S, R2W	SEC. 16, T5S, R3W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	L&S EXPLORATION CO.
COMPLETED	08/30/39	12/14/38	12/13/82
SAMPLED	06/11/45	06/11/45	07/22/85
FORMATION	MIOC-KLUMPP	MIOC-KLUMPP	EOCE-OBERLIN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9040	8478	9490
WELLHEAD PRESSURE,PSIG	4700	3000	NOT GIVEN
OPEN FLOW, MCFD	3787	1333	1998
COMPONENT, MOLE PCT			
METHANE	83.0	83.7	83.7
ETHANE	16.9	16.3	7.6
PROPANE	---	---	3.7
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	1.1
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.8
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.6
NITROGEN	0.0	0.0	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.0	0.5
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1144	1140	1232
SPECIFIC GRAVITY	0.639	0.635	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2881 SAMPLE 16172	INDEX 2882 SAMPLE 10854	INDEX 2883 SAMPLE 15554
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ALLEN	ALLEN	ALLEN
FIELD	INDIAN VILLAGE N	KINDER S	LYLES
WELL NAME	POWELL LUMBER CO. NO. 1	CHARLES KUNTZ NO. 1	ALLEN NO. 1
LOCATION	SEC. 8, T7S, R6W	SEC. 19, T3S, R5W	SEC. 7, T6S, R4W
OWNER	WAINOCO OIL & GAS CO.	W. W. F. OIL CORP.	GETTY OIL CO.
COMPLETED	05/12/80	07/01/66	03/31/78
SAMPLED	01/15/81	01/28/67	01/15/79
FORMATION	-6150 FT. SAND	OLIG-FRIO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6180	8216	12576
WELLHEAD PRESSURE,PSIG	2335	2300	7400
OPEN FLOW, MCFD	390	900	2000
COMPONENT, MOLE PCT			
METHANE	97.5	91.7	80.9
ETHANE	1.1	3.9	9.3
PROPANE	0.1	1.9	5.0
N-BUTANE	TRACE	0.6	1.0
ISOBUTANE	TRACE	0.5	0.8
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	0.6	0.7
OXYGEN	0.0	0.8	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	1.6
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1015	1107	1199
SPECIFIC GRAVITY	0.568	0.623	0.707

	INDEX 2884 SAMPLE 13987	INDEX 2885 SAMPLE 14507	INDEX 2886 SAMPLE 14718
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ASSUMPTION	ASSUMPTION	ASSUMPTION
FIELD	BAY NATCHEZ	BAYOU SHERMAN	BAYOU ST. VINCENT
WELL NAME	BROWNELL-KIDD NO. C-1	SCHOOL BOARD NO. 1-A	LABARRE-TRICHE NO. 4
LOCATION	SEC. 25, T12S, R12E	SEC. 16, T15S, R14E	SEC. 8, T13S, R13E
OWNER	CITIES SERVICE OIL CO.	EXCHANGE OIL & GAS CORP.	SUN OIL CO.
COMPLETED	10/09/73	11/10/73	11/15/75
SAMPLED	04/17/74	10/14/75	07/08/76
FORMATION	MIOC-SIPHONINA DAVISI	OLIG-DISCORBIS	MIOC-CRISTELLARIA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13930	15790	15851
WELLHEAD PRESSURE,PSIG	4999	5300	8941
OPEN FLOW, MCFD	80000	NOT GIVEN	5246
COMPONENT, MOLE PCT			
METHANE	84.0	90.5	94.2
ETHANE	2.7	4.0	3.1
PROPANE	0.7	1.9	0.9
N-BUTANE	0.2	0.4	0.2
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.0	0.5	0.4
OXYGEN	2.1	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.8	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	948	1078	1059
SPECIFIC GRAVITY	0.646	0.630	0.598

	INDEX 2887 SAMPLE 12353	INDEX 2888 SAMPLE 15595	INDEX 2889 SAMPLE 12240
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ASSUMPTION	ASSUMPTION	ASSUMPTION
FIELD	GRAND BAYOU	GRAVEYARD ISLAND	LAKE VERRET
WELL NAME	O. C. LOG BLANCHARD NO. 1	MICHEIL NO. 1	STATE LEASE 4919 NO. 1
LOCATION	SEC. 49, T12S, R13E	SEC. 12, T14S, R12E	T14S, R13E
OWNER	TEXACO INC.	TEXAS CRUDE, INC.	GENERAL CRUDE OIL CO., ET AL
COMPLETED	12/04/69	11/20/78	06/08/69
SAMPLED	08/12/70	04/02/79	04/14/70
FORMATION	MIOC-B-1 SAND	NOT GIVEN	MIOC-PLANULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13594	7678	14676
WELLHEAD PRESSURE,PSIG	1750	1250	9800
OPEN FLOW, MCFD	954	7	9600
COMPONENT, MOLE PCT			
METHANE	94.4	86.6	94.4
ETHANE	3.0	4.5	2.5
PROPANE	0.3	2.1	1.0
N-BUTANE	0.2	1.0	0.2
ISOBUTANE	0.2	1.5	0.2
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	TRACE	0.5	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	0.4	0.6	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1056	1185	1054
SPECIFIC GRAVITY	0.594	0.673	0.598

	INDEX 2890 SAMPLE 14629	INDEX 2891 SAMPLE 17233	INDEX 2892 SAMPLE 4045
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BEAUREGARD	BEAUREGARD	BEAUREGARD
FIELD	FIELD S	LITTLE BARNES CREEK	NEALE
WELL NAME	ARCO NO. 7	OWENS ILLINOIS NO. 1	KEYTE NO. 1
LOCATION	SEC. 31, T6S, R12W	SEC. 36, T4S, R9W	SEC. 30, T3S, R10W
OWNER	SOHIO PETROLEUM CO.	FOREST OIL CORP.	ATLANTIC REFINING CO.
COMPLETED	02/26/75	10/05/81	10/23/44
SAMPLED	03/02/76	03/26/84	05/25/45
FORMATION	EOCE-WILCOX	EOCE-COCKFIELD 9TH	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11124	7976	10874
WELLHEAD PRESSURE,PSIG	4000	2367	1650
OPEN FLOW, MCFD	10000	2300	200
COMPONENT, MOLE PCT			
METHANE	76.1	83.9	73.3
ETHANE	11.8	6.6	24.8
PROPANE	5.3	5.2	---
N-BUTANE	1.8	1.2	---
ISOBUTANE	0.8	1.3	---
N-PENTANE	0.1	0.3	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.5	0.5	0.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.0	0.5	1.9
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1217	1227	1187
SPECIFIC GRAVITY	0.721	0.703	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2893 SAMPLE 4050	INDEX 2894 SAMPLE 4747	INDEX 2895 SAMPLE 13086
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BEAUREGARD	BIENVILLE	BIENVILLE
FIELD	NEALE	BEAR CREEK	BEAR CREEK
WELL NAME	IRA SPIERS T-5	ADVANCE NO. 1	T. J. CUMMINGS NO. 2
LOCATION	SEC. 26, T3S, R11W	SEC. 8, T16N, R5W	SEC. 1, T15N, R6W
OWNER	ATLANTIC REFINING CO.	C. H. MURPHY & CO.	SOUTHERN NATURAL GAS CO.
COMPLETED	03/11/45	07/27/48	05/25/66
SAMPLED	05/25/45	05/17/49	08/31/67
FORMATION	EOCE-WILCOX	CRET-PETTIT & SLIGO	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	11172	7061	10203
WELLHEAD PRESSURE, PSIG	2600	2325	5625
OPEN FLOW, MCFD	130	7300	4300
COMPONENT, MOLE PCT			
METHANE	52.9	96.2	94.8
ETHANE	45.1	0.9	1.6
PROPANE	---	0.2	0.4
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	TRACE	0.1
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.8	1.3	0.3
OXYGEN	0.8	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.8	0.8	2.4
HELIUM	TRACE	0.03	TRACE
HEATING VALUE*	1344	1013	1019
SPECIFIC GRAVITY	0.797	0.579	0.600

	INDEX 2896 SAMPLE 5487	INDEX 2897 SAMPLE 13042	INDEX 2898 SAMPLE 10778
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BIENVILLE
FIELD	BRYCELAND W	BRYCELAND W	DANVILLE
WELL NAME	W. H. TEASLEY NO. 1	SMITH NO. 1	NOAH BRADLEY NO. 1
LOCATION	SEC. 20, T17N, R6W	SEC. 26, T17N, R7W	SEC. 30, T15N, R4W
OWNER	PAN AMERICAN SOUTHERN CORP.	FRANKS & PETROFUNDS, INC.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	06/05/52	07/10/71	--/--/00
SAMPLED	05/21/53	09/30/71	--/--/00
FORMATION	CRET-TRAVIS PEAK	CRET-HOSSTON B	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	7612	8600	8260
WELLHEAD PRESSURE, PSIG	3362	4692	3250
OPEN FLOW, MCFD	16800	NOT GIVEN	13000
COMPONENT, MOLE PCT			
METHANE	95.9	91.8	95.9
ETHANE	1.7	1.5	0.3
PROPANE	0.2	0.3	TRACE
N-BUTANE	TRACE	0.2	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	4.0	2.0
OXYGEN	TRACE	1.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.2	1.6
HELIUM	0.02	0.01	0.06
HEATING VALUE*	1022	971	977
SPECIFIC GRAVITY	0.578	0.603	0.579

	INDEX 2899 SAMPLE 14191	INDEX 2900 SAMPLE 14192	INDEX 2901 SAMPLE 13050
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BIENVILLE
FIELD	DANVILLE	DANVILLE	DRISCOLL
WELL NAME	BROWN NO. 1	BROWN NO. 1-D	DAVIS BROTHERS NO. 1
LOCATION	SEC. 26, T14N, R5W	SEC. 26, T14N, R5W	SEC. 4, T16N, R4W
OWNER	SKLAR & PHILLIPS OIL CO.	SKLAR & PHILLIPS OIL CO.	FRANKS & PETROFUNDS, INC.
COMPLETED	06/--/74	06/--/74	02/25/71
SAMPLED	10/25/74	10/25/74	09/30/71
FORMATION	CRET-HOSSTON C	CRET-HOSSTON A	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8800	8000	9131
WELLHEAD PRESSURE, PSIG	3200	2200	2874
OPEN FLOW, MCFD	60000	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.6	95.5	96.6
ETHANE	0.2	0.2	1.2
PROPANE	TRACE	TRACE	0.2
N-BUTANE	TRACE	TRACE	0.2
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.1	2.5	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	1.6	1.2
HELIUM	0.03	0.03	0.02
HEATING VALUE*	984	976	1017
SPECIFIC GRAVITY	0.578	0.583	0.582

	INDEX 2902 SAMPLE 3865	INDEX 2903 SAMPLE 16075	INDEX 2904 SAMPLE 16958
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BIENVILLE
FIELD	LUCKY	LUCKY	RINGGOLD W
WELL NAME	NEBO OIL CO. A-1	TOBIN NO. 1	CY RA SUA J. F. BOYET NO. 1
LOCATION	SEC. 11, T15N, R7W	SEC. 18, T15N, R6W	SEC. 31, T16N, R7W
OWNER	PLACID OIL CO.	PLACID OIL CO.	AMOCO PRODUCTION CO. (USA)
COMPLETED	01/15/43	08/22/79	06/01/83
SAMPLED	09/13/44	09/22/80	06/01/83
FORMATION	CRET-PETTIT	JURA-COTTON VALLEY	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6834	9987	9600
WELLHEAD PRESSURE, PSIG	NOT GIVEN	4100	2900
OPEN FLOW, MCFD	1950	8000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.7	94.9	86.1
ETHANE	1.1	1.3	3.9
PROPANE	---	0.2	1.4
N-BUTANE	---	0.1	0.6
ISOBUTANE	---	0.1	0.3
N-PENTANE	---	TRACE	0.3
ISOPENTANE	---	TRACE	0.5
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.5
NITROGEN	0.0	0.6	0.1
OXYGEN	0.1	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.4
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	2.7	6.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1009	1002	1063
SPECIFIC GRAVITY	0.571	0.597	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2905 SAMPLE 16795	INDEX 2906 SAMPLE 4325	INDEX 2907 SAMPLE 14904
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BIENVILLE	BIENVILLE	BIENVILLE
FIELD	SAILES	WILDCAT	WOODARDVILLE
WELL NAME	CRAWFORD ET AL. NO. 1	OZLEY NO. 1	T. A. MARTIN NO. 1
LOCATION	SEC. 7, T15N, R7W	SEC. 13, T17N, R5W	SEC. 20, T15N, R9W
OWNER	FRANKS & PETROFUNDS, INC.	LION OIL CO.	MAY PETROLEUM, INC.
COMPLETED	09/04/81	05/14/47	07/23/76
SAMPLED	03/09/83	06/21/47	02/11/77
FORMATION	CRET-MOSSTON B	CRET-L	CRET-RODESSA
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9205	7696	5147
WELLHEAD PRESSURE,PSIG	1300	3546	2200
OPEN FLOW, MCFD	994	50000	2651
COMPONENT, MOLE PCT			
METHANE	95.7	94.2	94.3
ETHANE	1.0	3.1	1.4
PROPANE	0.1	---	0.2
N-BUTANE	0.1	---	0.1
ISOBUTANE	TRACE	---	0.1
N-PENTANE	0.1	---	TRACE
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	0.7	1.2	0.7
OXYGEN	TRACE	0.5	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.2	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.7	1.2	2.9
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1009	1010	1002
SPECIFIC GRAVITY	0.586	0.588	0.602

	INDEX 2908 SAMPLE 16540	INDEX 2909 SAMPLE 17421	INDEX 2910 SAMPLE 16185
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	BOSSIER	BOSSIER
FIELD	ANTRIM	ANTRIM N	ARKANA
WELL NAME	ANTRIM TRUST NO. 1	FOSTER NO. 1	WILLIAMETTE NO. 1
LOCATION	SEC. 1, T21N, R13W	SEC. 21, T22N, R13W	SEC. 8, T23N, R13W
OWNER	POGO PRODUCING CO.	JUSTISS OIL CO.	CRYSTAL OIL CO.
COMPLETED	04/02/81	05/02/84	--/--/00
SAMPLED	06/09/82	09/19/84	02/09/81
FORMATION	JURA-COTTON VALLEY	JURA-COTTON VALLEY & MCFERRI	JURA-HAYNESVILLE
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9152	9277	10689
WELLHEAD PRESSURE,PSIG	2940	3000	1000
OPEN FLOW, MCFD	545	300	20
COMPONENT, MOLE PCT			
METHANE	77.4	75.6	80.2
ETHANE	11.1	12.4	7.0
PROPANE	5.1	5.0	2.9
N-BUTANE	1.4	1.5	1.0
ISOBUTANE	0.7	0.6	0.9
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.2	2.8	3.7
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	1.7	1.3
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1230	1237	1118
SPECIFIC GRAVITY	0.737	0.745	0.713

	INDEX 2911 SAMPLE 16957	INDEX 2912 SAMPLE 160	INDEX 2913 SAMPLE 162
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	BOSSIER	BOSSIER
FIELD	COOTERVILLE	ELM GROVE	ELM GROVE
WELL NAME	CV RA SUA R. L. HOSIER NO. 1	W. H. HODGES NO. 1	R. E. MCDADE NO. 1
LOCATION	SEC. 35, T15N, R11W	SEC. 15, T16N, R11W	SEC. 29, T16N, R11W
OWNER	AMOCO PRODUCTION CO. (USA)	STANDARD OIL CO.	STANDARD OIL CO.
COMPLETED	04/21/83	02/12/20	--/--/00
SAMPLED	06/01/83	03/23/20	03/02/20
FORMATION	JURA-COTTON VALLEY	CRET---	CRET-
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9450	2497	2483
WELLHEAD PRESSURE,PSIG	2900	580	600
OPEN FLOW, MCFD	400	3500	1500
COMPONENT, MOLE PCT			
METHANE	93.0	93.5	93.7
ETHANE	2.7	3.5	3.1
PROPANE	0.3	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.1	0.3	2.7
OXYGEN	TRACE	0.4	0.4
ARGON	TRACE	---	---
HYDROGEN	0.3	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.1	0.1	TRACE
HELIUM	TRACE	0.11	TRACE
HEATING VALUE*	1016	1010	1005
SPECIFIC GRAVITY	0.607	0.564	0.583

	INDEX 2914 SAMPLE 172	INDEX 2915 SAMPLE 175	INDEX 2916 SAMPLE 17620
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	BOSSIER	BOSSIER
FIELD	ELM GROVE	ELM GROVE	ELM GROVE
WELL NAME	A. F. MCDADE NO. 2	MCCONNELL NO. 1	VDA L.A. COWLEY NO. 2
LOCATION	SEC. 31, T16N, R12W	SEC. 10, T16N, R11W	SEC. 2, T16N, R13W
OWNER	STANDARD OIL CO.	ARKANSAS NATURAL GAS CO.	GRIGSBY PETROLEUM, INC.
COMPLETED	10/01/19	01/06/20	12/14/84
SAMPLED	03/27/20	03/27/20	03/19/85
FORMATION	CRET-	CRET-TRINITY	CRET-JETER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	1254	2526	4689
WELLHEAD PRESSURE,PSIG	380	600	2300
OPEN FLOW, MCFD	15000	7000	950
COMPONENT, MOLE PCT			
METHANE	96.4	97.4	92.9
ETHANE	0.0	0.0	4.1
PROPANE	---	---	1.1
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	2.6	1.8	0.2
OXYGEN	0.6	0.5	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.0	0.8
HELIUM	TRACE	0.13	0.01
HEATING VALUE*	977	987	1078
SPECIFIC GRAVITY	0.571	0.563	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2917 SAMPLE 17621	INDEX 2918 SAMPLE 15279	INDEX 2919 SAMPLE 4757
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	BOSSIER	BOSSIER
FIELD	ELM GROVE	ROCKY MOUNT	SAREPTA S
WELL NAME	L.A. COWLEY NO. 1	ANTRIM ESTATE NO. 2-25	ARDIS NO. 1
LOCATION	SEC. 2, T16N, R13W	SEC. 25, T22N, R12W	SEC. 27, T22N, R11W
OWNER	GRIGSBY PETROLEUM, INC.	ARKLA EXPLORATION CO.	BARNSDALL OIL CO.
COMPLETED	09/10/84	12/08/77	07/05/49
SAMPLED	03/19/85	05/10/78	10/01/49
FORMATION	CRET-MOSSTON	JURA-COTTON VALLEY	JURA-SCHULER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	5938	9186	9155
WELLHEAD PRESSURE, PSIG	2450	3150	4492
OPEN FLOW, MCFD	2500	1400	596
COMPONENT, MOLE PCT			
METHANE	95.8	79.5	77.0
ETHANE	2.2	10.4	11.7
PROPANE	0.2	4.5	5.0
N-BUTANE	0.1	1.3	1.3
ISOBUTANE	0.0	0.6	0.8
N-PENTANE	0.1	0.4	0.4
ISOPENTANE	0.0	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	0.6	0.8	1.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	1.7	1.6
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1028	1226	1231
SPECIFIC GRAVITY	0.584	0.724	0.739

	INDEX 2920 SAMPLE 4819	INDEX 2921 SAMPLE 1973	INDEX 2922 SAMPLE 159
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	BOSSIER	BOSSIER	CADDO
FIELD	SAREPTA S	SLIGO	CEDAR GROVE
WELL NAME	ARDIS NO. 1	MURFF NO. 2	CHAS. DIAL NO. 2
LOCATION	SEC. 27, T22N, R11W	SEC. 24, T17N, R12W	SEC. 17, T17N, R13W
OWNER	BARNSDALL OIL CO., ET AL.	LOUISIANA GAS & FUEL CO.	TEXAS CO.
COMPLETED	06/05/49	12/22/29	05/06/18
SAMPLED	12/02/49	03/18/30	03/23/20
FORMATION	JURA-COTTON VALLEY	CRET-NACATOCH	-GUMBO
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8700	844	2215
WELLHEAD PRESSURE, PSIG	4122	325	60
OPEN FLOW, MCFD	10000	7200	500
COMPONENT, MOLE PCT			
METHANE	77.0	96.4	88.5
ETHANE	11.5	0.0	1.1
PROPANE	5.1	---	---
N-BUTANE	1.3	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	2.2	3.0	8.8
OXYGEN	0.1	0.3	1.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.6	0.3	0.3
HELIUM	0.02	0.03	TRACE
HEATING VALUE*	1144	977	916
SPECIFIC GRAVITY	0.731	0.571	0.606

	INDEX 2923 SAMPLE 14937	INDEX 2924 SAMPLE 17619	INDEX 2925 SAMPLE 15043
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CADDO	CADDO	CADDO
FIELD	ELM GROVE	ELM GROVE	JOHNSON BRANCH
WELL NAME	WHITTINGTON NO. 2	L.A. COWLEY NO. 3	NORMAN G. ALEXANDER NO. 1
LOCATION	SEC. 30, T16N, R12W	SEC. 1, T16N, R13W	SEC. 1, T15N, R16W
OWNER	ARKLA EXPLORATION CO.	GRIGSBY PETROLEUM, INC.	NORTH AMERICAN ROYALTIES INC
COMPLETED	--/--/00	02/01/85	07/01/77
SAMPLED	02/22/77	03/19/85	06/30/77
FORMATION	JURA-COTTON VALLEY	CRET-HILL	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8500	4597	9500
WELLHEAD PRESSURE, PSIG	3200	2350	3000
OPEN FLOW, MCFD	600	900	2000
COMPONENT, MOLE PCT			
METHANE	87.6	93.2	52.5
ETHANE	5.8	3.9	17.0
PROPANE	2.0	1.0	12.4
N-BUTANE	0.7	0.3	5.6
ISOBUTANE	0.4	0.3	4.0
N-PENTANE	0.2	0.1	1.9
ISOPENTANE	0.2	TRACE	1.9
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.2	1.6
NITROGEN	0.2	0.2	0.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.7	3.0
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1108	1075	1734
SPECIFIC GRAVITY	0.658	0.607	1.055

	INDEX 2926 SAMPLE 14125	INDEX 2927 SAMPLE 1272	INDEX 2928 SAMPLE 1816
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CADDO	CADDO	CADDO
FIELD	LONGWOOD	PINE ISLAND	PINE ISLAND
WELL NAME	W. E. NOEL FEE NO. 11	NO. 43 DILLON	DILLON NO. 92
LOCATION	SEC. 33, T19N, R16W	SEC. 13, T15N, R21W	SEC. 13, T21N, R15W
OWNER	TEXACO INC.	DIXIE OIL CO., INC.	DIXIE OIL CO., INC.
COMPLETED	02/11/74	10/--/24	--/--/00
SAMPLED	08/06/74	05/28/26	07/16/29
FORMATION	CRET-MOSSTON "B"	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6011	3623	6125
WELLHEAD PRESSURE, PSIG	2300	1550	NOT GIVEN
OPEN FLOW, MCFD	1000	46000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.9	82.2	63.5
ETHANE	4.1	15.4	29.7
PROPANE	1.0	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	1.4	0.6	5.8
OXYGEN	0.0	0.3	0.2
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.7	1.5	0.8
HELIUM	0.02	0.01	0.04
HEATING VALUE*	1070	1109	1175
SPECIFIC GRAVITY	0.616	0.649	0.734

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2929 SAMPLE 2269	INDEX 2930 SAMPLE 4898	INDEX 2931 SAMPLE 4843
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CADDO	CADDO	CADDO
FIELD	RODESSA	RODESSA	WILDCAT
WELL NAME	FRENCH NO. 1	PITTS NO. 5	ELLERBE NO. 1
LOCATION	SEC. 34, T23N, R16W	SEC. 11, T23N, R16W	SEC. 17, T15N, R12W
OWNER	UNITED PRODUCTION CORP.	ARKLA OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	01/13/31	04/--/49	05/22/48
SAMPLED	01/15/31	04/28/50	02/07/50
FORMATION	CRET-GLEN ROSE	JURA-SMACKOVER	CRET-KILPATRICK LIME ZONE
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	5501	10820	9459
WELLHEAD PRESSURE,PSIG	2350	4100	2600
OPEN FLOW, MCFD	20000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	86.8	90.4
ETHANE	8.2	2.4	4.3
PROPANE	---	0.9	1.9
N-BUTANE	---	0.5	0.7
ISOBUTANE	---	0.6	0.5
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.0	0.4
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.6	0.4
NITROGEN	4.8	6.0	0.9
OXYGEN	0.5	0.1	0.2
ARGON	---	0.9	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	1.7	0.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1013	1030	1125
SPECIFIC GRAVITY	0.628	0.656	0.640

	INDEX 2932 SAMPLE 15534	INDEX 2933 SAMPLE 14717	INDEX 2934 SAMPLE 16102
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALCASIEU	CALCASIEU
FIELD	BECKWITH CREEK	CHALKLEY N	CHLOE
WELL NAME	LC NAVAL STORE NO. 1	F. R. HOLLAND NO. 1	TOBILAR INC. NO. 1
LOCATION	SEC. 17, T8S, R9W	SEC. 29, T11S, R6W	SEC. 36, T9S, R8W
OWNER	TEXAS PACIFIC OIL CO., INC.	SUN OIL CO.	MCMORAN EXPLORATION CO.
COMPLETED	03/05/78	02/29/76	10/07/80
SAMPLED	12/07/78	07/01/76	10/17/80
FORMATION	OLIG-NODOSARIA	OLIG-FRIO	OLIG-HACKBERRY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8730	11256	11592
WELLHEAD PRESSURE,PSIG	3725	4950	5100
OPEN FLOW, MCFD	20	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	80.4	89.2	91.1
ETHANE	8.5	5.3	5.3
PROPANE	5.1	2.4	1.4
N-BUTANE	1.6	0.6	0.3
ISOBUTANE	1.7	0.8	0.3
N-PENTANE	0.4	0.2	0.1
ISOPENTANE	0.8	0.2	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	0.3	0.4	0.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1295	1135	1101
SPECIFIC GRAVITY	0.741	0.647	0.622

	INDEX 2935 SAMPLE 7083	INDEX 2936 SAMPLE 4651	INDEX 2937 SAMPLE 13357
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALCASIEU	CALCASIEU
FIELD	CHOUPIQUE	EDGERLY	HOLLYWOOD S
WELL NAME	C. O. NOBLE 3 NO. 2	KRAUSE&MANAHAN LUMBER NO. 1	PAN AM FEE NO. 1
LOCATION	SEC. 11, T11S, R11W	SEC. 17, T9S, R11W	SEC. 34, T10S, R7W
OWNER	CALIFORNIA CO.	GULF OIL CO.	MOBIL OIL CORP.
COMPLETED	05/29/59	10/12/48	12/06/72
SAMPLED	05/31/59	01/11/49	08/11/72
FORMATION	OLIG-ORTEGO	NOT GIVEN	OLIG-HACKBERRY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9032	8620	14060
WELLHEAD PRESSURE,PSIG	4000	4063	2500
OPEN FLOW, MCFD	4044	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	87.9	89.0	68.3
ETHANE	4.2	9.1	9.3
PROPANE	1.5	---	3.6
N-BUTANE	0.6	---	0.8
ISOBUTANE	0.7	---	1.2
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.3	---	0.3
NITROGEN	1.1	0.0	11.7
OXYGEN	0.1	0.8	2.9
ARGON	0.0	---	0.1
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	3.5	0.1	1.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1066	1065	1056
SPECIFIC GRAVITY	0.658	0.615	0.762

	INDEX 2938 SAMPLE 16664	INDEX 2939 SAMPLE 11528	INDEX 2940 SAMPLE 16593
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALCASIEU	CALCASIEU
FIELD	LAKE CHARLES S	MANCHESTER S	MANCHESTER S
WELL NAME	W.T.BURTON INDUSTRIES NO. 1	FARMERS LAND & CANAL NO. A-4	FARMERS LAND & CANAL NO. 1
LOCATION	SEC. 18, T11S, R8W	SEC. 27, T10S, R7W	SEC. 27, T10S, R7W
OWNER	MORAN EXPLORATION, INC.	COASTAL STATES GAS PROD. CO	DAMSON OIL CORP.
COMPLETED	07/27/82	09/09/66	03/05/80
SAMPLED	09/20/82	--/--/80	04/26/82
FORMATION	OLIG-HACKBERRY	OLIG-HACKBERRY	OLIG-HACKBERRY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14591	12886	13301
WELLHEAD PRESSURE,PSIG	10300	7900	4950
OPEN FLOW, MCFD	24000	8600	2700
COMPONENT, MOLE PCT			
METHANE	47.4	87.7	84.1
ETHANE	20.4	6.9	8.5
PROPANE	17.3	2.3	3.5
N-BUTANE	3.7	0.6	0.8
ISOBUTANE	5.8	0.4	1.1
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	1.7	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.1	0.3
NITROGEN	0.3	0.3	0.5
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.0	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1738	1131	1199
SPECIFIC GRAVITY	1.051	0.650	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2941 SAMPLE 11760	INDEX 2942 SAMPLE 17918	INDEX 2943 SAMPLE 4616
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALCASIEU	CALCASIEU	CALCASIEU
FIELD	MANCHESTER W	NOT GIVEN	WILDCAT
WELL NAME	LAKE CHARLES SUGAR CO. NO. 2	MAYO REALTY CO., INC. NO. 1	SWEETLAKE LD. & OIL C NO. 1
LOCATION	SEC. 14, T10S, R8W	SEC. 1, T11S, R9W	SEC. 34, T10S, R6W
OWNER	PAN AMERICAN PETROLEUM CORP.	KANEB ENERGY CO.	SOHIO PETROLEUM CO.
COMPLETED	11/08/67	07/01/85	05/20/48
SAMPLED	02/10/69	11/25/85	11/09/48
FORMATION	-12200 FT. SAND	MIOC-CRISTELLARIA	DLIG-CIBICIDES HAZZARDI
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12200	10420	10882
WELLHEAD PRESSURE,PSIG	9480	4575	4400
OPEN FLOW, MCFD	NOT GIVEN	2800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.2	76.3	61.9
ETHANE	4.9	10.9	34.9
PROPANE	1.3	6.0	---
N-BUTANE	0.4	1.7	---
ISOBUTANE	0.4	2.2	---
N-PENTANE	0.2	0.6	---
ISOPENTANE	0.1	0.6	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.2	0.6	---
NITROGEN	0.2	0.1	2.6
OXYGEN	0.0	TRACE	0.3
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.0	0.9	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1099	1345	1252
SPECIFIC GRAVITY	0.627	0.779	0.742

	INDEX 2944 SAMPLE 13360	INDEX 2945 SAMPLE 15620	INDEX 2946 SAMPLE 13377
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALDWELL	CALDWELL	CALDWELL
FIELD	BANKS SPRINGS	BANKS SPRINGS SW	CLARKS N
WELL NAME	OLINKRAFT NO. D-1	PARKER NO. 1	CENTRAL MINERALS NO. 1
LOCATION	SEC. 26, T13N, R3E	SEC. 35, T13N, R3E	SEC. 10, T12N, R3E
OWNER	FRANK SPOONER	MARLIN EXPLORATION, INC.	SCOTT PRODUCTION CO., INC.
COMPLETED	10/02/71	08/21/78	01/22/72
SAMPLED	08/--/72	05/15/79	09/05/72
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2510	2306	1553
WELLHEAD PRESSURE,PSIG	1020	860	630
OPEN FLOW, MCFD	420	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.9	96.8	95.6
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.7	2.7	4.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.03	0.03	0.04
HEATING VALUE*	983	985	970
SPECIFIC GRAVITY	0.569	0.568	0.572

	INDEX 2947 SAMPLE 14142	INDEX 2948 SAMPLE 11811	INDEX 2949 SAMPLE 14139
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALDWELL	CALDWELL	CALDWELL
FIELD	CLARKS S	COLUMBIA	COOPER
WELL NAME	LOUISIANA-CENTRAL NO. 11-23	OLIN NO. 1	MOBIL NO. 1
LOCATION	SEC. 23, T12N, R3E	SEC. 17, T13N, R4E	SEC. 31, T13N, R3E
OWNER	JUSTISS-MEARS OIL CO., INC.	JAMES C. STORM CO.	SOUTH LOUISIANA PROD. CO.
COMPLETED	02/13/74	08/23/68	04/26/74
SAMPLED	09/06/74	04/09/69	08/28/74
FORMATION	EOCE-WILCOX	NOT GIVEN	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2602	NOT GIVEN	2494
WELLHEAD PRESSURE,PSIG	510	NOT GIVEN	940
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.0	96.9	97.3
ETHANE	0.1	0.1	0.1
PROPANE	0.0	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	2.4	2.6	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	994	984	987
SPECIFIC GRAVITY	0.574	0.571	0.565

	INDEX 2950 SAMPLE 15621	INDEX 2951 SAMPLE 16275	INDEX 2952 SAMPLE 3897
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALDWELL	CALDWELL	CALDWELL
FIELD	PINEY CREEK	SPAULDING	VIXEN
WELL NAME	RUSSELL NO. 2	PIONEER #1	LA. CENTRAL LMBR. CO. NO. 1
LOCATION	SEC. 8, T12N, R3E	SEC. 13, T11N, R2E	SEC. 31, T15N, R3W
OWNER	FARMERS UNION CENT. EXCH. IN	LYONS PETROLEUM, INC.	SHELL OIL CO.
COMPLETED	10/27/78	05/27/81	--/--/00
SAMPLED	05/15/79	05/27/81	09/30/44
FORMATION	EOCE-WILCOX	NOT GIVEN	CRET-MOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2623	NOT GIVEN	11615
WELLHEAD PRESSURE,PSIG	1120	1000	3230
OPEN FLOW, MCFD	NOT GIVEN	185	5980
COMPONENT, MOLE PCT			
METHANE	97.2	97.1	87.2
ETHANE	0.1	0.1	6.0
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	2.4	2.5	0.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.3	6.8
HELIUM	0.03	0.03	0.03
HEATING VALUE*	987	985	991
SPECIFIC GRAVITY	0.564	0.568	0.650

* CALCULATED GROSS BTU PER CU.FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2953 SAMPLE 7090	INDEX 2954 SAMPLE 15722	INDEX 2955 SAMPLE 17487
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CALDWELL	CAMERON	CAMERON
FIELD	VIKEN	BACKRIDGE	BACKRIDGE S
WELL NAME	LOUISIANA CEN. OIL & GAS FEE	J. A. DAVIS NO. 1	LONNIE A. DAVIS ET AL NO. 1
LOCATION	SEC. 23, T15N, R2E	SEC. 26, T14S, R9W	SEC. 25, T14S, R9W
OWNER	BARNWELL DRILLING CO., INC.	PEND OREILLE OIL & GAS CO.	WILLIAMS EXPLORATION CO.
COMPLETED	05/11/59	07/01/79	12/--/83
SAMPLED	05/29/59	08/10/79	--/--/00
FORMATION	CRET-RODESSA	PLIO-CLARKE	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	6597	13353	13360
WELLHEAD PRESSURE,PSIG	2668	8400	NOT GIVEN
OPEN FLOW, MCFD	14000	21500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.3	89.3	85.3
ETHANE	1.0	6.3	8.1
PROPANE	0.4	1.8	2.8
N-BUTANE	0.1	0.3	0.9
ISOBUTANE	0.5	0.5	0.9
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.4
NITROGEN	7.4	0.3	0.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.8	1.0	1.5
HELIUM	0.10	TRACE	TRACE
HEATING VALUE*	932	1105	1173
SPECIFIC GRAVITY	0.658	0.632	0.679

	INDEX 2956 SAMPLE 12012	INDEX 2957 SAMPLE 13806	INDEX 2958 SAMPLE 3669
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	BLACK BAYOU S	BLUE BUCK POINT	ADOLPH HEBERT NO. 1
WELL NAME	BROWN-ODOM NO. 4	NOBLE-CRAIN NO. 2	SEC. 16, T12S, R8W
LOCATION	SEC. 14, T12S, R12W	T15S, R16W	CONTINENTAL OIL CO.
OWNER	PAN AMERICAN PETROLEUM CORP.	TEXAS CRUDE, INC.	09/15/43
COMPLETED	06/15/69	08/04/73	09/21/43
SAMPLED	08/27/69	11/10/73	MIOC-
FORMATION	OLIG-HACKBERRY	MIOC-8400 FT. SAND	220
GEOLOGIC PROVINCE CODE	220	220	8571
DEPTH, FEET	11750	8435	4119
WELLHEAD PRESSURE,PSIG	5700	3100	NOT GIVEN
OPEN FLOW, MCFD	10000	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	88.7	94.1	88.2
ETHANE	4.5	3.4	10.2
PROPANE	2.1	0.7	---
N-BUTANE	0.5	0.1	---
ISOBUTANE	0.9	0.2	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.5	TRACE	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.7	0.1	---
NITROGEN	1.2	1.1	0.9
OXYGEN	0.0	0.1	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1154	1048	1076
SPECIFIC GRAVITY	0.662	0.591	0.614

	INDEX 2959 SAMPLE 16286	INDEX 2960 SAMPLE 4913	INDEX 2961 SAMPLE 15468
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	CAMERON CANAL	CAMERON W	CAMERON W BLK. 10
WELL NAME	BLANCHE FREMEAUX NO. 1	NO. A-2	STATE LEASE 6930 NO. 1
LOCATION	SEC. 25, T12S, R3W	BLK. 33, STATE LSE. NO. 1123	OFFSHORE
OWNER	MOBIL OIL CORP.	PHILLIPS PETROLEUM CO.	MAINOCO OIL & GAS CO.
COMPLETED	06/04/81	01/22/50	08/14/78
SAMPLED	06/22/81	06/28/50	10/26/78
FORMATION	OLIG-SUB ALLIANCE	PLIO-	MIOC-ABBEVILLE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12455	1665	12440
WELLHEAD PRESSURE,PSIG	8000	425	2750
OPEN FLOW, MCFD	1200	600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.9	98.3	89.3
ETHANE	4.9	0.2	6.2
PROPANE	1.6	0.1	1.8
N-BUTANE	0.3	0.1	0.4
ISOBUTANE	0.9	0.0	0.5
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.4	1.0	0.5
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.6	0.1	0.8
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1104	1006	1120
SPECIFIC GRAVITY	0.626	0.567	0.640

	INDEX 2962 SAMPLE 13094	INDEX 2963 SAMPLE 13444	INDEX 2964 SAMPLE 13361
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	CAMERON W BLK. 28	CHENIER PERDUE	CREOLE S
WELL NAME	STATE LEASE 5033 NO. 1	MIAMI CORP. NO. 1	S. O. CARTER NO. 1
LOCATION	BLK. 28	SEC. 10, T14S, R7W	SEC. 25, T14S, R7W
OWNER	OIL & GAS FUTURES, INC.	BALLARD & CORDELL CORP.	MCCORMICK OIL & GAS CORP.
COMPLETED	06/30/71	01/14/72	--/--/00
SAMPLED	10/22/71	10/04/72	08/--/72
FORMATION	-1400 SAND	MIOC-SIPHONINA DAVISI H	MIOC-PLANULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15230	9900	12848
WELLHEAD PRESSURE,PSIG	10240	5700	5000
OPEN FLOW, MCFD	NOT GIVEN	2500	1500
COMPONENT, MOLE PCT			
METHANE	94.9	92.1	92.8
ETHANE	2.2	4.6	3.9
PROPANE	0.6	1.6	1.1
N-BUTANE	0.1	0.3	0.2
ISOBUTANE	0.1	0.6	0.5
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.3	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1028	1097	1076
SPECIFIC GRAVITY	0.595	0.615	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 2965 SAMPLE 13725	INDEX 2966 SAMPLE 15278	INDEX 2967 SAMPLE 13185
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	DEEP LAKE	DEEP LAKE N	GRAND CHENIER S
WELL NAME	ROCKEFELLER NO. 12	MIAMI NO. 4	WATKINS-MILLER NO. 1
LOCATION	SEC. 24, T16S, R4W	SEC. 15, T15S, R3W	SEC. 5, T15S, R5W
OWNER	PENNZOIL PRODUCING CO.	QUINTANA PETROLEUM CORP.	SUPERIOR OIL CO.
COMPLETED	02/26/73	10/08/77	12/20/70
SAMPLED	09/16/73	05/09/78	11/04/71
FORMATION	-15400 SAND	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	16156	12300	11150
WELLHEAD PRESSURE,PSIG	6000	2400	3968
OPEN FLOW, MCFD	NOT GIVEN	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.1	93.7	95.7
ETHANE	4.3	2.8	2.4
PROPANE	1.5	0.8	0.7
N-BUTANE	0.3	0.2	0.0
ISOBUTANE	0.5	0.2	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.3	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	1.5	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1059	1047	1031
SPECIFIC GRAVITY	0.643	0.604	0.582

	INDEX 2968 SAMPLE 13010	INDEX 2969 SAMPLE 17275	INDEX 2970 SAMPLE 4349
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	GUEYDAN W	HIGH ISLAND	JOHNSON BAYOU
WELL NAME	DIXIE RICE CO. NO. 1	MIAMI "T" NO. 1	G. J. MCMANUS NO. 1
LOCATION	SEC. 1, T12S, R3W	SEC. 32, T13S, R7W	SEC. 20, T15S, R14W
OWNER	TEXACO INC.	ARCO OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	09/03/70	07/17/83	07/03/47
SAMPLED	09/07/71	05/02/84	08/22/47
FORMATION	MIOC-ZWAN	OLIG-CAMERINA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12542	17029	4480
WELLHEAD PRESSURE,PSIG	5000	12860	1750
OPEN FLOW, MCFD	7400	3310	3200
COMPONENT, MOLE PCT			
METHANE	92.7	92.8	97.2
ETHANE	3.6	3.3	2.4
PROPANE	1.4	0.6	---
N-BUTANE	0.3	0.1	---
ISOBUTANE	0.6	0.1	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.5	0.0	0.0
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	3.0	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1030	1031	1028
SPECIFIC GRAVITY	0.613	0.614	0.569

	INDEX 2971 SAMPLE 16150	INDEX 2972 SAMPLE 13180	INDEX 2973 SAMPLE 15589
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	JOHNSON BAYOU	JOHNSONS BAYOU W	KINGS BAYOU
WELL NAME	9000 RA SAU,SCHUH NO. 1	F. J. PAVELL C NO. 1	E. M. STEWART NO. 1
LOCATION	SEC. 5, T13S, R14W	SEC. 15, T13S, R15W	SEC. 1, T13S, R7W
OWNER	GREAT SOUTHERN O&G CO., INC.	ANOCO PRODUCTION CO.	HOUSTON OIL & MINERALS CORP.
COMPLETED	02/13/80	12/01/71	09/30/78
SAMPLED	12/06/80	03/30/72	03/23/79
FORMATION	MIOC-	MIOC-CRISTELLARIA	MIOC-PLANULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9000	9095	11580
WELLHEAD PRESSURE,PSIG	3100	3450	6800
OPEN FLOW, MCFD	400	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	90.6	90.5	89.5
ETHANE	4.4	3.6	3.6
PROPANE	1.6	0.8	0.9
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	0.8	0.1	0.1
NITROGEN	0.6	4.3	3.5
OXYGEN	0.0	0.1	0.8
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1145	1017	1022
SPECIFIC GRAVITY	0.646	0.617	0.618

	INDEX 2974 SAMPLE 12957	INDEX 2975 SAMPLE 17580	INDEX 2976 SAMPLE 9628
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	CAMERON	CAMERON
FIELD	LACASSANE	LAKE ARTHUR S	LAKE ARTHUR SW
WELL NAME	LACASSANE CO. NO. 4-8	DIXIE RICE NO. 1	P. DAVID NO. 1
LOCATION	SEC. 8, T12S, R5W	SEC. 3, T12S, R3W	SEC. 12, T12S, R4W
OWNER	TEXAS PACIFIC OIL CO., INC.	FORMAN PETROLEUM CORP.	BRAZOS OIL & GAS CO.
COMPLETED	01/02/70	05/26/83	08/17/63
SAMPLED	08/20/71	01/30/85	10/28/64
FORMATION	OL16-MARGINULINA HOWEI 2	MIOC-ZWAN	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13421	12337	10760
WELLHEAD PRESSURE,PSIG	8800	2100	3775
OPEN FLOW, MCFD	30000	1250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	88.8	92.8
ETHANE	5.2	5.4	4.1
PROPANE	2.2	2.2	1.2
N-BUTANE	0.5	0.6	0.4
ISOBUTANE	1.1	1.1	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.8	0.4	0.4
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1131	1147	1087
SPECIFIC GRAVITY	0.655	0.654	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2977 SAMPLE 15924		INDEX 2978 SAMPLE 11036		INDEX 2979 SAMPLE 10073	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	CAMERON		CAMERON		CAMERON	
FIELD	LAKE ARTHUR SW		LAKE MISERE		LITTLE PECAN LAKE	
WELL NAME	DIXIE RICE NO. 1		MIAMI CORP. C NO. 1		STATE LEASE 4103 WELL NO. 1	
LOCATION	SEC. 2, T12S, R3W		SEC. 28, T13S, R5W		ROCKEFELLER REFUGE	
OWNER	AMERICAN QUASAR PET. CO.		MOBIL OIL CORP.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	01/07/80		12/16/66		03/03/64	
SAMPLED	03/14/80		07/20/67		08/20/65	
FORMATION	MIOC-ZWAN		MIOC-PLANULINA A		MIOC-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	12510		10700		15000	
WELLHEAD PRESSURE,PSIG	2400		6600		1100	
OPEN FLOW, MCFD	4000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	89.7		96.2		90.9	
ETHANE	5.3		2.1		3.8	
PROPANE	2.1		0.4		2.0	
N-BUTANE	0.5		0.1		0.4	
ISOBUTANE	0.9		0.1		0.7	
N-PENTANE	0.1		TRACE		TRACE	
ISOPENTANE	0.3		0.0		0.2	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	0.1		0.4		0.3	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.4		1.5	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1136		1034		1091	
SPECIFIC GRAVITY	0.645		0.579		0.632	

	INDEX 2980 SAMPLE 14721		INDEX 2981 SAMPLE 13709		INDEX 2982 SAMPLE 15466	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	CAMERON		CAMERON		CAMERON	
FIELD	MALLARD BAY		MUD LAKE E		OCEAN VIEW	
WELL NAME	STATE LEASE 6574 LONG NO. 1		WINCENT HEIRS NO. 1		STREAM TRUST NO. 2	
LOCATION	SEC. 22, T13S, R3W		SEC. 18, T14S, R10W		SEC. 42, T15S, R13W	
OWNER	TESORO PETROLEUM CORP.		MCCORMICK OIL & GAS CORP.		WAINOCO OIL & GAS CO.	
COMPLETED	07/12/76		12/31/71		06/16/77	
SAMPLED	07/23/76		08/--/73		10/26/78	
FORMATION	OLIG-MARGINULINA		MIOC-PLANULINA		MIOC-ABBEVILLE	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8404		10220		11091	
WELLHEAD PRESSURE,PSIG	2650		3750		1800	
OPEN FLOW, MCFD	550000		4000		3037	
COMPONENT, MOLE PCT						
METHANE	93.3		91.0		89.7	
ETHANE	2.9		4.3		5.6	
PROPANE	1.4		1.7		1.8	
N-BUTANE	0.4		0.4		0.4	
ISOBUTANE	0.5		0.7		0.5	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.3		0.2	
NITROGEN	0.6		0.5		0.6	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.6		0.8	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1077		1116		1109	
SPECIFIC GRAVITY	0.611		0.634		0.634	

	INDEX 2983 SAMPLE 15467		INDEX 2984 SAMPLE 5403		INDEX 2985 SAMPLE 17538	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	CAMERON		CAMERON		CAMERON	
FIELD	OCEAN VIEW		PECAN LAKE S		SABINE LAKE	
WELL NAME	STREAM TRUST NO. 2		MIAMI CORP. NO. 6		SABINE LAKE W.U.-A NO. 2	
LOCATION	SEC. 42, T15S, R13W		SEC. 8, T15S, R5W		SABINE LAKE	
OWNER	WAINOCO OIL & GAS CO.		PAN AMERICAN PETROLEUM CORP.		STATE OF LOUISIANA	
COMPLETED	06/16/77		12/31/52		10/28/83	
SAMPLED	10/26/76		02/25/53		12/13/84	
FORMATION	MIOC-ABBEVILLE		MIOC-		OLIG-HACKBERRY	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	11091		10710		11940	
WELLHEAD PRESSURE,PSIG	1800		3958		5250	
OPEN FLOW, MCFD	3037		34000		8500	
COMPONENT, MOLE PCT						
METHANE	89.7		93.7		85.7	
ETHANE	5.7		2.6		7.2	
PROPANE	1.7		2.3		3.5	
N-BUTANE	0.4		0.3		0.8	
ISOBUTANE	0.5		0.0		0.8	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.2		0.0		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	0.5		0.0		0.5	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.3		0.8	
HELIUM	TRACE		0.02		TRACE	
HEATING VALUE*	1108		1088		1177	
SPECIFIC GRAVITY	0.634		0.606		0.676	

	INDEX 2986 SAMPLE 13718		INDEX 2987 SAMPLE 15209		INDEX 2988 SAMPLE 13119	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	CAMERON		CLAIBORNE		CLAIBORNE	
FIELD	SECOND BAYOU		ATHENS		DYKESVILLE	
WELL NAME	JOHN W. MECOM NO. 2		JOHN FERRELL ESTATE NO. 1		J. W. PRATHER NO. 1	
LOCATION	SEC. 33, T14S, R11W		SEC. 22, T20N, R7W		SEC. 7, T22N, R8W	
OWNER	SIGNAL PETROLEUM		ICH EXPLORATION CO.		SUN OIL CO.	
COMPLETED	02/10/71		--/--/00		07/--/71	
SAMPLED	09/11/73		02/13/78		12/20/71	
FORMATION	MIOC-P-3 SAND		NOT GIVEN		JURA-MCCRARY	
GEOLOGIC PROVINCE CODE	220		230		230	
DEPTH, FEET	12912		NOT GIVEN		8720	
WELLHEAD PRESSURE,PSIG	1400		NOT GIVEN		2640	
OPEN FLOW, MCFD	3000		NOT GIVEN		12000	
COMPONENT, MOLE PCT						
METHANE	88.8		87.9		63.5	
ETHANE	6.5		4.6		10.9	
PROPANE	1.7		1.8		5.8	
N-BUTANE	0.4		0.7		1.3	
ISOBUTANE	0.5		0.8		0.6	
N-PENTANE	0.1		0.8		0.2	
ISOPENTANE	0.1		0.1		0.3	
CYCLOPENTANE	TRACE		0.2		TRACE	
HEXANES PLUS	0.2		1.2		0.1	
NITROGEN	0.4		1.4		12.7	
OXYGEN	0.0		TRACE		3.0	
ARGON	0.0		0.0		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		0.5		1.4	
HELIUM	TRACE		0.03		0.02	
HEATING VALUE*	1109		1178		1088	
SPECIFIC GRAVITY	0.637		0.679		0.790	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 2989 SAMPLE 17190	INDEX 2990 SAMPLE 17070	INDEX 2991 SAMPLE 14152
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CLAIBORNE	CLAIBORNE	CLAIBORNE
FIELD	FRAZIER CREEK	LEATHERMAN CREEK	OAKS
WELL NAME	CONTINENTAL CAN NO. 1-29	SHERRILL NO. 8	MORELOCK NO. 1
LOCATION	SEC. 29, T19N, R6W	SEC. 21, T19N, R7W	SEC. 36, T23N, R8W
OWNER	ANKLA EXPLORATION CO.	MCGOLDRICK OIL CO.	LONE STAR PRODUCING CO.
COMPLETED	06/23/83	11/--/82	07/13/75
SAMPLED	02/21/84	09/26/83	09/21/76
FORMATION	JURA-TAYLOR	JURA-COTTON VALLEY	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	11456	10030	10955
WELLHEAD PRESSURE, PSIG	5950	1700	1790
OPEN FLOW, MCFD	6500	4200	1000
COMPONENT, MOLE PCT			
METHANE	96.7	92.0	84.8
ETHANE	0.9	3.1	5.1
PROPANE	0.1	0.9	2.0
N-BUTANE	0.1	0.3	0.6
ISOBUTANE	TRACE	0.3	0.8
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	0.3	0.3	4.2
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	2.1	1.8
HELIUM	0.01	TRACE	0.03
HEATING VALUE*	1002	1059	1077
SPECIFIC GRAVITY	0.578	0.621	0.668

	INDEX 2992 SAMPLE 14926	INDEX 2993 SAMPLE 1951	INDEX 2994 SAMPLE 2444
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CLAIBORNE	CLAIBORNE	CLAIBORNE
FIELD	OAKS	SUGAR CREEK	SUGAR CREEK
WELL NAME	WARE NO. 1	KILPATRICK NO. 1	TREADWELL HAWK NO. 1
LOCATION	SEC. 10, T22N, R7W	SEC. 7, T19N, R5W	SEC. 6, T19N, R5W
OWNER	LYONS PETROLEUM, INC.	TRIANGLE DRILLING CO., INC.	SUGAR CREEK SYNDICATE
COMPLETED	07/07/76	--/--/00	10/14/31
SAMPLED	02/17/77	03/10/30	01/03/32
FORMATION	JURA-SMACKOVER	NOT GIVEN	CRET-GLEN ROSE
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	10763	4355	4367
WELLHEAD PRESSURE, PSIG	5600	NOT GIVEN	1615
OPEN FLOW, MCFD	1000	NOT GIVEN	29170
COMPONENT, MOLE PCT			
METHANE	85.1	85.2	83.1
ETHANE	7.7	12.6	15.3
PROPANE	2.9	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.3	1.4	0.9
OXYGEN	0.0	0.3	0.3
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.4	0.5	0.3
HELIUM	0.01	0.06	0.06
HEATING VALUE*	1168	1089	1116
SPECIFIC GRAVITY	0.678	0.629	0.638

	INDEX 2995 SAMPLE 5486	INDEX 2996 SAMPLE 2309	INDEX 2997 SAMPLE 4015
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CLAIBORNE	CONCORDIA	CONCORDIA
FIELD	WILDCAT	FERRIDAY	NOT GIVEN
WELL NAME	B. M. WOODS NO. 1	SAUNDERS NO. 3	BENNETT NO. 1
LOCATION	SEC. 30, T22N, R8W	SEC. 42, T8, R10	SEC. 27, T9N, R10E
OWNER	PAN AMERICAN SOUTHERN CORP.,	UNITED GAS PUBLIC SERVICE CO	CALIFORNIA CO.
COMPLETED	05/04/53	03/15/31	--/--/00
SAMPLED	05/21/53	04/07/31	--/--/00
FORMATION	JURA-BODCAW	EOCE-JACKSON	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8711	1420	NOT GIVEN
WELLHEAD PRESSURE, PSIG	3000	615	NOT GIVEN
OPEN FLOW, MCFD	1480	28000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.5	97.1	69.9
ETHANE	1.8	0.0	26.7
PROPANE	0.2	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.5	1.7	0.8
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.5	1.1	2.4
HELIUM	0.02	0.00	TRACE
HEATING VALUE*	1031	984	1187
SPECIFIC GRAVITY	0.587	0.573	0.714

	INDEX 2998 SAMPLE 14735	INDEX 2999 SAMPLE 15368	INDEX 3000 SAMPLE 15219
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	DE SOTO	DE SOTO	DE SOTO
FIELD	BENSON	BETHANY LONGSTREET	BRUSHY BAYOU
WELL NAME	CLAYTON ENGLISH NO. 1	BURFORD NO. 1	B. E. WILBURN NO. 1
LOCATION	SEC. 2, T10N, R14W	SEC. 18, T13N, R13N	SEC. 34, T11N, R12W
OWNER	TERRA RESOURCES, INC.	CRYSTAL OIL CO.	SUN PRODUCTION CO.
COMPLETED	04/16/76	04/28/78	08/27/77
SAMPLED	08/13/76	09/11/78	03/08/78
FORMATION	CRET-PALUXY	CRET-PALUXY	CRET-PALUXY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	3124	3248	2969
WELLHEAD PRESSURE, PSIG	1320	1328	1350
OPEN FLOW, MCFD	2300	2528	557
COMPONENT, MOLE PCT			
METHANE	94.0	91.0	93.1
ETHANE	2.4	2.5	1.8
PROPANE	1.1	1.0	1.0
N-BUTANE	0.4	0.3	0.6
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	1.3	4.2	1.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1065	1027	1088
SPECIFIC GRAVITY	0.601	0.610	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3001 SAMPLE 4612		INDEX 3002 SAMPLE 14611		INDEX 3003 SAMPLE 15031	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	DE SOTO		DE SOTO		DE SOTO	
FIELD	BUTLER		CASPIANA		CASPIANA	
WELL NAME	J. J. RAMBIN NO. 1		SUSIE B. OSBY NO. 1		OLINKRAFT NO. 2	
LOCATION	SEC. 23, T11N, R11W		SEC. 14, T15N, R13W		SEC. 19, T15N, R13W	
OWNER	TEXAS CO.		TENNECO OIL CO.		RAY PETROLEUM, INC.	
COMPLETED	04/13/48		--/--/00		09/02/76	
SAMPLED	11/08/48		03/12/76		06/23/77	
FORMATION	CRET-RODESSA		JURA-COTTON VALLEY		CRET-RODESSA	
GEOLOGIC PROVINCE CODE	230		230		230	
DEPTH, FEET	4972		9142		5170	
WELLHEAD PRESSURE, PSIG	2350		1500		1700	
OPEN FLOW, MCFD	150		1659		1200	
COMPONENT, MOLE PCT						
METHANE	85.8		90.4		93.1	
ETHANE	8.0		4.9		3.8	
PROPANE	---		1.3		1.1	
N-BUTANE	---		0.5		0.4	
ISOBUTANE	---		0.3		0.2	
N-PENTANE	---		0.1		0.2	
ISOPENTANE	---		0.1		0.1	
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---		0.2		0.2	
NITROGEN	4.4		0.4		0.4	
OXYGEN	0.2		0.0		0.0	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	1.6		2.1		0.5	
HELIUM	0.68		TRACE		0.02	
HEATING VALUE*	1015		1076		1083	
SPECIFIC GRAVITY	0.628		0.631		0.611	

	INDEX 3004 SAMPLE 196		INDEX 3005 SAMPLE 15303		INDEX 3006 SAMPLE 14931	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	DE SOTO		DE SOTO		DE SOTO	
FIELD	DE SOTO		GRAND CANE		MOLLY	
WELL NAME	MUD NO. 1		A. F. WILLIAMS NO. 1		BURFORD ESTATE NO. 1	
LOCATION	SEC. 12, T12N, R12W		SEC. 13, T13N, R15W		SEC. 27, T14N, R14W	
OWNER	TEXAS CO.		RAY PETROLEUM, INC.		PLACID OIL CO.	
COMPLETED	11/01/12		--/--/00		09/12/76	
SAMPLED	04/10/20		06/10/78		03/02/77	
FORMATION	-BLUE GAS SAND		CRET-HOSSTON		CRET-HOSSTON	
GEOLOGIC PROVINCE CODE	230		230		230	
DEPTH, FEET	2610		7173		NOT GIVEN	
WELLHEAD PRESSURE, PSIG	35		1500		2700	
OPEN FLOW, MCFD	200000		1220		2000	
COMPONENT, MOLE PCT						
METHANE	95.4		94.2		96.4	
ETHANE	0.0		2.1		0.9	
PROPANE	---		0.5		0.1	
N-BUTANE	---		0.2		0.1	
ISOBUTANE	---		0.1		TRACE	
N-PENTANE	---		0.1		0.0	
ISOPENTANE	---		0.1		TRACE	
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---		0.1		TRACE	
NITROGEN	3.5		1.2		1.3	
OXYGEN	0.5		0.0		0.0	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.1		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		1.2		1.0	
HELIUM	TRACE		0.02		0.02	
HEATING VALUE*	966		1029		999	
SPECIFIC GRAVITY	0.575		0.596		0.575	

	INDEX 3007 SAMPLE 15355		INDEX 3008 SAMPLE 15801		INDEX 3009 SAMPLE 11077	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	DE SOTO		DE SOTO		MANSFIELD	
FIELD	KINGSTON		KINGSTON		NABORS N-J NO. 1	
WELL NAME	STATE LEASE 6760 NO. 1		JOE E. MORAN NO. 1		SEC. 8, T12N, R13W	
LOCATION	SEC. 8, T14N, R13W		SEC. 15, T13N, R13W		W. C. NABORS	
OWNER	TENNECO OIL CO.		ENERGY RESERVES GROUP, INC.		11/08/66	
COMPLETED	01/06/78		12/13/77		08/26/67	
SAMPLED	08/30/78		09/20/79		CRET-PETTIT	
FORMATION	JURA-COTTON VALLEY		JURA-COTTON VALLEY		230	
GEOLOGIC PROVINCE CODE	230		230		6532	
DEPTH, FEET	9515		9250		NOT GIVEN	
WELLHEAD PRESSURE, PSIG	3750		3370		NOT GIVEN	
OPEN FLOW, MCFD	1575		NOT GIVEN			
COMPONENT, MOLE PCT						
METHANE	88.9		89.6		96.8	
ETHANE	5.5		5.3		0.3	
PROPANE	1.6		1.5		0.1	
N-BUTANE	0.4		0.4		0.0	
ISOBUTANE	0.3		0.4		0.0	
N-PENTANE	0.2		0.2		0.0	
ISOPENTANE	0.2		0.2		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.2		0.2		0.0	
NITROGEN	0.2		0.1		1.9	
OXYGEN	0.2		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.2		2.1		0.8	
HELIUM	0.01		TRACE		0.03	
HEATING VALUE*	1092		1096		989	
SPECIFIC GRAVITY	0.642		0.641		0.572	

	INDEX 3010 SAMPLE 4183		INDEX 3011 SAMPLE 14534		INDEX 3012 SAMPLE 14535	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	DE SOTO		DE SOTO		DE SOTO	
FIELD	SPIDER		WILDCAT		WILDCAT	
WELL NAME	NABORS NO. 1		JACKSON B. DAVIS NO. 2		JACKSON B. DAVIS NO. 2	
LOCATION	SEC. 28, T12N, R14W		SEC. 24, T15N, R14W		SEC. 24, T15N, R14W	
OWNER	PHILLIPS PETROLEUM CO.		RAY PETROLEUM, INC.		RAY PETROLEUM, INC.	
COMPLETED	07/18/46		11/17/75		11/17/75	
SAMPLED	11/09/46		11/17/75		11/17/75	
FORMATION	CRET-L		CRET-RODESSA		CRET-PETTIT	
GEOLOGIC PROVINCE CODE	230		230		230	
DEPTH, FEET	6180		5200		6300	
WELLHEAD PRESSURE, PSIG	2010		2100		2450	
OPEN FLOW, MCFD	39000		1700		2100	
COMPONENT, MOLE PCT						
METHANE	86.0		92.1		92.7	
ETHANE	11.0		3.7		3.7	
PROPANE	---		1.3		1.1	
N-BUTANE	---		0.4		0.5	
ISOBUTANE	---		0.3		0.3	
N-PENTANE	---		0.1		0.1	
ISOPENTANE	---		0.1		0.1	
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---		0.2		0.1	
NITROGEN	1.7		1.2		0.4	
OXYGEN	0.3		0.0		0.0	
ARGON	---		0.0		0.0	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	1.0		0.5		1.2	
HELIUM	0.03		0.03		0.01	
HEATING VALUE*	1068		1075		1068	
SPECIFIC GRAVITY	0.627		0.614		0.612	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 3013 SAMPLE 17628	INDEX 3014 SAMPLE 15913	INDEX 3015 SAMPLE 17313
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	E. BATON ROUGE	E. BATON ROUGE	E. BATON ROUGE
FIELD	COMITE	PORT HUDSON	PORT HUDSON
WELL NAME	EISWORTH NO. 1	GEORGIA PACIFIC NO. 1	HAZEL ANDREWS NO. 1
LOCATION	SEC. 41, T6S, R2E	SEC. 64, T4S, R2W	SEC. 61, T4S, R2W
OWNER	AMAREX, INC.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO. (USA)
COMPLETED	10/09/82	12/17/77	05/02/84
SAMPLED	03/19/85	02/28/80	06/06/84
FORMATION	CRET-TUSCALOOSA	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	18100	16616	16986
WELLHEAD PRESSURE,PSIG	10970	4925	4900
OPEN FLOW, MCFD	NOT GIVEN	9300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.3	83.7	67.4
ETHANE	5.9	4.3	10.5
PROPANE	1.7	1.7	6.5
N-BUTANE	0.4	0.5	1.9
ISOBUTANE	0.5	0.5	2.0
N-PENTANE	0.2	0.2	0.6
ISOPENTANE	0.1	0.3	0.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.5
NITROGEN	0.6	1.7	0.6
OXYGEN	TRACE	0.3	0.2
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.0	6.3	9.1
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1076	1043	1252
SPECIFIC GRAVITY	0.681	0.696	0.860

	INDEX 3016 SAMPLE 16264	INDEX 3017 SAMPLE 17489	INDEX 3018 SAMPLE 14527
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	E. BATON ROUGE	EVANGELINE	EVANGELINE
FIELD	PROFIT ISLAND	BASILE	DURALDE
WELL NAME	TRANSMATCH NO. 1	THOMAS YOUNG NO. 1	PINELANDS PETROLEUM NO. 1
LOCATION	SEC. 22, T5S, R2W	NOT GIVEN	SEC. 21, T5S, R2W
OWNER	HUNT PETROLEUM CORP.	STRIKER PETROLEUM CORP.	SKLAR & PHILLIPS, INC.
COMPLETED	04/15/81	01/24/83	10/12/75
SAMPLED	05/21/81	10/11/84	11/04/75
FORMATION	CRET-TUSCALOOSA	OLIG-FRIO B	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	19069	8337	7704
WELLHEAD PRESSURE,PSIG	8420	500	2700
OPEN FLOW, MCFD	13000	30	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	87.2	91.9
ETHANE	6.1	6.7	3.6
PROPANE	1.8	2.9	2.1
N-BUTANE	0.4	0.8	0.5
ISOBUTANE	0.6	0.7	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	0.2	0.2	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.9	0.3	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1071	1174	1121
SPECIFIC GRAVITY	0.705	0.663	0.631

	INDEX 3019 SAMPLE 17259	INDEX 3020 SAMPLE 3698	INDEX 3021 SAMPLE 17059
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	EVANGELINE	EVANGELINE	IBERIA
FIELD	PORT BARRY	REDDELL	AVERY ISLAND SE
WELL NAME	HIRSCH TRUST NO. 1	PARDEE NO. 3	E. T. WEEKS SR. EST. NO. 1-D
LOCATION	SEC. 25, T5S, R2W	SEC. 20, T4S, R2E	SEC. 50, T13S, R6E
OWNER	WOODS PETROLEUM CORP.	CONTINENTAL OIL CO.	ENERGY RESERVES GROUP, INC.
COMPLETED	09/--/83	11/10/43	09/12/82
SAMPLED	04/17/84	11/20/43	09/12/83
FORMATION	OLIG-FRIO	EOCE-SPARTA	MIOC-SIPHONINA DAVISI-2
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8488	9960	17338
WELLHEAD PRESSURE,PSIG	500	4779	5800
OPEN FLOW, MCFD	20	150000	400
COMPONENT, MOLE PCT			
METHANE	88.0	73.0	91.4
ETHANE	6.9	24.4	3.1
PROPANE	2.2	---	1.0
N-BUTANE	0.6	---	0.3
ISOBUTANE	0.6	---	0.2
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.4	---	0.2
CYCLOPENTANE	0.2	---	TRACE
HEXANES PLUS	0.4	---	0.1
NITROGEN	TRACE	0.7	0.9
OXYGEN	TRACE	0.4	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.3
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.4	1.5	2.3
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1166	1177	1043
SPECIFIC GRAVITY	0.657	0.695	0.620

	INDEX 3022 SAMPLE 13137	INDEX 3023 SAMPLE 13138	INDEX 3024 SAMPLE 15184
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	BAYOU PIGEON E	BAYOU PIGEON E	BAYOU POSTILLION
WELL NAME	WILLIAMS, INC. NO. 1	WILLIAMS, INC. NO. 1	WILLIAMS U NO 1
LOCATION	SEC. 10, T12S, R11E	SEC. 10, T12S, R11E	SEC. 28, T12S, R11E
OWNER	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.	PHILLIPS PETROLEUM CO.
COMPLETED	03/05/70	03/05/70	09/02/76
SAMPLED	01/19/72	01/19/72	01/07/78
FORMATION	OLIG-DISCORBIS 15	OLIG-DISCORBIS 14	OLIG-DISCORBIS 10
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12487	12420	11882
WELLHEAD PRESSURE,PSIG	4476	4459	3750
OPEN FLOW, MCFD	24500	52000	14500
COMPONENT, MOLE PCT			
METHANE	96.0	96.0	94.5
ETHANE	2.2	2.3	3.2
PROPANE	0.5	0.5	0.7
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.2	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1055	1047	1057
SPECIFIC GRAVITY	0.580	0.585	0.595

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3025 SAMPLE 17668	INDEX 3026 SAMPLE 14442	INDEX 3027 SAMPLE 17085
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	BAYOU POSTILLION	BAYOU POSTILLION E	EUGENE ISLAND
WELL NAME	WILLIAMS INC. NO. 1	E. H. PETERMAN ET AL. NO C-2	STATE LEASE 7634 NO. 2
LOCATION	SEC. 13, T12S, R11E	SEC. 36, T12S, R11E	BLK. 9
OWNER	GODRICH OIL CO.	CHEVRON OIL CO.	VOLVO PETROLEUM, INC.
COMPLETED	10/10/83	02/18/74	03/03/80
SAMPLED	05/13/85	08/14/75	10/10/83
FORMATION	OLIG-DISCORBIS 15	-14800 FT. SAND	-816 MOD NO. 3 SAND
GEOLOGIC PROVINCE CODE	220	220	952
DEPTH, FEET	13691	14588	10813
WELLHEAD PRESSURE,PSIG	2700	5500	4400
OPEN FLOW, MCFD	2000	13300	3500
COMPONENT, MOLE PCT			
METHANE	95.6	94.0	96.9
ETHANE	2.2	2.6	1.6
PROPANE	0.4	0.8	0.3
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	0.4	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.4	0.4
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1038	1047	1034
SPECIFIC GRAVITY	0.587	0.602	0.577

	INDEX 3028 SAMPLE 14665	INDEX 3029 SAMPLE 14993	INDEX 3030 SAMPLE 14994
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	IBERIA	JEFFERSON ISLAND	JEFFERSON ISLAND
WELL NAME	DUHE NO. 2	J. L. BAYLESS NO. 1	J. L. BAYLESS NO. 1-D
LOCATION	SEC. 41, T12S, R8E	SEC. 65, T12S, R5E	SEC. 65, T12S, R5E
OWNER	ASHLAND OIL, INC.	C & K PETROLEUM, INC.	C & K PETROLEUM, INC.
COMPLETED	06/15/75	02/14/77	02/04/77
SAMPLED	04/27/76	05/04/77	05/04/77
FORMATION	MIOC-ROEHAN	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11612	13759	13381
WELLHEAD PRESSURE,PSIG	4042	5000	4960
OPEN FLOW, MCFD	1321	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.9	87.8	85.6
ETHANE	3.6	5.1	6.2
PROPANE	1.0	2.7	3.0
N-BUTANE	0.2	0.9	0.7
ISOBUTANE	0.3	0.8	0.9
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.4	0.1	1.0
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.6	1.9
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1068	1153	1133
SPECIFIC GRAVITY	0.600	0.669	0.674

	INDEX 3031 SAMPLE 15109	INDEX 3032 SAMPLE 12413	INDEX 3033 SAMPLE 4341
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	JEFFERSON ISLAND	MOUND POINT	RABBIT ISLAND
WELL NAME	CLEVELAND DUHON NO. 1	MOUND POINT NO. 38	STATE RABBIT ISLAND NO. 10
LOCATION	SEC. 65, T12S, R5E	STATE LEASE 340, OFFSHORE	ATCHAFALAYA BAY
OWNER	C & K PETROLEUM, INC.	TEXACO INC.	TEXAS CO.
COMPLETED	07/24/77	08/01/69	06/22/47
SAMPLED	09/26/77	08/31/70	08/12/47
FORMATION	MIOC-SD2	-Y SAND, SEG. D.	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13592	12050	10545
WELLHEAD PRESSURE,PSIG	100	3500	4200
OPEN FLOW, MCFD	NOT GIVEN	5300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.2	92.2	83.1
ETHANE	6.6	3.0	9.5
PROPANE	3.2	1.4	---
N-BUTANE	1.0	0.2	---
ISOBUTANE	0.9	0.5	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.3	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.4	0.3	---
NITROGEN	1.5	1.4	5.6
OXYGEN	0.0	0.0	1.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.5	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.0	0.7	0.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1170	1076	1012
SPECIFIC GRAVITY	0.685	0.620	0.636

	INDEX 3034 SAMPLE 12378	INDEX 3035 SAMPLE 12386	INDEX 3036 SAMPLE 4021
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERIA
FIELD	RABBIT ISLAND	RABBIT ISLAND	WEEKS ISLAND
WELL NAME	STATE LEASE 340 NO. 93	STATE LEASE 340 NO. 93	SMITH STATE UNIT 1 NO. 1
LOCATION	ATCHAFALAYA BAY, OFFSHORE	OFFSHORE	SEC. 13, T14S, R6E
OWNER	TEXACO INC.	TEXACO INC.	SHELL OIL CO.
COMPLETED	02/01/69	02/01/69	--/--/00
SAMPLED	08/12/70	08/12/70	05/10/45
FORMATION	MIOC-NO. 20 SAND, SEG. A	MIOC-NO. 20 SAND, SEG. A	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11072	11072	13400
WELLHEAD PRESSURE,PSIG	4300	4300	4500
OPEN FLOW, MCFD	8800	8800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.5	94.5	84.7
ETHANE	2.8	2.9	14.4
PROPANE	1.0	0.9	---
N-BUTANE	0.3	0.2	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.5	0.3	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1068	1061	1116
SPECIFIC GRAVITY	0.602	0.596	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3037 SAMPLE 4096	INDEX 3038 SAMPLE 5633	INDEX 3039 SAMPLE 17595
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERIA	IBERIA	IBERVILLE
FIELD	WEEKS ISLAND	WEEKS ISLAND	BAYOU SORRELL NW
WELL NAME	SMITH-STATE UNIT 1	GONSOULIN STATE UNIT NO. 2	BAIST NO. 1
LOCATION	SEC. 13, T14S, R8E	SEC. 41, T14S, R7E	SEC. 87, T10S, R10E
OWNER	SHELL OIL CO.	SHELL OIL CO.	HOUSTON OILFIELDS CO.
COMPLETED	--/--/00	10/01/53	03/23/84
SAMPLED	04/25/45	06/04/54	02/20/85
FORMATION	MIOC-	MIOC-L	OLIG-CIBICIDES HAZZARDI
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13551	17186	11824
WELLHEAD PRESSURE,PSIG	5000	5800	3500
OPEN FLOW, MCFD	NOT GIVEN	4847	1425
COMPONENT, MOLE PCT			
METHANE	85.5	93.5	91.3
ETHANE	10.9	2.6	4.9
PROPANE	---	0.6	1.7
N-BUTANE	---	0.2	0.4
ISOBUTANE	---	0.2	0.5
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	3.1	1.3	0.4
OXYGEN	0.1	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.2	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	1.2	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1061	1032	1165
SPECIFIC GRAVITY	0.626	0.599	0.622

	INDEX 3040 SAMPLE 15569	INDEX 3041 SAMPLE 3945	INDEX 3042 SAMPLE 3946
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERVILLE	IBERVILLE	IBERVILLE
FIELD	GROSSE TETE	LAUREL RIDGE	LAUREL RIDGE
WELL NAME	WILBERTS "C" NO. 1	ADAM MYHEL NO. 1	C. G. ROBINSON NO. 1
LOCATION	SEC. 22, T8S, R11E	SEC. 91, T10S, R13E	SEC. 91, T10S, R13E
OWNER	GOLDKING PRODUCTION CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/02/75	07/03/44	11/20/44
SAMPLED	02/09/79	11/21/44	11/21/44
FORMATION	PENN-ROWE	OLIG-MET LIME	OLIG-MET LIME
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10448	10688	10620
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4449	2978
COMPONENT, MOLE PCT			
METHANE	86.8	90.8	91.6
ETHANE	6.9	8.9	8.3
PROPANE	3.5	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.7	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.4	0.0	0.0
OXYGEN	0.0	0.3	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.8	0.5
HELIUM	TRACE	0.00	0.01
HEATING VALUE*	1176	1071	1071
SPECIFIC GRAVITY	0.665	0.608	0.601

	INDEX 3043 SAMPLE 16046	INDEX 3044 SAMPLE 4146	INDEX 3045 SAMPLE 9158
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	IBERVILLE	JACKSON	JACKSON
FIELD	BARINGOUIN	CHATHAM	CHATHAM
WELL NAME	E. G. HYNES ET AL. NO. 1	TREMONT LUMBER CO. NO. 1	TREMONT A NO. 1
LOCATION	SEC. 98, T7S, R9E	SEC. 22, T15N, R1W	SEC. 15, T15N, R1W
OWNER	RIO BRAVO OIL CO.	SHELL OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	08/31/78	05/15/45	11/27/62
SAMPLED	08/11/80	10/31/46	11/04/63
FORMATION	OLIG-FRIO	NOT GIVEN	CRET-JAMES
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	9402	9620	6840
WELLHEAD PRESSURE,PSIG	3400	3100	2800
OPEN FLOW, MCFD	1000	150	44000
COMPONENT, MOLE PCT			
METHANE	91.1	95.9	89.1
ETHANE	3.8	0.0	1.0
PROPANE	1.9	---	0.6
N-BUTANE	0.5	---	0.2
ISOBUTANE	0.6	---	TRACE
N-PENTANE	0.2	---	TRACE
ISOPENTANE	0.3	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.4	---	0.2
NITROGEN	1.0	0.9	8.4
OXYGEN	0.1	0.4	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	3.2	TRACE
HELIUM	0.01	0.05	0.10
HEATING VALUE*	1123	971	962
SPECIFIC GRAVITY	0.635	0.589	0.610

	INDEX 3046 SAMPLE 15646	INDEX 3047 SAMPLE 14447	INDEX 3048 SAMPLE 15883
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JACKSON	JACKSON	JACKSON
FIELD	CLEAR BRANCH	DANVILLE	DANVILLE
WELL NAME	M. S. SMITH NO. 1	CAN B NO. 1	HODGE-HUNT NO. 1
LOCATION	SEC. 2, T14N, R2W	SEC. 29, T14N, R4W	SEC. 30, T14N, R4W
OWNER	HUNT PETROLEUM CORP.	PHILLIPS PETROLEUM CO.	JUSTISS-MEARS OIL CO., INC.
COMPLETED	07/22/78	01/26/74	09/17/79
SAMPLED	06/12/79	09/02/75	01/16/80
FORMATION	CRET-HOSSTON	CRET-HOSSTON	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9820	8530	8443
WELLHEAD PRESSURE,PSIG	3900	3259	1550
OPEN FLOW, MCFD	6900	3000	1581
COMPONENT, MOLE PCT			
METHANE	92.5	94.1	95.1
ETHANE	0.1	0.2	0.2
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.4	3.0	2.4
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.8	2.6	2.1
HELIUM	0.03	0.08	0.05
HEATING VALUE*	939	957	970
SPECIFIC GRAVITY	0.616	0.593	0.587

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3049 SAMPLE 14555	INDEX 3050 SAMPLE 16175	INDEX 3051 SAMPLE 16729
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JACKSON	JACKSON	JACKSON
FIELD	KEPPLER CREEK	VERNON	VERNON
WELL NAME	L. S. STEWART NO. 1	WILLIAMETTE NO. 1	DAVIS BROS. LUMBER NO. A-1
LOCATION	SEC. 14, T16N, R3W	SEC. 33, T17N, R2W	SEC. 21, T6N, R2E
OWNER	JONES-O'BRIEN, INC.	WESSELY ENERGY CORP.	CRYSTAL OIL CO.
COMPLETED	12/09/74	--/--/00	05/--/82
SAMPLED	12/--/75	01/23/81	12/10/82
FORMATION	CRET-JAMES	NOT GIVEN	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6572	NOT GIVEN	13684
WELLHEAD PRESSURE,PSIG	1892	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2008	NOT GIVEN	3900
COMPONENT, MOLE PCT			
METHANE	84.9	95.9	96.1
ETHANE	0.9	0.3	0.3
PROPANE	0.3	TRACE	TRACE
N-BUTANE	0.1	TRACE	0.0
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.2	2.0	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.0	1.5	3.1
HELIUM	0.09	0.05	TRACE
HEATING VALUE*	900	982	989
SPECIFIC GRAVITY	0.650	0.580	0.590

	INDEX 3052 SAMPLE 17545	INDEX 3053 SAMPLE 13157	INDEX 3054 SAMPLE 12947
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON	JEFFERSON	JEFFERSON DAVIS
FIELD	BAY DE CHENE	GOOD HOPE E	BON AIR
WELL NAME	SFL 1217 NO. 1	UNIV. CITY SUBDIVISION NO. 1	E. MALLETT NO. 1
LOCATION	SEC. 26, T19S, R24E	SEC. 11, T12S, R9E	SEC. 21, T10S, R6W
OWNER	SUPERIOR OIL CO.	DAMSON EXPLORATION CORP.	AUSTRAL GAS CO.
COMPLETED	05/05/83	08/01/70	04/06/70
SAMPLED	12/17/84	02/--/72	08/11/71
FORMATION	-1900 RA SU	-UNIV. SAND	OLIG-HACKBERRY M
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1928	9544	11958
WELLHEAD PRESSURE,PSIG	805	3000	5980
OPEN FLOW, MCFD	539	4500	55000
COMPONENT, MOLE PCT			
METHANE	99.3	93.4	77.8
ETHANE	0.0	1.4	6.3
PROPANE	0.0	1.0	5.7
N-BUTANE	0.0	0.3	1.8
ISOBUTANE	0.0	0.5	2.9
N-PENTANE	0.0	0.2	0.8
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	0.0	0.2	0.2
HEXANES PLUS	0.0	0.4	0.6
NITROGEN	0.5	1.9	2.4
OXYGEN	0.0	0.3	0.3
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.7
HELIUM	0.03	0.01	TRACE
HEATING VALUE*	1006	1065	1297
SPECIFIC GRAVITY	0.557	0.614	0.773

	INDEX 3055 SAMPLE 13882	INDEX 3056 SAMPLE 17540	INDEX 3057 SAMPLE 3830
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	BON AIR N	HATHAWAY	LAKE ARTHUR
WELL NAME	EUGENE LEBLANC NO. 1	GLENN F. LITTERAL NO. 1	J. STUNDIVANT NO. 4
LOCATION	SEC. 1, T10S, R6W	SEC. 9, T8S, R3W	SEC. 35, T10S, R4W
OWNER	AMOCO PRODUCTION CO.	TEE-OPERATING CO.	CONTINENTAL OIL CO.
COMPLETED	06/13/73	06/--/83	04/26/44
SAMPLED	01/28/74	12/11/84	05/05/44
FORMATION	OLIG-HACKBERRY	OLIG-FRIO	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12300	10351	11348
WELLHEAD PRESSURE,PSIG	7600	1800	5400
OPEN FLOW, MCFD	7500	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	92.2	90.6	80.6
ETHANE	4.7	4.3	14.0
PROPANE	1.4	1.7	---
N-BUTANE	0.2	0.5	---
ISOBUTANE	0.3	0.9	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	TRACE	0.3	---
NITROGEN	0.4	0.6	4.4
OXYGEN	0.0	TRACE	0.4
ARGON	0.0	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.8	0.5	0.6
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1076	1122	1067
SPECIFIC GRAVITY	0.611	0.638	0.650

	INDEX 3058 SAMPLE 12303	INDEX 3059 SAMPLE 16462	INDEX 3060 SAMPLE 15166
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	LAKE ARTHUR S	ROANOKE E	THORNWELL
WELL NAME	J. T. FERGUSON NO. 1	M.A. WILKENSON NO. 1	J. M. PETITJEAN NO. 1
LOCATION	SEC. 13, T11S, R3W	SEC. 16, T9S, R3W	SEC. 15, T11S, R4W
OWNER	TEXACO INC.	CONOCO, INC.	ANSCHUTZ CORP.
COMPLETED	02/02/70	09/25/81	11/01/76
SAMPLED	06/17/70	03/26/82	12/08/77
FORMATION	MIOC-ALLIANCE SEG. A	OLIG-HACKBERRY SD 2ND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11953	12284	15744
WELLHEAD PRESSURE,PSIG	3180	7900	5600
OPEN FLOW, MCFD	7329	4080	3700
COMPONENT, MOLE PCT			
METHANE	91.0	84.5	87.3
ETHANE	4.2	5.5	6.0
PROPANE	1.9	3.9	2.3
N-BUTANE	0.4	1.5	0.5
ISOBUTANE	0.8	1.4	0.5
N-PENTANE	0.1	0.6	0.2
ISOPENTANE	0.1	0.7	0.2
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.4	0.8	0.3
NITROGEN	0.6	0.7	0.1
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	2.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1128	1257	1118
SPECIFIC GRAVITY	0.631	0.717	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3061 SAMPLE 6049	INDEX 3062 SAMPLE 3810	INDEX 3063 SAMPLE 4824
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	THORNWELL S	WELSH	WELSH N
WELL NAME	EDDIE BENOIT NO. 1	W. L. TRIMBLE NO. 1	R. A. ESTES NO. 1
LOCATION	SEC. 25, T11S, R5W	SEC. 16, T9S, R5W	SEC. 11, T9S, R5W
OWNER	PAN AMERICAN PETROLEUM CORP.	STANOLIND OIL & GAS CO.	CONTINENTAL OIL CO.
COMPLETED	05/08/55	07/05/43	08/05/49
SAMPLED	05/07/56	04/16/44	11/30/49
FORMATION	OLIG-BENOIT	OLIG-M	OLIG-HACKBERRY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12778	8838	11263
WELLHEAD PRESSURE, PSIG	7500	3500	4875
OPEN FLOW, MCFD	NOT GIVEN	19000	1580
COMPONENT, MOLE PCT			
METHANE	70.7	85.0	93.3
ETHANE	14.5	9.4	3.7
PROPANE	7.0	----	1.1
N-BUTANE	1.7	----	0.5
ISOBUTANE	2.5	----	0.2
N-PENTANE	0.5	----	0.1
ISOPENTANE	0.7	----	0.2
CYCLOPENTANE	0.1	----	TRACE
HEXANES PLUS	0.4	----	0.0
NITROGEN	0.0	4.8	0.4
OXYGEN	0.1	0.3	0.1
ARGON	0.0	----	0.0
HYDROGEN	TRACE	----	0.0
HYDROGEN SULFIDE**	0.0	----	----
CARBON DIOXIDE	2.1	0.5	0.6
HELIUM	0.03	0.00	TRACE
HEATING VALUE*	1368	1030	1070
SPECIFIC GRAVITY	0.814	0.627	0.605

	INDEX 3064 SAMPLE 16740	INDEX 3065 SAMPLE 10417	INDEX 3066 SAMPLE 16283
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	JEFFERSON DAVIS	LA SALLE	LA SALLE
FIELD	WILDCAT	OLLA	SEARCY N
WELL NAME	IRVIN FONTENOT NO. 1	URANIA LUMBER CO. NO. E-2	IPB NO. 6
LOCATION	SEC. 7, T8S, R5W	SEC. 10, T10N, R2E	SEC. 4, T8N, R2E
OWNER	GETTY OIL CO.	PLACID OIL CO.	PLACID OIL CO.
COMPLETED	07/--/82	09/30/65	10/31/80
SAMPLED	12/--/82	02/24/66	06/15/81
FORMATION	OLIG-HACKBERRY	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	9688	2482	2810
WELLHEAD PRESSURE, PSIG	NOT GIVEN	1100	1300
OPEN FLOW, MCFD	3000	650	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.4	97.0	97.1
ETHANE	3.9	0.2	0.2
PROPANE	1.7	0.0	TRACE
N-BUTANE	0.5	0.0	TRACE
ISOBUTANE	0.6	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	2.5	1.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	1.0
HELIUM	TRACE	0.03	0.02
HEATING VALUE*	1115	986	992
SPECIFIC GRAVITY	0.628	0.569	0.573

	INDEX 3067 SAMPLE 16842	INDEX 3068 SAMPLE 15622	INDEX 3069 SAMPLE 10039
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LA SALLE	LAFAYETTE	LAFAYETTE
FIELD	SUMMERVILLE S	ANSELM COULEE	CADE
WELL NAME	IPB LLS NO. 22	E. RICHARD NO. 1	BROUSSARD PLANT, INC. NO. 1
LOCATION	SEC. 35, T9N, R2E	SEC. 10, T11S, R4E	SEC. 3, T11S, YOUNGSVILLE E
OWNER	PLACID OIL CO.	REB PETROLEUM CO.	SUPERIOR OIL CO.
COMPLETED	11/--/82	05/14/79	08/19/64
SAMPLED	03/--/83	05/10/79	08/04/65
FORMATION	EOCE-E-3 SAND	NOT GIVEN	OLIG-MARTEX
GEOLOGIC PROVINCE CODE	230	220	220
DEPTH, FEET	3964	12698	15155
WELLHEAD PRESSURE, PSIG	900	6015	7725
OPEN FLOW, MCFD	170	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.0	89.1	93.7
ETHANE	0.3	6.2	3.0
PROPANE	TRACE	2.3	1.3
N-BUTANE	0.0	0.5	0.3
ISOBUTANE	0.0	0.5	0.2
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	1.8	0.3	0.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.5	1.0
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	979	1130	1067
SPECIFIC GRAVITY	0.575	0.640	0.607

	INDEX 3070 SAMPLE 11634	INDEX 3071 SAMPLE 17533	INDEX 3072 SAMPLE 14253
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFAYETTE	LAFAYETTE	LAFAYETTE
FIELD	MAURICE N	MAURICE N	PARCPERQUE N
WELL NAME	J. M. BROUSSARD NO. 1	PAUL DE CLOUT NO. 1	GUIDRY NO. 1
LOCATION	SEC. 19, T10S, R4E	SEC. 24, T10S, R3E	SEC. 23, T11S, R4E
OWNER	EDWIN L. COX	EXCHANGE OIL & GAS CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	08/05/67	12/03/84	06/12/74
SAMPLED	--/--/00	11/29/84	01/03/75
FORMATION	OLIG-MARGINULINA TEXANA	MIOC-MEXICANA	OLIG-CAMERINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13076	15100	15735
WELLHEAD PRESSURE, PSIG	9900	10000	8900
OPEN FLOW, MCFD	6500	10	52000
COMPONENT, MOLE PCT			
METHANE	91.3	85.4	87.0
ETHANE	4.7	6.4	6.5
PROPANE	1.3	3.2	2.9
N-BUTANE	0.5	0.8	0.5
ISOBUTANE	0.2	1.1	1.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	0.9	0.5	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	2.0	1.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1107	1167	1148
SPECIFIC GRAVITY	0.631	0.687	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3073 SAMPLE 17564	INDEX 3074 SAMPLE 8187	INDEX 3075 SAMPLE 13919
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFAYETTE	LAFAYETTE	LAFOURCHE
FIELD	RIDGE W	WILOCAY	BAY LIZETTE
WELL NAME	PRIDGEON MEAUX NO. 1	C. R. MAYER NO. 1	STATE LEASE 5918 NO. 1
LOCATION	SEC. 23, T10S, R2E	SEC. 24, T9S, R3E	SEC. 11, T21S, R23E
OWNER	MAY PETROLEUM, INC.	SKELLY OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	02/27/84	05/19/61	06/24/73
SAMPLED	01/10/85	09/05/61	02/04/74
FORMATION	OLIG-MIOGYP	NOT GIVEN	MIOC-TEXTULARIA L-1
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12160	13493	14495
WELLHEAD PRESSURE,PSIG	5300	8600	5234
OPEN FLOW, MCFD	1103	200000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.9	89.7	96.8
ETHANE	4.5	4.6	1.1
PROPANE	1.5	2.2	0.2
N-BUTANE	0.4	0.5	0.1
ISOBUTANE	0.4	0.7	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.3	0.8	0.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.6	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.9	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1095	1104	1009
SPECIFIC GRAVITY	0.619	0.633	0.576

	INDEX 3076 SAMPLE 13731	INDEX 3077 SAMPLE 17322	INDEX 3078 SAMPLE 3812
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	BAYOU RAPHAEL	BOURG E	BULLY CAMP
WELL NAME	ALTA F. STONE ET AL. NO. 1	STATE LEASE 9637 NO. 2	DELTA SECURITIES CO. NO. 1
LOCATION	SEC. 45, T19S, R22E	T17S,R19E	SEC. 1, T19S, R22E
OWNER	NORTHCOTT EXPLORATION CO.	MCCORMICK PRODUCTION CO.	GULF OIL CO.
COMPLETED	06/19/73	06/06/83	11/11/62
SAMPLED	09/19/73	08/13/84	04/18/44
FORMATION	-STONE	-KRUMBHAER C	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1687	11917	996
WELLHEAD PRESSURE,PSIG	735	4100	200
OPEN FLOW, MCFD	187	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.3	94.9	94.0
ETHANE	TRACE	2.4	0.2
PROPANE	0.1	0.8	---
N-BUTANE	0.0	0.2	---
ISOBUTANE	0.0	0.3	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	0.5	0.3	5.1
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.6	0.3
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1006	1096	956
SPECIFIC GRAVITY	0.558	0.594	0.582

	INDEX 3079 SAMPLE 10094	INDEX 3080 SAMPLE 15935	INDEX 3081 SAMPLE 14241
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	CHEGBY	CUT OFF	GOLDEN MEADOW
WELL NAME	CRISTELLARIA A SUB BOWIE 1-A	E. P. BRAND NO. 1	SL378 CATFISH LAKE NO. 101
LOCATION	SEC. 6, T14S, R17E	SEC. 3, T18S, R21E	SEC. 3, T20S, R21E
OWNER	TEXAS PACIFIC OIL CO.	MCALESTER FUEL CO.	TEXACO INC.
COMPLETED	03/06/64	12/28/78	11/13/74
SAMPLED	09/02/65	04/10/80	12/06/74
FORMATION	MIOC-CRISTELLARIA	MIOC-UL-2	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12040	13867	10286
WELLHEAD PRESSURE,PSIG	6150	9160	1800
OPEN FLOW, MCFD	7600	200000	518000
COMPONENT, MOLE PCT			
METHANE	92.9	94.9	93.8
ETHANE	4.0	2.9	2.9
PROPANE	1.4	0.7	1.2
N-BUTANE	0.3	0.2	0.4
ISOBUTANE	0.3	0.2	0.5
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.3	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1083	1059	1085
SPECIFIC GRAVITY	0.610	0.594	0.611

	INDEX 3082 SAMPLE 12944	INDEX 3083 SAMPLE 14565	INDEX 3084 SAMPLE 15747
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	GRAND ISLE-OFFSHORE	JOE MCHUGH	LAKE BOEUF
WELL NAME	STATE LEASE 3523 NO. 5	ARMAND BOURG ET AL. NO. 1	SABINE ROYALTY CORP. NO. 1
LOCATION	GRAND ISLE BLK. NO. 25	SEC. 37, T15S, R20E	SEC. 29, T13S, R18E
OWNER	HUNT OIL CO.	AMOCO PRODUCTION CO.	MEMORAN EXPLORATION CO.
COMPLETED	06/11/70	02/19/75	05/--/78
SAMPLED	08/05/71	02/26/75	09/12/79
FORMATION	MIOC-X-SERIES	MIOC-	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	17948	11788	9510
WELLHEAD PRESSURE,PSIG	5100	5100	3100
OPEN FLOW, MCFD	1500	NOT GIVEN	650
COMPONENT, MOLE PCT			
METHANE	96.1	92.3	93.6
ETHANE	1.0	4.4	2.8
PROPANE	0.6	1.7	1.2
N-BUTANE	0.2	0.5	0.5
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.4	0.4	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.2	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1054	1103	1086
SPECIFIC GRAVITY	0.591	0.618	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3085 SAMPLE 15208	INDEX 3086 SAMPLE 13200	INDEX 3087 SAMPLE 14114
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	LAKE BOEUF SW	LEEVILLE	RACCOON LAKE
WELL NAME	LAUREL VALLEY PLAN NO. 1	L L & E NO. 44	STATE LEASE 6052 NO. 1
LOCATION	SEC. 51, T15S, R17E	SEC. 13, T21S, R22E	SEC. 20, T21S, R24E
OWNER	R. L. BURNS OIL & GAS CORP.	TEXACO INC.	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	05/05/72	01/29/74
SAMPLED	02/13/78	05/04/72	01/30/74
FORMATION	NOT GIVEN	PLIO-1900 FT. SAND	MIOC-TEXTULARIA L-6
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	1908	15178
WELLHEAD PRESSURE,PSIG	4200	810	5200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	99.4	87.5
ETHANE	5.6	TRACE	3.0
PROPANE	3.2	TRACE	2.9
N-BUTANE	0.9	TRACE	0.8
ISOBUTANE	1.1	TRACE	2.0
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.4	TRACE	0.5
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	0.1
NITROGEN	0.6	0.4	0.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	2.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1183	1007	1140
SPECIFIC GRAVITY	0.678	0.555	0.680

	INDEX 3088 SAMPLE 14140	INDEX 3089 SAMPLE 13348	INDEX 3090 SAMPLE 13349
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD	RACCOON LAKE	STATE LEASE 3088	TIMBALIER BAY
WELL NAME	FASTERLING NO. 9	STATE LEASE 3088 NO. 11	STATE LEASE 3088 NO. 12
LOCATION	SEC. 20, T21S, R24E	TIMBALIER BAY	TIMBALIER BAY
OWNER	AMOCO PRODUCTION CO.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	--/--/00	02/23/71	11/28/71
SAMPLED	07/22/74	08/09/72	08/09/72
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	2912	2295
WELLHEAD PRESSURE,PSIG	750	1200	900
OPEN FLOW, MCFD	4000	2650	3000
COMPONENT, MOLE PCT			
METHANE	92.0	99.3	99.3
ETHANE	3.0	0.1	0.1
PROPANE	1.7	0.1	TRACE
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.9	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1075	1010	1008
SPECIFIC GRAVITY	0.624	0.559	0.558

	INDEX 3091 SAMPLE 15115	INDEX 3092 SAMPLE 17860	INDEX 3093 SAMPLE 17861
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LAFOURCHE	LINCOLN	LINCOLN
FIELD	VALENTINE NE	CHOUDRANT	CHOUDRANT
WELL NAME	D. W. DOUSSEN O&PLNTG NO. 1	PIPES NO. 1	LEWIS NO. 1
LOCATION	SEC.100, T17S, R20E	SEC. 27, T18N, R2W	SEC. 28, T18N, R2W
OWNER	SUPERIOR OIL CO.	MCCONATHY PRODUCTION CO.	MCCONATHY PRODUCTION CO.
COMPLETED	07/27/76	03/--/84	03/--/84
SAMPLED	09/07/77	10/09/85	10/09/85
FORMATION	MIOC-	CRET-RA-SUC	JURA-RA-SUD
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	12338	6982	9614
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2300	2600
OPEN FLOW, MCFD	2014	3200	700
COMPONENT, MOLE PCT			
METHANE	96.1	96.4	79.2
ETHANE	1.4	0.4	7.9
PROPANE	0.5	0.1	4.8
N-BUTANE	0.2	0.0	1.5
ISOBUTANE	0.2	0.0	1.3
N-PENTANE	0.1	0.0	0.5
ISOPENTANE	0.1	0.0	0.5
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.6
NITROGEN	0.6	1.7	0.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.4	2.9
HELIUM	TRACE	0.05	0.01
HEATING VALUE*	1039	986	1240
SPECIFIC GRAVITY	0.588	0.578	0.750

	INDEX 3094 SAMPLE 15850	INDEX 3095 SAMPLE 4713	INDEX 3096 SAMPLE 15711
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	CLAY	MICO-KNOWLES	MICO-KNOWLES
WELL NAME	BENNETT NO. 1	T. L. L. MCCRARY UNIT 8-31	RAY E. UPCHURCH NO. 1
LOCATION	SEC. 2, T11N,R3W	SEC. 14, T19N, R4W	SEC. 7, T19N, R3W
OWNER	ARKLA EXPLORATION CO.	CALIFORNIA CO.	I.M.C. EXPLORATION CO.
COMPLETED	06/18/79	10/15/48	03/08/79
SAMPLED	12/06/79	01/14/49	07/25/79
FORMATION	CRET-HOSSTON	JURA-COTTON VALLEY	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	8189	8910	9466
WELLHEAD PRESSURE,PSIG	3375	3223	4800
OPEN FLOW, MCFD	2300	14500	500
COMPONENT, MOLE PCT			
METHANE	96.0	78.4	86.3
ETHANE	0.8	9.6	7.2
PROPANE	0.1	4.5	2.7
N-BUTANE	0.1	1.2	0.6
ISOBUTANE	TRACE	0.6	0.5
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.2	2.5	0.5
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	2.5	1.5
HELIUM	0.04	0.01	0.01
HEATING VALUE*	998	1173	1138
SPECIFIC GRAVITY	0.583	0.726	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3097 SAMPLE 12837	INDEX 3098 SAMPLE 5106	INDEX 3099 SAMPLE 3851
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	MIDDLE FORK	NOT GIVEN	RUSTON
WELL NAME	RESER NO. 1	BURFORD NO. 1	W. F. JILES NO. 1
LOCATION	SEC. 2, T20N, R3W	SEC. 11, T17N, R4W	SEC. 19, T19N, R2W
OWNER	CRYSTAL OIL CO.	PAN AMERICAN SOUTHERN CORP.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	01/14/71	06/09/51	10/26/43
SAMPLED	05/24/71	09/26/51	03/20/44
FORMATION	JURA-SMACKOVER	CRET-GARDNER	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	10775	6533	5878
WELLHEAD PRESSURE,PSIG	850	2221	2350
OPEN FLOW, MCFD	300000	7300	84000
COMPONENT, MOLE PCT			
METHANE	81.8	96.6	93.8
ETHANE	5.1	1.0	1.5
PROPANE	0.0	0.2	---
N-BUTANE	5.0	0.1	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	2.7	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.4	0.0	---
NITROGEN	1.7	1.0	3.6
OXYGEN	0.0	TRACE	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.3	0.4	0.6
HELIUM	0.02	0.03	0.09
HEATING VALUE*	1225	1011	977
SPECIFIC GRAVITY	0.757	0.577	0.584

	INDEX 3100 SAMPLE 3910	INDEX 3101 SAMPLE 4775	INDEX 3102 SAMPLE 4776
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	RUSTON	RUSTON	RUSTON
WELL NAME	J. C. DOWLING NO. 1	DOWLING UNIT NO. 2-T	DOWLING UNIT NO. 2-C
LOCATION	SEC. 30, T19N, R2W	SEC. 30, T19N, R2W	SEC. 30, T19N, R2W
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	05/25/49	01/17/49	01/17/49
SAMPLED	12/16/49	06/19/49	06/19/49
FORMATION	CRET-PETTIT	JURA-	JURA-
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	5312	8760	8674
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3284	4011
OPEN FLOW, MCFD	NOT GIVEN	26000	8000
COMPONENT, MOLE PCT			
METHANE	98.9	92.3	87.5
ETHANE	0.5	3.1	6.5
PROPANE	---	1.0	2.4
N-BUTANE	---	0.4	0.7
ISOBUTANE	---	0.0	0.3
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	0.3	1.6	0.4
OXYGEN	0.2	TRACE	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	1.1	1.6
HELIUM	0.09	0.03	0.01
HEATING VALUE*	970	1049	1127
SPECIFIC GRAVITY	0.580	0.611	0.657

	INDEX 3103 SAMPLE 10082	INDEX 3104 SAMPLE 10083	INDEX 3105 SAMPLE 14158
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	RUSTON	RUSTON	RUSTON
WELL NAME	M MOSS SUB. GILES NO. 4-D	L MOSS SUB., GILES NO. 4	PAUL E. BLACKMOND NO. 1
LOCATION	SEC. 19, T19N, R2W	SEC. 19, T19N, R2W	SEC. 1, T18N, R2W
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	04/15/65	04/15/64	07/06/73
SAMPLED	08/26/65	08/26/65	10/24/74
FORMATION	CRET-HOSSTON	CRET-HOSSTON	JURA-BODCAW
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6703	7918	9320
WELLHEAD PRESSURE,PSIG	2700	3100	3000
OPEN FLOW, MCFD	2400	2300	6000
COMPONENT, MOLE PCT			
METHANE	96.0	94.2	86.9
ETHANE	1.3	3.2	5.3
PROPANE	0.6	0.7	1.9
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	0.1	0.1	0.5
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.1	0.7	1.2
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.6	2.9
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1023	1028	1081
SPECIFIC GRAVITY	0.582	0.598	0.659

	INDEX 3106 SAMPLE 5105	INDEX 3107 SAMPLE 5107	INDEX 3108 SAMPLE 5108
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	LINCOLN	LINCOLN	LINCOLN
FIELD	SIMSBORO	SIMSBORO	SIMSBORO
WELL NAME	GIVINS NO. 1	GIVINS NO. 2	GIVINS NO. 3
LOCATION	SEC. 11, T17N, R4W	SEC. 2, T17N, R4W	SEC. 2, T17N, R4W
OWNER	PAN AMERICAN SOUTHERN CORP.	PAN AMERICAN SOUTHERN CORP.	PAN AMERICAN SOUTHERN CORP.
COMPLETED	03/03/51	03/31/51	06/27/51
SAMPLED	09/26/51	09/26/51	09/26/51
FORMATION	CRET-JAMES	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	5698	5434	7946
WELLHEAD PRESSURE,PSIG	2575	2469	3134
OPEN FLOW, MCFD	36300	4400	16900
COMPONENT, MOLE PCT			
METHANE	89.9	90.5	94.4
ETHANE	0.9	1.0	2.4
PROPANE	0.3	0.5	0.7
N-BUTANE	0.0	0.2	0.4
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	7.6	7.1	0.4
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.3	1.2
HELIUM	0.09	0.09	0.02
HEATING VALUE*	943	954	1050
SPECIFIC GRAVITY	0.604	0.604	0.601

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3109 SAMPLE 5109		INDEX 3110 SAMPLE 5137		INDEX 3111 SAMPLE 9210	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	LINCOLN		LINCOLN		LINCOLN	
FIELD	SIMSBORO		SIMSBORO		TERRYVILLE	
WELL NAME	GIVINS NO. 3		GIVINS NO. 2		GALLOWAY UNIT	
LOCATION	SEC. 2, T17N, R4W		SEC. 2, T17N, R4W		SEC. 17, T19N, R4W	
OWNER	PAN AMERICAN SOUTHERN CORP.		PAN AMERICAN SOUTHERN CORP.		CROW DRLG. & PROD. CO., ET A	
COMPLETED	06/27/51		03/31/51		03/31/62	
SAMPLED	09/26/51		01/16/52		12/18/63	
FORMATION	CRET-GARDNER		CRET-RODESSA		JURA-COTTON VALLEY	
GEOLOGIC PROVINCE CODE	230		230		230	
DEPTH, FEET	6570		5434		9354	
WELLHEAD PRESSURE,PSIG	1700		2449		4000	
OPEN FLOW, MCFD	8000		4400		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	96.5		90.6		82.6	
ETHANE	1.0		0.9		9.2	
PROPANE	0.3		0.3		3.8	
N-BUTANE	0.1		0.2		1.1	
ISOBUTANE	0.0		0.0		0.3	
N-PENTANE	0.0		0.1		0.3	
ISOPENTANE	0.1		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.0		0.2		0.3	
NITROGEN	0.9		7.1		0.3	
OXYGEN	TRACE		0.1		0.1	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	1.1		0.7		1.8	
HELIUM	0.03		0.09		0.01	
HEATING VALUE*	1011		967		1184	
SPECIFIC GRAVITY	0.580		0.604		0.696	

	INDEX 3112 SAMPLE 15712		INDEX 3113 SAMPLE 16252		INDEX 3114 SAMPLE 16608	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	LINCOLN		LIVINGSTON		MADISON	
FIELD	TERRYVILLE		WATSON		NEWLIGHT N	
WELL NAME	LORAINE HOWARD ESTATE NO. 1		MR. E. CARAWAY NO. 1		CHICAGO MILL NO. B-1	
LOCATION	SEC. 32, T19N, R4W		SEC. 22, T5S, R3E		SEC. 30, T15N, R10E	
OWNER	I.M.C. EXPLORATION CO.		SHELL OIL CO., ET AL.		CRYSTAL OIL CO.	
COMPLETED	10/26/78		11/17/80		08/04/82	
SAMPLED	07/25/79		05/07/81		08/04/82	
FORMATION	CRET-HOSSTON		CRET-TUSCALOOSA		JURA-COTTON VALLEY	
GEOLOGIC PROVINCE CODE	230		220		230	
DEPTH, FEET	9367		15630		12900	
WELLHEAD PRESSURE,PSIG	3600		2150		5900	
OPEN FLOW, MCFD	250		NOT GIVEN		185	
COMPONENT, MOLE PCT						
METHANE	86.2		64.5		91.8	
ETHANE	3.4		14.0		0.1	
PROPANE	1.7		8.6		0.0	
N-BUTANE	0.5		1.8		0.1	
ISOBUTANE	1.5		1.9		0.0	
N-PENTANE	0.8		0.3		0.1	
ISOPENTANE	0.8		0.5		0.0	
CYCLOPENTANE	0.4		0.1		0.2	
HEXANES PLUS	2.4		0.2		0.2	
NITROGEN	0.4		1.5		0.7	
OXYGEN	TRACE		TRACE		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8		7.3		5.5	
HELIUM	0.02		0.01		0.02	
HEATING VALUE*	1252		1283		958	
SPECIFIC GRAVITY	0.734		0.859		0.633	

	INDEX 3115 SAMPLE 9529		INDEX 3116 SAMPLE 15475		INDEX 3117 SAMPLE 15090	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	NATCHITOCHES		NATCHITOCHES		NATCHITOCHES	
FIELD	BLACK LAKE		DEMORY CREEK		EROGAN	
WELL NAME	EDENBORN, INC. NO. 3		MARTIN LBR. CO. NO. 1		MARTIN NO. B-1	
LOCATION	SEC. 11, T11N, R6W		SEC. 3, T12N, R7W		SEC. 28, T11N, R10W	
OWNER	PACID OIL CO.		BODCAW CO.		PHILLIPS PETROLEUM CO.	
COMPLETED	06/23/64		02/11/78		08/09/76	
SAMPLED	08/05/64		10/31/78		09/05/77	
FORMATION	CRET-PETTIT		CRET-PALUXY		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	230		230		230	
DEPTH, FEET	8000		3817		13282	
WELLHEAD PRESSURE,PSIG	3060		1615		8300	
OPEN FLOW, MCFD	14000		414		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	82.3		90.8		93.7	
ETHANE	3.9		1.3		0.1	
PROPANE	4.3		0.6		0.1	
N-BUTANE	1.1		0.3		0.1	
ISOBUTANE	TRACE		0.2		0.0	
N-PENTANE	0.4		0.1		0.1	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	1.8		6.3		0.1	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.1	
CARBON DIOXIDE	6.0		0.1		5.4	
HELIUM	0.09		0.07		TRACE	
HEATING VALUE*	1184		990		975	
SPECIFIC GRAVITY	0.713		0.607		0.619	

	INDEX 3118 SAMPLE 16618		INDEX 3119 SAMPLE 17568		INDEX 3120 SAMPLE 17560	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	NATCHITOCHES		OFFSHORE-OCS		OFFSHORE-OCS	
FIELD	ROBELINE		BLK. 10		CAMERON E	
WELL NAME	B.E. CHRISTMAS NO. 1		OCS-G-2892 NO. 2		OCS G-4777 NO. A-3	
LOCATION	SEC. 7, T8N, R9W		EUGENE ISLAND AREA		EAST CAMERON 32	
OWNER	GETTY OIL CO.		TRANSCO EXPLORATION CO.		SONAT EXPLORATION CO.	
COMPLETED	01/29/82		--/--/00		--/--/00	
SAMPLED	08/02/82		01/11/85		01/05/85	
FORMATION	CRET-HOSSTON		MIOC-NOT GIVEN		MIOC-NOT GIVEN	
GEOLOGIC PROVINCE CODE	230		952		220	
DEPTH, FEET	8897		15193		13298	
WELLHEAD PRESSURE,PSIG	4350		10095		4337	
OPEN FLOW, MCFD	6700		27000		11280	
COMPONENT, MOLE PCT						
METHANE	96.1		91.9		93.3	
ETHANE	1.1		3.3		2.7	
PROPANE	TRACE		1.3		1.0	
N-BUTANE	0.0		0.4		0.3	
ISOBUTANE	0.0		0.4		0.4	
N-PENTANE	0.0		0.2		0.1	
ISOPENTANE	0.0		0.1		0.2	
CYCLOPENTANE	0.0		0.1		0.1	
HEXANES PLUS	0.0		0.4		0.2	
NITROGEN	0.9		0.3		0.4	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.8		1.6		1.4	
HELIUM	0.03		TRACE		TRACE	
HEATING VALUE*	976		1088		1070	
SPECIFIC GRAVITY	0.585		0.630		0.617	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3121 SAMPLE 12980	INDEX 3122 SAMPLE 13007	INDEX 3123 SAMPLE 13523
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	CAMERON E BLK. 195	CAMERON E BLK. 265	CAMERON E BLK. 33
WELL NAME	OCS-G-0958 NO. A-1	OCS-0972 NO. A-2	OCS-G-1972 NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	SIGNAL OIL & GAS CO.	TEXACO INC.	MOBIL OIL CORP.
COMPLETED	11/23/69	10/21/70	01/22/72
SAMPLED	08/21/71	08/12/71	01/18/73
FORMATION	UNKN-CP-25 SAND	NOT GIVEN	MIOC-ROBULUS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11846	8476	10200
WELLHEAD PRESSURE,PSIG	6000	3655	3750
OPEN FLOW, MCFD	5400	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	85.0	97.5	94.9
ETHANE	4.9	1.1	2.7
PROPANE	4.4	0.4	0.8
N-BUTANE	1.0	0.1	0.1
ISOBUTANE	2.2	0.2	0.3
N-PENTANE	0.8	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.7	TRACE	0.1
NITROGEN	0.6	0.5	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1244	1028	1053
SPECIFIC GRAVITY	0.708	0.571	0.594

	INDEX 3124 SAMPLE 12358	INDEX 3125 SAMPLE 13040	INDEX 3126 SAMPLE 11035
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	CAMERON W BLK. 192	CAMERON W BLK. 47	CAMERON W BLK. 49
WELL NAME	OCS-0187, H-2 WELL	OCS-G-1437 NO. 1	STATE LEASE 4291 NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	CHEVRON OIL CO.	CHEVRON OIL CO.
COMPLETED	02/24/69	04/02/67	07/07/67
SAMPLED	07/28/70	09/23/71	07/18/67
FORMATION	MIOC-KP SAND	MIOC---	MIOC-8700 FOOT SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11632	12700	8694
WELLHEAD PRESSURE,PSIG	8950	8200	5953
OPEN FLOW, MCFD	80000	NOT GIVEN	12000
COMPONENT, MOLE PCT			
METHANE	93.1	92.0	95.8
ETHANE	3.5	3.4	2.5
PROPANE	1.1	0.9	0.6
N-BUTANE	0.3	0.2	0.1
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	0.3	1.7	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.2	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1082	1046	1054
SPECIFIC GRAVITY	0.614	0.612	0.587

	INDEX 3127 SAMPLE 17520	INDEX 3128 SAMPLE 17868	INDEX 3129 SAMPLE 12962
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	CAMERON W, BLK. 197	CHANDELEUR	EUGENE ISLAND BLK. 273
WELL NAME	OCS-G-3972 NO. A-1	OCS-G-5470 NO. A-1	OCS-G-0986 NO. 5
LOCATION	NOT GIVEN	BLOCK 29-A	NOT GIVEN
OWNER	CHEVRON U.S.A., INC.	TENNECO OIL CO.	FOREST OIL CORP.
COMPLETED	01/26/83	07/07/84	08/26/70
SAMPLED	10/04/84	10/05/85	08/03/71
FORMATION	OLIG-M SAND	MIOC-M SAND	PLEI-4500 FT. SAND
GEOLOGIC PROVINCE CODE	952	952	220
DEPTH, FEET	4970	5000	4746
WELLHEAD PRESSURE,PSIG	2425	1920	1829
OPEN FLOW, MCFD	38581	5400	138800
COMPONENT, MOLE PCT			
METHANE	99.6	98.3	99.2
ETHANE	0.1	1.0	0.5
PROPANE	TRACE	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.2	0.3	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1011	1019	1016
SPECIFIC GRAVITY	0.557	0.565	0.559

	INDEX 3130 SAMPLE 12963	INDEX 3131 SAMPLE 13765	INDEX 3132 SAMPLE 13767
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273
WELL NAME	OCS-G-0987 NO. A-1	EUGENE ISLAND 273 NO. A-1	EUGENE ISLAND 273 NO. A-9
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	08/31/70	08/31/70	09/01/70
SAMPLED	08/03/71	09/15/73	09/15/73
FORMATION	PLEI-3500 FT. SAND	PLEI-3500 FT. SAND	PLEI-4600 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3498	4982	4712
WELLHEAD PRESSURE,PSIG	1426	1340	1860
OPEN FLOW, MCFD	36600	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.7	99.6	98.3
ETHANE	0.1	0.1	1.0
PROPANE	0.1	TRACE	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.2	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1014	1011	1021
SPECIFIC GRAVITY	0.559	0.558	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3133 SAMPLE 13768	INDEX 3134 SAMPLE 13771	INDEX 3135 SAMPLE 13773
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 273
WELL NAME	EUGENE ISLAND 273 NO. A-7	EUGENE ISLAND 273 NO. A-5	EUGENE ISLAND 273 NO. A-3
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	06/11/70	08/26/70	08/23/70
SAMPLED	09/15/73	09/15/73	09/15/73
FORMATION	PLEI-3100 FT. SAND	PLEI-4500 FT. SAND	PLEI-4900 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3219	4746	4902
WELLHEAD PRESSURE,PSIG	1300	1650	1620
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.6	99.1	97.1
ETHANE	0.2	0.5	1.6
PROPANE	0.0	0.1	0.6
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.1	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1013	1015	1031
SPECIFIC GRAVITY	0.557	0.561	0.572

	INDEX 3136 SAMPLE 13774	INDEX 3137 SAMPLE 13769	INDEX 3138 SAMPLE 13778
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	EUGENE ISLAND BLK. 287	EUGENE ISLAND BLK. 292	EUGENE ISLAND BLK. 292
WELL NAME	EUGENE ISLAND 287 NO. D-2	EUGENE ISLAND 292 NO. B5-D	EUGENE ISLAND 287 NO. D-8
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	04/05/71	12/31/69	04/07/71
SAMPLED	09/14/73	09/14/73	09/14/73
FORMATION	PLEI-E.E. SAND	PLEI-E.E. SAND	PLEI-C.H. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4928	4958	3564
WELLHEAD PRESSURE,PSIG	1840	1995	1450
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	95.8	99.4
ETHANE	1.5	2.3	0.1
PROPANE	0.6	0.9	TRACE
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.4	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1038	1053	1009
SPECIFIC GRAVITY	0.575	0.586	0.558

	INDEX 3139 SAMPLE 13770	INDEX 3140 SAMPLE 13776	INDEX 3141 SAMPLE 16773
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	EUGENE ISLAND BLK. 307	EUGENE ISLAND BLK. 314	EUGENE ISLAND BLK. 322
WELL NAME	EUGENE ISLAND 307 NO. E-2	EUGENE ISLAND 292 NO. B-5	NO. A-2
LOCATION	NOT GIVEN	NOT GIVEN	OCS-G-2606 EUGENE IS. BLK322
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	AMOCO PRODUCTION CO. (USA)
COMPLETED	12/30/71	12/31/69	02/14/83
SAMPLED	09/15/73	09/14/73	02/14/83
FORMATION	PLEI-C.H. SAND	PLEI-E.E. SAND	PLEI-ANG-81
GEOLOGIC PROVINCE CODE	220	220	952
DEPTH, FEET	6084	5289	5988
WELLHEAD PRESSURE,PSIG	1650	1995	2100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	96.8	95.5	99.2
ETHANE	1.8	2.4	0.1
PROPANE	0.6	1.0	TRACE
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.3	0.3	0.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1044	1055	1008
SPECIFIC GRAVITY	0.578	0.590	0.557

	INDEX 3142 SAMPLE 13168	INDEX 3143 SAMPLE 13370	INDEX 3144 SAMPLE 13222
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	GRAND ISLE BLK. 25	GRAND ISLE BLK. 25	MAIN PASS BLK. 27
WELL NAME	STATE LEASE 5015 NO. 1	STATE LEASE 3523 NO. 6	OCS-G-1312 NO. 2
LOCATION	GRAND ISLE	GRAND ISLE BLK. 25	NOT GIVEN
OWNER	HUNT OIL CO.	HUNT OIL CO.	CHEVRON OIL CO.
COMPLETED	11/05/71	03/12/72	02/21/70
SAMPLED	03/12/72	08/31/72	05/23/72
FORMATION	MIOC-"Y" SERIES	MIOC-NOT GIVEN	MIOC-7900 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	20440	18480	7952
WELLHEAD PRESSURE,PSIG	9000	3550	3300
OPEN FLOW, MCFD	5100	5000	1266
COMPONENT, MOLE PCT			
METHANE	92.7	92.6	95.6
ETHANE	2.5	3.4	1.5
PROPANE	1.7	1.1	1.1
N-BUTANE	0.4	0.2	0.4
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.6	0.3	0.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.8	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1069	1057	1074
SPECIFIC GRAVITY	0.618	0.614	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3145 SAMPLE 16784	INDEX 3146 SAMPLE 17922	INDEX 3147 SAMPLE 17615
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	MISSISSIPPI CANYON BLK 148-A	SOUTH MARSH ISLAND N BLK.274	TIMBALIER S BLK. 195
WELL NAME	OCS-G-2640 NO. A-1	OCS-G-4822 NO. A1	A-3
LOCATION	MISSISSIPPI CANYON BLK 148-A	NOT GIVEN	OCS-G-3593
OWNER	ARCO OIL & GAS CO.	TENNECO OIL CO.	GULF OIL CORP.
COMPLETED	09/12/81	02/16/85	08/--/81
SAMPLED	03/04/83	11/30/85	03/07/85
FORMATION	PLIO-9100 RA	PLIO-ME SAND	PLIO-GSD. RESVR. "A"
GEOLOGIC PROVINCE CODE	952	952	952
DEPTH, FEET	9752	8534	9966
WELLHEAD PRESSURE,PSIG	3721	3800	2700
OPEN FLOW, MCFD	7501	9500	60000
COMPONENT, MOLE PCT			
METHANE	96.5	97.2	97.8
ETHANE	1.3	1.5	1.1
PROPANE	0.5	0.2	0.3
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.3	0.5	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1042	1028	1034
SPECIFIC GRAVITY	0.582	0.576	0.575

	INDEX 3148 SAMPLE 11822	INDEX 3149 SAMPLE 12289	INDEX 3150 SAMPLE 11819
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	VERMILION BLK. 131	VERMILION BLK. 255	VERMILION BLK. 46
WELL NAME	A-4	OCS G 1152 A-4	OCS 079, NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	MOBIL OIL CORP.	FOREST OIL CORP.	MOBIL OIL CORP.
COMPLETED	12/16/68	05/28/69	09/19/67
SAMPLED	02/04/69	06/05/70	02/02/69
FORMATION	MIOC-NO. 14 SAND	PLIO-8350 FT. SAND	MIOC---
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12556	8350	15242
WELLHEAD PRESSURE,PSIG	4400	3270	7400
OPEN FLOW, MCFD	NOT GIVEN	5500	8000
COMPONENT, MOLE PCT			
METHANE	92.3	93.9	90.9
ETHANE	3.4	2.9	3.5
PROPANE	1.3	1.3	2.0
N-BUTANE	0.4	0.3	0.5
ISOBUTANE	0.4	0.4	0.9
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.2	TRACE	0.2
HEXANES PLUS	0.5	0.1	0.3
NITROGEN	0.2	0.5	0.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.2	1.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1107	1070	1115
SPECIFIC GRAVITY	0.628	0.600	0.644

	INDEX 3151 SAMPLE 11820	INDEX 3152 SAMPLE 9184	INDEX 3153 SAMPLE 10081
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	VERMILION BLK. 46	WEST DELTA BLK. 20	WEST DELTA BLK. 30
WELL NAME	OCS 079, NO. A-40	SL 1998 I-1	OCS-G-816;S-18
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	MOBIL OIL CORP.	KERR-MCGEE OIL IND., INC.	HUMBLE OIL & REFINING CO.
COMPLETED	06/19/57	12/04/62	08/25/65
SAMPLED	02/02/69	11/27/63	08/25/65
FORMATION	MIOC---	OLIG-DISCORBIS 12	MIOC-D-3D, 8B
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6981	5296	9320
WELLHEAD PRESSURE,PSIG	2500	2150	3700
OPEN FLOW, MCFD	6000	13	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.5	97.8	93.8
ETHANE	1.6	0.6	3.6
PROPANE	0.4	0.5	1.1
N-BUTANE	0.1	0.0	0.3
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.6	0.8	0.4
OXYGEN	0.1	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1035	1018	1069
SPECIFIC GRAVITY	0.579	0.567	0.594

	INDEX 3154 SAMPLE 12622	INDEX 3155 SAMPLE 13817	INDEX 3156 SAMPLE 15068
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	WEST DELTA BLK. 41	WEST DELTA BLK. 55	WEST DELTA BLK. 55
WELL NAME	OCS G-1872 NO. B-2	SL 2559 NO. 11	STATE LEASE 979 NO. 21
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/15/69	12/14/72	11/15/76
SAMPLED	12/18/70	11/17/73	08/02/77
FORMATION	MIOC---	MIOC---	MIOC---
GEOLOGIC PROVINCE CODE	220	220	952
DEPTH, FEET	9460	3202	7764
WELLHEAD PRESSURE,PSIG	3500	1275	2700
OPEN FLOW, MCFD	NOT GIVEN	500	2448
COMPONENT, MOLE PCT			
METHANE	97.7	99.0	94.0
ETHANE	1.2	0.1	2.2
PROPANE	0.4	0.1	1.3
N-BUTANE	0.0	0.0	0.5
ISOBUTANE	0.0	0.1	0.8
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	0.4	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.3
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1022	1020	1074
SPECIFIC GRAVITY	0.568	0.563	0.605

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3157 SAMPLE 16277	INDEX 3158 SAMPLE 17382	INDEX 3159 SAMPLE 17673
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OFFSHORE-OCS	OUACHITA	OUACHITA
FIELD	WEST DELTA BLK. 56	CADEVILLE	CADEVILLE
WELL NAME	STATE LEASE 2550 NO. 2	E. J. WHITE NO. 1	JA Y. HEAD NO. 1
LOCATION	NOT GIVEN	SEC. 36, T17N, R1E	SEC. 32, T17N, R2E
OWNER	CONOCO, INC.	DIAMOND SHAMROCK CORP.	FRANKS PETROLEUM, INC.
COMPLETED	02/01/81	08/16/84	03/31/84
SAMPLED	06/05/81	08/16/84	05/10/85
FORMATION	PLEI-DT56-2	JURA-COTTON VALLEY	CRET-JAMES
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	4145	10178	5618
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5800	2800
OPEN FLOW, MCFD	NOT GIVEN	3100	5000
COMPONENT, MOLE PCT			
METHANE	98.7	86.8	90.0
ETHANE	0.3	5.8	1.2
PROPANE	0.1	1.8	0.5
N-BUTANE	TRACE	0.6	0.2
ISOBUTANE	TRACE	0.4	TRACE
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.5	0.7	7.1
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.9	0.8
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1017	1100	961
SPECIFIC GRAVITY	0.564	0.666	0.609

	INDEX 3160 SAMPLE 9201	INDEX 3161 SAMPLE 15143	INDEX 3162 SAMPLE 17559
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	OUACHITA
FIELD	CADEVILLE SW	CALHOUN	CHENIERE CREEK
WELL NAME	GOLSON NO. 1	BRIMBERRY GAS UNIT NO. 1	MC HENRY ESTATE NO. 1
LOCATION	SEC. 27, T17N, R1E	SEC. 7, T17N, R1E	SEC. 2, T16N, R3E
OWNER	SINCLAIR OIL & GAS CO.	MITCHELL ENERGY CORP.	MARVEY BROTLES
COMPLETED	02/01/62	04/27/77	--/--/00
SAMPLED	01/10/64	11/09/77	03/06/85
FORMATION	JURA-COTTON VALLEY	JURA-CADEVILLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	10056	9580	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4700	6000	NOT GIVEN
OPEN FLOW, MCFD	1850	NOT GIVEN	250
COMPONENT, MOLE PCT			
METHANE	96.1	77.2	92.4
ETHANE	1.2	8.2	0.6
PROPANE	0.6	5.5	0.1
N-BUTANE	0.0	2.5	0.1
ISOBUTANE	0.0	1.6	TRACE
N-PENTANE	0.0	1.0	TRACE
ISOPENTANE	0.0	1.0	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.7	0.1
NITROGEN	0.2	0.6	4.4
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	1.5	2.1
HELIUM	0.01	0.01	0.09
HEATING VALUE*	1011	1335	958
SPECIFIC GRAVITY	0.586	0.788	0.600

	INDEX 3163 SAMPLE 17711	INDEX 3164 SAMPLE 13759	INDEX 3165 SAMPLE 14676
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	OUACHITA
FIELD	CHENIERE CREEK	DREW	DREW S
WELL NAME	THOMPSON NO. 1	R. W. WILLIAMS NO. 1	MONROE SD. & GRAVEL NO. 1
LOCATION	SEC. 7, T16N, R3E	SEC. 22, T16N, R2E	SEC. 6, T17N, R3E
OWNER	L. H. RESOURCES	FRANKS PETROLEUM, INC.	JUSTISS-MEARS OIL CO., INC.
COMPLETED	09/09/83	07/13/72	10/06/75
SAMPLED	06/--/85	10/17/73	05/11/76
FORMATION	CRET-HOSSTON E2-RES B	JURA-COTTON VALLEY	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9249	9065	9551
WELLHEAD PRESSURE,PSIG	2200	4000	3150
OPEN FLOW, MCFD	1000	7500	1960
COMPONENT, MOLE PCT			
METHANE	91.2	91.9	79.2
ETHANE	2.1	3.7	8.1
PROPANE	0.5	1.2	3.0
N-BUTANE	0.2	0.2	0.7
ISOBUTANE	0.2	0.3	0.6
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.6	0.1	0.3
NITROGEN	2.5	0.5	1.1
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.8	6.4
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1039	1055	1110
SPECIFIC GRAVITY	0.631	0.616	0.739

	INDEX 3166 SAMPLE 14858	INDEX 3167 SAMPLE 15223	INDEX 3168 SAMPLE 15474
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	OUACHITA
FIELD	DREW S	MILLHAVEN	MILLHAVEN
WELL NAME	J. MCINTOSH NO. 1	FAIRCREEK NO. 1	B. RYMES NO. 1
LOCATION	SEC. 19, T18N, R2E	SEC. 14, T17N, R4E	SEC. 22, T17N, R4E
OWNER	FRANKS PETROLEUM, INC.	JUSTISS-MEARS OIL CO., INC.	JUSTISS-MEARS OIL CO., INC.
COMPLETED	--/--/00	10/15/77	10/17/78
SAMPLED	11/12/76	03/12/78	10/17/78
FORMATION	NOT GIVEN	CRET-HOSSTON	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	NOT GIVEN	5633	5517
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2675	2325
OPEN FLOW, MCFD	NOT GIVEN	825	750
COMPONENT, MOLE PCT			
METHANE	89.1	93.2	93.2
ETHANE	4.4	0.9	0.9
PROPANE	1.5	0.2	0.2
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	0.2	TRACE	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	4.2	3.3
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	0.9	1.8
HELIUM	0.03	0.08	0.08
HEATING VALUE*	1062	978	978
SPECIFIC GRAVITY	0.643	0.591	0.597

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3169 SAMPLE 1406	INDEX 3170 SAMPLE 1408	INDEX 3171 SAMPLE 4332
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	OUACHITA
FIELD	MONROE	MONROE	MONROE
WELL NAME	FUDICKER NO. 1	PEERLESS NO. 1	FEE 152 NO. 1
LOCATION	SEC. 13, T18N, R4E	SEC. 28, T19N, R5E	SEC. 4, T18N, R4E
OWNER	J. M. HUBER CORP.	PEERLESS CARBON CO.	UNION PRODUCING CO.
COMPLETED	--/--/00	--/--/00	06/09/47
SAMPLED	06/20/27	07/12/27	07/31/47
FORMATION	NOT GIVEN	CRET-MONROE	CRET-U
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2206	2219	2160
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	335
OPEN FLOW, MCFD	1066	1872	1743
COMPONENT, MOLE PCT			
METHANE	80.3	79.2	91.7
ETHANE	10.7	15.8	1.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.4	2.9	6.3
OXYGEN	0.6	1.6	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.6	0.3
HELIUM	0.07	0.09	0.11
HEATING VALUE*	1005	1085	956
SPECIFIC GRAVITY	0.645	0.660	0.591

	INDEX 3172 SAMPLE 5267	INDEX 3173 SAMPLE 4712	INDEX 3174 SAMPLE 13848
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	OUACHITA	OUACHITA	PLAQUEMINES
FIELD	SWARTZ AREA	WILDCAT	BASTIAN BAY
WELL NAME	BREECE LUMBER CO. NO. 1	BREECE LUMBER CO. NO. 2	FASTERLING 9 WEN NO. 9
LOCATION	SEC. 31 T18N, R5E	SEC. 30, T17N, R5E	NOT GIVEN
OWNER	MONLA GAS CO.	CALIFORNIA CO.	PHILLIPS PETROLEUM CO.
COMPLETED	01/06/52	09/28/48	--/--/00
SAMPLED	07/10/52	07/09/49	12/26/73
FORMATION	JURA-BODCAW	CRET-L	MIOC-9200 FT. SAND
GEOLOGIC PROVINCE CODE	230	230	220
DEPTH, FEET	7345	5232	9328
WELLHEAD PRESSURE,PSIG	3437	2200	1000
OPEN FLOW, MCFD	30000	2240	1000
COMPONENT, MOLE PCT			
METHANE	91.5	92.8	94.3
ETHANE	3.0	0.9	2.6
PROPANE	0.9	0.1	1.3
N-BUTANE	0.3	0.1	0.4
ISOBUTANE	0.2	0.0	0.4
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	3.9	5.9	0.5
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	1.8	0.2
HELIUM	0.06	0.02	TRACE
HEATING VALUE*	1029	963	1085
SPECIFIC GRAVITY	0.608	0.616	0.608

	INDEX 3175 SAMPLE 13851	INDEX 3176 SAMPLE 13846	INDEX 3177 SAMPLE 13847
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BASTIAN BAY	BASTIAN BAY E	BASTIAN BAY E
WELL NAME	DISC. 12-SUA-FEE B NO. 1	FASTERLING NO. 1	FASTERLING B NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/26/73	12/26/73	12/26/73
FORMATION	O16-DISCORBIS	-5700 FT. SAND	MIOC-L SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10008	5720	11416
WELLHEAD PRESSURE,PSIG	2750	1800	300
OPEN FLOW, MCFD	6000	1000	330
COMPONENT, MOLE PCT			
METHANE	94.7	95.6	92.5
ETHANE	2.4	1.7	3.2
PROPANE	1.1	0.6	1.5
N-BUTANE	0.3	TRACE	0.4
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.6	0.8	0.7
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1077	1042	1090
SPECIFIC GRAVITY	0.604	0.587	0.622

	INDEX 3178 SAMPLE 13849	INDEX 3179 SAMPLE 13853	INDEX 3180 SAMPLE 13807
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BASTIAN BAY E	BASTIAN BAY E	BASTIAN BAY SE
WELL NAME	FEE N NO. 1	LL & E NO. 25	ABERCROMBIE NO. 5
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 44, T21S, R29E
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	GULF OIL CO.- U.S.
COMPLETED	--/--/00	02/01/74	02/03/71
SAMPLED	12/26/73	12/26/73	11/09/73
FORMATION	MIOC-ROBULUS "15" ZONE	-6600 FT. SAND	MIOC-P-2 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10263	6592	13171
WELLHEAD PRESSURE,PSIG	2500	2400	3850
OPEN FLOW, MCFD	4500	2300	1250
COMPONENT, MOLE PCT			
METHANE	93.5	87.8	96.4
ETHANE	3.1	1.8	1.5
PROPANE	1.3	0.9	0.4
N-BUTANE	0.4	0.1	0.1
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.6	7.0	0.5
OXYGEN	0.0	1.3	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1082	968	1029
SPECIFIC GRAVITY	0.609	0.623	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3181 SAMPLE 13808		INDEX 3182 SAMPLE 13809		INDEX 3183 SAMPLE 13810	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	PLAQUEMINES		PLAQUEMINES		PLAQUEMINES	
FIELD	BASTIAN BAY SE		BASTIAN BAY SE		BASTIAN BAY SE	
WELL NAME	P. P. NO. 3-D		ABERCROMBIE NO. A-2		ABERCROMBIE NO. 3	
LOCATION	SEC. 4, T21S, R29E		SEC. 4, T21S, R29E		SEC. 9, T21S, R29E	
OWNER	GULF OIL CO.- U.S.		GULF OIL CO.- U.S.		GULF OIL CO.- U.S.	
COMPLETED	07/04/70		03/10/67		05/28/73	
SAMPLED	11/09/73		11/09/73		11/09/73	
FORMATION	-SE S RA SUA		-SE ORA SUB		-SE R RA SUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	13761		12753		13769	
WELLHEAD PRESSURE,PSIG	2600		1640		1650	
OPEN FLOW, MCFD	8000		4400		1000	
COMPONENT, MOLE PCT						
METHANE	93.6		91.2		92.9	
ETHANE	2.6		4.1		2.7	
PROPANE	1.1		1.6		1.3	
N-BUTANE	0.3		0.5		0.3	
ISOBUTANE	0.4		0.5		0.4	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	0.6		0.7		0.9	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.8		1.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1061		1099		1066	
SPECIFIC GRAVITY	0.605		0.629		0.615	

	INDEX 3184 SAMPLE 13811		INDEX 3185 SAMPLE 13812		INDEX 3186 SAMPLE 13850	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	PLAQUEMINES		PLAQUEMINES		PLAQUEMINES	
FIELD	BASTIAN BAY SE		BASTIAN BAY SE		BASTIAN BAY W	
WELL NAME	P. P. NO. 3		ABERCROMBIE NO. A-2-D		LL & E FEE 24 NO. 24	
LOCATION	SEC. 9, T21S, R29E		SEC. 4, T21S, R29E		NOT GIVEN	
OWNER	GULF OIL CO.- U.S.		GULF OIL CO.- U.S.		PHILLIPS PETROLEUM CO.	
COMPLETED	07/04/70		03/10/67		--/--/00	
SAMPLED	11/09/73		11/09/73		12/26/73	
FORMATION	-SE S-3 RA SUB		-SE N RB SUB		OLIG-5100 FT. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	13913		12244		5176	
WELLHEAD PRESSURE,PSIG	3000		2740		1025	
OPEN FLOW, MCFD	13500		10200		350	
COMPONENT, MOLE PCT						
METHANE	93.6		92.7		97.4	
ETHANE	2.5		3.3		1.3	
PROPANE	1.2		1.4		0.4	
N-BUTANE	0.3		0.3		TRACE	
ISOBUTANE	0.4		0.5		0.1	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.1		0.1		TRACE	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	0.7		0.9		0.5	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.6		0.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1070		1084		1029	
SPECIFIC GRAVITY	0.612		0.616		0.571	

	INDEX 3187 SAMPLE 13852		INDEX 3188 SAMPLE 17243		INDEX 3189 SAMPLE 17244	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	PLAQUEMINES		PLAQUEMINES		PLAQUEMINES	
FIELD	BASTIAN BAY W		BAY BATISTE		BAY BATISTE	
WELL NAME	SUA-LL&E NO. 24-D		LASL 9570 NO. 1		LASL 9570 NO. 3	
LOCATION	NOT GIVEN		PORT SULPHUR		PORT SULPHUR	
OWNER	PHILLIPS PETROLEUM CO.		PEND OREILLE OIL & GAS CO.		PEND OREILLE OIL & GAS CO.	
COMPLETED	--/--/00		02/--/83		02/--/83	
SAMPLED	12/26/73		04/06/84		04/06/84	
FORMATION	-7000 FT. SAND		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6984		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	2500		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	2100		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	95.1		87.6		71.6	
ETHANE	2.1		5.7		13.0	
PROPANE	1.2		2.6		8.0	
N-BUTANE	0.2		0.9		2.4	
ISOBUTANE	0.4		0.7		2.1	
N-PENTANE	0.1		0.3		0.6	
ISOPENTANE	0.1		0.4		0.7	
CYCLOPENTANE	0.1		0.1		0.2	
HEXANES PLUS	0.2		0.3		0.5	
NITROGEN	0.4		0.2		0.8	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		1.0		1.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1075		1150		1406	
SPECIFIC GRAVITY	0.599		0.665		0.820	

	INDEX 3190 SAMPLE 17245		INDEX 3191 SAMPLE 17264		INDEX 3192 SAMPLE 17266	
STATE	LOUISIANA		LOUISIANA		LOUISIANA	
PARISH	PLAQUEMINES		PLAQUEMINES		PLAQUEMINES	
FIELD	BAY BATISTE		BAY JIMMY		BAY JIMMY	
WELL NAME	LASL 9570 NO. 2		STATE LEASE 8512 NO. 1		STATE LEASE 8512 NO. 2	
LOCATION	SEC. 8, T19S, R26E		PORT SULPHUR		PORT SULPHUR	
OWNER	PEND OREILLE OIL & GAS CO.		PEND OREILLE OIL & GAS CO.		PEND OREILLE OIL & GAS CO.	
COMPLETED	02/--/83		02/--/83		02/--/83	
SAMPLED	04/06/84		04/20/84		04/20/84	
FORMATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	13770		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	2525		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	630		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	86.1		90.0		83.7	
ETHANE	6.7		4.6		7.0	
PROPANE	3.3		2.1		4.3	
N-BUTANE	1.0		0.8		1.5	
ISOBUTANE	0.8		0.7		1.1	
N-PENTANE	0.3		0.4		0.5	
ISOPENTANE	0.3		0.2		0.4	
CYCLOPENTANE	0.1		0.2		0.2	
HEXANES PLUS	0.3		0.5		0.4	
NITROGEN	0.2		0.1		0.1	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.5		0.8	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1183		1158		1239	
SPECIFIC GRAVITY	0.678		0.654		0.711	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3193 SAMPLE 17267	INDEX 3194 SAMPLE 11429	INDEX 3195 SAMPLE 14752
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BAY JIMMY	BAYOU GENTILLY	BRETON SOUND BLK. 20
WELL NAME	LL & ES NO. 1	DELACROIX NO. 1	STATE LEASE 1999 NO. 23
LOCATION	PORT SULPHUR	SEC. 17, T15S, R14E	BRETON SOUND AREA
OWNER	PEND OREILLE OIL & GAS CO.	SINCLAIR OIL & GAS CO.	KERR-MCGEE CORP.
COMPLETED	02/--/83	11/15/66	--/--/00
SAMPLED	04/20/84	04/04/68	09/07/76
FORMATION	NOT GIVEN	MIOC-CIBICIDES OPIMA	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	10859	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	6600	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.8	93.4	95.6
ETHANE	7.1	2.4	1.8
PROPANE	3.8	1.1	0.9
N-BUTANE	1.3	0.3	0.4
ISOBUTANE	0.9	0.4	0.3
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	0.1	1.6	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	TRACE
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1208	1068	1080
SPECIFIC GRAVITY	0.698	0.615	0.599

	INDEX 3196 SAMPLE 13473	INDEX 3197 SAMPLE 15028	INDEX 3198 SAMPLE 17519
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	BRETON SOUND BLK. 30	CLAM LAKE	COX BAY
WELL NAME	STATE LEASE 5670 NO. 1	ORLEANS LEVEE BOARD NO. 1	ORLEANS LEVEE BOARD NO. 1
LOCATION	BLK. 30 OFFSHORE	T17S, R15E	SEC. 28, T18S, R15E
OWNER	DESPOT EXPLORATION, INC.	PEL-TEX OIL CO., INC.	CAMPBELL ENERGY
COMPLETED	02/20/72	06/09/76	09/--/82
SAMPLED	11/29/72	06/05/77	11/06/84
FORMATION	NOT GIVEN	MIOC-BASAL	MIOC-1200 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5652	12390	12000
WELLHEAD PRESSURE,PSIG	2520	4426	3150
OPEN FLOW, MCFD	NOT GIVEN	2700	30000
COMPONENT, MOLE PCT			
METHANE	97.0	70.4	97.8
ETHANE	1.6	11.4	0.7
PROPANE	0.7	8.8	0.2
N-BUTANE	0.1	3.1	0.1
ISOBUTANE	0.0	2.8	TRACE
N-PENTANE	TRACE	0.8	TRACE
ISOPENTANE	TRACE	1.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.6	TRACE
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1033	1464	1012
SPECIFIC GRAVITY	0.574	0.852	0.567

	INDEX 3199 SAMPLE 12843	INDEX 3200 SAMPLE 17378	INDEX 3201 SAMPLE 16026
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	CROW-BAYOU	DELTA DUCK CLUB	DRAKES BAY
WELL NAME	STATE-SMITH NO. 1	DELTA DUCK CLUB UT. 1-A NO.1	LL & E NO. 1
LOCATION	SEC. 33, T15S, R15E	SEC. 29, T20S, R20E	SEC. 33, T20S, R29E
OWNER	JONES-O'BRIEN, INC.	SUPERIOR OIL CO. (TEXACO)	C & K PETROLEUM, INC.
COMPLETED	11/--/70	08/13/84	01/10/78
SAMPLED	05/29/71	TERT-MIOCENE U	07/30/80
FORMATION	NOT GIVEN	220	MIOC-
GEOLOGIC PROVINCE CODE	220	12000	220
DEPTH, FEET	8507	5485	10732
WELLHEAD PRESSURE,PSIG	3200	800	1000
OPEN FLOW, MCFD	1550		NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	83.7	95.7
ETHANE	1.8	7.2	1.6
PROPANE	0.8	4.3	0.8
N-BUTANE	0.2	1.8	0.3
ISOBUTANE	0.4	1.0	0.2
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	0.6	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.0	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1061	1206	1063
SPECIFIC GRAVITY	0.596	0.699	0.596

	INDEX 3202 SAMPLE 17391	INDEX 3203 SAMPLE 10085	INDEX 3204 SAMPLE 12949
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	NOT GIVEN	POINTE-A-LA-HACHE	POTASH
WELL NAME	STATE LEASE 7896 NO. 1	UL-5 RJ SU A M. LESLEY NO. 1	C. J. EDGERSON NO. 1
LOCATION	BRETON SOUND BLK.23	SEC. 25, T16S, R14E	SEC. 6, T18S, R27E
OWNER	POGO PRODUCING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	07/30/80	06/04/64	02/01/70
SAMPLED	08/20/80	08/26/65	08/06/71
FORMATION	PLEI-3500 FT. SAND	MIOC-UL-5	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3490	10900	11732
WELLHEAD PRESSURE,PSIG	1440	3900	6150
OPEN FLOW, MCFD	1508	3500	3500
COMPONENT, MOLE PCT			
METHANE	98.8	95.7	94.7
ETHANE	0.1	1.6	1.1
PROPANE	TRACE	0.8	0.4
N-BUTANE	0.0	0.3	0.1
ISOBUTANE	0.0	0.4	0.1
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.8	0.5	0.4
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	3.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1003	1065	1001
SPECIFIC GRAVITY	0.562	0.596	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3205 SAMPLE 14169	INDEX 3206 SAMPLE 14238	INDEX 3207 SAMPLE 17423
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	SOUTH PASS BLK. 27	SOUTH PASS BLK. 27	SPANISH LAKE
WELL NAME	OCS0694 NO. 129	OCS 0697 NO. C-17	10800 RASUA,DELACROIX NO.F-1
LOCATION	EAST BAY OFF SHORE	BLK. 27 OFFSHORE	SEC. 21, T15S, R13E
OWNER	SHELL OIL CO.	TEXACO INC.	AMCO OIL & GAS CO.
COMPLETED	12/08/72	02/15/72	04/19/83
SAMPLED	10/07/74	11/21/74	09/19/84
FORMATION	PLIO-M-4	EOCE-WILCOX	MIOC-10800 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7409	10555	10810
WELLHEAD PRESSURE,PSIG	2300	1450	4500
OPEN FLOW, MCFD	2900	1453	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.4	91.4	98.5
ETHANE	2.5	3.8	0.9
PROPANE	1.2	1.8	0.1
N-BUTANE	0.3	0.6	0.1
ISOBUTANE	0.3	0.5	0.0
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	TRACE
NITROGEN	0.3	0.5	0.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1079	1123	1011
SPECIFIC GRAVITY	0.604	0.635	0.565

	INDEX 3208 SAMPLE 6488	INDEX 3209 SAMPLE 6489	INDEX 3210 SAMPLE 15169
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	PLAQUEMINES	PLAQUEMINES
FIELD	VENICE	VENICE	WEST BAY
WELL NAME	MANHATTAN LAND&FRUIT CO. 2	MANHATTAN LAND&FRUIT CO. 19	STATE LEASE 192 "PP" 133
LOCATION	SEC. 21, T21S, R30E	SEC. 26, T21S, R30E	LAT 29 07 42 LONG 89 26 2
OWNER	TIDEWATER OIL CO.	TIDEWATER OIL CO.	GULF ENERGY & MINERALS CO.
COMPLETED	05/--/56	11/--/48	05/20/77
SAMPLED	01/22/58	01/22/58	12/15/77
FORMATION	MIOC-L	MIOC-L	PLEI-MKR SAND 2ND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15700	8500	2484
WELLHEAD PRESSURE,PSIG	6220	2500	1000
OPEN FLOW, MCFD	NOT GIVEN	10000	2400
COMPONENT, MOLE PCT			
METHANE	88.7	86.4	99.2
ETHANE	4.3	6.0	0.0
PROPANE	2.6	2.6	TRACE
N-BUTANE	0.8	1.2	0.0
ISOBUTANE	0.7	1.0	0.0
N-PENTANE	0.1	0.5	0.0
ISOPENTANE	0.1	0.5	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	0.1	0.7	0.0
NITROGEN	0.7	0.5	0.6
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.5	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1210	1005
SPECIFIC GRAVITY	0.650	0.691	0.557

	INDEX 3211 SAMPLE 15246	INDEX 3212 SAMPLE 15553	INDEX 3213 SAMPLE 16057
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	POINTE COUPEE	POINTE COUPEE	POINTE COUPEE
FIELD	FALSE RIVER	JUDGE DIGBY	JUDGE DIGBY
WELL NAME	ALMA PLANTATION NO. 1	W. C. PARLANGE NO. 2	LE BLANC-LE JUENE NO. 1
LOCATION	SEC. 87, T6S, R11E	SEC. 49, T5S, R9E	SEC. 65, T5S, R10E
OWNER	CHEVRON U.S.A., INC.	CHEVRON U.S.A., INC.	CHEVRON U.S.A., INC.
COMPLETED	06/04/75	06/02/78	09/14/79
SAMPLED	01/29/78	01/17/79	08/26/80
FORMATION	CRET-TUSCALOOSA	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	19800	20268	20490
WELLHEAD PRESSURE,PSIG	13100	11620	10160
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	17260
COMPONENT, MOLE PCT			
METHANE	90.6	90.2	89.8
ETHANE	1.8	1.7	2.2
PROPANE	0.2	0.3	0.4
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.5	0.3	0.2
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.3	7.2	7.0
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	975	964	976
SPECIFIC GRAVITY	0.639	0.643	0.646

	INDEX 3214 SAMPLE 16807	INDEX 3215 SAMPLE 16869	INDEX 3216 SAMPLE 17588
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	POINTE COUPEE	POINTE COUPEE	POINTE COUPEE
FIELD	MOORE-SAMS	MORGANZA	MORGANZA
WELL NAME	W. J. HURST NO. 1	DOROTHY C. BROWN NO. 3	REX CALLICOTT NO. 2
LOCATION	SEC. 55, T4S, R9E	SEC. 48, T4S, R8E	SEC. 84, T4S, R8E
OWNER	AMOCO PRODUCTION CO. (USA)	AMOCO PRODUCTION CO. (USA)	AMOCO PRODUCTION CO.
COMPLETED	08/14/82	11/08/82	08/30/83
SAMPLED	03/05/83	04/09/83	02/07/85
FORMATION	CRET-TUSCALOOSA	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	18882	18478	18946
WELLHEAD PRESSURE,PSIG	8400	6015	8850
OPEN FLOW, MCFD	NOT GIVEN	8000	25000
COMPONENT, MOLE PCT			
METHANE	90.3	89.2	90.8
ETHANE	3.0	3.1	2.3
PROPANE	0.4	0.6	0.3
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	0.2	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.9	5.9	5.7
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	987	1012	994
SPECIFIC GRAVITY	0.637	0.651	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3217 SAMPLE 16796	INDEX 3218 SAMPLE 16446	INDEX 3219 SAMPLE 4939
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	POINTE COUPEE	POINTE COUPEE	POINTE COUPEE
FIELD	NOT GIVEN	PROFIT ISLAND	SHERBURNE
WELL NAME	RAVENSWOOD CO. INC. NO. 2	HURST-RICARD NO. 1	W. J. KURZWEG NO. 1
LOCATION	SEC. 42, T4S, R9E	SEC. 49, T5S, R11E	SEC. 24, T6S, R7E
OWNER	AMOCO PRODUCTION CO.	CHEVRON U.S.A., INC.	TEXAS CO.
COMPLETED	10/--/82	12/22/80	04/29/50
SAMPLED	11/--/82	03/12/82	10/10/50
FORMATION	CRET-TUSCALOOSA	-19,100 SU "U"	EOCE-COCKFIELD
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	18880	18640	10324
WELLHEAD PRESSURE,PSIG	9672	7000	6100
OPEN FLOW, MCFD	5200	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.0	86.4	89.9
ETHANE	1.8	4.9	5.7
PROPANE	0.2	1.5	2.5
N-BUTANE	0.1	0.4	0.7
ISOBUTANE	TRACE	0.5	0.4
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	3.6	0.4	TRACE
OXYGEN	0.7	0.1	0.2
ARGON	0.1	0.0	0.0
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	5.2	5.1	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	938	1064	1130
SPECIFIC GRAVITY	0.638	0.674	0.639

	INDEX 3220 SAMPLE 13706	INDEX 3221 SAMPLE 14964	INDEX 3222 SAMPLE 16400
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	POTTER	RAPIDES	RED RIVER
FIELD	HUMPHREY	NOT GIVEN	ALPHA
WELL NAME	L. D. RIGGS NO. 2	R-1109(312442N0921210.01)	CHARLES BEACH NO. 1
LOCATION	SEC. 88, T17S, R16E	SEC. 19, T5N, R3E	SEC. 34, T12N, R8W
OWNER	UNION TEXAS PETROLEUM CORP.	U.S. GEOLOGICAL SURVEY	AMERADA HESS CORP.
COMPLETED	11/05/72	04/11/77	08/10/80
SAMPLED	08/29/73	04/11/77	12/23/81
FORMATION	MIOC-HOLLYWOOD	PLEI-PRAIRIE TERRACE	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	220	220	230
DEPTH, FEET	11574	50	9353
WELLHEAD PRESSURE,PSIG	8150	3	4800
OPEN FLOW, MCFD	165000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.7	59.8	96.7
ETHANE	3.6	0.2	0.2
PROPANE	1.4	0.0	TRACE
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.5	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.5	33.6	0.7
OXYGEN	0.0	0.4	0.0
ARGON	0.0	0.5	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	5.4	2.4
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1094	609	983
SPECIFIC GRAVITY	0.617	0.752	0.582

	INDEX 3223 SAMPLE 3953	INDEX 3224 SAMPLE 3954	INDEX 3225 SAMPLE 3955
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RED RIVER	RED RIVER	RED RIVER
FIELD	GAHAGAN	GAHAGAN	GAHAGAN
WELL NAME	SEMP RUSS NO. 1	SEMP RUSS NO. 1	SEMP RUSS NO. 1
LOCATION	SEC. 16, T12N, R10W	SEC. 16, T12N, R10W	SEC. 16, T12N, R10W
OWNER	TEXAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	--/--/00	--/--/00	12/21/44
SAMPLED	11/16/44	--/--/00	12/19/44
FORMATION	CRET-TRAVIS PEAK	CRET-L	CRET-RODESSA
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	7146	6750	5000
WELLHEAD PRESSURE,PSIG	2250	710	2480
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	20000
COMPONENT, MOLE PCT			
METHANE	96.4	96.5	97.7
ETHANE	1.6	2.8	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	0.0
OXYGEN	0.4	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	1.6	0.5	2.1
HELIUM	0.05	0.05	0.05
HEATING VALUE*	1005	1026	990
SPECIFIC GRAVITY	0.580	0.575	0.576

	INDEX 3226 SAMPLE 16357	INDEX 3227 SAMPLE 16922	INDEX 3228 SAMPLE 17891
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RED RIVER	RED RIVER	RED RIVER
FIELD	MARTIN	MARTIN	MARTIN
WELL NAME	TEER NO. 1	CROWN ZELLERBACH NO. 1	J. D. MUCKABY NO. 1
LOCATION	SEC. 19, T13N, R8W	SEC. 18, T13N, R8W	SEC. 1, T13N, R9W
OWNER	PIONEER PRODUCTION CORP.	PIONEER PRODUCTION CORP.	AMERADA HESS CORP.
COMPLETED	03/18/81	05/04/83	06/04/85
SAMPLED	10/19/81	05/04/83	11/--/85
FORMATION	NOT GIVEN	NOT GIVEN	JURA-COTTON VALLEY L
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	11405	NOT GIVEN	11254
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3400	6000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	94.3	94.5	94.5
ETHANE	0.2	0.2	0.2
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.1	0.4	0.3
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	5.3	4.5	4.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	961	962	963
SPECIFIC GRAVITY	0.608	0.600	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3229 SAMPLE 16977	INDEX 3230 SAMPLE 4299	INDEX 3231 SAMPLE 5028
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RED RIVER	RICHLAND	RICHLAND
FIELD	THORN LAKE	DELHI	RICHLAND
WELL NAME	CV RA SUB SAMPLE NO. 2	S. A. MAYES NO. 1	J. L. PIPES, NO. 1
LOCATION	SEC. 9, T14N, R11W	SEC. 23, T17N, R9E	SEC. 35, T17N, R6E
OWNER	AMOCO PRODUCTION CO. (USA)	MURPHY-SUN INTERESTS	UNITED CARBON CO., INC.
COMPLETED	08/06/82	09/08/45	08/12/51
SAMPLED	06/16/83	04/09/47	03/29/51
FORMATION	JURA-COTTON VALLEY	CRET-U	CRET-
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	9800	3323	2384
WELLHEAD PRESSURE,PSIG	3600	1467	200
OPEN FLOW, MCFD	225	30	400
COMPONENT, MOLE PCT			
METHANE	93.9	58.4	86.9
ETHANE	1.9	40.5	5.0
PROPANE	0.2	---	2.1
N-BUTANE	0.1	---	0.7
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.3
NITROGEN	0.1	0.0	2.7
OXYGEN	TRACE	0.8	0.2
ARGON	TRACE	---	TRACE
HYDROGEN	0.3	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.2	0.3	1.3
HELIUM	TRACE	TRACE	0.05
HEATING VALUE*	1004	1317	1090
SPECIFIC GRAVITY	0.601	0.762	0.655

	INDEX 3232 SAMPLE 16199	INDEX 3233 SAMPLE 17696	INDEX 3234 SAMPLE 4148
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RICHLAND	RICHLAND	RICHLAND
FIELD	SACKSONIA	SACKSONIA	WILDCAT
WELL NAME	MAY A. LINTON ET AL. NO. 1	PATRICK NO. 1	SAYRE NO. 1
LOCATION	SEC. 11, T17N, R8E	SEC. 4, T17N, R8E	SEC. 34, T17N, R7E
OWNER	HUNT ENERGY CORP.	SPIRIT PETROLEUM CO.	LYD CORP.
COMPLETED	08/31/80	12/22/83	08/02/46
SAMPLED	02/24/81	05/31/85	10/26/46
FORMATION	CRET-RODESSA	CRET-RODESSA	NOT GIVEN
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2858	2784	2598
WELLHEAD PRESSURE,PSIG	1272	1240	900
OPEN FLOW, MCFD	889	300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.5	93.3	87.0
ETHANE	0.2	0.2	10.1
PROPANE	TRACE	0.1	---
N-BUTANE	TRACE	0.0	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.3	0.0	---
CYCLOPENTANE	0.2	0.0	---
HEXANES PLUS	0.2	0.0	---
NITROGEN	5.4	5.9	2.6
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.4	0.1
HELIUM	0.09	0.09	TRACE
HEATING VALUE*	985	951	1062
SPECIFIC GRAVITY	0.593	0.584	0.617

	INDEX 3235 SAMPLE 4368	INDEX 3236 SAMPLE 13723	INDEX 3237 SAMPLE 15293
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	RICHLAND	SABINE	SABINE
FIELD	WILDCAT	PLEASANT HILL	WILDCAT
WELL NAME	FED. LAND BANK NO. 1	LOGAN NO. 1	BOISE SOUTHERN B-5 NO. 1
LOCATION	SEC. 10, T17N, R9E	SEC. 21, T10N, R12W	SEC. 32, T9N, R12W
OWNER	MURPHY-SUN INTERESTS	MCCULLOCH OIL CORP.	SUN PRODUCTION CO.
COMPLETED	04/15/47	12/04/72	12/29/77
SAMPLED	10/02/47	09/20/73	05/25/78
FORMATION	CRET-L	CRET-MOSSTON	CRET-MOORINGSPORT
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	3153	7470	4703
WELLHEAD PRESSURE,PSIG	1515	3365	2490
OPEN FLOW, MCFD	9400	19500	878
COMPONENT, MOLE PCT			
METHANE	94.7	94.9	93.4
ETHANE	1.9	0.3	0.5
PROPANE	---	0.1	0.2
N-BUTANE	---	0.0	0.1
ISOBUTANE	---	0.1	TRACE
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	TRACE	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	2.6	2.9	5.1
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	1.6	0.4
HELIUM	0.04	0.05	0.06
HEATING VALUE*	993	978	973
SPECIFIC GRAVITY	0.581	0.588	0.589

	INDEX 3238 SAMPLE 11821	INDEX 3239 SAMPLE 11826	INDEX 3240 SAMPLE 16055
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. BERNARD	ST. BERNARD	ST. BERNARD
FIELD	MAIN PASS BLK. 6	MAIN PASS BLK. 6	RIGOLETS
WELL NAME	OCS-G-1366 NO. TD	OCS-G-1499, NO. 2	STATE LEASE 6651 NO. 2
LOCATION	OFFSHORE	OFFSHORE	T11S, R16E, LAKE BORGNE
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	CHEVRON U.S.A., INC.
COMPLETED	03/06/68	01/26/68	05/02/80
SAMPLED	02/07/69	02/07/69	08/20/80
FORMATION	-4800 FT. SAND	MIOC-	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4800	6950	13777
WELLHEAD PRESSURE,PSIG	2100	2725	3200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1700
COMPONENT, MOLE PCT			
METHANE	98.3	98.5	86.3
ETHANE	0.5	0.4	6.1
PROPANE	0.1	TRACE	2.3
N-BUTANE	0.0	0.1	0.6
ISOBUTANE	0.0	0.0	0.9
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.7	0.4	0.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	2.8
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1008	1022	1194
SPECIFIC GRAVITY	0.563	0.567	0.666

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3241 SAMPLE 11804	INDEX 3242 SAMPLE 13763	INDEX 3243 SAMPLE 3701
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. BERNARD	ST. CHARLES	ST. CHARLES
FIELD	STUARDS BLUFF	NOT GIVEN	PARADIS
WELL NAME	STATE LEASE 4909 NO. 2	RATHBORNE NO. 1	LOUISIANA LAND & EXPL. NO. 3
LOCATION	SEC. 17, T15S, R17E	SEC. 29, T13S, R19E	SEC. 40, T14S, R20E
OWNER	TEXAS CRUDE OIL CO.	MIDWEST OIL CORP.	TEXAS CO.
COMPLETED	06/28/56	--/--/00	--/--/00
SAMPLED	03/29/59	10/--/73	11/28/43
FORMATION	TERT-	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8932	11131	11394
WELLHEAD PRESSURE,PSIG	3300	NOT GIVEN	5457
OPEN FLOW, MCFD	NOT GIVEN	3141	20000
COMPONENT, MOLE PCT			
METHANE	97.9	93.5	88.7
ETHANE	0.4	2.8	10.1
PROPANE	0.1	1.1	---
N-BUTANE	0.0	0.2	---
ISOBUTANE	0.0	0.6	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	0.2	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.2	---
NITROGEN	1.1	0.6	0.1
OXYGEN	0.2	0.0	0.4
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.3	0.6	0.7
HELIUM	TRACE	TRACE	0.00
HEATING VALUE	1001	1075	1080
SPECIFIC GRAVITY	0.566	0.610	0.614

	INDEX 3244 SAMPLE 3720	INDEX 3245 SAMPLE 14130	INDEX 3246 SAMPLE 14374
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. CHARLES	ST. CHARLES	ST. JAMES
FIELD	PARADIS	TAFT S	BAYOU CITANON
WELL NAME	LOUISIANA LAND & EXPL. CO.	OCCIDENTAL PET. CORP. NO. 1	BOWIE LUMBER CO. NO. 1
LOCATION	SEC. 40, T14S, R20E	SEC. 58, T13S, R20E	SEC. 18, T13S, R17E
OWNER	TEXAS CO.	ASHLAND OIL, INC.	UNION TEXAS PETROLEUM CORP.
COMPLETED	--/--/00	08/15/74	11/19/74
SAMPLED	02/19/44	08/16/74	05/22/75
FORMATION	MIOC-	MIOC-	MIOC-MA-3
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10237	11122	11450
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4000	6900
OPEN FLOW, MCFD	10000	1600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	94.6	95.1
ETHANE	9.9	2.4	2.5
PROPANE	---	0.5	0.6
N-BUTANE	---	0.2	0.1
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.0	0.6	0.5
OXYGEN	0.4	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.9	0.5	0.4
HELIUM	0.03	0.01	TRACE
HEATING VALUE	1077	1066	1051
SPECIFIC GRAVITY	0.614	0.602	0.590

	INDEX 3247 SAMPLE 13363	INDEX 3248 SAMPLE 15161	INDEX 3249 SAMPLE 17660
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. JAMES	ST. JAMES	ST. JAMES
FIELD	COLLEGE POINT "HESTER"	LAPICE	VACHERIE
WELL NAME	MAI RA SUB. MATHERNE NO. 1	HAWTHORNE NO. 1	ST. JOSEPH PLT & MFG NO. 1
LOCATION	SEC. 34, T12S, R4E	SEC. 41, T12S, R15E	SEC. 52, T13S, R17E
OWNER	KENMORE OIL CO., INC.	BROCK EXPLORATION CORP.	REPUBLIC MINERAL CORP.
COMPLETED	01/04/71	04/29/77	04/09/83
SAMPLED	08/29/72	11/25/77	05/01/85
FORMATION	MIOC-MA-1	MIOC-J SAND	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10264	11314	10742
WELLHEAD PRESSURE,PSIG	1949	3900	NOT GIVEN
OPEN FLOW, MCFD	4694	1250	4207
COMPONENT, MOLE PCT			
METHANE	90.8	89.3	91.1
ETHANE	4.8	5.1	3.0
PROPANE	1.9	1.7	1.6
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.7	0.5	0.9
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	0.3	0.2	1.0
NITROGEN	0.5	1.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE	1124	1098	1161
SPECIFIC GRAVITY	0.634	0.640	0.656

	INDEX 3250 SAMPLE 14235	INDEX 3251 SAMPLE 4174	INDEX 3252 SAMPLE 14873
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. LANDRY	ST. LANDRY	ST. LANDRY
FIELD	ANDREPONT	CANKTON	LAWTELL
WELL NAME	DALLAS PITRE NO. 1	VINCENT BOAGNI NO. 1	W. C. RICHARD ET AL. NO. 1
LOCATION	SEC. 99, T5S, R3E	SEC. 28, T8S, R4E	SEC. 27, T6S, R3E
OWNER	SOUTH LOUISIANA PROD. CO.	HUMBLE OIL & REFINING CO.	SABINE PRODUCTION CO.
COMPLETED	08/05/74	09/05/46	08/26/75
SAMPLED	11/19/74	11/07/46	12/16/76
FORMATION	EOCE-WILCOX	MIOC-U	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12573	3065	9340
WELLHEAD PRESSURE,PSIG	4760	NOT GIVEN	3789
OPEN FLOW, MCFD	750	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	83.7	99.7	88.4
ETHANE	7.8	0.0	5.1
PROPANE	3.8	---	3.2
N-BUTANE	0.9	---	0.9
ISOBUTANE	0.8	---	0.8
N-PENTANE	0.2	---	0.2
ISOPENTANE	0.4	---	0.3
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	0.8	0.0	0.6
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.3	0.2	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE	1186	1010	1159
SPECIFIC GRAVITY	0.693	0.557	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3253 SAMPLE 4690	INDEX 3254 SAMPLE 15738	INDEX 3255 SAMPLE 9069
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. LANDRY	ST. LANDRY	ST. LANDRY
FIELD	MELVILLE	MONCRIEF	SHUTESTON
WELL NAME	SWIFT NO. 1	TURNER LUMBER CO. NO. 1	A. L. ALBARADO NO. 1
LOCATION	SEC. 23, T4S, R6E	SEC. 4, T3S, R6E	SEC. 34, T7S, R3E
OWNER	SUN OIL CO.	GULF OIL CORP.	FALCON SEABOARD DRILLING CO.
COMPLETED	11/04/48	10/10/77	09/19/62
SAMPLED	03/03/49	08/30/79	08/21/63
FORMATION	EOCE-WILCOX	CRET-TUSCALOOSA	OLIG-NODOSARIA BLAMPIEDI
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11239	16498	10374
WELLHEAD PRESSURE, PSIG	3125	5740	1600
OPEN FLOW, MCFD	NOT GIVEN	7500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.9	89.2	89.6
ETHANE	5.7	3.3	5.0
PROPANE	3.9	0.7	1.9
N-BUTANE	1.2	0.2	0.5
ISOBUTANE	0.7	0.2	0.6
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	0.5	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.1	0.1
NITROGEN	1.8	0.6	1.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	5.6	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1189	1004	1106
SPECIFIC GRAVITY	0.706	0.645	0.635

	INDEX 3256 SAMPLE 14020	INDEX 3257 SAMPLE 13729	INDEX 3258 SAMPLE 14623
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARTIN	ST. MARTIN	ST. MARTIN
FIELD	ARNAUDVILLE S	BAYOU DES GLAISES	BAYOU LONG
WELL NAME	DR. SIDNEY FREDRICK NO. 1	STATE LEASE 5770 NO. 1	JEANERETTE L & S NO. 1
LOCATION	SEC. 38, T8S, R5E	SEC. 84, T8S, R8E	SEC. 13, T13S, R11E
OWNER	TEXACO INC.	TEXACO INC.	UNION OIL CO. OF CALIF.
COMPLETED	12/10/73	08/12/72	11/20/74
SAMPLED	05/29/74	09/26/73	03/17/76
FORMATION	EOCE-WILCOX	OLIG-FRIO	MIOC-PLANULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15886	12470	13570
WELLHEAD PRESSURE, PSIG	7000	4000	5200
OPEN FLOW, MCFD	2300	3800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.8	93.9	94.8
ETHANE	7.0	2.9	2.3
PROPANE	2.0	1.1	0.8
N-BUTANE	0.3	0.2	0.1
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	0.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.7	0.6	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1087	1066	1045
SPECIFIC GRAVITY	0.664	0.603	0.598

	INDEX 3259 SAMPLE 14624	INDEX 3260 SAMPLE 14958	INDEX 3261 SAMPLE 4763
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARTIN	ST. MARTIN	ST. MARTIN
FIELD	BAYOU LONG	BAYOU LONG	DUCK LAKE
WELL NAME	JEANERETTE L & S NO. 3	JEANERETTE L & S NO. 1	STATE GOODRICH NO. 1
LOCATION	SEC. 13, T13S, R11E	SEC. 12, T13S, R11E	SEC. 2, T14S, R11E
OWNER	UNION OIL CO. OF CALIF.	CHEVRON OIL CO.	HUNT OIL CO.
COMPLETED	07/14/75	01/29/76	07/16/49
SAMPLED	03/17/76	03/28/77	10/19/49
FORMATION	MIOC-PLANULINA	MIOC-14900 SAND	MIOC-D-1 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13380	13966	12342
WELLHEAD PRESSURE, PSIG	5200	5400	4580
OPEN FLOW, MCFD	NOT GIVEN	3500	70
COMPONENT, MOLE PCT			
METHANE	94.7	84.2	92.7
ETHANE	2.3	2.3	3.6
PROPANE	0.8	0.8	1.1
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.5	8.7	0.6
OXYGEN	0.8	2.0	0.1
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	0.9	1.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1048	949	1070
SPECIFIC GRAVITY	0.596	0.645	0.612

	INDEX 3262 SAMPLE 14373	INDEX 3263 SAMPLE 15626	INDEX 3264 SAMPLE 17617
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARTIN	ST. MARTIN	ST. MARTIN
FIELD	FAUSSE POINTE	HAPPYTOWN	LAKE MARTIN
WELL NAME	STATE LEASE 293 NO. 109	IBERVILLE LAND CO. NO. 1	BALDWIN LUMBER CO. FEE NO. 1
LOCATION	T13S, R6E	SEC. 128, T7S, R8E	SEC. 3, T10S, R5E
OWNER	TEXACO INC.	OGW CHEMICAL CO.	TEXACO U.S.A.
COMPLETED	10/28/74	05/29/77	12/18/84
SAMPLED	05/22/75	05/24/79	03/04/85
FORMATION	PLIO-	OLIG-FRIO	OLIG-MARGINULINA TEXANA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	810	10668	12700
WELLHEAD PRESSURE, PSIG	520	3350	6400
OPEN FLOW, MCFD	180	2375	1750
COMPONENT, MOLE PCT			
METHANE	94.8	87.5	85.2
ETHANE	2.6	5.4	7.7
PROPANE	1.0	3.1	3.8
N-BUTANE	0.1	0.9	0.8
ISOBUTANE	0.1	0.9	1.0
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	TRACE	0.5	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.8	0.6	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.4	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.4
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1046	1178	1192
SPECIFIC GRAVITY	0.587	0.665	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3265 SAMPLE 3684	INDEX 3266 SAMPLE 12943	INDEX 3267 SAMPLE 13281
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARTIN	ST. MARTIN	ST. MARTIN
FIELD	LAKE VERRET W	LITTLE BAY	SIMON PASS N
WELL NAME	JEANERETTE STATE UNIT NO. 1	STATE LEASE 5097 NO. 2	W. T. SHINN NO. 1
LOCATION	SEC. 15, T14S, R12E	ATCHAFALAYA BAY	SEC. 23, T15S, R13E
OWNER	SHELL OIL CO.	AMERADA HESS CORP.	OCCIDENTAL PETROLEUM CORP.
COMPLETED	10/21/43	09/06/69	09/18/71
SAMPLED	10/20/43	08/03/71	06/22/72
FORMATION	MIOC-	MIOC-CIBICIDES OPIMA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4633	18705	12782
WELLHEAD PRESSURE,PSIG	1500	6600	4100
OPEN FLOW, MCFD	NOT GIVEN	3800	4510
COMPONENT, MOLE PCT			
METHANE	94.0	85.3	92.8
ETHANE	4.7	5.8	2.9
PROPANE	---	2.8	1.3
N-BUTANE	---	0.7	0.4
ISOBUTANE	---	0.7	0.5
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	0.1	0.4
NITROGEN	0.9	1.8	0.5
OXYGEN	0.4	0.1	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	2.5	0.6
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1036	1101	1101
SPECIFIC GRAVITY	0.589	0.673	0.625

	INDEX 3268 SAMPLE 13282	INDEX 3269 SAMPLE 14395	INDEX 3270 SAMPLE 13891
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARTIN	ST. MARY	ST. MARY
FIELD	SIMON PASS N	BALDWIN	BATEMAN LAKE
WELL NAME	HEBERT NO. 2D	W. R. HEINEN NO. 1	WK&L NO. 30
LOCATION	NOT GIVEN	SEC. 13, T14S, R9E	NOT GIVEN
OWNER	OCCIDENTAL PETROLEUM CORP.	SUN OIL CO.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/22/72	06/20/75	02/02/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	93.8	93.2	93.9
ETHANE	3.6	3.3	2.8
PROPANE	1.1	1.0	1.1
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.4	0.8	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1081	1060	1073
SPECIFIC GRAVITY	0.612	0.608	0.609

	INDEX 3271 SAMPLE 13892	INDEX 3272 SAMPLE 13893	INDEX 3273 SAMPLE 13894
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WAX BAYOU NO. 28	ST. MARY PARISH S.B. NO. 1	WK&L NO. 8
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/03/74	02/03/74	--/--/00
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2000	6000	
COMPONENT, MOLE PCT			
METHANE	88.1	94.8	94.3
ETHANE	4.7	2.8	2.9
PROPANE	2.3	0.9	1.1
N-BUTANE	0.5	0.1	0.2
ISOBUTANE	0.7	0.3	0.4
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	1.2	0.4	0.9
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.5	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1108	1057	1061
SPECIFIC GRAVITY	0.653	0.594	0.595

	INDEX 3274 SAMPLE 13895	INDEX 3275 SAMPLE 13896	INDEX 3276 SAMPLE 13897
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WAX BAYOU NO. 32	WAX BAYOU NO. 11	ST. MARY PARISH S.B. NO. 3
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/03/74	02/02/74	02/03/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3350	NOT GIVEN
OPEN FLOW, MCFD	6000	5000	3000
COMPONENT, MOLE PCT			
METHANE	94.2	94.7	93.2
ETHANE	3.0	2.8	3.0
PROPANE	1.2	0.9	1.2
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.4	0.5	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1061	1063	1076
SPECIFIC GRAVITY	0.606	0.596	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3277 SAMPLE 13898	INDEX 3278 SAMPLE 13899	INDEX 3279 SAMPLE 13901
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WK&L NO. 18	WAX BAYOU NO. 3	WK&L NO 7
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/02/74	02/03/74	02/05/74
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-10900 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7000	6000	7000
COMPONENT, MOLE PCT			
METHANE	93.0	93.0	93.9
ETHANE	3.1	3.1	2.9
PROPANE	1.3	1.3	1.2
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	0.4	0.3	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1087	1095	1077
SPECIFIC GRAVITY	0.618	0.620	0.608

	INDEX 3280 SAMPLE 13902	INDEX 3281 SAMPLE 13903	INDEX 3282 SAMPLE 13904
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WK&L NO. 1	WAX BAYOU CO. NO. 52	WK&L NO. 22
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/05/74	02/05/74	02/05/74
FORMATION	MIOC-9900 FT. SAND	-10100 FT. SAND	-10500 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3000	3000	
COMPONENT, MOLE PCT			
METHANE	94.3	91.7	92.8
ETHANE	3.1	3.5	3.7
PROPANE	1.2	1.6	1.6
N-BUTANE	0.2	0.5	0.3
ISOBUTANE	0.3	0.7	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	0.4	0.9	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1072	1129	1085
SPECIFIC GRAVITY	0.601	0.636	0.612

	INDEX 3283 SAMPLE 13905	INDEX 3284 SAMPLE 13906	INDEX 3285 SAMPLE 13907
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BATEMAN LAKE
WELL NAME	WAX BAYOU CO. NO. 22	WK&L NO. 6	WAX BAYOU CO. NO. 39
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/05/74	02/05/74	02/06/74
FORMATION	-SUN STATE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	12800	535
COMPONENT, MOLE PCT			
METHANE	85.2	84.9	84.9
ETHANE	4.8	6.8	5.0
PROPANE	3.0	3.7	4.2
N-BUTANE	1.5	1.0	1.3
ISOBUTANE	1.4	1.0	1.6
N-PENTANE	0.7	0.3	0.3
ISOPENTANE	1.1	0.6	0.5
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	1.0	0.4	0.3
NITROGEN	0.4	0.9	0.5
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.7	1.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1250	1208	1206
SPECIFIC GRAVITY	0.727	0.693	0.704

	INDEX 3286 SAMPLE 13908	INDEX 3287 SAMPLE 13909	INDEX 3288 SAMPLE 4035
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BATEMAN LAKE	BATEMAN LAKE	BAYOU SALE
WELL NAME	MERANTO NO. 1	WAX BAYOU CO. NO. 35	ST. MARY PSH. LD. CO. NO. 5
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 41, T17S, R9E
OWNER	TEXACO INC.	TEXACO INC.	ATLANTIC REFINING CO.
COMPLETED	--/--/00	--/--/00	05/23/42
SAMPLED	02/06/74	02/06/74	07/12/45
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	10202
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3825
OPEN FLOW, MCFD	831	5000	218
COMPONENT, MOLE PCT			
METHANE	91.4	89.6	91.7
ETHANE	3.8	4.9	8.0
PROPANE	1.8	2.2	---
N-BUTANE	0.4	0.6	---
ISOBUTANE	0.6	0.9	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	1.5	0.4	0.0
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.2	0.9	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1092	1130	1072
SPECIFIC GRAVITY	0.629	0.648	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3289 SAMPLE 4034	INDEX 3290 SAMPLE 4035	INDEX 3291 SAMPLE 10009
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	BAYOU SALE	BAYOU SALE	BELLE ISLE W
WELL NAME	ST. MARY PSH. LD. CO. NO. 3	ST. MARY PSH. LD. CO. NO.C-1	ST. MARY LAND D NO. 2
LOCATION	SEC. 41, T13S, R9E	SEC. 2, T17S, R9E	SEC. 19, T17S, R10E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	SUN OIL CO.
COMPLETED	04/27/42	--/--/00	05/09/64
SAMPLED	07/12/45	07/12/45	01/23/65
FORMATION	MIOC-	MIOC-TECHE	MIOC-X-5 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10698	10460	13760
WELLHEAD PRESSURE,PSIG	1950	3900	6000
OPEN FLOW, MCFD	2000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.3	91.5	89.9
ETHANE	9.2	8.0	4.1
PROPANE	---	---	1.5
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.8
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.3
HEXANES PLUS	---	---	0.8
NITROGEN	0.0	0.0	0.9
OXYGEN	0.0	0.0	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.6
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.5	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1080	1070	1142
SPECIFIC GRAVITY	0.605	0.599	0.645

	INDEX 3292 SAMPLE 13775	INDEX 3293 SAMPLE 13772	INDEX 3294 SAMPLE 13777
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK. 273	EUGENE ISLAND BLK. 292	EUGENE ISLAND BLK. 292
WELL NAME	EUGENE ISLAND 273 NO. A-2	EUGENE ISLAND 292 NO. B1-D	EUGENE ISLAND 287 NO. D-1
LOCATION	OFFSHORE	OFFSHORE	OFFSHORE
OWNER	FOREST OIL CORP.	FOREST OIL CORP.	FOREST OIL CORP.
COMPLETED	04/27/70	01/16/70	04/06/71
SAMPLED	09/15/73	09/14/73	09/14/73
FORMATION	PLEI-4000 FT. SAND	PLEI-D.B. SAND	PLEI-E.M. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4138	4208	5488
WELLHEAD PRESSURE,PSIG	1620	1675	1930
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	99.2	98.1	96.9
ETHANE	0.2	1.3	1.6
PROPANE	TRACE	0.2	0.6
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.5	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1008	1022	1033
SPECIFIC GRAVITY	0.558	0.565	0.575

	INDEX 3295 SAMPLE 13766	INDEX 3296 SAMPLE 10965	INDEX 3297 SAMPLE 14187
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	EUGENE ISLAND BLK. 314	FRANKLIN E	GARDEN CITY
WELL NAME	EUGENE ISLAND 314 NO. F-4	W. P. FOSTER ET AL. NO. 1	BLANCHE L. SMITH NO. 1
LOCATION	OFFSHORE	SEC. 39, T13S, R10E	SEC. 27, T15S, R9E
OWNER	FOREST OIL CORP.	ATLANTIC RICHFIELD CO.	NORTH AMERICAN ROYALTIES INC
COMPLETED	05/03/72	01/12/66	08/16/73
SAMPLED	09/15/73	12/29/66	10/17/74
FORMATION	PLEI-B.C. SAND	MIOC-MA-5 SAND	MIOC-MA-5 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2416	15395	15948
WELLHEAD PRESSURE,PSIG	900	10300	8400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	11000
COMPONENT, MOLE PCT			
METHANE	99.6	90.6	85.6
ETHANE	TRACE	5.8	6.7
PROPANE	TRACE	0.9	3.2
N-BUTANE	0.0	0.2	0.6
ISOBUTANE	0.0	0.0	1.0
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.3	1.1	0.8
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.1	1.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1009	1052	1155
SPECIFIC GRAVITY	0.557	0.611	0.674

	INDEX 3298 SAMPLE 14196	INDEX 3299 SAMPLE 4032	INDEX 3300 SAMPLE 17342
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	MORSESHOE BAYOU	JEANERETTE N	LAKE SAND E
WELL NAME	PARISH LAND CO. NO. 22	TECHE SUGAR FACT. NO. 1	S/L 10251 NO. 1
LOCATION	SEC. 7, T17S, R10E	SEC. 19, T13S, R9E	T17S, R8E
OWNER	TEXACO INC.	ATLANTIC REFINING CO.	UNION TEXAS PETROLEUM CORP.
COMPLETED	09/03/73	01/25/45	06/08/84
SAMPLED	10/29/74	07/13/45	06/28/84
FORMATION	NOT GIVEN	MIOC-	MIOC-ROB CHAMBERS: 3RD
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13715	11880	17543
WELLHEAD PRESSURE,PSIG	7800	1200	13400
OPEN FLOW, MCFD	NOT GIVEN	551	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.7	89.3	93.4
ETHANE	3.7	9.6	2.6
PROPANE	1.8	---	0.7
N-BUTANE	0.8	---	0.2
ISOBUTANE	0.9	---	0.2
N-PENTANE	0.3	---	0.1
ISOPENTANE	0.5	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.4	---	0.1
NITROGEN	4.1	0.0	0.6
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.7	1.0	2.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1077	1038
SPECIFIC GRAVITY	0.667	0.612	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3301 SAMPLE 13388	INDEX 3302 SAMPLE 13819	INDEX 3303 SAMPLE 5067
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	LITTLE BAY	MYETTE POINT	PATTERSON
WELL NAME	STATE LEASE 5097 NO. 2	STATE LEASE 5705 NO. 1	ZENOR NO. 1
LOCATION	T19S, R11E	T13S R10E	SEC. 42, T15S, R11E
OWNER	AMERADA HESS CORP.	MCCORMICK OIL & GAS CORP.	SUN OIL CO.
COMPLETED	03/09/71	05/03/72	01/15/51
SAMPLED	09/19/72	11/28/72	06/15/51
FORMATION	MIOC-CIBICIDES OPIMA	MIOC-	MIOC-L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	18705	15156	11365
WELLHEAD PRESSURE,PSIG	6500	8800	3500
OPEN FLOW, MCFD	6650	1900	18000
COMPONENT, MOLE PCT			
METHANE	83.4	77.8	89.3
ETHANE	7.0	7.3	4.5
PROPANE	3.4	5.8	2.0
N-BUTANE	0.9	1.6	0.6
ISOBUTANE	0.9	1.8	0.8
N-PENTANE	0.3	0.8	0.6
ISOPENTANE	TRACE	0.7	0.0
CYCLOPENTANE	0.1	0.7	0.1
HEXANES PLUS	0.2	1.5	0.8
NITROGEN	0.7	0.3	0.8
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	3.1	1.6	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1146	1351	1155
SPECIFIC GRAVITY	0.696	0.795	0.659

	INDEX 3304 SAMPLE 11855	INDEX 3305 SAMPLE 11832	INDEX 3306 SAMPLE 14376
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	ST. MARY
FIELD	POINT CHEVREUIL	SHELL ISLAND	SWEET BAY LAKE
WELL NAME	STATE LEASE 5047 NO. 1	CITRUS LAND CO., INC. NO. 1-A	MIAMI CORP. NO. 12
LOCATION	ATCHAFALAYA BAY	SEC. 2, T16S, R11E	SEC. 20, T17S, R12E
OWNER	TEXACO INC.	CHEVRON OIL CO.	TEXACO INC.
COMPLETED	11/28/68	06/14/68	10/31/74
SAMPLED	05/06/69	04/23/69	05/23/75
FORMATION	MIOC-TEXTULARIA W	MIOC-13800 FT. SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10650	13844	12852
WELLHEAD PRESSURE,PSIG	3920	4457	850
OPEN FLOW, MCFD	3746	3200	1200
COMPONENT, MOLE PCT			
METHANE	96.1	88.0	88.5
ETHANE	2.1	5.7	5.0
PROPANE	0.7	2.4	2.5
N-BUTANE	0.0	0.8	0.7
ISOBUTANE	0.0	0.5	0.8
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	0.8	0.6	0.8
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.9	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1030	1137	1137
SPECIFIC GRAVITY	0.578	0.653	0.655

	INDEX 3307 SAMPLE 16577	INDEX 3308 SAMPLE 4696	INDEX 3309 SAMPLE 4791
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TANGIPAHOA	TERREBONNE	TERREBONNE
FIELD	MITCHELLS LAKE	BAY BAPTISTE	BAY ST. ELAINE
WELL NAME	A.C. POWELL NO. 1	STATE BAY BAPTISTE NO. 1	STATE NO. 1-C
LOCATION	SEC. 40, T7S, R8E	SEC. 41, T19S, R19E	SEC. 15, T22S, R18E
OWNER	SUPERIOR OIL CO.	UNION PRODUCING CO.	TEXAS CO.
COMPLETED	03/29/82	05/09/45	09/26/48
SAMPLED	07/13/82	01/20/49	06/23/49
FORMATION	NOT GIVEN	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7360	8780	13718
WELLHEAD PRESSURE,PSIG	2500	3375	4500
OPEN FLOW, MCFD	1300	49000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.7	95.7	94.3
ETHANE	1.3	2.1	3.3
PROPANE	1.5	0.7	0.9
N-BUTANE	0.6	0.3	0.3
ISOBUTANE	1.3	0.1	0.1
N-PENTANE	0.6	0.1	TRACE
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.5	TRACE	TRACE
HEXANES PLUS	1.2	0.2	0.0
NITROGEN	7.9	0.6	0.4
OXYGEN	1.7	0.1	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.0	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1083	1058	1060
SPECIFIC GRAVITY	0.705	0.590	0.596

	INDEX 3310 SAMPLE 14907	INDEX 3311 SAMPLE 14908	INDEX 3312 SAMPLE 17606
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	BAYOU CAPASAW	BAYOU CAPASAW	BAYOU PIQUANT
WELL NAME	CONTINENTAL L&F CO. A NO. 1	CONTINENTAL L&F CO. A NO. 1	CONT. LAND & FUR CO. NO.1
LOCATION	SEC. 16, T18S, R15E	SEC. 16, T18S, R15E	SEC. 36, T18S, R14E
OWNER	SOUTHPORT EXPLORATION, INC.	SOUTHPORT EXPLORATION, INC.	SANTA FE MINERALS, INC.
COMPLETED	03/--/76	03/--/76	03/29/84
SAMPLED	02/17/77	02/17/77	03/06/85
FORMATION	MIOC-	MIOC-TEXTULARIA	MIOC-TEXTULARIA W-4
GEOLOGIC PROVINCE CODE	220	220	230
DEPTH, FEET	10188	8617	13036
WELLHEAD PRESSURE,PSIG	3500	3300	8134
OPEN FLOW, MCFD	2000	500	10000
COMPONENT, MOLE PCT			
METHANE	96.9	94.9	97.2
ETHANE	1.7	2.6	1.2
PROPANE	0.3	1.0	0.2
N-BUTANE	TRACE	0.2	0.1
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.6	0.7	0.6
OXYGEN	0.0	0.8	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1023	1060	1024
SPECIFIC GRAVITY	0.572	0.595	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3313 SAMPLE 15091	INDEX 3314 SAMPLE 10679	INDEX 3315 SAMPLE 3849
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	CAILLOU ISLAND	CRESCENT FARMS	DEER ISLAND
WELL NAME	STATE LEASE 188 NO. 645	REALTY RB-SUA TRAHAN, ET AL.	CONTINENTAL LAND & FUR NO. 2
LOCATION	TIMBALIER BAY, T23S, R20E	SEC. 49, T17S, R16E	SEC. 24, T16S, R12E
OWNER	TEXACO INC.	GULF OIL CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	11/09/76	10/19/62	09/29/42
SAMPLED	09/07/77	07/20/66	05/25/44
FORMATION	MIOC-X SAND	MIOC-REALTY	MIOC-
GEOLOGIC PROVINCE CODE	952	220	220
DEPTH, FEET	19970	11116	9565
WELLHEAD PRESSURE,PSIG	12000	4710	4200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	95.0	89.0
ETHANE	6.3	3.1	7.0
PROPANE	5.0	0.9	---
N-BUTANE	3.3	0.4	---
ISOBUTANE	2.1	0.0	---
N-PENTANE	1.1	0.0	---
ISOPENTANE	1.3	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.9	0.0	---
NITROGEN	0.2	0.3	3.4
OXYGEN	0.0	0.0	0.4
ARGON	0.0	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.9	0.3	0.2
HELIUM	TRACE	0.06	0.00
HEATING VALUE*	1364	1035	1027
SPECIFIC GRAVITY	0.807	0.590	0.607

	INDEX 3316 SAMPLE 3786	INDEX 3317 SAMPLE 10105	INDEX 3318 SAMPLE 14250
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	DELARGE	FIDDLERS LAKE	FOUR ISLE DOME
WELL NAME	FITZPATRICK-WIZARD NO. 1	LL & E B-1	R. W. BUCKLEY U9 NO. 6
LOCATION	SEC. 77, T19S, R17E	SEC. 12, T21S, R13E	SEC. 11, T12S, R16E
OWNER	UNION PRODUCING CO., ET AL.	TEXACO INC.	SUPERIOR OIL CO.
COMPLETED	07/06/43	--/--/00	03/15/74
SAMPLED	--/--/00	09/05/65	12/27/74
FORMATION	MIOC-	MIOC-	-NO. 92 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13460	15510	17203
WELLHEAD PRESSURE,PSIG	4500	10175	4550
OPEN FLOW, MCFD	12	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	89.9	88.6
ETHANE	9.9	5.5	5.0
PROPANE	---	1.8	2.0
N-BUTANE	---	0.5	0.5
ISOBUTANE	---	0.4	0.8
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	0.3	0.5	0.3
OXYGEN	0.4	0.0	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.0	0.9	2.6
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1073	1109	1099
SPECIFIC GRAVITY	0.617	0.635	0.654

	INDEX 3319 SAMPLE 13175	INDEX 3320 SAMPLE 17307	INDEX 3321 SAMPLE 6498
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	GIBSON	GRAND BOIS	HOLLYWOOD
WELL NAME	KLEINSCHMIDT NO. 1	TENNECO FEE R NO. 7	SOUTHDOWN UNIT 3, WELL NO. 1
LOCATION	SEC. 5, T17S, R15E	SEC. 7, T18S, R20E	SEC. 5, T17S, R17E
OWNER	QUINTANA PETROLEUM CORP.	TENNECO OIL CO.	TIDEWATER OIL CO.
COMPLETED	10/20/71	05/29/84	08/--/57
SAMPLED	04/03/72	05/29/84	01/28/58
FORMATION	MIOC-	MIOC-TEX-O	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15136	12168	14400
WELLHEAD PRESSURE,PSIG	10500	2789	10500
OPEN FLOW, MCFD	15000	10000	22000
COMPONENT, MOLE PCT			
METHANE	92.8	94.1	93.2
ETHANE	3.0	2.8	3.0
PROPANE	1.0	0.8	1.0
N-BUTANE	0.2	0.2	0.3
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	0.9	0.3	0.5
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.9	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1059	1085	1067
SPECIFIC GRAVITY	0.613	0.611	0.611

	INDEX 3322 SAMPLE 13722	INDEX 3323 SAMPLE 17566	INDEX 3324 SAMPLE 5022
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	HUMPHREYS	HUMPHREYS	KENT BAYOU
WELL NAME	J. A. ANTILL NO. 1	JOSEPH BLANCHARD NO. 1	CONTINENTAL LD & FUR CO. 1
LOCATION	SEC. 35, T17S, R16E	SEC. 42, T17S, R16E	SEC. 35, T17S, R13E
OWNER	PENNZOIL PRODUCING CO.	PENNZOIL PRODUCING CO.	UNION PRODUCING CO.
COMPLETED	11/29/71	06/06/83	10/07/50
SAMPLED	09/24/73	01/14/84	03/22/51
FORMATION	MIOC-LL SAND	MIOC-FF RA SUA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14800	12520	11085
WELLHEAD PRESSURE,PSIG	8200	7900	4464
OPEN FLOW, MCFD	15000	11776	56000
COMPONENT, MOLE PCT			
METHANE	92.9	91.7	91.2
ETHANE	3.1	3.4	4.0
PROPANE	1.1	1.3	1.8
N-BUTANE	0.2	0.5	0.6
ISOBUTANE	0.4	0.5	0.7
N-PENTANE	TRACE	0.1	0.4
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.3	0.8	0.5
NITROGEN	0.4	0.5	0.2
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.3	0.6	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1073	1120	1128
SPECIFIC GRAVITY	0.617	0.637	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3325 SAMPLE 13113	INDEX 5326 SAMPLE 15269	INDEX 3327 SAMPLE 14637
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	LAKE BOUDREAUX	LAKE GERO	LAKE MATCH
WELL NAME	STATE LEASE 5351 NO. 1	C. RICE NO. 1	FEE NO. 2
LOCATION	T19S, R18W	SEC. 13, T19S, R17E	SEC. 8, T18S, R16E
OWNER	AMOCO PRODUCTION CO., ET AL.	LOUISIANA LAND & EXPL. CO.	LOUISIANA LAND & EXPL. CO.
COMPLETED	08/30/71	10/12/70	09/29/74
SAMPLED	12/16/71	06/--/72	03/30/76
FORMATION	MIOC-TEXTULARIA	MIOC-DULARGE	MIOC-DD-1
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12637	14710	8670
WELLHEAD PRESSURE,PSIG	7200	3200	3096
OPEN FLOW, MCFD	30000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.4	94.1	96.6
ETHANE	4.1	2.8	1.9
PROPANE	1.7	0.8	0.5
N-BUTANE	0.3	0.1	0.1
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	TRACE
NITROGEN	0.4	0.6	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.3	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1096	1038	1048
SPECIFIC GRAVITY	0.616	0.597	0.580

	INDEX 3328 SAMPLE 13984	INDEX 3329 SAMPLE 15294	INDEX 3330 SAMPLE 15247
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	LAPEYROUSE	MONTEGUT NE	MOSQUITO BAY
WELL NAME	AURELIE ESCHETE NO. 1	ELLENDER NO. 1	JOHN M. SMITH ET AL. NO. 1
LOCATION	SEC. 30, T19S, R18E	SEC. 57, T18S, R19E	SEC. 35, T20S, R12E
OWNER	QUINTANA PETROLEUM CORP.	GOLDKING PRODUCTION CO.	LADD PETROLEUM CORP.
COMPLETED	11/06/73	10/20/77	09/19/78
SAMPLED	04/18/74	05/--/78	03/22/78
FORMATION	MIOC-TEXTULARIA W-4	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	16284	11674	12116
WELLHEAD PRESSURE,PSIG	11940	NOT GIVEN	4200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2620
COMPONENT, MOLE PCT			
METHANE	89.1	95.2	90.0
ETHANE	5.9	2.2	3.8
PROPANE	2.1	0.9	2.0
N-BUTANE	0.3	0.3	0.7
ISOBUTANE	0.6	0.3	1.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.4	0.5	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.3	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1070	1146
SPECIFIC GRAVITY	0.637	0.598	0.655

	INDEX 3331 SAMPLE 15276	INDEX 3332 SAMPLE 15277	INDEX 3333 SAMPLE 14193
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	MOSQUITO BAY	MOSQUITO BAY	POINT AU FER
WELL NAME	JOHN M. SMITH ET AL. NO. 1	JOHN M. SMITH ET AL. NO. 1	SL 649, NELSON LLEE WUA NO.5
LOCATION	SEC. 35, T20S, R12E	SEC. 35, T20S, R12E	SEC. 6, T20S, R11E
OWNER	LADD PETROLEUM CORP.	LADD PETROLEUM CORP.	TEXACO INC.
COMPLETED	09/19/78	02/19/78	05/07/73
SAMPLED	05/--/78	05/--/78	10/27/74
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12116	12116	9075
WELLHEAD PRESSURE,PSIG	4200	4200	3300
OPEN FLOW, MCFD	2620	2620	4400
COMPONENT, MOLE PCT			
METHANE	92.3	92.2	93.4
ETHANE	3.3	3.3	2.9
PROPANE	1.4	1.4	0.8
N-BUTANE	0.4	0.4	0.2
ISOBUTANE	0.7	0.7	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.7	0.7	1.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.5
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1095	1098	1067
SPECIFIC GRAVITY	0.626	0.628	0.609

	INDEX 3334 SAMPLE 13399	INDEX 3335 SAMPLE 13752	INDEX 3336 SAMPLE 13753
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	TERREBONNE	TERREBONNE	TERREBONNE
FIELD	SHIP SHOAL BLK. 23	SHIP SHORE BLK. 23	SHIP SHORE BLK. 23
WELL NAME	STATE LEASE 4533 NO. 2	LL & E NO. 1	LL & E NO. 10
LOCATION	STATE LEASE BLOCK 23	SEC. 22, T22S, R15E	SEC. 22, T22S, R15E
OWNER	EXCHANGE OIL & GAS CORP.	EXCHANGE OIL & GAS CORP.	EXCHANGE OIL & GAS CORP.
COMPLETED	11/08/71	11/01/72	11/01/72
SAMPLED	09/26/72	10/11/73	10/11/73
FORMATION	MIOC-14400 FT. SAND	MIOC-14400 FT. SAND	MIOC-14200 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14424	9198	13834
WELLHEAD PRESSURE,PSIG	4952	2200	3900
OPEN FLOW, MCFD	2000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.3	83.2	92.1
ETHANE	3.8	6.7	3.6
PROPANE	1.3	4.6	1.4
N-BUTANE	0.3	1.1	0.3
ISOBUTANE	0.3	1.4	0.5
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.2	0.5	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.6	0.9	0.8
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.0	0.8
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1071	1210	1083
SPECIFIC GRAVITY	0.615	0.706	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3337 SAMPLE 17137	INDEX 3338 SAMPLE 15820	INDEX 3339 SAMPLE 15347
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	UNION	UNION	UNION
FIELD	DARBONNE	MONROE	MONROE
WELL NAME	DILLARD NO. 1	LITTLE NO. 1	C. H. ALLEN NO. 1
LOCATION	SEC. 27, T20N, R1W	SEC. 23, T22N, R2E	SEC. 26, T22N, R2E
OWNER	MIDROC OIL CO.	ERGON INC.	ERGON INC.
COMPLETED	07/--/81	02/03/77	99/99/77
SAMPLED	11/09/83	06/10/77	08/15/78
FORMATION	JURA-COTTON VALLEY-DAVIS	CRET-SARATOGA	CRET-
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	6574	2130	2100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	420
OPEN FLOW, MCFD	211	40	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.6	89.6	90.9
ETHANE	8.4	8.7	0.7
PROPANE	3.5	0.2	0.1
N-BUTANE	1.0	0.1	0.1
ISOBUTANE	0.6	0.1	0.0
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.5	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	0.4	0.1	7.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	TRACE	0.1
HELIUM	0.02	0.09	0.08
HEATING VALUE*	1191	937	949
SPECIFIC GRAVITY	0.692	0.604	0.597

	INDEX 3340 SAMPLE 14640	INDEX 3341 SAMPLE 17634	INDEX 3342 SAMPLE 13686
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	UNION	UNION	VERMILION
FIELD	MOUNT OLIVE	NOT GIVEN	ABBEVILLE
WELL NAME	L. C. MINTER NO. 1	HAMONS A NO.1	L. S. GOLDBERG NO. 1
LOCATION	SEC. 3, T21N, R3W	SEC. 27, T19N, R2E	SEC. 30, T12S, R3E
OWNER	GETTY OIL CO.	CITIES SERVICE OIL & GAS COR	SUPERIOR OIL CO.
COMPLETED	01/13/76	--/--/00	05/22/73
SAMPLED	04/22/76	--/--/00	08/21/73
FORMATION	JURA-HAYNESVILLE	NOT GIVEN	MIOC-DUHON
GEOLOGIC PROVINCE CODE	230	230	220
DEPTH, FEET	10310	11942	11110
WELLHEAD PRESSURE,PSIG	2531	1915	4275
OPEN FLOW, MCFD	8600	2804	5054
COMPONENT, MOLE PCT			
METHANE	81.7	91.7	95.1
ETHANE	8.3	4.4	2.6
PROPANE	3.5	1.4	0.8
N-BUTANE	1.0	0.5	0.2
ISOBUTANE	0.9	0.6	0.2
N-PENTANE	0.2	0.3	TRACE
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.5	0.6	0.3
OXYGEN	0.3	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	0.5
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	1158	1108	1054
SPECIFIC GRAVITY	0.695	0.622	0.591

	INDEX 3343 SAMPLE 13087	INDEX 3344 SAMPLE 13088	INDEX 3345 SAMPLE 6492
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	BUCK POINT N	BUCK POINT N	ERATH
WELL NAME	STATE LEASE 3020 NO. 1	STATE LEASE 3020 NO. 1	R. Y. ROSE
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 40, T13S, R4E
OWNER	SANDMAN OIL CORP.	SANDMAN OIL CORP.	TIDEWATER OIL CO.
COMPLETED	11/04/70	11/04/70	--/--/00
SAMPLED	10/19/71	10/19/71	01/29/58
FORMATION	MIOC-11600 FT. SAND	MIOC-11900 FT. SAND	OLIG-U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11602	11936	7800
WELLHEAD PRESSURE,PSIG	3785	3985	2450
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	25000
COMPONENT, MOLE PCT			
METHANE	90.3	90.7	93.9
ETHANE	4.4	4.4	3.5
PROPANE	2.3	2.0	1.0
N-BUTANE	0.5	0.5	0.2
ISOBUTANE	0.7	0.7	0.4
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.7	0.6	0.9
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.2
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1112	1099	1059
SPECIFIC GRAVITY	0.637	0.628	0.599

	INDEX 3346 SAMPLE 16276	INDEX 3347 SAMPLE 15948	INDEX 3348 SAMPLE 17594
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	ESTHER	FLORENCE S	FLORENCE S
WELL NAME	SAGRERA HEIRS NO. 4	E. M. WATKINS NO. 33	E. M. WATKINS NO. 39
LOCATION	SEC. 18, T14S, R3E	SEC. 25, T13S, R2W	SEC. 25, T13S, R2W
OWNER	AMERADA HESS CORP.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	02/14/81	07/12/79	01/29/85
SAMPLED	06/05/81	04/02/80	02/15/85
FORMATION	MIOC-14060 SAND	MIOC-P-3 SAND	MIOC-P-3 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14048	11028	10978
WELLHEAD PRESSURE,PSIG	9400	3800	4200
OPEN FLOW, MCFD	3000	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.8	95.1	94.9
ETHANE	2.7	2.4	2.5
PROPANE	0.8	0.7	0.8
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1053	1066	1063
SPECIFIC GRAVITY	0.596	0.595	0.601

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3349 SAMPLE 3808	INDEX 3350 SAMPLE 15228	INDEX 3351 SAMPLE 14438
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	FRESH WATER BAYOU	GROSSE ISLE	GUEYDAN E
WELL NAME	LOUISIANA FURS, INC. 1-C	MOLEUS RICHARD NO. 1	CAMILE ADAM NO. 1
LOCATION	SEC. 33, T16S, R2E	SEC. 15, T12S, R9E	SEC. 30, T11S, R1E
OWNER	UNION OIL CO. OF CALIF.	TEXACO INC.	ATLANTIC RICHFIELD CO.
COMPLETED	11/29/43	07/19/77	--/--/00
SAMPLED	04/16/44	03/13/78	08/15/75
FORMATION	MIOC-BASAL	UNKN-RICHARD	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11115	14496	12896
WELLHEAD PRESSURE,PSIG	4000	750	9650
OPEN FLOW, MCFD	NOT GIVEN	677	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.0	77.1	93.5
ETHANE	8.2	7.6	3.3
PROPANE	---	5.8	1.0
N-BUTANE	---	2.1	0.1
ISOBUTANE	---	4.3	0.3
N-PENTANE	---	0.7	TRACE
ISOPENTANE	---	0.8	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.6	0.1
NITROGEN	3.8	0.2	0.7
OXYGEN	0.4	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.9
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1028	1382	1055
SPECIFIC GRAVITY	0.619	0.802	0.603

	INDEX 3352 SAMPLE 14439	INDEX 3353 SAMPLE 13041	INDEX 3354 SAMPLE 15798
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	GUEYDAN E	GUEYDAN SE	GUEYDAN SW
WELL NAME	CAMILE ADAM ET AL. NO. 3	GATLE ET AL. NO. 1	GARDINER NO. 1
LOCATION	SEC. 31, T11S, R1E	SEC. 18, T12S, R1W	SEC. 14, T12S, R2W
OWNER	ATLANTIC RICHFIELD CO.	SUPERIOR OIL CO.	MCALESTER FUEL CO.
COMPLETED	--/--/00	07/16/70	03/25/79
SAMPLED	08/--/75	09/08/71	10/02/79
FORMATION	OLIG-FRIO	MIOC-	OLIG-ALLIANCE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11469	16308	11610
WELLHEAD PRESSURE,PSIG	5950	9700	3668
OPEN FLOW, MCFD	NOT GIVEN	6605	8000
COMPONENT, MOLE PCT			
METHANE	93.0	86.3	93.6
ETHANE	3.8	5.2	3.1
PROPANE	1.4	2.9	1.1
N-BUTANE	0.3	0.7	0.3
ISOBUTANE	0.5	0.9	0.5
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.4	0.7	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.9	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1083	1137	1090
SPECIFIC GRAVITY	0.609	0.679	0.615

	INDEX 3355 SAMPLE 17459	INDEX 3356 SAMPLE 14286	INDEX 3357 SAMPLE 14878
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	GUEYDAN SW	KAPLAN	KAPLAN S
WELL NAME	HARDSCRAMBLE NO. 3	E. DARTEZ NO. 1	W. J. GREEN NO. 1
LOCATION	SEC. 22, T12S, R2W	SEC. 14, T12S, R1E	SEC. 23, T12S, R1E
OWNER	HAWTHORNE OIL & GAS CORP.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	--/--/00	06/11/74	--/--/00
SAMPLED	09/--/84	02/25/75	12/27/76
FORMATION	OLIG-SUB ALLIANCE 2	OLIG-MIOCYP	OLIG-CAMERINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12035	19434	17200
WELLHEAD PRESSURE,PSIG	7131	NOT GIVEN	9514
OPEN FLOW, MCFD	6000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.8	91.6	82.6
ETHANE	5.0	2.0	8.3
PROPANE	1.7	0.3	3.6
N-BUTANE	0.4	0.1	0.9
ISOBUTANE	0.8	0.1	0.8
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.0	TRACE	0.3
CYCLOPENTANE	0.4	TRACE	0.1
HEXANES PLUS	0.8	0.1	0.2
NITROGEN	0.1	1.6	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	4.2	2.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1155	983	1171
SPECIFIC GRAVITY	0.651	0.620	0.700

	INDEX 3358 SAMPLE 16399	INDEX 3359 SAMPLE 10870	INDEX 3360 SAMPLE 13683
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	LAC BLANC	LE BOEUF S	LELEUX
WELL NAME	STATE LEASE 3057 NO 40	MONTET NO. 1	T. M. ABSHIRE NO. 1
LOCATION	SEC. 19, T15S, R1E	SEC. 30, T11S, R3E	SEC. 8, T11S, R2E
OWNER	SUPERIOR OIL CO.	OWEN DRILLING CO.	EASON OIL CO.
COMPLETED	03/13/81	11/30/66	11/01/73
SAMPLED	12/18/81	--/--/00	08/19/73
FORMATION	MIOC-75 SAND	MIOC-ALLIANCE	OLIG-MARGINULINA TEXANA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14930	11230	16352
WELLHEAD PRESSURE,PSIG	7600	4050	6750
OPEN FLOW, MCFD	8084	2000	6700
COMPONENT, MOLE PCT			
METHANE	82.3	92.6	90.4
ETHANE	5.2	3.6	4.8
PROPANE	4.0	1.3	1.3
N-BUTANE	1.3	0.3	0.2
ISOBUTANE	2.1	0.4	0.4
N-PENTANE	0.7	0.2	TRACE
ISOPENTANE	0.9	0.1	0.1
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	1.2	0.1	0.1
NITROGEN	1.7	0.9	0.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.5	2.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1286	1078	1065
SPECIFIC GRAVITY	0.751	0.613	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3361 SAMPLE 14160	INDEX 3362 SAMPLE 5090	INDEX 3363 SAMPLE 17698
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	LIVE OAK	NOT GIVEN	OUTSIDE ISLAND
WELL NAME	GODCHAUX NO. 7-D	NO. A-5	AMOS BROUSSARD NO. 1
LOCATION	SEC. 88, T14S, R3E	STATE LEASE 880, BLK. 39	SEC. 1, T14S, R1W
OWNER	ATLANTIC RICHFIELD CO.	PURE OIL CO.	EXPLORATION CO. OF LA.
COMPLETED	07/01/73	02/09/51	08/17/83
SAMPLED	10/03/74	06/24/51	--/--/00
FORMATION	MIOC-12300 FT. SAND	MIOC-	MIOC-PLANULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12282	7360	12040
WELLHEAD PRESSURE,PSIG	2265	3420	NOT GIVEN
OPEN FLOW, MCFD	5400	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	96.0	89.7
ETHANE	4.1	1.6	4.8
PROPANE	1.5	0.6	1.9
N-BUTANE	0.3	0.2	0.6
ISOBUTANE	0.5	0.1	0.6
N-PENTANE	TRACE	0.1	0.4
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	0.4	0.7	0.3
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.0	0.4	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1082	1040	1149
SPECIFIC GRAVITY	0.618	0.584	0.654

	INDEX 3364 SAMPLE 13918	INDEX 3365 SAMPLE 13164	INDEX 3366 SAMPLE 12950
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	PARCPERDUE N	PARCPERDUE W	PECAN ISLAND
WELL NAME	LANDRY A NO. 1	DUHON NO. 1	VERMILION NO. 1
LOCATION	SEC. 27, T11S, R4E	SEC. 53, T11S, R4E	SEC. 16, T17S, R1E
OWNER	PHILLIPS PETROLEUM CO.	CHEVRON OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/00	05/05/70	12/19/69
SAMPLED	02/15/74	03/02/72	08/05/71
FORMATION	OLIG-CAMERINA	OLIG-CAMERINA	-MARY 36-A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15550	15649	18414
WELLHEAD PRESSURE,PSIG	10100	11400	10500
OPEN FLOW, MCFD	50000	3125	10200
COMPONENT, MOLE PCT			
METHANE	87.0	92.3	98.7
ETHANE	6.3	3.8	0.5
PROPANE	2.8	1.5	0.1
N-BUTANE	0.6	0.2	0.0
ISOBUTANE	1.2	0.4	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.3	0.2	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.2	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1155	1080	1011
SPECIFIC GRAVITY	0.666	0.618	0.561

	INDEX 3367 SAMPLE 13975	INDEX 3368 SAMPLE 13976	INDEX 3369 SAMPLE 16598
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	REDFISH POINT	REDFISH POINT	RICEVILLE
WELL NAME	STATE LEASE 3306 NO. 3	STATE LEASE 3306 NO. 3	FIRST NATIONAL FARMS NO. 1
LOCATION	T16S, R4E	OFFSHORE, T16S, R4E	SEC. 24, T11S, R2W
OWNER	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.	AMERICAN QUASAR PET. CO.
COMPLETED	03/06/72	03/06/72	05/04/80
SAMPLED	03/19/74	03/19/74	07/08/82
FORMATION	OLIG-M SAND	OLIG-N SAND	OLIG-ARA SUB
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	15192	15629	11700
WELLHEAD PRESSURE,PSIG	9000	NOT GIVEN	4120
OPEN FLOW, MCFD	1600	NOT GIVEN	5763
COMPONENT, MOLE PCT			
METHANE	79.8	80.5	95.2
ETHANE	5.1	5.1	2.4
PROPANE	4.8	4.8	0.7
N-BUTANE	1.8	1.7	0.2
ISOBUTANE	2.8	2.6	0.3
N-PENTANE	0.7	0.6	0.1
ISOPENTANE	1.0	0.9	0.1
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	1.0	0.7	0.1
NITROGEN	1.2	1.3	0.3
OXYGEN	0.1	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.7	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1311	1284	1060
SPECIFIC GRAVITY	0.782	0.766	0.597

	INDEX 3370 SAMPLE 5074	INDEX 3371 SAMPLE 5075	INDEX 3372 SAMPLE 5097
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	ROLLOVER	ROLLOVER	ROLLOVER
WELL NAME	NO. A-3	WELL A-8	A-6
LOCATION	STATE LEASE 880, BLK. 39	STATE LEASE 879, BLK. 39	STATE LEASE 878, BLK. 38
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	01/21/51	01/27/51	12/30/50
SAMPLED	06/24/51	06/24/51	06/24/51
FORMATION	MIOC-	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7736	7783	7824
WELLHEAD PRESSURE,PSIG	3700	3709	3713
OPEN FLOW, MCFD	10000	10000	10000
COMPONENT, MOLE PCT			
METHANE	95.9	96.1	94.6
ETHANE	2.1	2.0	1.7
PROPANE	0.7	0.6	1.7
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.1	0.2	0.8
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.4	1.1
OXYGEN	0.1	0.1	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1045	1043	1042
SPECIFIC GRAVITY	0.588	0.584	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3373 SAMPLE 15012	INDEX 3374 SAMPLE 13652	INDEX 3375 SAMPLE 3918
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	VERMILION	VERMILION
FIELD	TIGRE LAGOON	VERMILION BLK. 16	WHITE LAKE W
WELL NAME	EDNA DELCAMBRE NO. 1	S. L. 5008 NO. 1	STATE LEASE 540 NO. 1-A
LOCATION	8 MI. S OF DELCAMBRE	BLK. 3, ZONE 1	T14S, R2W
OWNER	GEOTHERMIC RESOURCES	EXCHANGE OIL & GAS CORP.	UNION OIL CO. OF CALIF.
COMPLETED	05/--/77	01/29/73	12/31/43
SAMPLED	05/29/77	06/17/73	10/19/44
FORMATION	MIOC-PLANULINA	-15700' SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12870	NOT GIVEN	10650
WELLHEAD PRESSURE, PSIG	9600	9100	3750
OPEN FLOW, MCFD	250	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.4	91.6	92.4
ETHANE	2.6	2.7	5.9
PROPANE	0.8	1.2	---
N-BUTANE	0.2	0.2	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.5	1.1	0.0
OXYGEN	0.1	0.2	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.8	2.2	1.3
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1044	1041	1042
SPECIFIC GRAVITY	0.609	0.622	0.598

	INDEX 3376 SAMPLE 15517	INDEX 3377 SAMPLE 15201	INDEX 3378 SAMPLE 17486
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	VERMILION	W. BATON ROUGE	W. BATON ROUGE
FIELD	WILDCAT	FALSE RIVER	FALSE RIVER
WELL NAME	BRUSSARD LAND CO. NO. 2	POPLAR GROVE P & R CO. NO. 1	F. E. FARWELL NO. 4
LOCATION	SEC. 20, T14S, R2E	SEC. 9, T6S, R11E	SEC. 61, T6S, R1W
OWNER	INEXCO OIL CO.	CHEVRON U.S.A., INC.	CHEVRON U.S.A., INC.
COMPLETED	--/--/00	06/18/76	03/31/83
SAMPLED	11/15/78	01/13/78	10/09/84
FORMATION	NOT GIVEN	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	19700	19957
WELLHEAD PRESSURE, PSIG	4300	12380	4325
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1515
COMPONENT, MOLE PCT			
METHANE	91.0	89.5	90.6
ETHANE	4.9	2.7	0.4
PROPANE	1.5	0.5	TRACE
N-BUTANE	0.4	0.1	0.1
ISOBUTANE	0.4	0.1	0.0
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.4	0.5	0.4
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	6.4	8.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1099	975	933
SPECIFIC GRAVITY	0.627	0.640	0.643

	INDEX 3379 SAMPLE 5233	INDEX 3380 SAMPLE 16959	INDEX 3381 SAMPLE 1980
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WASHINGTON	WEBSTER	WEBSTER
FIELD	ANGIE	ADA	CARTERVILLE
WELL NAME	GAYLORD CONTAINER CORP. C-1	MONZINGO C NO. 1	BAKER NO. 2
LOCATION	SEC. 47, T1S, R14E	SEC. 27, T18N, R8W	SEC. 32, T23N, R11W
OWNER	HUMBLE OIL & REFINING CO.	PHILLIPS PETROLEUM CO.	MAGNOLIA PETROLEUM CO.
COMPLETED	07/06/51	09/04/82	06/05/28
SAMPLED	04/24/52	05/18/83	04/03/30
FORMATION	CRET-TUSCALOOSA	JURA-COTTON VALLEY	CRET-TOKIO
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	9004	9296	3078
WELLHEAD PRESSURE, PSIG	4143	5406	150
OPEN FLOW, MCFD	51500	10500	1500
COMPONENT, MOLE PCT			
METHANE	96.3	86.6	97.8
ETHANE	0.5	5.5	1.1
PROPANE	0.3	2.0	---
N-BUTANE	0.1	0.6	---
ISOBUTANE	0.1	0.8	---
N-PENTANE	0.1	0.4	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	0.4	---
HEXANES PLUS	0.1	1.1	---
NITROGEN	1.5	0.5	0.8
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	0.0	---
HYDROGEN	0.1	0.3	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.9	1.6	0.2
HELIUM	0.03	TRACE	0.03
HEATING VALUE*	1008	1165	1010
SPECIFIC GRAVITY	0.582	0.683	0.567

	INDEX 3382 SAMPLE 17237	INDEX 3383 SAMPLE 6878	INDEX 3384 SAMPLE 15310
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WEBSTER	WEBSTER	WINN
FIELD	DYKESVILLE E	MINDEN	CALVIN
WELL NAME	MEARN "A" NO. 1	I. W. YOUNGBLOOD NO. 1	U.S.A. 3-31 NO. 1
LOCATION	SEC. 3, T22N, R9W	SEC. 21, T19N, R8W	SEC. 31, T12N, R4W
OWNER	CITIES SERVICE OIL & GAS COR	PAN AMERICAN PETROLEUM CORP.	GETTY OIL CO.
COMPLETED	07/22/83	09/29/58	02/06/78
SAMPLED	04/02/84	11/25/58	07/01/78
FORMATION	JURA-SMACKOVER C	CRET-PALUXY	-TERRYVILLE
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	11565	7468	13000
WELLHEAD PRESSURE, PSIG	7325	2875	7200
OPEN FLOW, MCFD	6305	45000	750
COMPONENT, MOLE PCT			
METHANE	93.5	96.1	91.6
ETHANE	3.1	3.0	8.2
PROPANE	0.7	0.8	0.1
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.4	0.5	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.1	0.1	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.2	7.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1060	1059	934
SPECIFIC GRAVITY	0.609	0.604	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3385 SAMPLE 13311	INDEX 3386 SAMPLE 15224	INDEX 3387 SAMPLE 14978
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WINN	WINN	WINN
FIELD	CALVIN	MATTAWAY BRANCH	HICKORY VALLEY
WELL NAME	F. B. TREAT NO. 1	PARDEE NO. 1	LOUISIANA-PACIFIC B NO. 1
LOCATION	SEC. 34, T12N, R4W	SEC. 22, T12N, R1E	SEC. 30, T12N, R1E
OWNER	GETTY OIL CO.	JUSTISS-MEARS OIL CO., INC.	TRIDENT OIL & GAS CORP.
COMPLETED	01/05/76	11/02/77	12/15/75
SAMPLED	07/01/76	03/12/78	04/18/77
FORMATION	-TROY	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	15520	2781	2007
WELLHEAD PRESSURE,PSIG	10450	1100	855
OPEN FLOW, MCFD	650	347	1000
COMPONENT, MOLE PCT			
METHANE	91.0	97.6	97.7
ETHANE	0.1	0.1	0.2
PROPANE	TRACE	0.0	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.3	1.8	1.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE*	0.6	0.0	0.0
CARBON DIOXIDE	8.5	0.2	0.1
HELIUM	0.01	0.02	0.03
HEATING VALUE*	929	998	996
SPECIFIC GRAVITY	0.638	0.565	0.565

	INDEX 3388 SAMPLE 14961	INDEX 3389 SAMPLE 14971	INDEX 3390 SAMPLE 14206
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WINN	WINN	WINN
FIELD	HICKORY VALLEY N	HICKORY VALLEY NE	HICKORY VALLEY W
WELL NAME	HERRING NO. 1	MORRIS EST. & BOZEMAN NO. 1	OLINKRAFT NO. 2
LOCATION	SEC. 33, T13N, R1E	SEC. 2, T12N, R1E	SEC. 24, T12N, R1W
OWNER	JUSTISS-MEARS OIL CO., INC.	TRIDENT OIL & GAS CORP.	TRIDENT OIL & GAS CORP.
COMPLETED	07/16/76	05/21/76	01/16/74
SAMPLED	04/06/77	04/18/77	10/20/74
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	2050	2136	2471
WELLHEAD PRESSURE,PSIG	800	920	1000
OPEN FLOW, MCFD	250	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.1	97.3	97.8
ETHANE	0.1	0.1	TRACE
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.5	2.3	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.03	0.03	0.05
HEATING VALUE*	988	987	991
SPECIFIC GRAVITY	0.567	0.566	0.563

	INDEX 3391 SAMPLE 2479	INDEX 3392 SAMPLE 17633	INDEX 3393 SAMPLE 14988
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	WINN	WINN	WINN
FIELD	NOT GIVEN	NOT GIVEN	WILDCAT
WELL NAME	SALT MINE	CON CAN NO. A-1	BODCAW NO. 1
LOCATION	SEC. 20, T11N, R3W	SEC. 24, T13N, R4W	SEC. 30, T12N, R4W
OWNER	CAREY SALT CO.	CLEMENTS ENERGY, INC.	GETTY OIL CO.
COMPLETED	--/--/00	--/--/00	12/31/76
SAMPLED	--/--/00	03/29/85	04/29/77
FORMATION	NOT GIVEN	JURA-COTTON VALLEY	CRET-MOSSTON
GEOLOGIC PROVINCE CODE	230	230	230
DEPTH, FEET	800	13640	9081
WELLHEAD PRESSURE,PSIG	NOT GIVEN	9200	2900
OPEN FLOW, MCFD	NOT GIVEN	600	1500
COMPONENT, MOLE PCT			
METHANE	0.0	99.5	94.2
ETHANE	0.0	0.1	0.2
PROPANE	---	TRACE	0.1
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	5.8	0.2	2.4
OXYGEN	0.0	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	94.2	TRACE	3.1
HELIUM	0.03	0.01	0.06
HEATING VALUE*	0	1010	960
SPECIFIC GRAVITY	1.496	0.555	0.597

	INDEX 3394 SAMPLE 14995	INDEX 3395 SAMPLE 5008	INDEX 3396 SAMPLE 5240
STATE	LOUISIANA	MARYLAND	MARYLAND
PARISH	WINN	GARRETT	GARRETT
FIELD	WILDCAT	DEER PARK ANTICLINE	LOCH LYNN HEIGHTS
WELL NAME	BODCAW NO. 1	OREN T. GRASER NO. 1	GEORGE PERRINE NO. 1
LOCATION	SEC. 30, T12N, R4W	NOT GIVEN	NOT GIVEN
OWNER	GETTY OIL CO.	COLUMBIAN CARBON CO.	PANHANDLE EASTERN PIPELINE C
COMPLETED	12/31/76	01/14/51	12/16/51
SAMPLED	05/11/77	03/13/51	08/24/52
FORMATION	CRET-SLIGO	DEVO-M	DEVO-CORNIFEROUS & CHERT
GEOLOGIC PROVINCE CODE	230	160	160
DEPTH, FEET	8413	2969	3711
WELLHEAD PRESSURE,PSIG	3400	1435	1000
OPEN FLOW, MCFD	1650	249	1500
COMPONENT, MOLE PCT			
METHANE	77.3	95.6	96.4
ETHANE	1.1	1.1	1.0
PROPANE	0.9	0.1	TRACE
N-BUTANE	1.2	0.0	0.0
ISOBUTANE	0.9	TRACE	0.0
N-PENTANE	0.6	0.0	0.0
ISOPENTANE	0.8	TRACE	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.5	TRACE	0.0
NITROGEN	6.4	2.8	2.2
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	10.1	0.0	0.1
HELIUM	0.05	0.08	0.08
HEATING VALUE*	986	992	995
SPECIFIC GRAVITY	0.767	0.573	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3397 SAMPLE 10418	INDEX 3398 SAMPLE 4852	INDEX 3399 SAMPLE 4972
STATE	MARYLAND	MARYLAND	MARYLAND
COUNTY	GARRETT	GARRETT	GARRETT
FIELD	NEGRO MOUNTAIN	NOT GIVEN	OAKLAND
WELL NAME	U.S.A. TRACT NO. 186-A	ELMER N. BEACHY NO. 424	No. K. WELCH NO. 1
LOCATION	GRANTSVILLE TWP.	NOT GIVEN	NOT GIVEN
OWNER	CUMBERLAND & ALLEGHENY GAS C	CUMBERLAND & ALLEGHENY GAS C	COLUMBIAN CARBON CO.
COMPLETED	12/17/65	06/23/49	09/25/50
SAMPLED	02/08/66	02/21/50	01/15/51
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8545	4910	2834
WELLHEAD PRESSURE,PSIG	3050	1600	1610
OPEN FLOW, MCFD	8250	582	8029
COMPONENT, MOLE PCT			
METHANE	98.0	95.5	95.9
ETHANE	1.0	1.1	1.1
PROPANE	0.0	0.2	0.1
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.8	2.7	2.1
OXYGEN	0.0	0.2	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.04	0.08	0.07
HEATING VALUE*	1011	1000	1005
SPECIFIC GRAVITY	0.565	0.577	0.576

	INDEX 3400 SAMPLE 5084	INDEX 3401 SAMPLE 5156	INDEX 3402 SAMPLE 5372
STATE	MARYLAND	MARYLAND	MARYLAND
COUNTY	GARRETT	GARRETT	GARRETT
FIELD	OAKLAND	OAKLAND	OAKLAND
WELL NAME	JONI J. MILLER NO. 1 GW-1504	Mr. M. WEEKS NO. 1	JASPER RILEY NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	DIST. 7
OWNER	COLUMBIAN CARBON CO.	CUMBERLAND & ALLEGHENY GAS C	CUMBERLAND & ALLEGHENY GAS C
COMPLETED	03/13/51	11/14/51	06/--/52
SAMPLED	07/14/51	01/28/52	10/29/52
FORMATION	DEVO-M	DEVO-CHERT & ORISKANY	DEVO-HUNTERSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3860	3608	3293
WELLHEAD PRESSURE,PSIG	1600	670	1300
OPEN FLOW, MCFD	363	409	1430
COMPONENT, MOLE PCT			
METHANE	94.2	95.9	96.2
ETHANE	1.0	0.1	1.0
PROPANE	0.1	0.1	0.0
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	4.3	2.2	2.6
OXYGEN	0.2	0.2	0.1
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.08	0.08	0.08
HEATING VALUE*	975	985	992
SPECIFIC GRAVITY	0.580	0.565	0.570

	INDEX 3403 SAMPLE 3130	INDEX 3404 SAMPLE 5001	INDEX 3405 SAMPLE 14409
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ALLEGAN	ANTRIM	ANTRIM
FIELD	WILDCAT	ANTRIM COUNTY	MANCELONA
WELL NAME	HEASLEY NO. 2	STATE-CUSTER NO. 1	STATE MANCELONA C NO. 1
LOCATION	SEC. 21, T4N, R13W	SEC. 16, T29N, R7W	SEC. 34, T29N, R5W
OWNER	REGAL DUTCH PETROLEUM CO.	OHIO OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	10/23/41	11/08/50	06/13/74
SAMPLED	02/17/42	01/24/51	07/07/75
FORMATION	SILU-SALINA BASAL	DEVO-TRAVERSE	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2706	1070	6580
WELLHEAD PRESSURE,PSIG	1200	500	2668
OPEN FLOW, MCFD	514	3000	22000
COMPONENT, MOLE PCT			
METHANE	71.5	93.1	82.6
ETHANE	26.6	1.6	8.9
PROPANE	---	0.2	4.0
N-BUTANE	---	0.1	1.0
ISOBUTANE	---	TRACE	1.3
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.0	0.5
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.2
NITROGEN	1.5	3.9	1.3
OXYGEN	0.1	0.1	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.7	TRACE
HELIUM	0.10	0.01	0.02
HEATING VALUE*	1201	981	1218
SPECIFIC GRAVITY	0.694	0.589	0.697

	INDEX 3406 SAMPLE 3835	INDEX 3407 SAMPLE 3132	INDEX 3408 SAMPLE 3137
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ARENAC	ARENAC	ARENAC
FIELD	ADAMS	ARENAC	ARENAC
WELL NAME	MEE NO. 1	SWAFFIELD NO. 1	CRANDALL NO. 1
LOCATION	SEC. 4, T19N, R3E	SEC. 10, T20N, R4E	SEC. 14, T20N, R4E
OWNER	DON RATBURN	ARENAC OIL & GAS CO.	ARENAC OIL & GAS CO.
COMPLETED	11/15/42	07/20/37	08/11/37
SAMPLED	05/03/44	02/20/42	02/10/42
FORMATION	MISS-BEREA	MISS-BEREA	MISS-BEREA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1500	1128	1190
WELLHEAD PRESSURE,PSIG	800	414	434
OPEN FLOW, MCFD	500	3720	2870
COMPONENT, MOLE PCT			
METHANE	60.2	61.7	66.0
ETHANE	10.0	14.6	12.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	28.7	22.1	21.9
OXYGEN	0.4	0.9	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.1
HELIUM	0.72	0.46	0.46
HEATING VALUE*	789	887	885
SPECIFIC GRAVITY	0.722	0.723	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3409 SAMPLE 3134	INDEX 3410 SAMPLE 3852	INDEX 3411 SAMPLE 3133
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ARENAC	ARENAC	BAY
FIELD	DEEP RIVER	DEEP RIVER	KAWKAWLIN
WELL NAME	MUTCH NO. 2	KLIMER NO. 1	BATESON NO. 1
LOCATION	SEC. 17, T19N, R4E	SEC. 18, T19N, R4E	SEC. 2, T14N, R4E
OWNER	ARENAC OIL & GAS CO.	ARENAC OIL & GAS CO.	GULF OIL CO.
COMPLETED	02/07/42	--/--/00	10/26/41
SAMPLED	02/10/42	05/03/44	02/11/42
FORMATION	MISS-BEREA	MISS-BEREA	SILU-SALINA BASAL
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1493	1500	NOT GIVEN
WELLHEAD PRESSURE,PSIG	835	750	5113
OPEN FLOW, MCFD	6200	10000	7000
COMPONENT, MOLE PCT			
METHANE	68.8	60.8	65.8
ETHANE	9.8	10.0	31.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.2	28.8	0.4
OXYGEN	0.4	0.4	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.1	0.0	1.8
HELIUM	0.68	0.75	0.00
HEATING VALUE*	873	795	1258
SPECIFIC GRAVITY	0.687	0.718	0.732

	INDEX 3412 SAMPLE 3073	INDEX 3413 SAMPLE 7198	INDEX 3414 SAMPLE 11508
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	ALBION	ALBION	CAL-LEE
WELL NAME	J. C. TURNER NO. 1	MILLER-FARLEY NO. 1	R-K-V NO. 1
LOCATION	SEC. 15, T3S, R4W	SEC. 22, T3S, R4W	SEC. 16, T1S, R5W
OWNER	CONTINENTAL OIL CO.	OHIO OIL CO.	MASK-MARKEL-WOOD
COMPLETED	12/27/41	04/20/59	--/--/00
SAMPLED	02/04/42	09/02/59	05/03/68
FORMATION	DEVO-TRAVERSE	ORDO-TRENTON & BLACK RIVER	SILU-SALINA & NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1592	4164	3200
WELLHEAD PRESSURE,PSIG	552	825	1000
OPEN FLOW, MCFD	10300	810	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.9	63.0	78.5
ETHANE	4.0	7.2	7.6
PROPANE	---	3.2	3.4
N-BUTANE	---	0.7	0.9
ISOBUTANE	---	TRACE	1.2
N-PENTANE	---	TRACE	0.4
ISOPENTANE	---	2.7	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.1	0.5
NITROGEN	5.7	22.7	7.0
OXYGEN	0.9	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.36	0.20	0.12
HEATING VALUE*	972	998	1141
SPECIFIC GRAVITY	0.602	0.783	0.709

	INDEX 3415 SAMPLE 17639	INDEX 3416 SAMPLE 11486	INDEX 3417 SAMPLE 3129
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	CONVIS	PARTELLO	WILDCAT
WELL NAME	J.R. WALTERS ET AL NO.1-12	PUTNEY-ROOP COMM. NO. 3	J. C. TURNER NO. 1
LOCATION	SEC. 12, T1S, R6W	SEC. 13, T1S, R5W	SEC. 15, T3S, R4W
OWNER	SMITH PETROLEUM CO.	HUMBLE OIL & REFINING CO.	CONTINENTAL OIL CO.
COMPLETED	10/08/82	10/28/65	12/27/41
SAMPLED	03/25/85	05/10/68	02/12/42
FORMATION	SILU-NIAGARAN	SILU-SALINA A-2	DEVO-TRAVERSE
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3124	3184	1600
WELLHEAD PRESSURE,PSIG	50	1200	565
OPEN FLOW, MCFD	30	15600	3004
COMPONENT, MOLE PCT			
METHANE	65.9	75.9	86.0
ETHANE	16.3	6.7	4.5
PROPANE	7.8	2.8	---
N-BUTANE	1.9	0.8	---
ISOBUTANE	2.3	0.6	---
N-PENTANE	0.9	0.3	---
ISOPENTANE	0.6	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.5	0.4	---
NITROGEN	3.9	11.9	8.7
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.35	0.13	0.37
HEATING VALUE*	1384	1050	952
SPECIFIC GRAVITY	0.831	0.705	0.614

	INDEX 3418 SAMPLE 3144	INDEX 3419 SAMPLE 3149	INDEX 3420 SAMPLE 5363
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CLARE
FIELD	FREEMAN	FREEMAN	HAMILTON N
WELL NAME	PERKINS-MILLER NO. 8	W. H. SMITH NO. 16	HUTZI-WOODS, ET AL. NO. 1
LOCATION	SEC. 15, T18N, R6W	SEC. 13, T18N, R6W	SEC. 6, T19N, R3W
OWNER	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.	SUN OIL CO.
COMPLETED	07/10/39	09/09/39	05/27/52
SAMPLED	02/04/42	02/04/42	07/08/52
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1469	1474	1469
WELLHEAD PRESSURE,PSIG	562	555	600
OPEN FLOW, MCFD	6175	468	9000
COMPONENT, MOLE PCT			
METHANE	72.7	79.6	71.7
ETHANE	17.0	12.3	6.1
PROPANE	---	---	1.9
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	8.6	7.2	19.1
OXYGEN	1.1	0.2	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.39	0.40	0.68
HEATING VALUE*	1041	1027	903
SPECIFIC GRAVITY	0.680	0.647	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3421 SAMPLE 3143	INDEX 3422 SAMPLE 3147	INDEX 3423 SAMPLE 2469
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CLARE
FIELD	LINCOLN	LINCOLN	MCKAY-MERCIER
WELL NAME	FRACKELTON NO. 5	D. W. FRACKELTON NO. 13	MCKAY NO. 8
LOCATION	SEC. 20, T18N, R5W	SEC. 18, T18N, R5W	SEC. 6, T17N, R4W
OWNER	AMERICAN PRODUCTION CO.	TAGGART BROTHERS CO.	JAMES A. MCKAY & SON
COMPLETED	05/29/41	08/21/35	12/25/31
SAMPLED	02/04/42	02/04/42	02/19/32
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1539	1511	1406
WELLHEAD PRESSURE,PSIG	592	594	620
OPEN FLOW, MCFD	14200	5325	13800
COMPONENT, MOLE PCT			
METHANE	75.5	76.6	79.6
ETHANE	14.4	16.4	7.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.2	6.4	11.5
OXYGEN	0.4	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.40	0.33	0.55
HEATING VALUE*	1023	1070	948
SPECIFIC GRAVITY	0.665	0.663	0.641

	INDEX 3424 SAMPLE 3755	INDEX 3425 SAMPLE 3920	INDEX 3426 SAMPLE 4100
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CLARE
FIELD	SUMMERFIELD	SUMMERFIELD	SURRY (DOMESTIC USE)
WELL NAME	MILLS-KEEHN-MILTNER NO. 1	STATE NO. A-1	FRIZZELL NO. 1
LOCATION	SEC. 2, T20N, R6W	SEC. 15, T20N, R5W	SEC. 23, T17N, R5W
OWNER	TAGGART BROTHERS CO.	PURE OIL CO.	MICHIGAN CONSOLIDATED GAS CO
COMPLETED	01/25/43	05/22/44	--/--/00
SAMPLED	04/01/44	10/20/44	--/--/00
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1285	1309	1458
WELLHEAD PRESSURE,PSIG	515	551	NOT GIVEN
OPEN FLOW, MCFD	11600	520	475
COMPONENT, MOLE PCT			
METHANE	77.2	78.8	73.5
ETHANE	16.6	10.2	13.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.4	9.8	12.4
OXYGEN	0.2	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.27	0.55	0.62
HEATING VALUE*	1080	981	983
SPECIFIC GRAVITY	0.662	0.648	0.671

	INDEX 3427 SAMPLE 3128	INDEX 3428 SAMPLE 3148	INDEX 3429 SAMPLE 3151
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CLARE	CLARE	CLARE
FIELD	WILDCAT	WINTERFIELD	WINTERFIELD
WELL NAME	J. F. MCKENNA NO. 2	ACKER-BLACKLEDGE NO. 96	THOMAS NO. 28
LOCATION	SEC. 29, T19N, R3W	SEC. 19, T20N, R6W	SEC. 28, T20N, R6W
OWNER	SUN OIL CO.	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.
COMPLETED	06/19/41	12/13/41	09/23/41
SAMPLED	02/10/42	02/04/42	02/04/42
FORMAIION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1211	1374	1336
WELLHEAD PRESSURE,PSIG	465	541	540
OPEN FLOW, MCFD	21700	14400	1125
COMPONENT, MOLE PCT			
METHANE	63.8	76.9	77.2
ETHANE	8.8	17.5	16.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	25.9	4.9	5.3
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	1.07	0.25	0.25
HEATING VALUE*	804	1051	1080
SPECIFIC GRAVITY	0.703	0.662	0.661

	INDEX 3430 SAMPLE 13597	INDEX 3431 SAMPLE 13711	INDEX 3432 SAMPLE 16188
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	CRAWFORD	CRAWFORD	EATON
FIELD	FREDERIC	FREDERIC	EATON RAPIDS
WELL NAME	STATE-FREDERIC NO. 1-20	STALLING-HANSON NO. 1-13	GETTER NO. 3-17
LOCATION	SEC. 20, T28N, R4W	SEC. 13,	SEC. 17, T2N, R3W
OWNER	SHELL OIL CO.	SHELL OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	05/10/73	--/--/00	09/04/79
SAMPLED	05/10/73	09/07/73	02/13/81
FORMATION	SILU-NIAGARAN	NOT GIVEN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	7167	NOT GIVEN	4064
WELLHEAD PRESSURE,PSIG	2912	NOT GIVEN	1683
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	9300
COMPONENT, MOLE PCT			
METHANE	85.5	83.1	79.9
ETHANE	5.4	7.0	7.6
PROPANE	2.8	3.6	3.3
N-BUTANE	0.9	1.0	0.8
ISOBUTANE	1.5	1.6	0.8
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.5	0.6	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	0.9	6.3
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.8	0.4
HELIUM	0.01	0.01	0.09
HEATING VALUE*	1152	1193	1116
SPECIFIC GRAVITY	0.687	0.706	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3433 SAMPLE 17919		INDEX 3434 SAMPLE 15160		INDEX 3435 SAMPLE 12153	
STATE	MICHIGAN		MICHIGAN		MICHIGAN	
COUNTY	GLADWIN		GRAND TRAVERSE		GRAND TRAVERSE	
FIELD	NOT GIVEN		BLAIR 21		BOARDMAN S	
WELL NAME	LETTS UNIT NO. 2-36		STATE-BLAIR NO 2-21A		STATE-UNION NO. 1	
LOCATION	SEC. 36, T18N, R1W		SEC. 21, T26N, R11W		SEC. 12, T26N, R9W	
OWNER	AMOCO PRODUCTION CO.		NORTHERN MICHIGAN EXPL. CO.		MCCLURE OIL CO.	
COMPLETED	11/29/84		02/04/77		10/13/69	
SAMPLED	11/27/85		11/28/77		12/02/69	
FORMATION	SILU-PRAIRIE DU CHIEN		SILU-NIAGARAN		SILU-NIAGARAN	
GEOLOGIC PROVINCE CODE	305		305		305	
DEPTH, FEET	11218		5533		6779	
WELLHEAD PRESSURE,PSIG	4400		2519		2191	
OPEN FLOW, MCFD	9119		5825		18400	
COMPONENT, MOLE PCT						
METHANE	90.9		84.4		76.8	
ETHANE	3.9		7.4		8.6	
PROPANE	1.1		3.2		5.6	
N-BUTANE	0.5		1.0		1.9	
ISOBUTANE	0.3		0.2		3.1	
N-PENTANE	0.3		0.5		0.7	
ISOPENTANE	0.1		0.3		0.3	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.3		0.6		0.6	
NITROGEN	2.9		1.3		1.5	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		TRACE		0.6	
HELIUM	0.09		0.09		0.01	
HEATING VALUE*	1070		1213		1320	
SPECIFIC GRAVITY	0.623		0.694		0.773	

	INDEX 3436 SAMPLE 15746		INDEX 3437 SAMPLE 14173		INDEX 3438 SAMPLE 16367	
STATE	MICHIGAN		MICHIGAN		MICHIGAN	
COUNTY	GRAND TRAVERSE		GRAND TRAVERSE		GRAND TRAVERSE	
FIELD	MAYFIELD		MAYFIELD		MAYFIELD	
WELL NAME	SCHAUB NO. 6		SCHMUCHAL NO. 1-3		NICKERSON NO. 1	
LOCATION	SEC. 13, T25N, R11W		SEC. 3, T25N, R11W		SEC. 18 T25N, R11W	
OWNER	SHELL OIL CO.		SHELL OIL CO.		TRAVERSE OIL CO.	
COMPLETED	04/13/78		04/03/73		01/29/80	
SAMPLED	09/07/79		09/20/79		10/30/81	
FORMATION	SILU-NIAGARAN		SILU-NIAGARAN		SILU-NIAGARAN	
GEOLOGIC PROVINCE CODE	305		305		305	
DEPTH, FEET	6594		5974		6450	
WELLHEAD PRESSURE,PSIG	2250		2120		2400	
OPEN FLOW, MCFD	3619		80000		5000	
COMPONENT, MOLE PCT						
METHANE	87.3		84.0		81.0	
ETHANE	5.8		7.9		10.2	
PROPANE	2.5		3.4		4.5	
N-BUTANE	0.9		0.9		1.1	
ISOBUTANE	1.4		1.1		1.3	
N-PENTANE	0.2		0.2		0.3	
ISOPENTANE	0.4		0.4		0.4	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	0.9		1.7		1.1	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.1		0.1	
HELIUM	0.02		0.03		0.01	
HEATING VALUE*	1166		1184		1236	
SPECIFIC GRAVITY	0.666		0.682		0.708	

	INDEX 3439 SAMPLE 15810		INDEX 3440 SAMPLE 13717		INDEX 3441 SAMPLE 15059	
STATE	MICHIGAN		MICHIGAN		MICHIGAN	
COUNTY	GRAND TRAVERSE		GRAND TRAVERSE		GRAND TRAVERSE	
FIELD	UNION		UNION 8		WHITEWATER	
WELL NAME	ST. UNION "B" NO. 1-22		UNION NO. 1-8		STATE WHITEWATER-E NO. 1	
LOCATION	SEC. 22, T26N, R9W		NOT GIVEN		SEC. 22, T27N, R9W	
OWNER	AMOCO PRODUCTION CO.		SHELL OIL CO.		AMOCO PRODUCTION CO.	
COMPLETED	07/10/78		--/--/00		10/05/76	
SAMPLED	10/23/79		09/05/73		07/18/77	
FORMATION	SILU-NIAGARAN		NOT GIVEN		SILU-NIAGARAN	
GEOLOGIC PROVINCE CODE	305		305		305	
DEPTH, FEET	NOT GIVEN		NOT GIVEN		6172	
WELLHEAD PRESSURE,PSIG	2022		NOT GIVEN		2440	
OPEN FLOW, MCFD	12200		NOT GIVEN		9500	
COMPONENT, MOLE PCT						
METHANE	87.8		87.3		86.1	
ETHANE	5.6		6.1		6.8	
PROPANE	2.5		2.5		3.0	
N-BUTANE	0.9		0.7		0.9	
ISOBUTANE	1.6		0.9		1.1	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.5		0.3		0.3	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	0.9		1.7		1.2	
OXYGEN	0.0		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.1	
HELIUM	0.02		0.03		0.02	
HEATING VALUE*	1175		1144		1171	
SPECIFIC GRAVITY	0.666		0.656		0.668	

	INDEX 3442 SAMPLE 13785		INDEX 3443 SAMPLE 3899		INDEX 3444 SAMPLE 4623	
STATE	MICHIGAN		MICHIGAN		MICHIGAN	
COUNTY	GRAND TRAVERSE		GRATIOT		GRATIOT	
FIELD	WILDCAT		ITHACA NW		REMARK	
WELL NAME	WHITEWATER NO. 1-36		DAVIDSON NO. 1		WILLIAMS-GRAY ET AL. NO. 1	
LOCATION	SEC. 36, T27N, R9W		SEC. 36, T11N, R3W		SEC. 25, T10N, R4W	
OWNER	AMOCO PRODUCTION CO.		C. E. WELLER&T. F. CALDWELL		SOHIO PETROLEUM CO.	
COMPLETED	01/12/71		11/28/43		09/02/48	
SAMPLED	10/25/73		06/15/44		11/08/48	
FORMATION	SILU-NIAGARAN		MISS-MICHIGAN STRAY		MISS-MICHIGAN STRAY	
GEOLOGIC PROVINCE CODE	305		305		305	
DEPTH, FEET	6360		890		985	
WELLHEAD PRESSURE,PSIG	1340		420		450	
OPEN FLOW, MCFD	6000		16000		5200	
COMPONENT, MOLE PCT						
METHANE	87.2		84.8		78.4	
ETHANE	5.7		14.4		11.5	
PROPANE	2.3		---		---	
N-BUTANE	0.8		---		---	
ISOBUTANE	1.4		---		---	
N-PENTANE	0.2		---		---	
ISOPENTANE	0.4		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.3		---		---	
NITROGEN	1.1		0.0		9.2	
OXYGEN	0.0		0.0		0.3	
ARGON	0.0		---		---	
HYDROGEN	TRACE		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.2		0.8		0.0	
HELIUM	0.02		0.03		0.65	
HEATING VALUE*	1168		1117		1000	
SPECIFIC GRAVITY	0.667		0.634		0.649	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3445 SAMPLE 3158	INDEX 3446 SAMPLE 6553	INDEX 3447 SAMPLE 7199
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	GRATIOT	MILLSDALE	MILLSDALE
FIELD	NOT GIVEN	SCIPIO	SCIPIO
WELL NAME	EARL COOK NO. 1	STEPHENS NO. 1	LATTAS NO. 1
LOCATION	SEC. 41, T10N, R2W	SEC. 10, T5S, R3W	SEC. 10, T5S, R3W
OWNER	WILTON R. WILSON	MCCLURE OIL CO.	OHIO OIL CO.
COMPLETED	10/01/40	09/18/57	02/22/58
SAMPLED	02/02/42	04/14/58	09/02/59
FORMATION	MISS-MICHIGAN STRAY	ORDO-TRENTON	ORDO-TRENTON & BLACK RIVER
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	870	NOT GIVEN	3744
WELLHEAD PRESSURE,PSIG	391	1929	585
OPEN FLOW, MCFD	1188	NOT GIVEN	206
COMPONENT, MOLE PCT			
METHANE	77.4	50.2	50.4
ETHANE	10.5	9.6	17.1
PROPANE	---	9.5	15.0
N-BUTANE	---	3.9	4.6
ISOBUTANE	---	1.6	1.9
N-PENTANE	---	1.0	0.4
ISOPENTANE	---	0.7	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.4	0.4
NITROGEN	10.8	22.0	7.9
OXYGEN	0.5	0.6	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.65	0.28	0.03
HEATING VALUE*	972	1210	1556
SPECIFIC GRAVITY	0.652	0.917	0.982

	INDEX 3448 SAMPLE 7200	INDEX 3449 SAMPLE 7201	INDEX 3450 SAMPLE 7203
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MILLSDALE	MILLSDALE	MILLSDALE
FIELD	SCIPIO	SCIPIO	SCIPIO
WELL NAME	STEPHENS NO. 1	ROWE NO. 2	W. ROWE A-2
LOCATION	SEC. 10, T5S, R3W	SEC. 10, T5S, R3W	SEC. 9, T5S, R3W
OWNER	OHIO OIL CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	09/13/57	04/20/59	03/30/59
SAMPLED	09/02/59	09/02/59	09/02/59
FORMATION	ORDO-TRENTON & BLACK RIVER	ORDO-TRENTON & BLACK RIVER	ORDO-TRENTON & BLACK RIVER
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3755	3898	3948
WELLHEAD PRESSURE,PSIG	900	200	400
OPEN FLOW, MCFD	956	NOT GIVEN	237
COMPONENT, MOLE PCT			
METHANE	50.0	49.8	60.2
ETHANE	TRACE	17.9	7.4
PROPANE	5.6	6.3	4.4
N-BUTANE	2.8	4.7	1.3
ISOBUTANE	TRACE	3.6	0.7
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	2.7	3.0	1.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.5	0.4
NITROGEN	36.6	10.9	23.7
OXYGEN	1.2	TRACE	TRACE
ARGON	0.1	0.2	TRACE
HYDROGEN	0.2	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	2.6	0.1
HELIUM	0.20	0.01	0.20
HEATING VALUE*	881	1493	1004
SPECIFIC GRAVITY	0.875	0.984	0.799

	INDEX 3451 SAMPLE 17753	INDEX 3452 SAMPLE 13648	INDEX 3453 SAMPLE 3145
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	INGHAM	INGHAM	ISABELLA
FIELD	ONANDAGA	VEVAY 19	BROOMFIELD
WELL NAME	NORMAN D. REESE NO. 6-2	F. LOVETTE UNIT NO. 1	WINTERS NO. 1
LOCATION	SEC. 16, T1N, R2W	SEC. 18, T2N, R1W	SEC. 10, T14N, R6W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	FLETCHER & LEMAN
COMPLETED	06/04/84	03/04/72	05/03/41
SAMPLED	07/12/85	07/13/73	02/05/42
FORMATION	DEVO-TRAVERSE	SILU-NIAGARAN	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2056	3998	1332
WELLHEAD PRESSURE,PSIG	250	1475	335
OPEN FLOW, MCFD	250	8736	500
COMPONENT, MOLE PCT			
METHANE	72.1	82.4	74.3
ETHANE	7.9	7.4	19.8
PROPANE	4.1	3.7	---
N-BUTANE	1.4	0.9	---
ISOBUTANE	0.3	1.1	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	13.4	2.1	5.2
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	1.4	0.1
HELIUM	0.30	0.06	0.34
HEATING VALUE*	1052	1166	1107
SPECIFIC GRAVITY	0.721	0.696	0.675

	INDEX 3454 SAMPLE 3150	INDEX 3455 SAMPLE 10255	INDEX 3456 SAMPLE 3146
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ISABELLA	ISABELLA	ISABELLA
FIELD	FREMONT	UNION TWP.	VERNON
WELL NAME	RIGGLE NO. 1	ELMER IMERING NO. 1	GUSS POLLARD NO. 1
LOCATION	SEC. 21, T13N, R5W	SEC. 6, T14N, R4W	SEC. 1, T15N, R4W
OWNER	BELVIDERE OIL CO.	MERRILL DRILLING CO.	CHARTIERS OIL CO.
COMPLETED	09/15/41	09/--/65	02/28/55
SAMPLED	01/30/42	10/26/65	02/05/62
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1311	1387	1288
WELLHEAD PRESSURE,PSIG	529	470	NOT GIVEN
OPEN FLOW, MCFD	1000	7450	100
COMPONENT, MOLE PCT			
METHANE	75.8	81.8	77.4
ETHANE	17.5	3.6	5.7
PROPANE	---	0.5	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	5.9	13.3	15.6
OXYGEN	0.3	0.1	0.5
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.38	0.71	0.75
HEATING VALUE*	1081	906	886
SPECIFIC GRAVITY	0.666	0.630	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3457 SAMPLE 3138	INDEX 3458 SAMPLE 7202	INDEX 3459 SAMPLE 13196
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ISABELLA	JACKSON	KALKASKA
FIELD	WISE NO. 2	PULASKI	BLUE LAKE
WELL NAME	COMMUNITY LEASE A	BARTELL NO. 1	STATE BLUE LAKE NO. 1-28
LOCATION	SEC. 21, T16N, R3W	SEC. 7, T4S, R5W	SEC. 28, T28N, R5W
OWNER	CITIES SERVICE OIL CO.	SHELL OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	10/24/40	06/20/59	12/15/70
SAMPLED	02/05/42	09/03/59	04/24/72
FORMATION	MISS-MICHIGAN STRAY	ORDO-TRENTON & BLACK RIVER	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1248	4196	7105
WELLHEAD PRESSURE,PSIG	577	600	2840
OPEN FLOW, MCFD	2970	459	17762
COMPONENT, MOLE PCT			
METHANE	78.9	51.6	89.6
ETHANE	4.5	16.8	5.8
PROPANE	---	13.1	2.4
N-BUTANE	---	3.7	0.7
ISOBUTANE	---	2.1	1.3
N-PENTANE	---	0.7	0.1
ISOPENTANE	---	1.8	0.3
CYCLOPENTANE	---	0.7	TRACE
HEXANES PLUS	---	2.0	0.2
NITROGEN	15.7	7.4	0.4
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.78	0.03	0.01
HEATING VALUE*	876	1555	1154
SPECIFIC GRAVITY	0.659	0.997	0.648

	INDEX 3460 SAMPLE 13786	INDEX 3461 SAMPLE 15749	INDEX 3462 SAMPLE 13080
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	KALKASKA	KALKASKA	KALKASKA
FIELD	BLUE LAKE	BLUE LAKE	BOARDMAN S
WELL NAME	SIMPSON C NO. 1-33	RICHMAN STATE-BLUE NO. 5	UNIT NO. 1-4
LOCATION	SEC. 33, T28N, R5W	SEC. 23, T28N, R5W	SEC. 4, T26N, R8W
OWNER	AMOCO PRODUCTION CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	12/31/71	12/20/77	10/09/71
SAMPLED	10/23/73	09/05/79	10/12/71
FORMATION	SILU-NIAGARAN	SILU-NIAGARAN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	7350	6785	6925
WELLHEAD PRESSURE,PSIG	1150	1480	2680
OPEN FLOW, MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.1	73.1	76.7
ETHANE	4.7	5.0	6.2
PROPANE	2.3	2.5	3.2
N-BUTANE	0.9	0.9	0.7
ISOBUTANE	1.5	1.3	1.3
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.5	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	0.4	12.7	8.8
OXYGEN	0.0	3.0	2.0
ARGON	0.0	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.4
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1173	1027	1066
SPECIFIC GRAVITY	0.659	0.737	0.712

	INDEX 3463 SAMPLE 13716	INDEX 3464 SAMPLE 14410	INDEX 3465 SAMPLE 14054
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	KALKASKA	KALKASKA	KALKASKA
FIELD	BOARDMAN UNIT	EXCELSIOR	KALKASKA N
WELL NAME	BOARDMAN NO. 2-4	SIMPSON-WESTERMAN NO. 1	STATE KALKASKA "F" NO. 1-24
LOCATION	NOT GIVEN	SEC. 31, T28N, R6W	SEC. 24, T27N, R8W
OWNER	SHELL OIL CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/80	12/10/74	07/17/74
SAMPLED	09/05/73	07/07/75	07/16/74
FORMATION	NOT GIVEN	SILU-NIAGARAN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	NOT GIVEN	6880	6388
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2736	2382
OPEN FLOW, MCFD	NOT GIVEN	150000	95000
COMPONENT, MOLE PCT			
METHANE	75.1	87.1	76.4
ETHANE	10.2	6.0	10.9
PROPANE	6.9	2.9	6.1
N-BUTANE	2.1	0.9	1.8
ISOBUTANE	3.0	1.4	2.3
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	1.0	0.5	0.7
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	1.2	0.8	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.6
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1362	1173	1313
SPECIFIC GRAVITY	0.787	0.667	0.762

	INDEX 3466 SAMPLE 14172	INDEX 3467 SAMPLE 3126	INDEX 3468 SAMPLE 15080
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	KALKASKA	KENT	LAPEER
FIELD	RAPID RIVER	WALKER	RICH
WELL NAME	RAPID RIVER NO. 1-35	BERLIN STATE BANK NO. 8	COOPER CONSOLIDATED NO. 1
LOCATION	SEC. 35, T28N, R7W	SEC. 5, T6N, R12W	SEC. 27, T10N, R10E
OWNER	SHELL OIL CO.	WEST MICHIGAN CONSUMERS CO.	MID-STATE OIL & GAS CO.
COMPLETED	10/08/75	05/03/41	--/--/75
SAMPLED	09/20/74	02/18/42	08/25/77
FORMATION	SILU-NIAGARAN	MISS-BEREA	MISS-BEREA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	6613	1083	1500
WELLHEAD PRESSURE,PSIG	2582	NOT GIVEN	720
OPEN FLOW, MCFD	770000	NOT GIVEN	260
COMPONENT, MOLE PCT			
METHANE	88.3	59.0	71.9
ETHANE	4.7	17.6	5.8
PROPANE	2.3	---	1.9
N-BUTANE	0.5	---	0.4
ISOBUTANE	1.7	---	0.1
N-PENTANE	0.1	---	TRACE
ISOPENTANE	0.4	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	TRACE
NITROGEN	0.3	22.3	19.4
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.1	0.1	TRACE
HELIUM	0.01	0.67	0.38
HEATING VALUE*	1158	913	903
SPECIFIC GRAVITY	0.667	0.733	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3469 SAMPLE 15081	INDEX 3470 SAMPLE 10951	INDEX 3471 SAMPLE 10952
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	LAPEER	LENAWEE	LENAWEE
FIELD	RICH	MORENCI	MORENCI
WELL NAME	RANDALL NO. 2	ALLEN NO. 1	WOODLEY NO. 1
LOCATION	SEC. 27, T10N, R10E	SEC. 10, T8S, R2W	NOT GIVEN
OWNER	MID-STATE OIL & GAS CO.	LIBERTY PETROLEUM CORP.	LIBERTY PETROLEUM CORP.
COMPLETED	--/--/74	07/01/66	08/01/66
SAMPLED	08/25/77	05/04/67	05/04/67
FORMATION	DEVO-DETROIT RIVER	DEVO-TRAVERSE	DEVO-TRAVERSE
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3000	620	620
WELLHEAD PRESSURE,PSIG	980	172	170
OPEN FLOW, MCFD	NOT GIVEN	6000	2500
COMPONENT, MOLE PCT			
METHANE	59.7	80.5	93.0
ETHANE	13.5	2.2	2.9
PROPANE	6.4	0.2	0.4
N-BUTANE	1.8	0.0	0.2
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	0.2	12.9	2.7
OXYGEN	0.0	2.5	0.9
ARGON	TRACE	0.2	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	13.0	0.0	0.0
CARBON DIOXIDE	3.9	1.4	0.7
HELIUM	0.03	0.04	0.05
HEATING VALUE*	1217	860	1011
SPECIFIC GRAVITY	0.862	0.649	0.593

	INDEX 3472 SAMPLE 11469	INDEX 3473 SAMPLE 8356	INDEX 3474 SAMPLE 4445
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	LENAWEE	LIVINGSTON	LIVINGSTON
FIELD	WILDCAT	FOWLERVILLE	HOWELL
WELL NAME	BROWER ET AL.	L. HOUSE NO. 1	BRAYTON NO. 1
LOCATION	SEC. 27, T7S, R2E	SEC. 1, T3N, R3E	SEC. 1, T2N, R4E
OWNER	BELL & GAULT DRILLING, INC.	HUMBLE OIL & REFINING CO.	PANHANDLE EASTERN PIPELINE C
COMPLETED	03/07/68	01/08/62	--/--/00
SAMPLED	04/30/68	01/03/62	02/27/48
FORMATION	DEVO-TRAVERSE	SILU-NIAGARAN	SILU-SALINA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	737	3835	NOT GIVEN
WELLHEAD PRESSURE,PSIG	290	1435	NOT GIVEN
OPEN FLOW, MCFD	1000	3500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.9	86.4	70.0
ETHANE	1.3	4.6	24.6
PROPANE	0.2	2.8	---
N-BUTANE	0.0	0.8	---
ISOBUTANE	0.0	1.3	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.0	0.4	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.3	---
NITROGEN	2.8	2.2	4.1
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.9	1.0
HELIUM	0.13	0.16	0.08
HEATING VALUE*	990	1142	1150
SPECIFIC GRAVITY	0.581	0.675	0.703

	INDEX 3475 SAMPLE 4333	INDEX 3476 SAMPLE 11501	INDEX 3477 SAMPLE 8496
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	LIVINGSTON	MACOMB	MACOMB
FIELD	NOT GIVEN	MUTTONVILLE	RAY
WELL NAME	CARRIE FRANCIS NO. 1	KETHE NO. 1	GHMAN
LOCATION	MARION TWP.	SEC. 13, T4N, R13E	SEC. 1, T4N, R13E
OWNER	PANHANDLE EASTERN PIPELINE C	MICHIGAN CONSOLIDATED GAS CO	PANHANDLE EASTERN PIPELINE C
COMPLETED	--/--/00	08/09/67	12/12/61
SAMPLED	08/11/47	05/10/68	04/09/62
FORMATION	-BAY	SILU-NIAGARAN	SILU-SALINA A-1
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	NOT GIVEN	2760	2945
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1217	1317
OPEN FLOW, MCFD	4900	52	53800
COMPONENT, MOLE PCT			
METHANE	83.6	88.5	88.4
ETHANE	6.8	4.7	5.0
PROPANE	2.6	2.2	2.2
N-BUTANE	0.5	0.7	0.7
ISOBUTANE	0.6	0.8	1.0
N-PENTANE	0.7	0.2	0.1
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	3.8	2.2	1.8
OXYGEN	0.2	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	TRACE	0.1
HELIUM	0.08	0.09	0.07
HEATING VALUE*	1103	1116	1122
SPECIFIC GRAVITY	0.671	0.644	0.644

	INDEX 3478 SAMPLE 10206	INDEX 3479 SAMPLE 15032	INDEX 3480 SAMPLE 15750
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MACOMB	MANISTEE	MANISTEE
FIELD	RAY	CLEON	CLEON
WELL NAME	LASKOWSKI NO. 5-1	STATE-CLEON NO. 1-19	DROTLEFF NO. 1
LOCATION	SEC. 1, T4N, R13E	SEC. 19, T24N, R13W	SEC. 31, T24N, R13W
OWNER	CONSUMERS POWER CO.	MILLER BROTHERS	SHELL OIL CO.
COMPLETED	06/29/65	--/--/00	11/18/77
SAMPLED	10/12/65	06/17/77	09/07/79
FORMATION	SILU-SALINA A-1	SILU-NIAGARAN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3213	5073	5262
WELLHEAD PRESSURE,PSIG	1101	2266	2025
OPEN FLOW, MCFD	3100	5500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.3	83.2	81.7
ETHANE	5.0	6.0	4.9
PROPANE	2.4	3.7	4.1
N-BUTANE	0.8	1.1	1.3
ISOBUTANE	1.2	1.1	1.5
N-PENTANE	0.2	0.3	0.5
ISOPENTANE	0.3	0.3	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	2.4	1.8	1.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.04	0.04
HEATING VALUE*	1135	1192	1242
SPECIFIC GRAVITY	0.659	0.688	0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3481 SAMPLE 16848	INDEX 3482 SAMPLE 2622	INDEX 3483 SAMPLE 3730
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MANISTEE	MECOSTA	MECOSTA
FIELD	CLEON 17	AUSTIN	BIG RAPIDS
WELL NAME	REHMAN NO. 3-16 A	FISH NO. 1	GUS MAMELUND NO. 1
LOCATION	SEC. 16, T24N, R13W	SEC. 10, T14N, R9W	SEC. 13, T15N, R10W
OWNER	NORTHERN MICHIGAN EXPL. CO.	TAGGART BROTHERS CO.	MICHIGAN CONSOLIDATED GAS CO
COMPLETED	02/04/80	07/01/53	08/16/43
SAMPLED	03/23/83	07/19/53	03/27/44
FORMATION	SILU-NIAGARAN BROWN	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	5376	1449	1140
WELLHEAD PRESSURE,PSIG	2100	530	NOT GIVEN
OPEN FLOW, MCFD	22440	4000	726
COMPONENT, MOLE PCT			
METHANE	82.8	74.8	70.0
ETHANE	7.8	16.9	18.0
PROPANE	3.6	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	1.1	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.7	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.5	---	---
NITROGEN	1.8	6.7	10.9
OXYGEN	0.0	0.4	0.4
ARGON	TRACE	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.8	0.1
HELIUM	0.04	0.42	0.55
HEATING VALUE*	1208	1061	1032
SPECIFIC GRAVITY	0.698	0.674	0.689

	INDEX 3484 SAMPLE 11479	INDEX 3485 SAMPLE 11483	INDEX 3486 SAMPLE 4018
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MECOSTA	MECOSTA
FIELD	BIG RAPIDS	BIG RAPIDS	COLFAX
WELL NAME	10TH-COTTER	COREY NO. 4	BUSH NO. 1
LOCATION	BIG RAPIDS TWP.	BIG RAPID TWP.	SEC. 1, T15N, R9W
OWNER	N. M. DONLEY, ET AL.	MICHIGAN CONSOLIDATED GAS CO	MICHIGAN CONSOLIDATED GAS CO
COMPLETED	06/22/65	12/04/45	04/14/45
SAMPLED	05/06/68	05/06/68	05/12/45
FORMATION	DEVO-DUNDEE	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	3450	1180	1290
WELLHEAD PRESSURE,PSIG	820	75	498
OPEN FLOW, MCFD	1500	1750	9000
COMPONENT, MOLE PCT			
METHANE	79.0	78.1	76.3
ETHANE	11.5	9.0	15.1
PROPANE	3.7	2.8	---
N-BUTANE	1.0	0.9	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.3	0.0	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	3.6	8.5	6.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	1.4
HELIUM	0.14	0.45	0.45
HEATING VALUE*	1173	1056	1044
SPECIFIC GRAVITY	0.694	0.675	0.668

	INDEX 3487 SAMPLE 3966	INDEX 3488 SAMPLE 4280	INDEX 3489 SAMPLE 4821
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MECOSTA	MECOSTA
FIELD	MARTINT	MORTON	PARIS
WELL NAME	EVANS NO. 1	F. S. STICKLER NO. 1	LEO BRENNAN NO. 1
LOCATION	SEC. 12, T15N, R8W	SEC. 15, T14N, R8W	SEC. 28, T16N, R10W
OWNER	MICHIGAN CONSOLIDATED GAS CO	MICHIGAN CONSOLIDATED GAS CO	CITIES SERVICE OIL CO.
COMPLETED	11/11/44	11/23/46	07/09/49
SAMPLED	01/05/45	01/14/47	12/29/49
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	DEVO-
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1386	1280	3494
WELLHEAD PRESSURE,PSIG	NOT GIVEN	520	1526
OPEN FLOW, MCFD	400	1663	1840
COMPONENT, MOLE PCT			
METHANE	67.2	99.0	77.8
ETHANE	23.4	0.0	12.0
PROPANE	---	---	3.9
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.3
NITROGEN	8.9	0.0	3.9
OXYGEN	0.0	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.35	0.40	0.13
HEATING VALUE*	1100	1003	1184
SPECIFIC GRAVITY	0.706	0.558	0.705

	INDEX 3490 SAMPLE 5024	INDEX 3491 SAMPLE 3156	INDEX 3492 SAMPLE 4479
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MECOSTA	MECOSTA
FIELD	PARIS	SIX LAKES	WHEATLAND
WELL NAME	MCFARLANE NO. 1	R. S. SWETT NO. 1	SMITH PET. CO. NO. 1
LOCATION	SEC. 21, T16N, R10W	SEC. 23, T13N, R8W	SEC. 9, T14N, R7W
OWNER	CITIES SERVICE OIL CO.	COLUMBIA OIL & GAS CO.	CARTER OIL CO.
COMPLETED	01/19/51	06/19/36	11/04/47
SAMPLED	03/20/51	01/10/52	04/15/48
FORMATION	MISS-U	MISS-MICHIGAN STRAY	MISS-
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1215	1326	1399
WELLHEAD PRESSURE,PSIG	480	425	NOT GIVEN
OPEN FLOW, MCFD	2000	1800	480
COMPONENT, MOLE PCT			
METHANE	77.0	72.4	67.7
ETHANE	8.7	18.9	15.8
PROPANE	2.9	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	9.6	7.7	14.0
OXYGEN	0.2	0.5	1.9
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.50	0.41	0.33
HEATING VALUE*	1042	1072	969
SPECIFIC GRAVITY	0.684	0.682	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3493 SAMPLE 3078	INDEX 3494 SAMPLE 11466	INDEX 3495 SAMPLE 17013
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MECOSTA	MISSAUKEE	MISSAUKEE
FIELD	WILDCAT	FALMOUTH	FALMOUTH
WELL NAME	GEORGE R. SAPP NO. 1	EDWARDS NO. 1-36	GILDE ET AL. NO. 1-25
LOCATION	SEC. 5, T14N, R8W	SEC. 36, T22N, R7W	SEC. 25, T22N, R7W
OWNER	COLMAR OIL & GAS SYNDICATE	CONSUMERS POWER CO.	PATRICK PETROLEUM CO.
COMPLETED	08/29/34	05/01/62	10/08/82
SAMPLED	01/27/42	04/30/68	08/--/83
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	ORDO-PRAIRIE DU CHIEN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1292	1424	10580
WELLHEAD PRESSURE,PSIG	560	185	3652
OPEN FLOW, MCFD	196	779	17500
COMPONENT, MOLE PCT			
METHANE	77.0	80.6	95.0
ETHANE	15.1	9.3	2.0
PROPANE	---	2.4	0.2
N-BUTANE	---	0.5	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	6.2	5.8	2.1
OXYGEN	1.1	TRACE	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	0.3
HYDROGEN SULFIDE**	---	0.5	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.92	0.22	0.03
HEATING VALUE*	1051	1066	1004
SPECIFIC GRAVITY	0.661	0.664	0.576

	INDEX 3496 SAMPLE 11465	INDEX 3497 SAMPLE 2306	INDEX 3498 SAMPLE 9626
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MISSAUKEE	MISSAUKEE	MISSAUKEE
FIELD	FORWARD	NOT GIVEN	REEDER
WELL NAME	BAAS BROTHERS NO. 1-25	MILLER NO. 1	STROTH MCBAIN NO. 1
LOCATION	SEC. 25, T21N, R7W	SEC. 24, T24N, R7W	SEC. 32, T22N, R7W
OWNER	CONSUMERS POWER CO.	HENRY MILTNER	CONSUMERS POWER CO.
COMPLETED	03/11/61	--/--/00	08/--/64
SAMPLED	04/30/68	03/22/31	11/13/64
FORMATION	MISS-MICHIGAN STRAY	-SILICA SAND	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1399	2610	1385
WELLHEAD PRESSURE,PSIG	140	1200	535
OPEN FLOW, MCFD	590	100	1495
COMPONENT, MOLE PCT			
METHANE	79.3	83.6	82.4
ETHANE	9.3	1.3	8.6
PROPANE	3.6	---	2.2
N-BUTANE	0.6	---	0.4
ISOBUTANE	0.2	---	0.2
N-PENTANE	0.2	---	TRACE
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	TRACE
NITROGEN	5.9	11.7	5.5
OXYGEN	0.2	0.3	0.2
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	3.1	0.3
HELIUM	0.23	0.05	0.25
HEATING VALUE*	1108	870	1070
SPECIFIC GRAVITY	0.680	0.641	0.654

	INDEX 3499 SAMPLE 9674	INDEX 3500 SAMPLE 3074	INDEX 3501 SAMPLE 3084
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MISSAUKEE	MISSAUKEE	MISSAUKEE
FIELD	REEDER	RIVERSIDE	RIVERSIDE
WELL NAME	DESWAN-DYKSTRA-STATE NO. 1	SCHURMAN NO. 38	GEESEMAN NO. 25
LOCATION	SEC. 9, T21N, R7W	SEC. 16, T21N, R7W	SEC. 20, T21N, R7W
OWNER	CONSUMERS POWER CO.	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.
COMPLETED	11/05/64	09/03/40	09/05/41
SAMPLED	12/22/64	01/28/42	01/28/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1388	1423	1431
WELLHEAD PRESSURE,PSIG	561	538	531
OPEN FLOW, MCFD	1230	8500	2350
COMPONENT, MOLE PCT			
METHANE	82.7	72.4	80.9
ETHANE	8.5	16.4	14.7
PROPANE	1.9	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	5.7	9.3	4.4
OXYGEN	TRACE	1.5	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.24	0.23	0.22
HEATING VALUE*	1064	1027	1074
SPECIFIC GRAVITY	0.652	0.683	0.650

	INDEX 3502 SAMPLE 3085	INDEX 3503 SAMPLE 3135	INDEX 3504 SAMPLE 3136
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MISSAUKEE	MONTCALM	MONTCALM
FIELD	WILDCAT	SIX LAKES	SUMNER-NEW HAVEN-CRYSTAL
WELL NAME	MILLER NO. 1	F. L. PETERSON NO. 1	MONDERICH NO. 1
LOCATION	SEC. 24, T24N, R7W	SEC. 12, T12N, R7W	SEC. 1, T10N, R5E
OWNER	HENRY MILTNER	FLETCHER & LEMAN, TR.	ROWNER CORP.
COMPLETED	05/26/31	01/09/36	05/04/36
SAMPLED	01/28/42	02/16/42	02/11/42
FORMATION	DEVO-ANTRIM	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2630	1246	963
WELLHEAD PRESSURE,PSIG	1	380	283
OPEN FLOW, MCFD	60	11625	13800
COMPONENT, MOLE PCT			
METHANE	80.0	77.2	73.9
ETHANE	14.1	16.2	12.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.1	6.0	12.5
OXYGEN	0.6	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.2	0.0	0.0
HELIUM	0.00	0.38	0.64
HEATING VALUE*	1063	1072	980
SPECIFIC GRAVITY	0.662	0.659	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3505 SAMPLE 3172	INDEX 3506 SAMPLE 6596	INDEX 3507 SAMPLE 3072
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MONTCALM	MONTCALM	MONTCALM
FIELD	WILDCAT	WILDCAT	WINFIELD
WELL NAME	PACKARD & WARD CON. NO. 1	HADDMES NO. 1	WEIKERT-SCHNICK NO. 13
LOCATION	SEC. 27, T11N, R8W	SEC. 16, T11N, R9W	SEC. 7, T12N, R9W
OWNER	M. L. BENTRY	MCCLURE OIL CO.	TAGGART BROTHERS CO.
COMPLETED	09/17/48	05/06/58	06/07/58
SAMPLED	02/03/42	05/09/58	01/27/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1134	1132	1122
WELLHEAD PRESSURE,PSIG	380	400	390
OPEN FLOW, MCFD	225	660	10400
COMPONENT, MOLE PCT			
METHANE	76.2	76.7	73.4
ETHANE	10.0	6.3	13.2
PROPANE	---	2.0	---
N-BUTANE	---	0.4	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	12.1	13.2	11.4
OXYGEN	0.5	0.0	0.2
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE	---	0.0	---
CARBON DIOXIDE	0.3	0.0	0.8
HELIUM	0.94	1.00	0.75
HEATING VALUE*	951	968	990
SPECIFIC GRAVITY	0.656	0.667	0.664

	INDEX 3508 SAMPLE 3080	INDEX 3509 SAMPLE 4589	INDEX 3510 SAMPLE 4849
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MONTCALM	MUSKEGON	MUSKEGON
FIELD	WINFIELD	CASNOVIA	NOT GIVEN
WELL NAME	CARR-JACK-ROWE NO. 8	DEWEY TODD NO. 1	BERGHUIS-GILES ET AL.
LOCATION	SEC. 6, T12N, R9W	SEC. 26, T10N, R13W	SEC. 7, T10N, R15W
OWNER	TAGGART BROTHERS CO.	REX OIL & GAS CO.	P. K. DEGENTHER
COMPLETED	--/--/--	10/13/48	12/09/49
SAMPLED	01/27/42	NOT GIVEN	02/16/50
FORMATION	MISS-MICHIGAN STRAY	305	MISS-BEREA
GEOLOGIC PROVINCE CODE	305	1530	305
DEPTH, FEET	1141	420	1047
WELLHEAD PRESSURE,PSIG	390	NOT GIVEN	340
OPEN FLOW, MCFD	1075		NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.9	74.5	69.3
ETHANE	13.8	8.6	5.2
PROPANE	---	---	2.8
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	11.9	15.9	21.3
OXYGEN	0.4	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.75	0.72	0.81
HEATING VALUE*	986	909	881
SPECIFIC GRAVITY	0.673	0.662	0.703

	INDEX 3511 SAMPLE 2754	INDEX 3512 SAMPLE 3968	INDEX 3513 SAMPLE 3915
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	MUSKEGON	NEWAYGO	NEWAYGO
FIELD	RAVENNA	BIG PRAIRIE	WILDCAT
WELL NAME	JACKSON WELL 108	CONSUMERS POWER CO. NO. 1	W. A. JAMES NO. 1
LOCATION	SEC. 8, T9N, R14W	SEC. 16, T13N, R11W	SEC. 3, T15N, R12W
OWNER	WEST MICHIGAN CONSUMERS CO.	TAGGART BROTHERS CO.	REX OIL & GAS CO.
COMPLETED	01/08/37	08/07/44	05/29/44
SAMPLED	09/30/37	09/01/45	05/06/44
FORMATION	MISS-BEREA	MISS-MICHIGAN STRAY	DEVO-TRAVERSE
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1191	1031	2671
WELLHEAD PRESSURE,PSIG	350	410	NOT GIVEN
OPEN FLOW, MCFD	260	4	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.4	85.5	0.0
ETHANE	13.2	1.6	29.4
PROPANE	---	---	42.5
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	22.1	11.3	25.6
OXYGEN	0.6	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.0	0.4	2.5
HELIUM	0.65	1.11	TRACE
HEATING VALUE*	879	895	1627
SPECIFIC GRAVITY	0.711	0.609	1.255

	INDEX 3514 SAMPLE 3795	INDEX 3515 SAMPLE 11482	INDEX 3516 SAMPLE 17325
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	NEWAYGO	OGEMAW	OSCEOLA
FIELD	WOODVILLE	LOGAN CHURCHILL	MERSEY-STUART
WELL NAME	GAS UNIT NO. 1	STAHLBUSH	BALDINO NO. 1-36
LOCATION	SEC. 29, T15N, R11W	SEC. --, T22N, R14E	SEC. 36, T17N, R9W
OWNER	OHIO OIL CO.	MINNESOTA MINING & MFG.	PPG OIL & GAS CO.
COMPLETED	06/23/43	05/16/61	11/16/83
SAMPLED	04/13/44	05/31/61	05/31/84
FORMATION	DEVO-TRAVERSE	MISS-BEREA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1138	1510	8075
WELLHEAD PRESSURE,PSIG	415	520	3622
OPEN FLOW, MCFD	2500	590	2942
COMPONENT, MOLE PCT			
METHANE	73.2	76.5	96.3
ETHANE	13.7	5.1	2.6
PROPANE	---	2.2	0.2
N-BUTANE	---	0.6	0.1
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	TRACE
NITROGEN	11.9	15.1	0.6
OXYGEN	0.5	0.0	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.63	0.31	0.03
HEATING VALUE*	987	944	1031
SPECIFIC GRAVITY	0.671	0.674	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3517 SAMPLE 3082	INDEX 3518 SAMPLE 3081	INDEX 3519 SAMPLE 3162
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OSCEOLA	OSCEOLA	OSCEOLA
FIELD	OSCEOLA TOWNSHIP	REED CITY	WILDCAT
WELL NAME	COOKE NO. 2	GRILL-KINGSBURY NO. 31	PRITCHARD NO. 1
LOCATION	SEC. 27, T18N, R8W	SEC. 16, T18N, R10W	SEC. 7, T18N, R7W
OWNER	TAGGART BROTHERS CO.	TAGGART BROTHERS CO.	TURNER PETROLEUM CORP.
COMPLETED	12/17/41	12/24/41	06/27/41
SAMPLED	01/28/42	01/28/42	02/04/42
FORMATION	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY	MISS-MICHIGAN STRAY
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1391	1202	1538
WELLHEAD PRESSURE,PSIG	572	415	NOT GIVEN
OPEN FLOW, MCFD	3100	5050	3900
COMPONENT, MOLE PCT			
METHANE	75.6	73.8	69.4
ETHANE	18.1	14.9	15.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.2	9.5	13.3
OXYGEN	0.6	1.2	1.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.32	0.38	0.34
HEATING VALUE*	1015	1015	977
SPECIFIC GRAVITY	0.669	0.674	0.695

	INDEX 3520 SAMPLE 14171	INDEX 3521 SAMPLE 13082	INDEX 3522 SAMPLE 15084
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OTSEGO	OTSEGO	OTSEGO
FIELD	CHARLTON	CHESTER	CHESTER TOWNSHIP
WELL NAME	CHARLTON NO. 1-31	CHESTER N NO. 1	STATE CHESTER NO. N-1
LOCATION	SEC. 31, T30N, R1W	SEC. 15, T29N, R2W	SEC. 15, T29N, R2W
OWNER	SHELL OIL CO.	SHELL OIL CO.	MURELL L. WELCH
COMPLETED	01/05/73	05/18/70	--/--/70
SAMPLED	09/17/74	10/13/71	08/29/77
FORMATION	SILU-NIAGARAN	SILU-SALINA & NIAGARAN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	5822	6352	6500
WELLHEAD PRESSURE,PSIG	2250	2250	2800
OPEN FLOW, MCFD	52000	NOT GIVEN	50
COMPONENT, MOLE PCT			
METHANE	78.6	82.2	83.7
ETHANE	8.7	7.2	8.3
PROPANE	5.1	3.6	3.5
N-BUTANE	2.0	0.7	1.0
ISOBUTANE	2.4	1.3	1.2
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	1.2	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	0.9	3.6	1.1
OXYGEN	0.0	0.7	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1331	1150	1202
SPECIFIC GRAVITY	0.764	0.689	0.691

	INDEX 3523 SAMPLE 15085	INDEX 3524 SAMPLE 11226	INDEX 3525 SAMPLE 3125
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OTSEGO	OTSEGO	OTTAWA
FIELD	CHESTER TOWNSHIP	STATE CHESTER	COOPERSVILLE
WELL NAME	STATE CHESTER NO. 1	CHESTER NO. 7	HAMBELTON NO. 1
LOCATION	SEC. 15, T29N, R2W	SEC. 10, T29N, R2W	SEC. 19, T8N, R13W
OWNER	MURELL L. WELCH	MURELL L. WELCH	WEST MICHIGAN CONSUMERS CO.
COMPLETED	--/--/78	11/05/66	12/24/39
SAMPLED	08/29/77	11/15/67	12/17/42
FORMATION	DEVO-ANTRIM	DEVO-ANTRIM	MISS-BEREA
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1500	1500	1190
WELLHEAD PRESSURE,PSIG	456	456	425
OPEN FLOW, MCFD	200	2250	3440
COMPONENT, MOLE PCT			
METHANE	91.9	93.3	62.5
ETHANE	0.6	0.1	14.0
PROPANE	0.3	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.3	0.3	22.3
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE*	0.0	0.0	---
CARBON DIOXIDE	6.9	6.2	0.1
HELIUM	TRACE	0.01	0.66
HEATING VALUE*	949	950	884
SPECIFIC GRAVITY	0.629	0.618	0.716

	INDEX 3526 SAMPLE 4379	INDEX 3527 SAMPLE 2820	INDEX 3528 SAMPLE 11496
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OTTAWA	SAGINAW	ST. CLAIR
FIELD	ZEELAND	NOT GIVEN	ALPINE
WELL NAME	GEORGE TIMMER NO. 1	WATER WELL	RAUSCH NO. 1
LOCATION	SEC. 10, T5N, R14W	NOT GIVEN	SEC. 32, T6N, R16E
OWNER	TRI-COUNTY DEVELOPMENT CO.	EDSON A. SCOGIN	SULLIVAN & LEROUX
COMPLETED	02/--/47	--/--/00	11/20/63
SAMPLED	11/22/47	08/14/39	05/10/68
FORMATION	MISS-	NOT GIVEN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	976	67	3353
WELLHEAD PRESSURE,PSIG	425	NOT GIVEN	1340
OPEN FLOW, MCFD	1	NOT GIVEN	1
COMPONENT, MOLE PCT			
METHANE	61.7	0.0	84.6
ETHANE	4.0	0.0	5.1
PROPANE	---	---	2.5
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	1.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	33.1	99.2	4.5
OXYGEN	0.2	0.2	0.3
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE*	---	---	0.0
CARBON DIOXIDE	0.1	0.6	0.5
HELIUM	0.86	0.02	0.11
HEATING VALUE*	597	0	1102
SPECIFIC GRAVITY	0.789	0.971	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3529 SAMPLE 9912	INDEX 3530 SAMPLE 10415	INDEX 3531 SAMPLE 10196
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	BELLE RIVER MILLS	BIG MAND	CAPAC
WELL NAME	G. WOOD NO. 1	FRANK CHASE NO. 1	MR. KERSTEN UNIT NO. 1
LOCATION	SEC. 18, T4N, R16E	SEC. 28, T5N, R15E	SEC. 9, T7N, R15E
OWNER	MICHIGAN CONSOLIDATED GAS CO	SUN OIL CO.	SUNRAY DX OIL CO.
COMPLETED	11/11/61	01/24/66	08/30/65
SAMPLED	06/03/65	02/23/66	10/04/65
FORMATION	SILU-NIAGARAN	SILU-NIAGARAN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2176	3122	4592
WELLHEAD PRESSURE,PSIG	710	1170	1260
OPEN FLOW, MCFD	164000	5000	1225
COMPONENT, MOLE PCT			
METHANE	87.2	87.4	88.8
ETHANE	4.8	4.3	5.1
PROPANE	2.2	1.8	1.9
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	1.0	1.0	1.0
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	3.2	3.6	0.1
OXYGEN	0.8	0.0	0.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0*	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.11	0.09
HEATING VALUE*	1106	1110	1058
SPECIFIC GRAVITY	0.650	0.655	0.684

	INDEX 3532 SAMPLE 11843	INDEX 3533 SAMPLE 9675	INDEX 3534 SAMPLE 12143
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	CAPAC	COLUMBUS	COLUMBUS
WELL NAME	BEEBE NO. 1	DUPONT NO. 1	F. WINN B NO. 1
LOCATION	SEC. 16, T7N, R15E	SEC. 22, T5N, R15E	SEC. 10, T5N, R15E
OWNER	LAMPHAR OIL & GAS CORP.	MICHIGAN CONSOLIDATED GAS CO	SUN OIL CO.
COMPLETED	04/28/69	08/25/64	09/11/69
SAMPLED	05/28/69	12/10/64	12/13/69
FORMATION	SILU-NIAGARAN	SILU-NIAGARAN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	4600	2738	3202
WELLHEAD PRESSURE,PSIG	800	1220	1201
OPEN FLOW, MCFD	500	62	3000
COMPONENT, MOLE PCT			
METHANE	85.6	87.5	78.9
ETHANE	5.5	4.3	4.8
PROPANE	2.1	1.8	2.5
N-BUTANE	0.8	0.7	0.6
ISOBUTANE	0.8	0.9	0.9
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	4.2	3.5	10.8
OXYGEN	0.6	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	0.9
HELIUM	0.10	0.11	0.10
HEATING VALUE*	1106	1101	1025
SPECIFIC GRAVITY	0.659	0.653	0.695

	INDEX 3535 SAMPLE 11360	INDEX 3536 SAMPLE 11671	INDEX 3537 SAMPLE 11434
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	COLUMBUS W	COLUMBUS W	COTTRELLVILLE
WELL NAME	BERNEY UNIT NO. 1	ED & MARIE SZYSKA NO. 1	ORVILLE JONES NO. 1
LOCATION	SEC. 18, T5N, R15E	COLUMBUS TWP.	SEC. 7, T3N, R16E
OWNER	SUN OIL CO.	NORTH AMERICAN DRILLING CO.	GLEN A. MILLS
COMPLETED	11/13/67	10/25/67	07/24/62
SAMPLED	03/07/68	10/02/68	04/04/68
FORMATION	SILU-NIAGARAN	SILU-NIAGARAN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2995	3233	2355
WELLHEAD PRESSURE,PSIG	1295	1196	800
OPEN FLOW, MCFD	100000	4380	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	83.9	87.1
ETHANE	4.4	4.5	4.4
PROPANE	2.0	2.3	2.0
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.9	1.2	0.8
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	4.2	4.8	4.5
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.2	0.1
HELIUM	0.11	0.10	0.16
HEATING VALUE*	1106	1091	1074
SPECIFIC GRAVITY	0.660	0.677	0.643

	INDEX 3538 SAMPLE 11435	INDEX 3539 SAMPLE 11500	INDEX 3540 SAMPLE 11499
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	COTTRELLVILLE	FOUR CORNERS AREA	MARSAC CREEK
WELL NAME	SAUER-CLAYTON NO. 1	CAIN NO. 1	KUSKOWSKI NO. 2
LOCATION	SEC. 7, T3N, R16E	SEC. 36, T4N, R15E	SEC. 30, T4N, R15E
OWNER	GLEN A. MILLS	CONSUMERS POWER CO.	CONSUMERS POWER CO.
COMPLETED	09/30/62	12/10/66	07/12/66
SAMPLED	04/04/68	05/07/68	05/07/68
FORMATION	SILU-NIAGARAN	SILU-SALINA & NIAGARAN	SILU-SALINA & NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2475	2436	2689
WELLHEAD PRESSURE,PSIG	800	1000	1000
OPEN FLOW, MCFD	NOT GIVEN	47500	33500
COMPONENT, MOLE PCT			
METHANE	75.1	86.3	87.1
ETHANE	3.9	4.5	4.8
PROPANE	1.8	2.0	2.3
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.7	0.8	0.9
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	14.1	4.8	3.6
OXYGEN	2.6	0.1	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.12	0.17	0.13
HEATING VALUE*	936	1078	1102
SPECIFIC GRAVITY	0.693	0.651	0.650

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3541 SAMPLE 9737	INDEX 3542 SAMPLE 5306	INDEX 3543 SAMPLE 11498
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	ST. CLAIR
FIELD	PETERS	PORT HURON	PUTTYGUT
WELL NAME	SCHOMBERG-BOUSSON NO. 2	RINGEL NO. 1-31	DONOGHUE SROKA NO. 1
LOCATION	SEC. 26, T4N, R15E	SEC. 31, T4N, R15E	SEC. 11, T4N, R15E
OWNER	SUN OIL CO.	PANHANDLE EASTERN PIPELINE C	CONSUMERS POWER CO.
COMPLETED	02/10/64	06/16/52	10/31/61
SAMPLED	02/10/65	09/27/52	05/07/68
FORMATION	SILU-SALINA	NOT GIVEN	SILU-SALINA A-1
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2474	2468	2782
WELLHEAD PRESSURE,PSIG	450	1151	300
OPEN FLOW, MCFD	2119	NOT GIVEN	6300
COMPONENT, MOLE PCT			
METHANE	83.5	81.9	86.7
ETHANE	4.7	5.7	5.2
PROPANE	2.2	2.2	2.6
N-BUTANE	1.1	0.5	0.9
ISOBUTANE	1.2	0.7	1.3
N-PENTANE	0.7	0.3	0.3
ISOPENTANE	0.6	0.1	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	1.7	0.1	0.1
NITROGEN	3.9	8.0	2.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.18	0.14	0.09
HEATING VALUE*	1215	1051	1135
SPECIFIC GRAVITY	0.721	0.667	0.660

	INDEX 3544 SAMPLE 11984	INDEX 3545 SAMPLE 5420	INDEX 3546 SAMPLE 11395
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	ST. CLAIR	ST. CLAIR	WASHTENAW
FIELD	SWAN CREEK	WILDCAT	LYNDON
WELL NAME	WISSMAN-DRAVES NO. 3	ADAMSKI NO. 2	SCHOONOVER NO. 1
LOCATION	SEC. 36, T4N, R15E	SEC. 27, T3N, R15E	SEC. 6, T1S, R3E
OWNER	CONSUMERS POWER CO.	PANHANDLE EASTERN PIPELINE C	WM. R. ALBERS
COMPLETED	08/26/67	01/19/53	05/08/59
SAMPLED	07/22/69	03/20/53	03/18/68
FORMATION	SILU-NIAGARAN	SILU-SALINA	DEVO-DETROIT RIVER
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	2368	2276	1730
WELLHEAD PRESSURE,PSIG	1160	1088	695
OPEN FLOW, MCFD	25000	8900	1500
COMPONENT, MOLE PCT			
METHANE	85.8	86.1	79.0
ETHANE	4.8	4.5	12.5
PROPANE	2.2	2.1	3.8
N-BUTANE	0.6	0.7	0.8
ISOBUTANE	0.8	0.7	0.2
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	5.0	4.7	2.3
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	0.4
HELIUM	0.16	0.15	0.14
HEATING VALUE*	1083	1078	1185
SPECIFIC GRAVITY	0.651	0.653	0.696

	INDEX 3547 SAMPLE 11396	INDEX 3548 SAMPLE 3173	INDEX 3549 SAMPLE 9743
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	WASHTENAW	WASHTENAW	WAYNE
FIELD	LYNDON	WILDCAT	NORTHVILLE
WELL NAME	MAY NO. 1	REHRL NO. 1	N-206
LOCATION	SEC. 6, T1S, R3E	SEC. 12, T1S, R7E	SEC. 16, T1S, R8E
OWNER	WM. R. ALBERS	LEE BROWN	CONSUMERS POWER CO.
COMPLETED	08/04/64	03/25/37	12/01/64
SAMPLED	03/18/68	02/06/42	02/11/65
FORMATION	DEVO-TRAVERSE	SILU-SALINA BASAL	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	1321	2900	3988
WELLHEAD PRESSURE,PSIG	545	1000	1100
OPEN FLOW, MCFD	650	300	3000
COMPONENT, MOLE PCT			
METHANE	81.4	63.2	70.4
ETHANE	6.3	21.6	8.5
PROPANE	1.7	---	2.5
N-BUTANE	0.6	---	0.7
ISOBUTANE	0.8	---	0.2
N-PENTANE	TRACE	---	0.2
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.1	---	0.2
NITROGEN	9.3	14.6	15.6
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	1.2
HELIUM	0.15	0.25	0.21
HEATING VALUE*	1019	1027	988
SPECIFIC GRAVITY	0.658	0.722	0.724

	INDEX 3550 SAMPLE 9744	INDEX 3551 SAMPLE 15748	INDEX 3552 SAMPLE 2794
STATE	MICHIGAN	MICHIGAN	MINNESOTA
COUNTY	WAYNE	WEXFORD	COTTONWOOD
FIELD	NORTHVILLE	WEXFORD	NOT GIVEN
WELL NAME	N-207	MIDDAUGH NO. 2	WATER WELL
LOCATION	SEC. 16, T1S, R8E	SEC. 4, T24N, R12W	SEC. 34, T105, R35
OWNER	CONSUMERS POWER CO.	SHELL OIL CO.	JAMES S. THOMPSON
COMPLETED	11/20/64	01/24/78	08/02/38
SAMPLED	02/11/65	09/07/79	08/02/38
FORMATION	ORDO-TRENTON	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	305	305	320
DEPTH, FEET	3977	6095	85
WELLHEAD PRESSURE,PSIG	1275	NOT GIVEN	260
OPEN FLOW, MCFD	3000	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	66.9	83.5	0.0
ETHANE	7.7	8.1	0.0
PROPANE	3.7	3.7	---
N-BUTANE	0.6	0.8	---
ISOBUTANE	TRACE	1.2	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	TRACE	0.3	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	13.5	1.9	89.4
OXYGEN	TRACE	TRACE	1.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	6.9	TRACE	2.9
HELIUM	0.20	0.03	0.00
HEATING VALUE*	951	1186	0
SPECIFIC GRAVITY	0.769	0.684	0.930

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3553 SAMPLE 2850	INDEX 3554 SAMPLE 4145	INDEX 3555 SAMPLE 5269
STATE	MINNESOTA	MISSISSIPPI	MISSISSIPPI
COUNTY	FLOYD	ADAMS	ADAMS
FIELD	NOT GIVEN	CRANFIELD	STANTON
WELL NAME	SOUTH WILLOW LAKE FARM	ELLA G. LEES NO. 9	LETTIE PROBY NO. 1
LOCATION	SEC. 3, T104N, R35W	SEC. 45, T7N, R1W	SEC. 41, T6N, R1W
OWNER	JAMES S. THOMPSON	CALIFORNIA CO.	AUSTIN STEWART
COMPLETED	--/--/00	06/24/46	02/23/52
SAMPLED	06/12/40	10/03/46	06/26/52
FORMATION	NOT GIVEN	CRET-PALUXY	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	320	210	210
DEPTH, FEET	60	11768	3980
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4400	1724
OPEN FLOW, MCFD	NOT GIVEN	5750	20000
COMPONENT, MOLE PCT			
METHANE	0.0	87.4	98.0
ETHANE	0.0	1.5	0.4
PROPANE	---	---	0.0
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	98.5	4.0	1.3
OXYGEN	0.2	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.3	6.9	0.2
HELIUM	0.00	0.07	0.02
HEATING VALUE*	0	912	1003
SPECIFIC GRAVITY	0.975	0.646	0.565

	INDEX 3556 SAMPLE 16868	INDEX 3557 SAMPLE 17750	INDEX 3558 SAMPLE 9242
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	CHICKASAW	CHICKASAW	CHICKASAW
FIELD	BACON	SUGAR RUN	THORN
WELL NAME	ASHBY 22-1 NO. 1	FRANKLIN ELLIS NO. 1	M. I. BLACK UNIT NO. 1
LOCATION	SEC. 22, T12S, R4E	SEC. 15, T12S, R5E	SEC. 22, T2S, R13E
OWNER	MOON-HINES-TIGRETT OPER. CO.	LOUISIANA LAND & EXPL. CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/--/82	--/--/00	01/27/64
SAMPLED	04/08/83	07/09/85	02/18/64
FORMATION	MISS-CARTER	MISS-CARTER	MISS-SANDERS
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	NOT GIVEN	2741	3461
WELLHEAD PRESSURE,PSIG	525	700	1330
OPEN FLOW, MCFD	125	350	20000
COMPONENT, MOLE PCT			
METHANE	97.3	97.8	97.7
ETHANE	1.0	0.1	1.3
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	1.0	1.9	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.07	0.11	0.10
HEATING VALUE*	1014	993	1013
SPECIFIC GRAVITY	0.568	0.562	0.564

	INDEX 3559 SAMPLE 3969	INDEX 3560 SAMPLE 12324	INDEX 3561 SAMPLE 14739
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	CLAIBORNE	CLARKE	CLAY
FIELD	BRUINSBURG	NANCY W	CORRINE
WELL NAME	W. R. HAMMETT NO. 1-A	M. M. MCCOY 6-10 NO. 1	WILSON NO. 24-1
LOCATION	SEC. 29, T11N, R1W	SEC. 6, T1N, R14E	SEC. 24, T16S, R7E
OWNER	SUN OIL CO.	GETTY OIL CO.	R. L. BURNS CORP.
COMPLETED	11/22/44	02/01/78	12/29/73
SAMPLED	02/14/45	07/16/78	08/23/76
FORMATION	EOCE-MOODYS BRANCH	JURA-SMACKOVER	MISS-CARTER
GEOLOGIC PROVINCE CODE	210	210	200
DEPTH, FEET	930	13800	5191
WELLHEAD PRESSURE,PSIG	406	21	1890
OPEN FLOW, MCFD	14000	760000	2000
COMPONENT, MOLE PCT			
METHANE	94.9	61.0	87.1
ETHANE	4.8	16.1	6.8
PROPANE	---	9.7	2.7
N-BUTANE	---	3.2	0.8
ISOBUTANE	---	1.9	0.4
N-PENTANE	---	0.8	0.3
ISOPENTANE	---	0.6	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.6	0.2
NITROGEN	0.0	2.3	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	1.8	0.0
CARBON DIOXIDE	0.3	1.8	0.1
HELIUM	0.04	0.02	0.08
HEATING VALUE*	1047	1436	1154
SPECIFIC GRAVITY	0.581	0.890	0.656

	INDEX 3562 SAMPLE 15978	INDEX 3563 SAMPLE 16203	INDEX 3564 SAMPLE 16845
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	CLAY	COPIAH	COVINGTON
FIELD	WILDCAT	GLANCY	GUM BRANCH
WELL NAME	JAMES C. FOSTER NO. 1	INT. PAPER CO. NO. 2	BOOTH NO. A-1
LOCATION	SEC. 29, T16S, R6E	SEC. 6, T9N, R7E	SEC. 28, T8N, R17W
OWNER	SHELL OIL CO.	KILROY CO. OF AMERICA	CALLON PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	03/11/82
SAMPLED	--/--/00	03/01/81	05/25/83
FORMATION	MISS-LEWIS	NOT GIVEN	CRET-SLIGO
GEOLOGIC PROVINCE CODE	200	210	210
DEPTH, FEET	10310	NOT GIVEN	14598
WELLHEAD PRESSURE,PSIG	996	2100	3200
OPEN FLOW, MCFD	2610	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	91.5	85.1	83.1
ETHANE	3.5	2.8	1.7
PROPANE	1.3	1.0	1.6
N-BUTANE	0.3	0.3	1.4
ISOBUTANE	0.2	0.3	1.5
N-PENTANE	0.1	0.1	1.8
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	TRACE	0.1	0.6
HEXANES PLUS	0.1	0.2	2.9
NITROGEN	0.3	3.7	0.9
OXYGEN	0.0	0.6	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	5.7	3.9
HELIUM	0.03	0.03	0.01
HEATING VALUE*	1090	981	1282
SPECIFIC GRAVITY	0.614	0.672	0.790

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3565 SAMPLE 8820	INDEX 3566 SAMPLE 12427	INDEX 3567 SAMPLE 17022
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	FORREST	GREENE	HANCOCK
FIELD	MAXIE	STATE LINE S	CATAHOULA CREEK
WELL NAME	MAXIE G.U. NO. 1	LUCAS NO. 1	GORDON BROWN NO. 1
LOCATION	SEC. 13, T1S, R13W	SEC. 14, T4N, R5W	SEC. 29, T6S, R15W
OWNER	MAYFLD OIL CO.	SHELL OIL CO.	HUNT ENERGY CORP.
COMPLETED	12/31/62	05/24/70	12/01/82
SAMPLED	01/05/63	09/30/70	08/12/83
FORMATION	CRET-EUTAW	JURA-NORPHLET	JURA-COTTON VALLEY U
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	7012	18207	19702
WELLHEAD PRESSURE,PSIG	2600	5770	318
OPEN FLOW, MCFD	7000	3560	1099
COMPONENT, MOLE PCT			
METHANE	94.4	69.4	92.7
ETHANE	0.9	11.6	0.1
PROPANE	0.5	6.4	TRACE
N-BUTANE	0.2	2.2	0.0
ISOBUTANE	0.2	2.9	0.0
N-PENTANE	0.1	0.8	0.0
ISOPENTANE	0.1	0.6	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.8	0.0
NITROGEN	2.7	2.6	2.1
OXYGEN	TRACE	0.1	0.2
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	2.5	4.6
HELIUM	0.03	0.01	0.02
HEATING VALUE*	1018	1354	942
SPECIFIC GRAVITY	0.595	0.837	0.609

	INDEX 3568 SAMPLE 10678	INDEX 3569 SAMPLE 15210	INDEX 3570 SAMPLE 2605
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	HANCOCK	HANCOCK	HINDS
FIELD	WAVELAND	WAVELAND	JACKSON
WELL NAME	WAVELAND G.U. NO. 1	CROSBY ESTATE "F" NO. 1	FONDREN NO. 1
LOCATION	SEC. 22, T8S, R15W	SEC. 1, T8S, R15W	SEC. 24, T6N, R1E
OWNER	HUMBLE OIL & REFINING CO.	PHILLIPS PETROLEUM CO.	UNITED GAS PUBLIC SERVICE CO
COMPLETED	07/19/65	--/--/00	01/07/33
SAMPLED	07/15/66	02/--/78	02/15/33
FORMATION	CRET-MOORINGSPORT	CRET-MOORINGSPORT	EOCE-NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	13848	13338	2440
WELLHEAD PRESSURE,PSIG	4100	3715	970
OPEN FLOW, MCFD	NOT GIVEN	4100	28000
COMPONENT, MOLE PCT			
METHANE	90.7	92.0	92.7
ETHANE	1.6	0.8	0.0
PROPANE	0.7	0.3	---
N-BUTANE	0.4	0.2	---
ISOBUTANE	0.2	TRACE	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	1.2	1.5	6.2
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	4.8	4.5	0.7
HELIUM	0.03	0.03	0.08
HEATING VALUE*	1005	986	939
SPECIFIC GRAVITY	0.640	0.626	0.588

	INDEX 3571 SAMPLE 12241	INDEX 3572 SAMPLE 17576	INDEX 3573 SAMPLE 13179
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	HINDS	HINDS	HUMPHREYS
FIELD	LEARNED	NEWMAN	FONOSLA
WELL NAME	SHELL-MCNAIR NO. 1	TOMPKINS NO. 1	PAT BARRETT NO. 1
LOCATION	SEC. 13, T4N, R4W	SEC. 33, T15N, R5E	PAT BARRETT LEASE
OWNER	SHELL OIL CO.	INDEX INC.	AMOCO PRODUCTION CO.
COMPLETED	10/21/69	11/--/83	12/19/71
SAMPLED	04/15/70	01/28/85	12/19/71
FORMATION	CRET-SLIGO	JURA-COTTON VALLEY	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	13300	17742	9384
WELLHEAD PRESSURE,PSIG	4910	6666	NOT GIVEN
OPEN FLOW, MCFD	5100	4650	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	83.7	57.8
ETHANE	0.2	1.0	4.2
PROPANE	TRACE	0.2	1.7
N-BUTANE	0.0	0.1	0.7
ISOBUTANE	0.0	0.1	0.8
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.0	TRACE	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.3
NITROGEN	3.7	5.3	3.5
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.0	9.4	30.1
HELIUM	0.05	0.04	0.04
HEATING VALUE*	939	887	800
SPECIFIC GRAVITY	0.609	0.682	0.944

	INDEX 3574 SAMPLE 17395	INDEX 3575 SAMPLE 16253	INDEX 3576 SAMPLE 12044
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JASPER	JASPER	JASPER
FIELD	CENTRAL HEIDELBERG	HEIDELBERG W	PAULDING W
WELL NAME	MASONITE NO. 1C36-6	COTTON VALLEY UNIT 5-5-2	MASONITE NO. 1
LOCATION	SEC. 36, T1N, R12E	SEC. 5, T10N, R10W	SEC. 8, T2N, R12E
OWNER	GAV PRODUCTION CO.	GULF OIL EXPL. & PROD. CO.	GETTY OIL CO.
COMPLETED	08/29/84	01/23/81	06/24/69
SAMPLED	08/29/84	05/06/81	09/16/69
FORMATION	CRET-EUTAW	JURA-COTTON VALLEY	JURA-BUCKNER
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	4977	11290	14186
WELLHEAD PRESSURE,PSIG	550	2000	2100
OPEN FLOW, MCFD	500	2895	825
COMPONENT, MOLE PCT			
METHANE	90.3	0.7	70.0
ETHANE	1.0	0.2	13.4
PROPANE	1.7	0.1	7.4
N-BUTANE	1.2	0.1	2.2
ISOBUTANE	1.0	TRACE	2.5
N-PENTANE	0.9	TRACE	0.7
ISOPENTANE	0.3	TRACE	0.9
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	1.0	0.1	0.4
NITROGEN	2.0	85.1	2.6
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	1.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	12.4	0.1
HELIUM	0.03	TRACE	0.02
HEATING VALUE*	1165	22	1367
SPECIFIC GRAVITY	0.676	1.040	0.808

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3577 SAMPLE 4020	INDEX 3578 SAMPLE 4175	INDEX 3579 SAMPLE 5866
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JASPER	JEFFERSON	JEFFERSON
FIELD	SOSO	FAYETTE	FAYETTE S
WELL NAME	EDWARDS-BAILEY UNIT NO. 1	M. R. SMITH NO. C-1	R. T. LIDDELL
LOCATION	SEC. 27, T10N, R15W	SEC. 27, T9N, R1W	SEC. 6T, T9N, R1E
OWNER	GULF OIL CO.	HUMBLE OIL & REFINING CO.	SINCLAIR OIL & GAS CO.
COMPLETED	02/28/45	11/05/46	02/04/51
SAMPLED	05/10/45	12/21/46	07/13/51
FORMATION	CRET-EUTAW & TUSCALOOSA	CRET-TUSCALOOSA	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	6590	3650	10064
WELLHEAD PRESSURE,PSIG	2956	NOT GIVEN	4186
OPEN FLOW, MCFD	62000	NOT GIVEN	42600
COMPONENT, MOLE PCT			
METHANE	52.7	99.8	83.2
ETHANE	46.5	0.0	7.6
PROPANE	---	---	2.7
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	0.4	0.0	2.4
OXYGEN	0.1	0.0	0.4
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	2.1
HELIUM	0.05	0.02	0.12
HEATING VALUE*	1367	1011	1186
SPECIFIC GRAVITY	0.798	0.556	0.677

	INDEX 3580 SAMPLE 13075	INDEX 3581 SAMPLE 13076	INDEX 3582 SAMPLE 15548
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	GWINVILLE	GWINVILLE	UNION CHURCH
WELL NAME	GWINVILLE GAS UNIT NO. 3	GWINVILLE GAS UNIT NO. 3	SARAH G. CUPIT NO. 1
LOCATION	SEC. 21, T9N, R19W	SEC. 21, T9N, R19W	SEC. 2, T8N, R4E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	INEXCO OIL CO.
COMPLETED	02/24/71	02/24/71	05/--/78
SAMPLED	10/06/71	10/06/71	12/27/78
FORMATION	CRET-PALUXY	CRET-PALUXY	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	12256	11116	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2450	3650	6200
OPEN FLOW, MCFD	7200	6600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.8	95.9	91.3
ETHANE	0.3	0.3	2.5
PROPANE	0.1	0.1	0.8
N-BUTANE	0.1	TRACE	0.2
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.7	1.8	1.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.5	3.6
HELIUM	0.04	0.04	0.02
HEATING VALUE*	990	992	1018
SPECIFIC GRAVITY	0.585	0.584	0.626

	INDEX 3583 SAMPLE 4288	INDEX 3584 SAMPLE 14956	INDEX 3585 SAMPLE 15909
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	WILDCAT	BASSFIELD	CARSON
WELL NAME	W. G. GREEN NO. 2	W. L. DEEN NO. 1	MAGNOLIA NO. 1
LOCATION	SEC. 10, T9N, R9E	SEC. 27, T1N, R17W	SEC. 11, T7N, R18W
OWNER	CALIFORNIA CO.	SUN OIL CO.	FOREST OIL CORP.
COMPLETED	01/05/47	12/15/76	10/--/78
SAMPLED	03/17/47	04/02/77	02/24/80
FORMATION	EDGE ----	CRET-HOSSTON & BOOTH	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	1452	16143	14766
WELLHEAD PRESSURE,PSIG	579	5200	4600
OPEN FLOW, MCFD	986	10500	1600
COMPONENT, MOLE PCT			
METHANE	95.3	93.5	88.5
ETHANE	0.1	0.3	3.7
PROPANE	---	0.1	1.5
N-BUTANE	---	0.1	0.7
ISOBUTANE	---	TRACE	0.5
N-PENTANE	---	0.1	0.3
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.5
NITROGEN	4.4	1.5	1.4
OXYGEN	0.0	0.0	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	2.9
HELIUM	0.02	0.03	0.02
HEATING VALUE*	967	968	1083
SPECIFIC GRAVITY	0.575	0.608	0.659

	INDEX 3586 SAMPLE 15910	INDEX 3587 7137	INDEX 3588 SAMPLE 15949
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	CARSON	GRANGE	GREEN'S CREEK
WELL NAME	MAGNOLIA NO. 1	JEFF HOLLOWAY NO. 1	DALE UNIT G-10 NO. 1
LOCATION	SEC. 11, T7N, R18W	SEC. 24, T6N, R20W	SEC. 8, T5N, R19W
OWNER	FOREST OIL CORP.	PAN AMERICAN PETROLEUM CORP.	HARKINS & CO.
COMPLETED	10/99/78	05/17/59	09/22/79
SAMPLED	02/24/80	07/01/59	04/22/80
FORMATION	-SINCLAIR	CRET-PALUXY	CRET-HOSSTON
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	14605	13248	16272
WELLHEAD PRESSURE,PSIG	3237	5300	5800
OPEN FLOW, MCFD	5300	NOT GIVEN	5500
COMPONENT, MOLE PCT			
METHANE	93.0	95.0	89.0
ETHANE	1.5	0.7	0.3
PROPANE	0.4	0.0	0.1
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.7	1.6	4.4
OXYGEN	TRACE	0.0	0.9
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	2.1	4.8
HELIUM	0.05	0.01	0.02
HEATING VALUE*	1008	984	935
SPECIFIC GRAVITY	0.611	0.587	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3589 SAMPLE 16033	INDEX 3590 SAMPLE 4190	INDEX 3591 SAMPLE 17687
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	GREEN'S CREEK	GWINVILLE	HOLIDAY CREEK
WELL NAME	W. H. LANGSTON NO. 1	VINNIE WALKER NO. 1	DUMAS-BURKETT NO. 1
LOCATION	SEC. 8, T5N, R19W	SEC. 34, T9N, R19W	SEC. 13, T6N, R18W
OWNER	MARION CORP.	GULF OIL CO.	INEXCO OIL CO.
COMPLETED	10/18/79	02/02/46	--/--/00
SAMPLED	08/11/80	11/19/46	05/28/85
FORMATION	CRET-SLIGO	CRET-U	CRET-MOSSTON
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	15780	8074	16338
WELLHEAD PRESSURE,PSIG	6000	3280	2800
OPEN FLOW, MCFD	3400	31000	1700
COMPONENT, MOLE PCT			
METHANE	94.0	95.3	92.8
ETHANE	0.3	2.0	0.5
PROPANE	0.1	---	0.2
N-BUTANE	0.1	---	0.2
ISOBUTANE	TRACE	---	TRACE
N-PENTANE	TRACE	---	0.2
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	1.2	1.4	1.8
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	4.1	0.9	3.8
HELIUM	0.03	0.04	0.03
HEATING VALUE*	969	1001	989
SPECIFIC GRAVITY	0.605	0.581	0.619

	INDEX 3592 SAMPLE 16456	INDEX 3593 SAMPLE 16660	INDEX 3594 SAMPLE 17665
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	JEFFERSON DAVIS	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD	DAKVALE	VINTAGE	VINTAGE
WELL NAME	AMOCO-SABINE NO. 1	CHAMPAGNE NO. 1	RIPPLE NO. 1
LOCATION	SEC. 26, T6N, R19W	SEC. 17, T6N, R18W	SEC. 8, T6N, R18W
OWNER	J-O-B OPERATING CO.	FOREST OIL CORP.	LYONS PETROLEUM CO.
COMPLETED	12/04/80	01/08/81	--/--/83
SAMPLED	03/17/82	09/15/82	05/10/85
FORMATION	CRET-SLIGO "C"	CRET-HARPER	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	15750	16182	16592
WELLHEAD PRESSURE,PSIG	5380	4861	4500
OPEN FLOW, MCFD	3991	6000	1900
COMPONENT, MOLE PCT			
METHANE	94.7	93.5	92.6
ETHANE	0.2	0.5	0.2
PROPANE	0.1	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.2	1.1	2.1
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	4.6	4.5
HELIUM	0.03	0.03	0.03
HEATING VALUE*	982	964	957
SPECIFIC GRAVITY	0.602	0.609	0.616

	INDEX 3595 SAMPLE 9243	INDEX 3596 SAMPLE 4077	INDEX 3597 SAMPLE 5131
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	KEMPER	LAMAR	LAMAR
FIELD	NOT GIVEN	BAXTERVILLE	BAXTERVILLE
WELL NAME	ROSIE MCNEIL	SNOWDEN NO. 1	VIRGIL DAVIS ET AL. NO. G-2
LOCATION	SEC. 32, T10N, R14E	SEC. 7, T1N, R16W	SEC. 7, T1N, R16W
OWNER	ROSIE MCNEIL	SUN OIL CO.	GULF OIL CO.
COMPLETED	--/--/00	05/22/45	04/06/51
SAMPLED	02/26/64	07/09/45	11/13/51
FORMATION	EOCE-WILCOX	CRET-U	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	200	210	210
DEPTH, FEET	175	7674	5182
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3048	2341
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	0.0	94.8	96.6
ETHANE	0.0	3.3	0.5
PROPANE	0.0	---	0.3
N-BUTANE	0.0	---	0.1
ISOBUTANE	0.0	---	0.1
N-PENTANE	0.0	---	0.1
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.2
NITROGEN	96.8	0.5	1.5
OXYGEN	0.0	0.0	TRACE
ARGON	1.1	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.0	1.3	0.6
HELIUM	0.11	0.05	0.03
HEATING VALUE*	0	1019	1017
SPECIFIC GRAVITY	0.982	0.585	0.582

	INDEX 3598 SAMPLE 15968	INDEX 3599 SAMPLE 15549	INDEX 3600 SAMPLE 15931
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	LAMAR	LAWRENCE	LOWNDES
FIELD	TATUM'S CAMP	MONTICELLO	CALEDONIA
WELL NAME	ROSS BEATTY NO. 8-7	SMITH ESTATE NO. 1	SMITH NO. 1-4
LOCATION	SEC. 8, T3N, R15W	SEC. 3, T7N, R11E	SEC. 4, T16S, R17W
OWNER	SUN GAS CO.	INEXCO OIL CO.	ELF AQUITAINE OIL & GAS
COMPLETED	07/19/79	07/--/78	12/23/79
SAMPLED	05/27/80	12/28/78	03/25/80
FORMATION	CRET-MOSSTON	CRET-MOSSTON	MISS-CARTER
GEOLOGIC PROVINCE CODE	210	210	200
DEPTH, FEET	15699	15791	4652
WELLHEAD PRESSURE,PSIG	5200	5000	1860
OPEN FLOW, MCFD	5843	5000	2700
COMPONENT, MOLE PCT			
METHANE	90.3	91.3	94.5
ETHANE	0.8	1.0	3.0
PROPANE	0.4	0.2	0.2
N-BUTANE	0.3	0.1	TRACE
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	TRACE	0.1
NITROGEN	2.3	2.3	1.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.8	4.6	0.4
HELIUM	0.03	0.04	0.10
HEATING VALUE*	997	967	1040
SPECIFIC GRAVITY	0.645	0.624	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3601 SAMPLE 17425	INDEX 3602 SAMPLE 16724	INDEX 3603 SAMPLE 17843
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	LOWNDES	LOWNDES	LOWNDES
FIELD	CORINNE	MAPLE BRANCH	MAPLE BRANCH S
WELL NAME	COLUMBUS & F BASE 19-15 NO.1	ALDRIDGE NO. 18-9	SIZEMORE NO. 28-11
LOCATION	SEC. 30, T16S, R18W	SEC. 18, T16S, R17W	SEC. 28, T16S, R17W
OWNER	TXO PRODUCTION CORP.	PRUET PRODUCTION CO.	PRUET PRODUCTION CO.
COMPLETED	12/01/83	12/10/81	10/06/83
SAMPLED	09/20/84	12/--/82	09/24/85
FORMATION	MISS-CARTER	MISS-CARTER	MISS-LEWIS
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	6765	4470	5353
WELLHEAD PRESSURE,PSIG	610	1842	600
OPEN FLOW, MCFD	283	NOT GIVEN	1081
COMPONENT, MOLE PCT			
METHANE	80.3	90.2	80.6
ETHANE	7.6	4.1	10.1
PROPANE	3.9	0.5	4.6
N-BUTANE	1.5	0.1	1.5
ISOBUTANE	1.0	0.4	0.5
N-PENTANE	0.9	0.0	0.4
ISOPENTANE	0.6	1.4	0.4
CYCLOPENTANE	1.2	0.6	0.2
HEXANES PLUS	1.8	0.4	0.4
NITROGEN	0.7	1.2	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.4	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.00	0.11	0.09
HEATING VALUE*	1350	1131	1246
SPECIFIC GRAVITY	0.773	0.642	0.716

	INDEX 3604 SAMPLE 16755	INDEX 3605 SAMPLE 15599	INDEX 3606 SAMPLE 5060
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MADISON	MADISON	MADISON
FIELD	CENTRAL FANNEGUSHA	GLUCKSTADT	NOT GIVEN
WELL NAME	MAUBERS NO. 1-CF	D. R. TANDALL NO. 1	J. R. CAMERON NO. 1
LOCATION	SEC. 34, T9N, R6E	NOT GIVEN	SEC. 36, T10N, R1E
OWNER	SHELL OIL CO.	TEXAS PACIFIC OIL CO., INC.	CONTINENTAL OIL CO.
COMPLETED	01/22/83	12/18/78	--/--/00
SAMPLED	01/22/83	04/07/79	05/30/51
FORMATION	JURA-NORPHLET	JURA-NORPHLET	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	14810	16050	13780
WELLHEAD PRESSURE,PSIG	2500	6800	2200
OPEN FLOW, MCFD	8000	5000	2760
COMPONENT, MOLE PCT			
METHANE	0.2	0.9	1.4
ETHANE	TRACE	0.1	TRACE
PROPANE	0.0	TRACE	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.2	0.4	0.5
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	98.5	98.5	95.6
HELIUM	0.01	TRACE	0.29
HEATING VALUE*	16	16	36
SPECIFIC GRAVITY	1.519	1.519	1.488

	INDEX 3607 SAMPLE 6493	INDEX 3608 SAMPLE 16273	INDEX 3609 SAMPLE 4080
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MARION	MARION	MARION
FIELD	BAXTERVILLE	GREENS CREEK	HUB
WELL NAME	T. W. DAVIS NO. 2	ROGERS 28-11 NO. 1	A. EVANS NO. 1
LOCATION	SEC. 31, T2N, R16W	SEC. 28, T5N, R19W	SEC. 15, T2N, R18W
OWNER	TIDEWATER OIL CO.	GETTY OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	01/--/58	04/26/80	03/03/45
SAMPLED	01/29/58	05/30/81	05/19/45
FORMATION	CRET-TUSCALOOSA	CRET-HARPER-S	CRET-U
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	7800	16150	9127
WELLHEAD PRESSURE,PSIG	2450	4600	2800
OPEN FLOW, MCFD	5000	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.5	92.2	93.2
ETHANE	0.5	0.4	3.7
PROPANE	0.2	0.1	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	0.1	0.1	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	1.9	1.4	1.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	5.5	1.1
HELIUM	TRACE	0.02	0.03
HEATING VALUE*	1013	956	1010
SPECIFIC GRAVITY	0.585	0.622	0.592

	INDEX 3610 SAMPLE 13039	INDEX 3611 SAMPLE 7669	INDEX 3612 SAMPLE 7670
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MARION	MARION	MARION
FIELD	HUB	KNOXO	KNOXO
WELL NAME	W. E. WALKER NO. 4	BOARD OF SUPV. NO. 1-LT	BOARD OF SUPV. NO. 1-UT
LOCATION	SEC. 10, T2N, R18W	SEC. 16, T2N, R12E	SEC. 16, T2N, R12E
OWNER	CHEVRON OIL CO.	TEXACO-SEABOARD, INC.	TEXACO-SEABOARD, INC.
COMPLETED	03/12/71	06/07/60	06/07/60
SAMPLED	09/22/71	09/09/60	09/09/60
FORMATION	CRET-PALUXY	CRET-PALUXY U	CRET-WASHITA
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	11704	12532	12386
WELLHEAD PRESSURE,PSIG	4224	4722	4620
OPEN FLOW, MCFD	5000	80000	4600
COMPONENT, MOLE PCT			
METHANE	95.5	96.3	97.6
ETHANE	0.5	0.1	0.0
PROPANE	0.2	0.0	0.0
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	1.2	1.0	0.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	2.3	2.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	998	978	989
SPECIFIC GRAVITY	0.594	0.580	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3613 SAMPLE 4838	INDEX 3614 SAMPLE 16289	INDEX 3615 SAMPLE 5757
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MARION	MARION	MONROE
FIELD	SANDY HOOK	SANDY HOOK	ABERDEEN
WELL NAME	PITTMAN NO. 2	GAS UNIT NO. 28-1	LEE HARRINGTON NO. 1
LOCATION	SEC. 12, T1N, R18W	SEC. 16, T1N, R14E	NOT GIVEN
OWNER	UNION PRODUCING CO.	EXXON CO., U.S.A.	SHELL OIL CO.
COMPLETED	01/02/49	03/19/80	01/15/55
SAMPLED	12/28/49	06/29/81	01/14/55
FORMATION	CRET-TUSCALOOSA	CRET-JAMES	MISS-
GEOLOGIC PROVINCE CODE	210	210	200
DEPTH, FEET	9006	14330	3500
WELLHEAD PRESSURE,PSIG	3340	7400	1442
OPEN FLOW, MCFD	32000	3250	3000
COMPONENT, MOLE PCT			
METHANE	88.1	94.8	95.3
ETHANE	1.0	0.2	2.4
PROPANE	0.6	TRACE	0.2
N-BUTANE	0.3	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.0	TRACE
NITROGEN	6.9	3.0	1.4
OXYGEN	1.3	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	3.9	0.4
HELIUM	0.03	0.02	0.10
HEATING VALUE*	959	964	1018
SPECIFIC GRAVITY	0.629	0.597	0.579

	INDEX 3616 SAMPLE 17185	INDEX 3617 SAMPLE 1781	INDEX 3618 SAMPLE 1825
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MONROE	MONROE	MONROE
FIELD	ABERDEEN	AMORY	AMORY
WELL NAME	CROSBY NO. 9-11	CARTER NO. 1	CARTER NO. 2
LOCATION	SEC. 9, T15S, R7E	SEC. 7, T13N, R17E	SEC. 7, T13N, R17E
OWNER	PRUET PRODUCTION CO.	AMORY PETROLEUM CO.	AMORY PETROLEUM CO.
COMPLETED	09/27/82	10/05/26	--/--/00
SAMPLED	02/20/84	05/20/29	08/03/29
FORMATION	MISS-CARTER	MISS-HARTSELLE	MISS-HARTSELLE
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	3828	2412	NOT GIVEN
WELLHEAD PRESSURE,PSIG	740	700	NOT GIVEN
OPEN FLOW, MCFD	1100	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.9	96.9	96.1
ETHANE	3.5	1.4	1.1
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	2.4	1.4	1.5
OXYGEN	TRACE	0.1	0.5
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.8
HELIUM	0.15	0.12	0.16
HEATING VALUE*	1013	1007	993
SPECIFIC GRAVITY	0.580	0.579	0.577

	INDEX 3619 SAMPLE 17186	INDEX 3620 SAMPLE 15536	INDEX 3621 SAMPLE 14975
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MONROE	MONROE	MONROE
FIELD	BIBB	BUTTAHATCHIE RIVER	CORINNE
WELL NAME	YOUNG NO. 35-2	HARMON NO. 16	SELF NO. 12-1
LOCATION	SEC. 35, T11S, R7E	SEC. 24, T15S, R18W	SEC. 12, T16S, R19W
OWNER	PRUET PRODUCTION CO.	PRUET & HUGHES OPER. CO.	CLEARY PETROLEUM CO.
COMPLETED	05/--/83	12/25/78	--/--/00
SAMPLED	02/20/84	12/08/78	04/13/77
FORMATION	MISS-EVANS	MISS-CARTER	MISS-CARTER
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	1798	4577	5010
WELLHEAD PRESSURE,PSIG	120	1825	1150
OPEN FLOW, MCFD	464	2900	4000
COMPONENT, MOLE PCT			
METHANE	95.4	94.5	88.0
ETHANE	2.1	3.0	6.5
PROPANE	0.1	0.5	2.2
N-BUTANE	0.0	0.1	0.7
ISOBUTANE	0.0	0.1	0.4
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	1.5	0.8	1.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.7	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.2
HELIUM	0.07	0.06	0.08
HEATING VALUE*	1009	1039	1134
SPECIFIC GRAVITY	0.569	0.591	0.648

	INDEX 3622 SAMPLE 17841	INDEX 3623 SAMPLE 17219	INDEX 3624 SAMPLE 17220
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MONROE	MONROE	MONROE
FIELD	GOODWIN	HAMILTON S	MAPLE BRANCH
WELL NAME	MESTER NO. 27-9	TAYLOR NO. 35-13	WELLS NO. 5-5
LOCATION	SEC. 27, T11S, R7E	NOT GIVEN	NOT GIVEN
OWNER	PRUET PRODUCTION CO.	DOUGLAS EXPLORATION CO., INC	DOUGLAS EXPLORATION CO., INC
COMPLETED	07/28/85	12/16/83	12/16/83
SAMPLED	09/24/85	03/21/84	03/21/84
FORMATION	MISS-EVANS	MISS-LEWIS	MISS-LEWIS
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	1770	5326	5236
WELLHEAD PRESSURE,PSIG	830	40	20
OPEN FLOW, MCFD	920	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.3	70.9	77.8
ETHANE	0.4	12.8	10.7
PROPANE	0.0	7.6	5.5
N-BUTANE	0.6	2.9	1.7
ISOBUTANE	0.0	1.4	0.8
N-PENTANE	0.1	0.9	0.6
ISOPENTANE	0.3	1.4	0.8
CYCLOPENTANE	0.1	0.5	0.4
HEXANES PLUS	0.2	0.8	0.6
NITROGEN	1.6	0.6	0.8
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.05	0.05	0.08
HEATING VALUE*	1034	1448	1312
SPECIFIC GRAVITY	0.589	0.834	0.753

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3625 SAMPLE 17222	INDEX 3626 SAMPLE 7502	INDEX 3627 SAMPLE 17075
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	MONROE	MONROE	MONROE
FIELD	MCKINLEY CREEK	ONOLONA	SPLUNGE
WELL NAME	ROBINSON NO. 19-15	MURPHREE NO. 1	WILLIAMSON 21-15 NO.-1
LOCATION	SEC. 19, T15S, R18W	SEC. 28, T12N, R6E	SEC. 21, T12S, R16W
OWNER	DOUGLAS EXPLORATION CO., INC	PURE OIL CO.	TXO PRODUCTION CORP.
COMPLETED	08/20/83	02/18/56	09/28/83
SAMPLED	03/22/84	04/14/60	09/27/83
FORMATION	MISS-LEWIS	MISS-CARTER	MISS-CARTER B
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	5304	2012	1720
WELLHEAD PRESSURE,PSIG	1850	845	750
OPEN FLOW, MCFD	NOT GIVEN	5950	600
COMPONENT, MOLE PCT			
METHANE	87.4	97.0	97.6
ETHANE	6.4	0.1	0.2
PROPANE	2.3	0.1	TRACE
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.3	0.0	0.0
HEXANES PLUS	0.4	0.0	0.0
NITROGEN	0.6	2.5	1.6
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.08	0.10	0.09
HEATING VALUE*	1173	987	993
SPECIFIC GRAVITY	0.665	0.566	0.562

	INDEX 3628 SAMPLE 7231	INDEX 3629 SAMPLE 17774	INDEX 3630 SAMPLE 17775
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	PIKE	PONTOTOC	PONTOTOC
FIELD	MCCOMB	GOODFOOD E	TROY
WELL NAME	GILLIS-POPE UNIT NO. 1	D. L. ABERNATHY 26-13 NO. 1	W. R. FALKNER 28-2 NO. 2
LOCATION	SEC. 10, T7E, R3W	SEC. 26, TL, R4E	NOT GIVEN
OWNER	SUN OIL CO., ET AL	LOUISIANA LAND & EXPL. CO.	LOUISIANA LAND & EXPL. CO.
COMPLETED	07/29/59	--/--/00	--/--/00
SAMPLED	09/24/59	07/17/85	07/17/85
FORMATION	CRET-TUSCALOOSA	NOT -ABERNATHY	MISS-LEWIS
GEOLOGIC PROVINCE CODE	210	200	200
DEPTH, FEET	10868	1861	2450
WELLHEAD PRESSURE,PSIG	NOT GIVEN	850	650
OPEN FLOW, MCFD	NOT GIVEN	650	500
COMPONENT, MOLE PCT			
METHANE	70.0	98.3	97.9
ETHANE	11.3	0.1	0.2
PROPANE	9.2	TRACE	0.1
N-BUTANE	2.5	0.0	0.0
ISOBUTANE	1.4	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	1.5	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.8	0.0	0.0
NITROGEN	0.5	1.4	1.5
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.1	0.1
HELIUM	0.01	0.09	0.08
HEATING VALUE*	1411	998	998
SPECIFIC GRAVITY	0.842	0.561	0.564

	INDEX 3631 SAMPLE 16565	INDEX 3632 SAMPLE 16892	INDEX 3633 SAMPLE 11714
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	RANKIN	RANKIN	RANKIN
FIELD	HOLLYBUSH CREEK	PISGAH S	PUCKETT
WELL NAME	MCKAY NO. 2	HAUBERG NO. 6-R	G. U. PUCKETT NO. 2
LOCATION	SEC. 29, T7N, R5E	SEC. 35, T7N, R4E	NOT GIVEN
OWNER	SHELL OIL CO.	SHELL OIL CO.	LARCO DRILLING CORP.
COMPLETED	06/25/82	--/--/00	02/--/67
SAMPLED	06/28/82	04/22/83	12/17/68
FORMATION	JURA-BUCKNER	JURA-BUCKNER	CRET-8630 GAS SAND
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	14700	14644	8630
WELLHEAD PRESSURE,PSIG	2200	2632	3100
OPEN FLOW, MCFD	10000	6875	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.3	0.3	92.0
ETHANE	TRACE	TRACE	0.4
PROPANE	0.0	0.0	TRACE
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.5
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	0.2	0.8	5.1
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	99.4	98.7	0.8
HELIUM	0.01	TRACE	0.06
HEATING VALUE*	3	3	1106
SPECIFIC GRAVITY	1.523	1.520	0.615

	INDEX 3634 SAMPLE 11715	INDEX 3635 SAMPLE 11520	INDEX 3636 SAMPLE 10957
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	RANKIN	RANKIN	SCOTT
FIELD	PUCKETT	WILDCAT	NOT GIVEN
WELL NAME	PUCKETT G.U. NO. 1	J. A. SPANN EST. NO. 1	WILLIE J. WADE NO. 1
LOCATION	SEC. 18, T3N, R6E	SEC. 19, T6N, R5E	SEC. 32, T8N, R7E
OWNER	LARCO DRILLING CORP.	GENERAL CRUDE OIL CO.	TEXACO INC.
COMPLETED	01/15/67	--/--/00	--/--/00
SAMPLED	12/17/68	05/--/68	05/09/67
FORMATION	CRET-8630 GAS SAND	JURA-SMACKOVER	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	8630	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3100	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	42000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	0.2	22.6
ETHANE	0.4	0.0	0.8
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.7	0.0	0.0
NITROGEN	5.4	1.1	11.0
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	98.5	65.3
HELIUM	0.04	0.02	0.05
HEATING VALUE*	1093	2	244
SPECIFIC GRAVITY	0.623	1.519	1.239

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3637 SAMPLE 13046	INDEX 3638 SAMPLE 13047	INDEX 3639 SAMPLE 15182
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	SIMPSON	SIMPSON	SIMPSON
FIELD	MERIT	MERIT	OAK CREEK
WELL NAME	COX H NO. 1	COX H NO. 1	WILLIAMSON NO. 1
LOCATION	SEC. 8, T1N, R4E	SEC. 5, T1N, R4E	SEC. 15, T10N, R19W
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	R. L. BURNS OIL & GAS CORP.
COMPLETED	10/01/70	10/01/70	--/--/00
SAMPLED	09/28/71	09/28/71	01/01/78
FORMATION	CRET-RODESSA U	CRET-RODESSA L	CRET-TUSCALOOSA
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	13204	13276	13777
WELLHEAD PRESSURE,PSIG	3000	3600	3700
OPEN FLOW, MCFD	1000	1350	4758
COMPONENT, MOLE PCT			
METHANE	91.9	92.5	81.6
ETHANE	0.5	0.4	0.3
PROPANE	0.2	0.2	0.1
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	3.7	3.7	5.5
OXYGEN	0.3	0.9	0.1
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	2.7	11.3
HELIUM	0.05	0.05	0.03
HEATING VALUE*	961	974	874
SPECIFIC GRAVITY	0.613	0.612	0.709

	INDEX 3640 SAMPLE 17404	INDEX 3641 SAMPLE 17589	INDEX 3642 SAMPLE 17316
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	SIMPSON	SIMPSON	SMITH
FIELD	OAK GROVE	OAK GROVE	BOYKIN CHURCH
WELL NAME	PAUL NEWSOME NO. 1	GEORGE MAGEE NO. 1	USA 17-9 NO. 1
LOCATION	SEC. 2, T9N, R19W	SEC. 27, T10N, R19W	SEC. 17, T3N, R1E
OWNER	CALLON PETROLEUM CO.	CALLON PETROLEUM CO.	XMCO, INC.
COMPLETED	09/05/84	01/13/84	03/08/84
SAMPLED	09/05/84	02/13/85	06/08/84
FORMATION	CRET-RODESSA A	CRET-WARE	CRET-RODESSA
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	13552	14004	10882
WELLHEAD PRESSURE,PSIG	2000	3200	2700
OPEN FLOW, MCFD	450	8000	500
COMPONENT, MOLE PCT			
METHANE	91.2	92.1	89.7
ETHANE	0.5	0.6	0.4
PROPANE	0.5	0.3	0.9
N-BUTANE	0.3	0.3	0.5
ISOBUTANE	0.6	0.3	0.9
N-PENTANE	0.6	0.5	0.9
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.2	0.2	0.3
HEXANES PLUS	1.1	1.0	1.4
NITROGEN	1.0	1.4	3.5
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.3	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.0	3.2	1.4
HELIUM	0.02	0.03	0.06
HEATING VALUE*	1066	1052	1108
SPECIFIC GRAVITY	0.662	0.645	0.671

	INDEX 3643 SAMPLE 16847	INDEX 3644 SAMPLE 7227	INDEX 3645 SAMPLE 7230
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	WALTHALL	WALTHALL	WALTHALL
FIELD	DARBUN N	DEXTER	DEXTER
WELL NAME	BOYD 34-10 NO. 1	M. B. MENGST NO. 1	JOE PITTMAN A NO. 1
LOCATION	SEC. 34, T4N, R11E	SEC. 7, T1N, R13E	SEC. 7, T1N, R13E
OWNER	PRUET PRODUCTION CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	10/19/80	07/--/59	01/--/59
SAMPLED	03/25/83	09/29/59	09/29/59
FORMATION	CRET-MOORINGSPORT	CRET-TUSCALOOSA	CRET-L
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	14364	9596	11062
WELLHEAD PRESSURE,PSIG	4700	3498	4200
OPEN FLOW, MCFD	29000	2050	10000
COMPONENT, MOLE PCT			
METHANE	94.0	95.7	96.7
ETHANE	0.3	0.9	0.2
PROPANE	0.1	0.1	0.2
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	TRACE	0.2	TRACE
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	1.1	1.3	0.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.1	1.8	1.9
HELIUM	0.02	0.02	0.03
HEATING VALUE*	966	1002	993
SPECIFIC GRAVITY	0.602	0.591	0.582

	INDEX 3646 SAMPLE 16839	INDEX 3647 SAMPLE 13380	INDEX 3648 SAMPLE 8405
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	WALTHALL	WALTHALL	WALTHALL
FIELD	DEXTER	KIRKLIN	KOKOMO
WELL NAME	MORRIS 2-9 NO. 1	LACY DAVIS NO. 1	J. O. MCDONALD NO. 1
LOCATION	SEC. 2, T1N, R12E	SEC. 11, T1N, R11E	SEC. 26, T3N, R11E
OWNER	GETTY OIL CO.	SOUTHEASTERN EXPLORATION, LT	SUN OIL CO.
COMPLETED	08/--/82	02/05/71	04/01/60
SAMPLED	03/--/83	09/12/72	02/07/62
FORMATION	CRET-PALUXY P-3	CRET-PALUXY	CRET-PALUXY
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	12306	13257	12944
WELLHEAD PRESSURE,PSIG	3690	1500	4833
OPEN FLOW, MCFD	6175	2150	23500
COMPONENT, MOLE PCT			
METHANE	86.3	95.7	96.3
ETHANE	0.2	0.1	0.1
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	6.9	0.9	0.8
OXYGEN	1.7	0.0	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.8	3.2	2.7
HELIUM	0.02	0.02	0.03
HEATING VALUE*	908	971	980
SPECIFIC GRAVITY	0.643	0.589	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3649 SAMPLE 13970	INDEX 3650 SAMPLE 15035	INDEX 3651 SAMPLE 17069
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	WALTHALL	WALTHALL	WARREN
FIELD	KOKOMO-DURBAN	TYLERTOWN	BOVINA
WELL NAME	WILMER HAMMOND NO. 1	MITCHELL-LAIRD NO. 1	UNIT NO. 7-9
LOCATION	SEC. 6, T2N, R12E	SEC. 26, T2N, R11E	SEC. 7, T16N, R5E
OWNER	MOORE & MINES	FLORIDA GAS EXPL. CO.	PLACID OIL CO.
COMPLETED	--/--/00	03/28/77	05/28/82
SAMPLED	03/28/74	06/23/77	09/20/83
FORMATION	CRET-PALUXY	CRET-PALUXY	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	12866	12698	16700
WELLHEAD PRESSURE,PSIG	2600	3200	5850
OPEN FLOW, MCFD	3500	NOT GIVEN	1200
COMPONENT, MOLE PCT			
METHANE	95.9	95.8	88.0
ETHANE	0.1	0.2	0.7
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	1.0	4.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	3.0	6.5
HELIUM	0.03	0.03	0.06
HEATING VALUE*	973	977	908
SPECIFIC GRAVITY	0.587	0.590	0.639

	INDEX 3652 SAMPLE 16376	INDEX 3653 SAMPLE 17121	INDEX 3654 SAMPLE 2169
STATE	MISSISSIPPI	MISSOURI	MONTANA
COUNTY	YAZOO	PLATTE	BIG HORN
FIELD	MECHANICSBURG	WILDCAT	HARDIN
WELL NAME	WILLIAMS ESTATE NO. 2	TIFFANY SPRINGS IND. NO. 4	NO. 17
LOCATION	SEC. 9, T9N, R3W	SEC. 36, T52N, R34W	SEC. 21, T1S, R33E
OWNER	CARDELL-TLAPEK CO.	TIFFANY SPRINGS INDUSTRY	BIG HORN OIL & GAS DEV. CO.
COMPLETED	07/28/81	06/--/83	08/11/30
SAMPLED	11/06/81	10/--/83	09/22/30
FORMATION	JURA-COTTON VALLEY	PENN-	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	210	335	515
DEPTH, FEET	12552	621	670
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	145
OPEN FLOW, MCFD	4000	425	161
COMPONENT, MOLE PCT			
METHANE	89.3	95.4	98.1
ETHANE	3.1	0.1	0.0
PROPANE	1.0	TRACE	---
N-BUTANE	0.4	0.1	---
ISOBUTANE	0.3	TRACE	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	0.7	3.8	1.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	4.6	0.2	0.1
HELIUM	0.02	0.17	0.07
HEATING VALUE*	1033	977	994
SPECIFIC GRAVITY	0.648	0.575	0.562

	INDEX 3655 SAMPLE 15993	INDEX 3656 SAMPLE 2179	INDEX 3657 SAMPLE 9159
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	BLACK COULEE	BOWES	BOWES
WELL NAME	STATE NO. 14-36	NO. 6	O. R. STEVENS NO. 1
LOCATION	SEC. 36, T32N, R18E	SEC. 9, T31N, R19E	SEC. 26, T32N, R19E
OWNER	MONTANA POWER CO.	MID-NORTHERN OIL CO.	TEXACO INC.
COMPLETED	12/26/79	09/26/29	07/08/57
SAMPLED	06/24/80	09/18/30	11/05/63
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1148	1060	735
WELLHEAD PRESSURE,PSIG	349	250	181
OPEN FLOW, MCFD	3215	17500	1395
COMPONENT, MOLE PCT			
METHANE	95.6	89.0	94.0
ETHANE	0.5	0.2	0.5
PROPANE	0.1	---	0.1
N-BUTANE	TRACE	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	TRACE	---	0.0
NITROGEN	3.6	10.6	5.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.08	0.11	0.10
HEATING VALUE*	980	905	960
SPECIFIC GRAVITY	0.573	0.599	0.580

	INDEX 3658 SAMPLE 2366	INDEX 3659 SAMPLE 1262	INDEX 3660 SAMPLE 14915
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	BOX ELDER	CHINOOK	LEROY
WELL NAME	PERKINS, STRANAHAN NO. 1	NO. 1	GEORGE BLEMA NO. 1
LOCATION	SEC. 14, T32N, R17E	SEC. 9, T31N, R19E	SEC. 11, T29N, R18E
OWNER	H. A. PERKINS	CALIFORNIA CO.	GUTHRIE OIL & GAS CO.
COMPLETED	06/17/31	--/--/24	10/07/76
SAMPLED	07/27/31	05/--/26	02/10/77
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1272	1026	1530
WELLHEAD PRESSURE,PSIG	425	245	406
OPEN FLOW, MCFD	7250	25000	2875
COMPONENT, MOLE PCT			
METHANE	93.7	95.7	94.7
ETHANE	1.7	0.3	0.3
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	4.3	3.1	4.8
OXYGEN	0.2	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.04	0.10	0.07
HEATING VALUE*	980	975	965
SPECIFIC GRAVITY	0.583	0.576	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3661 SAMPLE 13190	INDEX 3662 SAMPLE 13183	INDEX 3663 SAMPLE 13184
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SAWTOOTH MOUNTAIN	SHERARD	SHERARD
WELL NAME	MOORE NO. 33-14	ROBINSON NO. 11-34	ROBINSON NO. 11-34
LOCATION	SEC. 14, T27N, R18E	SEC. 34, T26N, R19E	SEC. 34, T26N, R19E
OWNER	WISE OIL CO.	WISE OIL CO.	WISE OIL CO.
COMPLETED	02/18/72	08/30/71	08/30/71
SAMPLED	04/11/72	04/07/72	04/07/72
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1850	1508	850
WELLHEAD PRESSURE,PSIG	480	521	210
OPEN FLOW, MCFD	743	10088	444
COMPONENT, MOLE PCT			
METHANE	87.1	94.2	95.1
ETHANE	2.7	0.4	0.3
PROPANE	1.5	0.1	TRACE
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	7.1	5.2	4.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.08	0.08	0.08
HEATING VALUE*	1019	964	969
SPECIFIC GRAVITY	0.633	0.578	0.573

	INDEX 3664 SAMPLE 13191	INDEX 3665 SAMPLE 13464	INDEX 3666 SAMPLE 13465
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SHERARD	SHERARD	SHERARD
WELL NAME	ROBINSON NO. 11-13	WILLIAMSON NO. 68-9	FED. NO. 11-15
LOCATION	SEC. 13, T26N, R19E	SEC. 9, T26N, R19E	SEC. 15, T25N, R18E
OWNER	WISE OIL CO.	WISE OIL CO.	WISE OIL CO.
COMPLETED	10/10/71	04/20/72	09/28/71
SAMPLED	04/11/72	10/05/72	11/05/72
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	400	1990	1558
WELLHEAD PRESSURE,PSIG	100	NOT GIVEN	500
OPEN FLOW, MCFD	65	8900	2600
COMPONENT, MOLE PCT			
METHANE	94.0	90.6	94.8
ETHANE	0.3	0.4	0.3
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	5.5	8.6	4.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.08	0.12	0.07
HEATING VALUE*	960	928	966
SPECIFIC GRAVITY	0.579	0.591	0.574

	INDEX 3667 SAMPLE 13466	INDEX 3668 SAMPLE 16192	INDEX 3669 SAMPLE 11966
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SHERARD	SHERARD	TIGER RIDGE
WELL NAME	FED. NO. 11-15	U.S. NO. 6-15	DEMBSON NO. 3-2
LOCATION	SEC. 15, T25N, R18E	SEC. 6, T25N, R18E	SEC. 3, T30N, R18E
OWNER	WISE OIL CO.	TRICENTROL U.S., INC.	HIGH CREST OILS, INC.
COMPLETED	09/28/71	--/--/00	04/04/67
SAMPLED	11/05/72	02/19/81	07/11/69
FORMATION	CRET-JUDITH RIVER	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	805	1580	1204
WELLHEAD PRESSURE,PSIG	200	460	307
OPEN FLOW, MCFD	40	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.8	95.5	94.0
ETHANE	0.3	0.3	1.5
PROPANE	0.1	TRACE	0.6
N-BUTANE	TRACE	0.0	0.2
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	5.5	3.5	3.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.09	0.05	0.09
HEATING VALUE*	958	986	1011
SPECIFIC GRAVITY	0.580	0.578	0.586

	INDEX 3670 SAMPLE 7489	INDEX 3671 SAMPLE 7635	INDEX 3672 SAMPLE 5039
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARBON
FIELD	BELFRY	BELFRY	CLARKS FORK
WELL NAME	BELFRY UNIT NO. 1	BELFRY UNIT NO. 1	MCCLELLAN-GOVT. NO. 1
LOCATION	SEC. 7, T9S, R22E	SEC. 7, T9S, R22E	SEC. 26, T9S, R22E
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	BRITISH AMERICAN OIL PROD. C
COMPLETED	03/22/58	03/22/58	04/20/51
SAMPLED	04/01/60	08/03/60	05/10/51
FORMATION	CRET-CLOVERLY	CRET-L	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	9843	9844	7536
WELLHEAD PRESSURE,PSIG	2390	2390	1325
OPEN FLOW, MCFD	4	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	3.3	76.4	81.2
ETHANE	1.0	13.6	11.7
PROPANE	0.4	5.0	3.6
N-BUTANE	0.1	1.3	0.6
ISOBUTANE	0.1	0.6	0.4
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	93.8	0.9	1.1
OXYGEN	0.0	TRACE	0.1
ARGON	1.1	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.3	---
CARBON DIOXIDE	0.2	1.3	0.9
HELIUM	0.01	0.02	0.04
HEATING VALUE*	68	1244	1173
SPECIFIC GRAVITY	0.965	0.731	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3673 SAMPLE 8961	INDEX 3674 SAMPLE 9555	INDEX 3675 SAMPLE 1771
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARBON
FIELD	CLARKS FORK	CLARKS FORK	DRY CREEK
WELL NAME	TEXACO-GOVT. C-NO. 1	GOVT. C NO. 1	NO. 1
LOCATION	SEC. 27, T9S, R22E	SEC. 27, T9S, R22E	SEC. 11, T7S, R21E
OWNER	TEXACO INC.	TEXACO INC.	OHIO OIL CO.
COMPLETED	02/--/63	07/23/63	--/--/00
SAMPLED	05/17/63	08/31/64	05/11/29
FORMATION	CRET-GREYBULL	CRET-GREYBULL	CRET-EAGLE
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	7920	7927	2350
WELLHEAD PRESSURE,PSIG	1878	NOT GIVEN	968
OPEN FLOW, MCFD	316	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	66.8	65.1	85.6
ETHANE	13.8	13.9	12.6
PROPANE	6.5	6.9	---
N-BUTANE	2.2	2.5	---
ISOBUTANE	1.8	1.3	---
N-PENTANE	0.7	0.7	---
ISOPENTANE	0.5	0.8	---
CYCLOPENTANE	0.3	0.3	---
HEXANES PLUS	0.8	1.0	---
NITROGEN	6.1	6.4	0.6
OXYGEN	0.7	0.1	0.2
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.9	1.1
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1303	1342	1093
SPECIFIC GRAVITY	0.819	0.844	0.632

	INDEX 3676 SAMPLE 1772	INDEX 3677 SAMPLE 2178	INDEX 3678 SAMPLE 2199
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARBON
FIELD	DRY CREEK	DRY CREEK	DRY CREEK
WELL NAME	NO. 1	NORTHERN PACIFIC NO. 1	NORTHERN PACIFIC NO. 2
LOCATION	SEC. 11, T7S, R21E	SEC. 11, T7S, R21E	SEC. 11, T7S, R21E
OWNER	OHIO OIL CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	--/--/00	03/31/29	--/--/00
SAMPLED	05/11/29	09/29/30	10/06/30
FORMATION	CRET-EAGLE	CRET-FRONTIER	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4450	4410	5412
WELLHEAD PRESSURE,PSIG	1400	1318	NOT GIVEN
OPEN FLOW, MCFD	6500	9000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.7	83.0	7.0
ETHANE	14.0	12.8	92.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.9	3.0	0.1
OXYGEN	0.3	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	1.1	0.5
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1099	1070	1727
SPECIFIC GRAVITY	0.640	0.641	1.018

	INDEX 3679 SAMPLE 9136	INDEX 3680 SAMPLE 14391	INDEX 3681 SAMPLE 9135
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARBON
FIELD	DRY CREEK	DRY CREEK	GOLDEN DOME
WELL NAME	CHAPMAN NO. 24	ROBINSON NO. 15	J. KUCKINSKI NO. 1
LOCATION	SEC. 2, T7S, R21E	SEC. 3, T7S, R21E	SEC. 14, T7S, R22E
OWNER	MARATHON OIL CO.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	04/--/54	08/01/72	10/31/61
SAMPLED	10/29/63	04/09/75	10/24/63
FORMATION	CRET-FRONTIER	CRET-JUDITH RIVER	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4062	1884	2633
WELLHEAD PRESSURE,PSIG	421	375	495
OPEN FLOW, MCFD	1800	500000	400
COMPONENT, MOLE PCT			
METHANE	88.9	87.2	86.7
ETHANE	6.8	7.1	5.4
PROPANE	1.4	2.3	2.1
N-BUTANE	0.3	0.4	0.9
ISOBUTANE	0.5	0.8	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.4	0.4	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.9	1.5	3.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.03	0.10
HEATING VALUE*	1122	1142	1126
SPECIFIC GRAVITY	0.635	0.653	0.659

	INDEX 3682 SAMPLE 16764	INDEX 3683 SAMPLE 17752	INDEX 3684 SAMPLE 11427
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARBON	CARBON	CARTER
FIELD	GOLDEN DOME	NOT GIVEN	BELL CREEK
WELL NAME	RIECKEN NO. 16-11	NEMION NO. 1	ESPY NO. 6-1
LOCATION	SEC. 11, T7S, R22E	SEC. 21, T4S, R23E	SEC. 6, T8S, R59E
OWNER	MONTANA POWER CO.	YVC, INC.	SINCLAIR OIL & GAS CO.
COMPLETED	08/--/82	02/--/83	09/08/67
SAMPLED	02/03/83	07/08/85	04/03/68
FORMATION	CRET-GREYBULL	CRET-BIG ELK	CRET-MUDDY
GEOLOGIC PROVINCE CODE	520	520	395
DEPTH, FEET	5442	823	4368
WELLHEAD PRESSURE,PSIG	1673	200	1062
OPEN FLOW, MCFD	900	20	14500
COMPONENT, MOLE PCT			
METHANE	71.0	83.1	94.4
ETHANE	13.2	0.1	0.3
PROPANE	6.1	TRACE	0.1
N-BUTANE	2.3	0.0	0.2
ISOBUTANE	1.4	0.0	0.1
N-PENTANE	0.4	0.0	0.1
ISOPENTANE	1.5	0.0	0.1
CYCLOPENTANE	0.2	0.0	0.1
HEXANES PLUS	0.6	0.0	0.2
NITROGEN	2.8	16.5	4.4
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.13	0.01	0.02
HEATING VALUE*	1359	844	997
SPECIFIC GRAVITY	0.807	0.625	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 3685 SAMPLE 11428	INDEX 3686 SAMPLE 2157	INDEX 3687 SAMPLE 2854
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CARTER	CARTER	CASCADE
FIELD	BELL CREEK	WOLF CREEK	VAUGHN
WELL NAME	ESPY NO. 7-1	NO. 1	SHANNON-ROBERTS NO. 1
LOCATION	SEC. 7, T8S, R55E	SEC. 7, T8S, R57E	SEC. 12, T20N, R1E
OWNER	SINCLAIR OIL & GAS CO.	JOHN R. POSS	BUSHFORD PETROLEUM SYND.
COMPLETED	10/04/67	--/--/00	--/--/00
SAMPLED	04/03/68	09/26/30	01/15/41
FORMATION	CRET-MUDDY	NOT GIVEN	DEVO-
GEOLOGIC PROVINCE CODE	395	395	500
DEPTH, FEET	4478	NOT GIVEN	3168
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	50
OPEN FLOW, MCFD	2000	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	94.3	97.0	1.8
ETHANE	0.5	0.0	0.0
PROPANE	0.1	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	4.3	2.7	28.9
OXYGEN	0.0	0.1	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	19.5
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	49.4
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	995	983	86
SPECIFIC GRAVITY	0.590	0.570	1.063

	INDEX 3688 SAMPLE 2305	INDEX 3689 SAMPLE 14328	INDEX 3690 SAMPLE 14943
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CHOUTEAU	CHOUTEAU	CHOUTEAU
FIELD	BARE PAW MOUNTAIN	BULLWACKER	BULLWACKER
WELL NAME	COOLEGE & COOLEGE	NORDEN NO. 3	HENDERSON NO. 5-27
LOCATION	SEC. 17, T25N, R17E	SEC. 29, T27N, R17E	SEC. 27, T27N, R17E
OWNER	COOLEGE & COOLEGE	ROLAND S. BOND	MONTANA POWER CO.
COMPLETED	01/01/22	09/23/74	09/03/76
SAMPLED	03/28/31	11/25/74	03/16/77
FORMATION	NOT GIVEN	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1700	2052	2365
WELLHEAD PRESSURE,PSIG	570	525	436
OPEN FLOW, MCFD	7000	2434	2000
COMPONENT, MOLE PCT			
METHANE	95.4	87.2	95.2
ETHANE	0.0	3.0	2.8
PROPANE	---	1.4	1.5
N-BUTANE	---	0.3	0.4
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	4.3	7.5	0.3
OXYGEN	0.1	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.05	0.08	0.10
HEATING VALUE*	966	1007	994
SPECIFIC GRAVITY	0.575	0.630	0.640

	INDEX 3691 SAMPLE 17414	INDEX 3692 SAMPLE 15880	INDEX 3693 SAMPLE 2328
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CHOUTEAU	CHOUTEAU	CHOUTEAU
FIELD	BULLWACKER	CHIP CREEK	SAND CREEK
WELL NAME	KANE NO. 3-28	STATE NO. 2-16	A. HUEBSCHWERTEN NO. 1
LOCATION	SEC. 28, T27N, R16E	SEC. 16, T26N, R17E	SEC. 17, T25N, R17E
OWNER	MONTANA POWER CO.	CANNEE OIL & GAS CO.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	09/11/80	08/29/79	04/05/23
SAMPLED	09/11/80	01/10/80	05/03/31
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2042	1444	1748
WELLHEAD PRESSURE,PSIG	527	389	570
OPEN FLOW, MCFD	2200	2125	7000
COMPONENT, MOLE PCT			
METHANE	87.2	91.4	90.0
ETHANE	4.0	0.4	2.0
PROPANE	1.5	0.1	---
N-BUTANE	0.3	0.1	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	6.1	7.7	6.4
OXYGEN	TRACE	TRACE	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.1	0.7
HELIUM	0.08	0.13	0.05
HEATING VALUE*	1024	939	948
SPECIFIC GRAVITY	0.631	0.591	0.603

	INDEX 3694 SAMPLE 13182	INDEX 3695 SAMPLE 13463	INDEX 3696 SAMPLE 9149
STATE	MONTANA	MONTANA	MONTANA
COUNTY	CHOUTEAU	CHOUTEAU	DAWSON
FIELD	SHERARD	WILDCAT	SAND CREEK
WELL NAME	FED. NO. 10-29	STATE NO. 24-16	R. N. GUEFF NO. 1
LOCATION	SEC. 29, T26N, R17E	SEC. 16, T25N, R17E	SEC. 4, T15N, R54E
OWNER	WISE OIL CO.	WISE OIL CO.	TEXACO INC.
COMPLETED	10/04/71	06/12/72	03/08/59
SAMPLED	04/07/72	11/05/72	11/01/65
FORMATION	CRET-EAGLE	CRET-EAGLE	SILU-INTERLAKE
GEOLOGIC PROVINCE CODE	500	500	395
DEPTH, FEET	1426	1706	8954
WELLHEAD PRESSURE,PSIG	360	590	NOT GIVEN
OPEN FLOW, MCFD	163	11000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.3	94.6	23.0
ETHANE	0.4	0.3	21.6
PROPANE	0.1	TRACE	21.8
N-BUTANE	0.0	TRACE	11.3
ISOBUTANE	0.0	TRACE	2.1
N-PENTANE	0.0	TRACE	4.8
ISOPENTANE	0.0	TRACE	3.2
CYCLOPENTANE	0.0	TRACE	0.2
HEXANES PLUS	0.0	TRACE	0.7
NITROGEN	8.0	4.8	8.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	2.1
HELIUM	0.11	0.05	0.10
HEATING VALUE*	955	964	2023
SPECIFIC GRAVITY	0.589	0.574	1.318

*) CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**) DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3697 SAMPLE 5601	INDEX 3698 SAMPLE 746	INDEX 3699 SAMPLE 1667
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	CABIN CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	UNIT NO. 11-33	MONTANA PETROLEUM CO. NO. 1	FINDLATER NO. 1
LOCATION	SEC. 33, T10N, R58E	SEC. 13, T7N, R59E	SEC. 13, T7N, R59E
OWNER	SHELL OIL CO.	MONTANA PETROLEUM CO.	J. G. FINDLATER
COMPLETED	--/--/00	--/--/17	06/--/28
SAMPLED	02/10/54	04/--/22	08/03/28
FORMATION	CAMB--	NOT GIVEN	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	10086	1440	491
WELLHEAD PRESSURE,PSIG	4360	150	95
OPEN FLOW, MCFD	60000	NOT GIVEN	468
COMPONENT, MOLE PCT			
METHANE	7.5	99.5	92.7
ETHANE	1.1	0.0	2.0
PROPANE	0.5	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	89.3	0.0	4.2
OXYGEN	0.0	0.3	0.5
ARGON	0.2	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.7	0.1	0.6
HELIUM	0.40	0.08	0.18
HEATING VALUE*	117	1008	975
SPECIFIC GRAVITY	0.944	0.557	0.590

	INDEX 3700 SAMPLE 2082	INDEX 3701 SAMPLE 2418	INDEX 3702 SAMPLE 2419
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	MONARCH NO. 6	NO. 46	NO. 7
LOCATION	SEC. 12, T5N, R59E	SEC. 36, T9N, R58E	SEC. 27, T10N, R58E
OWNER	MONARCH GAS CORP.	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.
COMPLETED	--/--/00	08/01/29	10/04/26
SAMPLED	06/26/30	10/10/31	10/10/31
FORMATION	CRET-EAGLE	CRET-JUDITH RIVER	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1985	718	864
WELLHEAD PRESSURE,PSIG	NOT GIVEN	210	210
OPEN FLOW, MCFD	15	26500	8000
COMPONENT, MOLE PCT			
METHANE	97.7	85.8	92.6
ETHANE	0.0	5.0	1.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	8.5	5.2
OXYGEN	0.2	0.6	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.09	0.13	0.14
HEATING VALUE*	990	959	972
SPECIFIC GRAVITY	0.565	0.619	0.588

	INDEX 3703 SAMPLE 2420	INDEX 3704 SAMPLE 2424	INDEX 3705 SAMPLE 2426
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	NO. 11	NO. 105	NO. 40
LOCATION	SEC. 36, T11N, R57E	SEC. 23, T8N, R59E	SEC. 2, T5N, R60E
OWNER	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.
COMPLETED	07/07/27	07/13/31	08/12/29
SAMPLED	10/10/31	10/11/31	10/11/31
FORMATION	CRET-JUDITH RIVER	CRET-JUDITH RIVER	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	761	762	937
WELLHEAD PRESSURE,PSIG	200	193	200
OPEN FLOW, MCFD	1000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.4	91.9	92.4
ETHANE	0.0	2.5	1.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.5	5.5	5.9
OXYGEN	0.0	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.12	0.11	0.09
HEATING VALUE*	956	976	965
SPECIFIC GRAVITY	0.578	0.591	0.588

	INDEX 3706 SAMPLE 2427	INDEX 3707 SAMPLE 2559	INDEX 3708 SAMPLE 2561
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	CEDAR CREEK	CEDAR CREEK	CEDAR CREEK
WELL NAME	NO. 2	GAS DEVELOPMENT CO. NO. 93	GAS DEVELOPMENT CO. NO. 81
LOCATION	SEC. 28, T8N, R60E	SEC. 18, T7N, R60E	SEC. 2, T8N, R59E
OWNER	H. M. MCDONALD	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.
COMPLETED	09/01/31	12/--/16	07/12/29
SAMPLED	10/12/31	09/27/32	09/27/32
FORMATION	CRET-EAGLE	CRET-JUDITH RIVER	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1662	799	1009
WELLHEAD PRESSURE,PSIG	NOT GIVEN	135	197
OPEN FLOW, MCFD	NOT GIVEN	1500	1187
COMPONENT, MOLE PCT			
METHANE	93.9	95.9	96.0
ETHANE	1.6	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	3.9	3.6
OXYGEN	0.1	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.0
HELIUM	0.10	0.10	0.12
HEATING VALUE*	980	971	972
SPECIFIC GRAVITY	0.583	0.571	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3709 SAMPLE 9122	INDEX 3710 SAMPLE 9123	INDEX 3711 SAMPLE 934
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FERGUS
FIELD	CEDAR CREEK	CEDAR CREEK	ANNELLS
WELL NAME	NO. 94	NO. 365	ROMUNDSTAD NO. 1-A
LOCATION	SEC. 18, T7N, R60E	SEC. 29, T7N, R60E	SEC. 4, T17N, R20E
OWNER	MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA UTILITIES CO.	CALIFORNIA CO.
COMPLETED	--/--/18	10/04/49	--/--/00
SAMPLED	10/24/63	10/24/63	08/08/24
FORMATION	CRET-JUDITH RIVER	CRET-EAGLE	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	395	395	510
DEPTH, FEET	837	1315	1240
WELLHEAD PRESSURE,PSIG	NOT GIVEN	322	345
OPEN FLOW, MCFD	295	180	3000
COMPONENT, MOLE PCT			
METHANE	95.4	95.3	42.3
ETHANE	0.2	0.4	0.4
PROPANE	0.1	0.2	---
N-BUTANE	0.0	TRACE	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	4.1	3.9	55.3
OXYGEN	0.0	0.0	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.10	0.10	0.60
HEATING VALUE*	973	978	936
SPECIFIC GRAVITY	0.574	0.575	0.789

	INDEX 3712 SAMPLE 935	INDEX 3713 SAMPLE 2248	INDEX 3714 SAMPLE 17390
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FERGUS	FERGUS	FERGUS
FIELD	ANNELLS	ANNELLS	LERDY
WELL NAME	EDWARDS NO. 1	NO. 1	FED. NO. N-27-23-19-N
LOCATION	SEC. 3, T17N, R20E	SEC. 4, T17N, R20E	SEC. 27, T23N, R19E
OWNER	CALIFORNIA CO.	G. LANDHEIM	FUEL RESOURCES DEV. CO.
COMPLETED	--/--/00	12/13/30	08/23/84
SAMPLED	08/08/24	12/16/30	08/23/84
FORMATION	NOT GIVEN	CRET-KOOTENAI	CRET-EAGLE
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	1470	1238	1323
WELLHEAD PRESSURE,PSIG	345	400	275
OPEN FLOW, MCFD	2900	2590	120
COMPONENT, MOLE PCT			
METHANE	38.7	42.1	93.1
ETHANE	1.0	1.2	0.3
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	58.3	56.0	6.2
OXYGEN	0.8	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	0.60	0.64	0.08
HEATING VALUE*	410	448	948
SPECIFIC GRAVITY	0.806	0.790	0.582

	INDEX 3715 SAMPLE 670	INDEX 3716 SAMPLE 1396	INDEX 3717 SAMPLE 17640
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FERGUS	GALLATIN	GLACIER
FIELD	MERCER DOME	NOT GIVEN	BIG ROCK
WELL NAME	WELL NO. 1	SPRING	JAMES BOT HEIRS NO.11-8
LOCATION	SEC. 4, T14N, R20E	SEC. 8, T3N, R3E	SEC. 8, T36N, R6W
OWNER	GAULT INVESTMENT CO.	W. L. STOCKTON	MONTANA POWER CO.
COMPLETED	06/01/18	--/--/00	08/21/84
SAMPLED	09/--/21	05/27/27	09/02/85
FORMATION	NOT GIVEN	NOT GIVEN	CRET-BLACK LEAF
GEOLOGIC PROVINCE CODE	510	505	500
DEPTH, FEET	194	NOT GIVEN	2035
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	170
OPEN FLOW, MCFD	10	NOT GIVEN	101
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	82.9
ETHANE	0.0	1.9	3.1
PROPANE	---	---	3.4
N-BUTANE	---	---	1.4
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	99.7	91.9	6.9
OXYGEN	0.2	0.8	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	4.6	0.1
HELIUM	0.08	0.76	0.35
HEATING VALUE*	0	34	1094
SPECIFIC GRAVITY	0.967	0.989	0.682

	INDEX 3718 SAMPLE 17878	INDEX 3719 SAMPLE 1842	INDEX 3720 SAMPLE 2154
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	BIG ROCK	CUT BANK	CUT BANK
WELL NAME	TRIBAL 355 NO. 10-11	TUNCK NO. 1	TUNCK NO. 1
LOCATION	SEC. 10, T37N, R7W	SEC. 1, T34N, R6W	SEC. 1, T34N, R6W
OWNER	MONTANA POWER CO.	PAR OIL CO.	JOSEPH DRUMHELLER
COMPLETED	07/--/85	08/26/29	08/02/29
SAMPLED	10/22/85	08/28/29	09/26/30
FORMATION	CRET-BLACK LEAF	MISS-MADISON	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	500	505	500
DEPTH, FEET	2197	NOT GIVEN	2710
WELLHEAD PRESSURE,PSIG	1232	NOT GIVEN	595
OPEN FLOW, MCFD	300	5000	6250
COMPONENT, MOLE PCT			
METHANE	76.7	86.2	80.6
ETHANE	7.9	9.1	13.5
PROPANE	6.4	---	---
N-BUTANE	2.5	---	---
ISOBUTANE	1.0	---	---
N-PENTANE	0.5	---	---
ISOPENTANE	0.6	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	3.2	3.8	4.2
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.1	1.5
HELIUM	0.16	0.55	0.18
HEATING VALUE*	1278	1036	1058
SPECIFIC GRAVITY	0.761	0.615	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3721 SAMPLE 2155	INDEX 3722 SAMPLE 4258	INDEX 3723 SAMPLE 7944
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	CUT BANK	CUT BANK
WELL NAME	MICHAEL NO. 1	MCGUINNESS NO. 8	WARFIELD U 1
LOCATION	SEC. 28, T36N, R5W	SEC. 6, T35N, R6W	SEC. 7, T35N, R5W
OWNER	O'NEIL & HILL	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	08/10/30	01/21/47	05/20/36
SAMPLED	09/26/30	05/12/47	04/27/61
FORMATION	CRET-KOOTENAI	CRET-KOOTENAI	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2755	2804	2977
WELLHEAD PRESSURE,PSIG	760	477	215
OPEN FLOW, MCFD	15000	8600	940
COMPONENT, MOLE PCT			
METHANE	78.6	76.4	77.4
ETHANE	13.1	17.4	7.8
PROPANE	---	---	3.2
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	4.8	4.1	5.0
OXYGEN	0.1	0.2	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	3.2	1.7	5.0
HELIUM	0.15	0.15	0.20
HEATING VALUE*	1031	1086	1064
SPECIFIC GRAVITY	0.670	0.674	0.721

	INDEX 3724 SAMPLE 7945	INDEX 3725 SAMPLE 9142	INDEX 3726 SAMPLE 9146
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	CUT BANK	CUT BANK
WELL NAME	MCNAMER N 4	ANTRIM NO. 3	THAYER NO. 2
LOCATION	SEC. 14, T36N, R5W	SEC. 34, T35N, R6W	SEC. 21, T35N, R6W
OWNER	MONTANA POWER CO.	TEXACO INC.	TEXACO INC.
COMPLETED	04/21/59	07/01/34	10/05/44
SAMPLED	04/27/61	11/05/63	11/04/63
FORMATION	MISS-MADISON	CRET-CUT BANK	CRET-BLACK LEAF
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2825	2918	1725
WELLHEAD PRESSURE,PSIG	755	50	52
OPEN FLOW, MCFD	5900	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.7	58.6	85.1
ETHANE	6.3	17.6	2.7
PROPANE	2.3	10.5	2.3
N-BUTANE	0.6	4.1	1.1
ISOBUTANE	0.6	1.3	0.9
N-PENTANE	0.1	0.8	0.2
ISOPENTANE	0.1	1.3	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	4.9	2.2	7.1
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	2.7	0.1
HELIUM	0.20	0.04	0.08
HEATING VALUE*	1054	1492	1051
SPECIFIC GRAVITY	0.681	0.923	0.657

	INDEX 3727 SAMPLE 9150	INDEX 3728 SAMPLE 9163	INDEX 3729 SAMPLE 10830
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	CUT BANK	CUT BANK
WELL NAME	ARONSON NO. 2	OF STUFF NO. 3	ELMER NO. 1
LOCATION	SEC. 21, T35N, R6W	SEC. 30, T36N, R5W	SEC. 3, T36N, R5W
OWNER	TEXACO INC.	TEXACO INC.	MONTANA POWER CO.
COMPLETED	01/19/41	01/06/48	--/--/00
SAMPLED	11/04/63	11/04/63	01/03/67
FORMATION	ORDO-LANDER	MISS-MADISON	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2953	3221	2676
WELLHEAD PRESSURE,PSIG	50	NOT GIVEN	715
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	41.0	77.8	82.0
ETHANE	25.4	8.5	6.0
PROPANE	13.9	4.1	2.3
N-BUTANE	7.0	1.4	0.5
ISOBUTANE	2.0	0.5	0.3
N-PENTANE	1.7	0.4	0.1
ISOPENTANE	2.9	0.3	0.9
CYCLOPENTANE	0.4	TRACE	TRACE
HEXANES PLUS	1.8	0.2	0.1
NITROGEN	1.3	3.6	6.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	3.0	1.1
HELIUM	0.00	0.10	0.25
HEATING VALUE*	1859	1151	1041
SPECIFIC GRAVITY	1.126	0.728	0.663

	INDEX 3730 SAMPLE 14453	INDEX 3731 SAMPLE 6735	INDEX 3732 SAMPLE 8543
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	DARLING AREA	TWO MEDICINE CREEK
WELL NAME	CLAPPER NO U-1	MOBERLY NO. 1	TWO MEDICINE NO. 1
LOCATION	SEC. 27, T35N, R5W	SEC. 1, T37N, R5W	SEC. 9, T31N, R11W
OWNER	MONTANA POWER CO.	FRART ASSOC.	MONTANA POWER CO.
COMPLETED	08/13/35	01/14/58	--/--/61
SAMPLED	05/05/75	07/15/58	05/02/62
FORMATION	CRET-KOOTENAI	CRET-CUT BANK	MISS-MADISON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2625	2600	8895
WELLHEAD PRESSURE,PSIG	710	829	2268
OPEN FLOW, MCFD	15365	600	808
COMPONENT, MOLE PCT			
METHANE	75.8	92.3	78.6
ETHANE	7.9	2.1	7.5
PROPANE	4.0	0.8	2.6
N-BUTANE	1.3	0.4	0.6
ISOBUTANE	0.7	0.2	0.3
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	5.3	0.9	4.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.0	2.7	5.4
HELIUM	0.14	0.05	0.05
HEATING VALUE*	1121	1036	1051
SPECIFIC GRAVITY	0.743	0.622	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3733 SAMPLE 9154		INDEX 3734 SAMPLE 9250		INDEX 3735 SAMPLE 14672	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	GOLDEN VALLEY		GOLDEN VALLEY		HILL	
FIELD	BIG COULEE		BIG COULEE		BADLANDS	
WELL NAME	N. N. STATE 36		N. N. N. P. B-1		PAPILLO NO. 28-1	
LOCATION	SEC. 36, T5N, R19E		SEC. 31, T5N, R20E		SEC. 28, T33N, R15E	
OWNER	NORTHERN NATURAL GAS PROD. C		UNION OIL CO. OF CALIF.		J. BURNS BROWN	
COMPLETED	10/16/59		--/--/00		--/--/75	
SAMPLED	10/23/63		02/28/64		05/12/76	
FORMATION	CRET-CAT CREEK 3RD		CRET-CAT CREEK 3RD		CRET-EAGLE	
GEOLOGIC PROVINCE CODE	515		515		500	
DEPTH, FEET	1987		NOT GIVEN		1000	
WELLHEAD PRESSURE,PSIG	888		882		450	
OPEN FLOW, MCFD	12700		NOT GIVEN		1400	
COMPONENT, MOLE PCT						
METHANE	90.3		89.8		93.5	
ETHANE	0.4		0.3		0.4	
PROPANE	0.2		0.3		0.1	
N-BUTANE	0.0		0.0		TRACE	
ISOBUTANE	0.0		0.0		0.1	
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.0		0.0		TRACE	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		TRACE	
NITROGEN	8.5		8.6		5.1	
OXYGEN	TRACE		0.0		0.4	
ARGON	0.1		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.7		0.2	
HELIUM	0.30		0.25		0.08	
HEATING VALUE*	927		923		960	
SPECIFIC GRAVITY	0.595		0.601		0.583	

	INDEX 3736 SAMPLE 14673		INDEX 3737 SAMPLE 10362		INDEX 3738 SAMPLE 17430	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	HILL		HILL		HILL	
FIELD	BADLANDS		CANADIAN COULEE		FRESNO	
WELL NAME	MILAN NO. 25-1		C. LINEWEAVER NO. 1		STATE NO. 3-36	
LOCATION	SEC. 25, T33N, R14E		SEC. 4, T36N, R8E		SEC. 36, T35N, R13E	
OWNER	J. BURNS BROWN		PAN AMERICAN PETROLEUM CORP.		WESTERN NATURAL GAS CO.	
COMPLETED	--/--/75		01/11/66		09/27/84	
SAMPLED	05/03/76		01/11/66		09/27/84	
FORMATION	CRET-EAGLE		JURA-SAWTOOTH		CRET-EAGLE	
GEOLOGIC PROVINCE CODE	500		500		500	
DEPTH, FEET	1000		3356		1000	
WELLHEAD PRESSURE,PSIG	450		1571		305	
OPEN FLOW, MCFD	1200		7300		200	
COMPONENT, MOLE PCT						
METHANE	96.7		96.8		96.6	
ETHANE	0.4		0.1		0.4	
PROPANE	0.1		0.0		TRACE	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	TRACE		0.0		0.0	
N-PENTANE	TRACE		0.0		0.0	
ISOPENTANE	TRACE		0.0		0.0	
CYCLOPENTANE	TRACE		0.0		0.0	
HEXANES PLUS	TRACE		0.0		0.0	
NITROGEN	2.7		1.7		2.8	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		1.4		TRACE	
HELIUM	0.08		0.05		0.08	
HEATING VALUE*	989		982		986	
SPECIFIC GRAVITY	0.568		0.576		0.567	

	INDEX 3739 SAMPLE 16153		INDEX 3740 SAMPLE 2308		INDEX 3741 SAMPLE 10368	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	HILL		HILL		HILL	
FIELD	GILDFORD		KREMLIN		NOT GIVEN	
WELL NAME	ARONOW NO. 1-7		ROEBUCK NO. 1		C. LINEWEAVER NO. 1	
LOCATION	SEC. 7, T33N, R11E		SEC. 20, T33N, R12E		SEC. 4, T36N, R8E	
OWNER	LARIO OIL & GAS CO.		JONES, RICE & PERKINS		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	12/16/80		--/--/00		12/26/65	
SAMPLED	12/17/80		03/29/31		12/20/65	
FORMATION	JURA-SAWTOOTH		-610 FEET		JURA-FIREMOON	
GEOLOGIC PROVINCE CODE	500		500		500	
DEPTH, FEET	3489		610		3406	
WELLHEAD PRESSURE,PSIG	1594		175		1564	
OPEN FLOW, MCFD	4855		200		4560	
COMPONENT, MOLE PCT						
METHANE	96.6		82.4		95.4	
ETHANE	0.1		0.0		0.1	
PROPANE	0.1		---		0.0	
N-BUTANE	0.1		---		0.0	
ISOBUTANE	0.1		---		0.0	
N-PENTANE	0.1		---		0.0	
ISOPENTANE	TRACE		---		0.0	
CYCLOPENTANE	0.1		---		0.0	
HEXANES PLUS	0.2		---		0.0	
NITROGEN	1.2		14.1		3.3	
OXYGEN	0.0		3.4		0.0	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	1.4		0.1		1.2	
HELIUM	0.02		0.05		0.04	
HEATING VALUE*	1008		835		968	
SPECIFIC GRAVITY	0.586		0.632		0.580	

	INDEX 3742 SAMPLE 13347		INDEX 3743 SAMPLE 6444		INDEX 3744 SAMPLE 7571	
STATE	MONTANA		MONTANA		MONTANA	
COUNTY	HILL		HILL		HILL	
FIELD	RED ROCK		RUDYARD		RUDYARD	
WELL NAME	WALTER E. PAULSON NO. 1		C. BRADBURY NO. 1		R. E. BAIR NO. 1	
LOCATION	SEC. 32, T34N, R17E		SEC. 10, T33N, R9E		SEC. 28, T34N, R9E	
OWNER	AMOCO PRODUCTION CO.		TEXAS CO.		TEXACO INC.	
COMPLETED	07/16/72		08/03/57		07/06/60	
SAMPLED	07/18/72		11/13/57		06/09/60	
FORMATION	CRET-EAGLE		JURA-SAWTOOTH		DEVO-SOURIS RIVER	
GEOLOGIC PROVINCE CODE	500		500		500	
DEPTH, FEET	1140		3380		5068	
WELLHEAD PRESSURE,PSIG	515		1550		2312	
OPEN FLOW, MCFD	335		2980		1150	
COMPONENT, MOLE PCT						
METHANE	96.2		96.7		4.5	
ETHANE	0.9		0.1		0.2	
PROPANE	TRACE		0.2		0.0	
N-BUTANE	TRACE		0.1		0.1	
ISOBUTANE	TRACE		0.1		0.2	
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.0		0.2		0.1	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	TRACE		0.1		0.1	
NITROGEN	3.2		0.7		92.8	
OXYGEN	TRACE		0.0		0.1	
ARGON	TRACE		0.0		0.2	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		1.7		0.7	
HELIUM	0.09		0.02		0.90	
HEATING VALUE*	982		1007		72	
SPECIFIC GRAVITY	0.569		0.585		0.955	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3745 SAMPLE 7572	INDEX 3746 SAMPLE 11720	INDEX 3747 SAMPLE 11721
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	HILL
FIELD	RUDYARD	TIGER RIDGE	TIGER RIDGE
WELL NAME	R. E. BAIR NO. 1	LUMPKIN NO. 23-1	SANDS NO. 15-1
LOCATION	SEC. 28, T34N, R9E	SEC. 23, T32N, R15E	SEC. 15, T32N, R15E
OWNER	TEXACO INC.	GOLDEN EAGLE EXPLORATION	GOLDEN EAGLE EXPLORATION
COMPLETED	07/06/60	10/10/68	08/--/68
SAMPLED	06/12/60	12/09/68	12/09/68
FORMATION	ORDO-RED RIVER	CRET-EAGLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	5263	1071	1010
WELLHEAD PRESSURE,PSIG	2130	450	435
OPEN FLOW, MCFD	3060	4000	3800
COMPONENT, MOLE PCT			
METHANE	0.9	90.0	96.4
ETHANE	TRACE	0.3	0.3
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	97.5	8.1	3.2
OXYGEN	0.3	1.2	0.0
ARGON	0.3	0.1	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	1.10	0.08	0.09
HEATING VALUE*	12	917	982
SPECIFIC GRAVITY	0.956	0.597	0.569

	INDEX 3748 SAMPLE 14330	INDEX 3749 SAMPLE 14333	INDEX 3750 SAMPLE 14850
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	HILL
FIELD	UNDESIGNATED	UNDESIGNATED	UNDESIGNATED
WELL NAME	CUNNINGHAM NO. 1	MILLER NO. 1	LONG NO. 30-15
LOCATION	SEC. 14, T34N, R16E	SEC. 29, T34N, R16E	SEC. 30, T34N, R15E
OWNER	WAINOCO, INC.	WAINOCO, INC.	OIL RESOURCES, INC.
COMPLETED	01/05/75	01/09/75	--/--/00
SAMPLED	05/11/75	05/11/75	10/26/76
FORMATION	CRET-EAGLE	CRET-VIRGELLE	CRET-EAGLE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	670	1489	NOT GIVEN
WELLHEAD PRESSURE,PSIG	270	320	410
OPEN FLOW, MCFD	2150	3400	16393
COMPONENT, MOLE PCT			
METHANE	97.0	96.3	96.8
ETHANE	0.3	0.3	0.4
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	2.6	3.2	2.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.08	0.09	0.07
HEATING VALUE*	988	981	990
SPECIFIC GRAVITY	0.566	0.568	0.569

	INDEX 3751 SAMPLE 13145	INDEX 3752 SAMPLE 13951	INDEX 3753 SAMPLE 1902
STATE	MONTANA	MONTANA	MONTANA
COUNTY	HILL	HILL	LIBERTY
FIELD	WILDCAT	WILDCAT	BEARS DEN
WELL NAME	GRANT NO. 12-22	MUELLER NO. 18-13	SUNBURST-RITTER NO. 1
LOCATION	SEC. 22, T34N, R15E	SEC. 18, T37N, R8E	SEC. 7, T36N, R6E
OWNER	WAINOCO OIL, LTD.	OIL RESOURCES, INC.	SUNBURST OIL & REFINING CO.
COMPLETED	12/13/71	12/07/73	06/21/27
SAMPLED	02/07/72	03/12/74	12/09/29
FORMATION	CRET-EAGLE	JURA-FIREHOON	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	602	3578	1783
WELLHEAD PRESSURE,PSIG	186	1441	400
OPEN FLOW, MCFD	4226	15500	14000
COMPONENT, MOLE PCT			
METHANE	96.4	97.6	89.9
ETHANE	0.2	0.1	4.1
PROPANE	0.1	0.1	---
N-BUTANE	0.0	TRACE	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	3.0	0.7	5.2
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	1.3	0.6
HELIUM	0.09	0.01	0.07
HEATING VALUE*	985	1002	984
SPECIFIC GRAVITY	0.569	0.575	0.603

	INDEX 3754 SAMPLE 12060	INDEX 3755 SAMPLE 9194	INDEX 3756 SAMPLE 4516
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	BLACK JACK	GRANDVIEW	KEITH BLOCK
WELL NAME	N. P. MCGREGOR NO. 32-34	BLAIR NO. 1	GEORGE COLBRY NO. 1
LOCATION	SEC. 32, T37N, R5E	SEC. 22, T34N, R4E	SEC. 13, T36N, R6E
OWNER	NORTHERN PACIFIC RAILWAY CO.	MONTANA POWER CO.	TEXAS CO.
COMPLETED	10/01/68	02/22/52	08/14/47
SAMPLED	09/30/69	12/02/63	05/05/48
FORMATION	CRET-SUNBURST	CRET-BOW ISLAND	MISS-L
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2420	1745	3005
WELLHEAD PRESSURE,PSIG	670	204	1215
OPEN FLOW, MCFD	2650	1520	8980
COMPONENT, MOLE PCT			
METHANE	97.2	95.4	97.4
ETHANE	0.2	0.7	1.1
PROPANE	TRACE	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.5	3.7	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	0.1	1.0
HELIUM	0.05	0.10	0.04
HEATING VALUE*	989	979	1006
SPECIFIC GRAVITY	0.569	0.579	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3757 SAMPLE 4517	INDEX 3758 SAMPLE 8812	INDEX 3759 SAMPLE 8813
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	KEITH BLOCK	KEITH BLOCK	KEITH BLOCK
WELL NAME	C. B. SORRELL-GOVT. NO. 1	KOLMEZ UNIT NO. 1	KOLMEI UNIT NO. 1
LOCATION	SEC. 29, T36N, R6E	SEC. 24, T36N, R6E	SEC. 20, T36N, R6E
OWNER	TEXAS CO.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED	03/03/47	08/07/62	08/07/62
SAMPLED	05/05/48	12/18/62	12/18/62
FORMATION	JURA-U	JURA-SAWTOOTH	CRET-BOW ISLAND
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2814	2850	1792
WELLHEAD PRESSURE,PSIG	750	818	595
OPEN FLOW, MCFD	998	2420	9000
COMPONENT, MOLE PCT			
METHANE	97.3	88.8	95.5
ETHANE	0.8	0.2	0.3
PROPANE	---	0.2	TRACE
N-BUTANE	---	0.1	TRACE
ISOBUTANE	---	TRACE	TRACE
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	0.8	7.9	3.7
OXYGEN	0.2	1.6	0.1
ARGON	---	0.1	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	1.0	0.2
HELIUM	0.05	0.05	0.09
HEATING VALUE*	1000	916	975
SPECIFIC GRAVITY	0.570	0.613	0.573

	INDEX 3760 SAMPLE 14887	INDEX 3761 SAMPLE 6993	INDEX 3762 SAMPLE 9620
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	KEITH BLOCK	KEITH E	MOUNT LILLY
WELL NAME	GUNDERSON NO. 13-34	T. W. COLBRY NO. 1	SCHAFER NO. 1
LOCATION	SEC. 34, T37N, R6E	SEC. 13, T36N, R6E	SEC. 20, T37N, R5E
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	CARDINAL PETROLEUM CO., ET A
COMPLETED	--/--/00	11/--/58	09/06/63
SAMPLED	01/22/77	03/06/59	10/16/64
FORMATION	JURA-SAWTOOTH	JURA-ELLIS & MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3150	NOT GIVEN	3020
WELLHEAD PRESSURE,PSIG	1177	1080	975
OPEN FLOW, MCFD	NOT GIVEN	25000	6190
COMPONENT, MOLE PCT			
METHANE	97.3	96.3	96.0
ETHANE	0.2	0.0	0.4
PROPANE	TRACE	0.3	0.3
N-BUTANE	TRACE	0.1	0.2
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.3	1.4	1.8
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	0.9
HELIUM	0.05	TRACE	0.06
HEATING VALUE*	989	1000	1007
SPECIFIC GRAVITY	0.568	0.587	0.584

	INDEX 3763 SAMPLE 15966	INDEX 3764 SAMPLE 16417	INDEX 3765 SAMPLE 4882
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	O'BRIENS COULEE	TRAIL CREEK	UTOPIA
WELL NAME	STATE NO. 6-17	STRATTON NO. 3-6	NICK LAAS NO. 2
LOCATION	SEC. 17, T35N, R7E	SEC. 6, T36N, R4E	SEC. 14, T33N, R4E
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	TEXAS CO.
COMPLETED	05/19/80	10/09/81	09/24/46
SAMPLED	05/16/80	01/26/82	03/16/50
FORMATION	CRET-WHITE SPECS	CRET-BOW ISLAND	DEVO-NISKU
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1752	1588	3540
WELLHEAD PRESSURE,PSIG	571	174	1360
OPEN FLOW, MCFD	1630	800	4347
COMPONENT, MOLE PCT			
METHANE	91.2	96.5	14.3
ETHANE	0.4	0.9	2.1
PROPANE	0.1	0.2	1.2
N-BUTANE	0.0	0.1	0.2
ISOBUTANE	0.0	TRACE	0.3
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	8.1	1.8	78.8
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	1.4
HELIUM	0.16	0.06	0.87
HEATING VALUE*	938	1015	248
SPECIFIC GRAVITY	0.592	0.577	0.931

	INDEX 3766 SAMPLE 9180	INDEX 3767 SAMPLE 9193	INDEX 3768 SAMPLE 2173
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	UTOPIA	UTOPIA	WHITLASH
WELL NAME	LAAS NO. 1	LAAS NO. 2	TOWNSMEND NO. 2
LOCATION	SEC. 14, T33N, R4E	SEC. 14, T34N, R4E	SEC. 22, T37N, R4E
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	WESTERN NATURAL GAS CO.
COMPLETED	09/11/44	09/24/46	08/05/29
SAMPLED	12/02/63	12/02/63	09/22/30
FORMATION	MISS-MADISON	JURA-SAWTOOTH	CRET-SHALE
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2346	2315	1565
WELLHEAD PRESSURE,PSIG	651	595	280
OPEN FLOW, MCFD	5400	9200	5000
COMPONENT, MOLE PCT			
METHANE	96.2	96.6	95.0
ETHANE	0.1	0.1	2.3
PROPANE	0.5	0.6	---
N-BUTANE	0.3	0.1	---
ISOBUTANE	0.1	0.1	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	TRACE	---
NITROGEN	1.0	0.9	2.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.5	1.5	0.1
HELIUM	0.03	0.03	0.05
HEATING VALUE*	1011	1007	1004
SPECIFIC GRAVITY	0.588	0.584	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3769 SAMPLE 2174	INDEX 3770 SAMPLE 2260	INDEX 3771 SAMPLE 2262
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	WHITLASH	WHITLASH	WHITLASH
WELL NAME	DOMR NO. 1	HAROLD BROWN NO. 1	ORR NO. 1
LOCATION	SEC. 17, T37N, R4E	SEC. 19, T37N, R4E	SEC. 22, T37N, R4E
OWNER	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	11/10/27	--/--/00	01/01/29
SAMPLED	09/22/30	01/14/31	01/14/31
FORMATION	CRET-SHALE	CRET-BLACK LEAF	JURA-ELLIS
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1485	1730	2200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	400
OPEN FLOW, MCFD	1500	10000	3000
COMPONENT, MOLE PCT			
METHANE	99.3	94.7	91.6
ETHANE	0.0	1.7	4.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	3.3	3.8
OXYGEN	0.1	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.09	0.07	0.07
HEATING VALUE*	1006	990	1005
SPECIFIC GRAVITY	0.558	0.579	0.594

	INDEX 3772 SAMPLE 2263	INDEX 3773 SAMPLE 2264	INDEX 3774 SAMPLE 2329
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	LIBERTY	LIBERTY
FIELD	WHITLASH	WHITLASH	WHITLASH
WELL NAME	ELMER BROWN NO. 1	MAHONEY NO. 1	MAHONEY NO. 1
LOCATION	SEC. 19, T37N, R4E	SEC. 23, T37N, R4E	SEC. 23, T37N, R4E
OWNER	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	--/--/00	11/01/30	12/22/30
SAMPLED	01/14/31	01/14/31	04/23/31
FORMATION	CRET-BLACK LEAF	CRET-SUNBURST	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1570	2066	2063
WELLHEAD PRESSURE,PSIG	350	700	600
OPEN FLOW, MCFD	8000	10700	9000
COMPONENT, MOLE PCT			
METHANE	95.0	86.1	87.1
ETHANE	1.5	8.9	8.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.1	4.5	3.6
OXYGEN	0.2	0.2	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.07	0.04	0.09
HEATING VALUE*	989	1032	1036
SPECIFIC GRAVITY	0.578	0.621	0.617

	INDEX 3775 SAMPLE 16865	INDEX 3776 SAMPLE 9658	INDEX 3777 SAMPLE 7454
STATE	MONTANA	MONTANA	MONTANA
COUNTY	LIBERTY	MCCONE	RUSSELSHELL
FIELD	WILDCAT	NOT GIVEN	BIG WALL
WELL NAME	IVA KOLSTAD NO. 1, ET AL.	FED. MCCONE NO. 1	MOFFETT NO. 3
LOCATION	SEC. 28, T29N, R4E	SEC. 22, T22N, R46E	SEC. 18, T10N, R27E
OWNER	LYTH CO., INC.	SINCLAIR OIL & GAS CO.	TEXACO INC.
COMPLETED	02/23/88	11/--/64	--/--/00
SAMPLED	04/20/83	12/30/64	03/21/60
FORMATION	CRET-COLORADO	MISS-KIBBEY	PENN-TYLER
GEOLOGIC PROVINCE CODE	500	395	510
DEPTH, FEET	448	NOT GIVEN	2966
WELLHEAD PRESSURE,PSIG	200	NOT GIVEN	1475
OPEN FLOW, MCFD	1023	NOT GIVEN	482
COMPONENT, MOLE PCT			
METHANE	91.8	13.2	29.2
ETHANE	0.4	3.6	2.6
PROPANE	TRACE	6.2	2.0
N-BUTANE	TRACE	5.5	0.8
ISOBUTANE	0.0	2.0	0.4
N-PENTANE	TRACE	2.4	0.3
ISOPENTANE	0.1	1.7	0.2
CYCLOPENTANE	TRACE	1.3	0.1
HEXANES PLUS	0.1	1.3	0.3
NITROGEN	7.2	59.8	63.4
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.8	0.1
HELIUM	0.13	1.38	0.50
HEATING VALUE*	943	865	475
SPECIFIC GRAVITY	0.586	1.122	0.886

	INDEX 3778 SAMPLE 7455	INDEX 3779 SAMPLE 4627	INDEX 3780 SAMPLE 2181
STATE	MONTANA	MONTANA	MONTANA
COUNTY	RUSSELSHELL	RUSSELSHELL	PHILLIPS
FIELD	BIG WALL	HOWARD COULEE	BOWDOIN
WELL NAME	ZDORB NO. 3	NORTHERN PACIFIC C NO. 1	NELSON NO. 515
LOCATION	SEC. 18, T10N, R27E	SEC. 13, T11N, R27E	SEC. 8, T31N, R34E
OWNER	TEXACO INC.	TEXAS CO.	BOWDOIN UTILITIES CO.
COMPLETED	01/13/60	10/08/48	04/30/30
SAMPLED	03/21/60	--/--/00	09/20/30
FORMATION	PENN-TYLER	MISS-MADISON	-SHALE
GEOLOGIC PROVINCE CODE	510	510	395
DEPTH, FEET	2963	5000	668
WELLHEAD PRESSURE,PSIG	1475	NOT GIVEN	205
OPEN FLOW, MCFD	500	344	1045
COMPONENT, MOLE PCT			
METHANE	22.7	3.0	95.2
ETHANE	2.2	4.0	0.0
PROPANE	2.0	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	69.4	68.0	4.5
OXYGEN	TRACE	0.3	0.1
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	23.5	0.2
HELIUM	0.60	1.16	0.07
HEATING VALUE*	433	102	964
SPECIFIC GRAVITY	0.922	1.081	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3781 SAMPLE 1916	INDEX 3782 SAMPLE 2167	INDEX 3783 SAMPLE 9182
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PHILLIPS	PHILLIPS
FIELD	BOWDOIN DOME AREA	BOWDOIN DOME AREA	BOWDOIN DOME AREA
WELL NAME	NO. 501	NO. 504	NO. 959
LOCATION	SEC. 36, T32N, R32E	SEC. 36, T32N, R32E	SEC. 20, T31N, R35E
OWNER	MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA UTILITIES CO.	FIDELITY GAS CO.
COMPLETED	11/23/29	12/16/29	07/--/57
SAMPLED	01/09/30	09/20/30	12/02/63
FORMATION	CRET-BOWDOIN	CRET-BOWDOIN	CRET-BOWDOIN
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	740	712	701
WELLHEAD PRESSURE,PSIG	210	222	160
OPEN FLOW, MCFD	370	414	448
COMPONENT, MOLE PCT			
METHANE	95.1	92.4	93.2
ETHANE	0.0	0.0	0.2
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	4.3	7.4	6.4
OXYGEN	0.3	0.0	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.07	0.07	0.10
HEATING VALUE*	963	936	948
SPECIFIC GRAVITY	0.577	0.587	0.582

	INDEX 3784 SAMPLE 9183	INDEX 3785 SAMPLE 14583	INDEX 3786 SAMPLE 14584
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PHILLIPS	PHILLIPS
FIELD	BOWDOIN DOME AREA	BOWDOIN DOME AREA	BOWDOIN DOME AREA
WELL NAME	NO. 845	2770 NO. 1	2061 NO. 1
LOCATION	SEC. 19, T32N, R32E	SEC. 29, T37N, R30E	SEC. 20, T36N, R31E
OWNER	FIDELITY GAS CO.	MIDLANDS GAS CORP.	MIDLANDS GAS CORP.
COMPLETED	08/--/47	11/18/75	09/14/75
SAMPLED	12/02/63	01/29/76	01/29/76
FORMATION	CRET-BOWDOIN	CRET-BOWDOIN	CRET-BOWDOIN
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1010	1397	1461
WELLHEAD PRESSURE,PSIG	465	554	608
OPEN FLOW, MCFD	400	225	450
COMPONENT, MOLE PCT			
METHANE	93.0	92.8	93.0
ETHANE	0.2	0.3	0.3
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	6.5	6.4	6.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.10	0.09	0.08
HEATING VALUE*	948	948	947
SPECIFIC GRAVITY	0.582	0.586	0.583

	INDEX 3787 SAMPLE 14617	INDEX 3788 SAMPLE 15341	INDEX 3789 SAMPLE 17738
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PHILLIPS	PHILLIPS
FIELD	BOWDOIN DOME AREA	BOWDOIN DOME AREA	BOWDOIN DOME AREA
WELL NAME	FED- 223631 NO. 1	FR ANDERSON NO. 1	WHITEWATER 2 FED. NO. 2451
LOCATION	SEC. 22, T36N, R31E	SEC. 1, T36N, R31E	SEC. 24, T35N, R31E
OWNER	ODESSA NATURAL CORP.	JOSEPH J.C. PAINE & ASSOC.	MIDLANDS GAS CORP.
COMPLETED	01/15/76	08/18/77	08/28/84
SAMPLED	03/22/76	08/06/78	07/02/85
FORMATION	CRET-BOWDOIN	CRET-BOWDOIN	CRET-BOWDOIN
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	1336	1355	1290
WELLHEAD PRESSURE,PSIG	565	575	351
OPEN FLOW, MCFD	2518	2253	520
COMPONENT, MOLE PCT			
METHANE	92.9	91.6	92.9
ETHANE	0.3	0.3	0.3
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	6.5	7.6	6.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.08	0.09	0.07
HEATING VALUE*	949	937	919
SPECIFIC GRAVITY	0.584	0.586	0.585

	INDEX 3790 SAMPLE 14452	INDEX 3791 SAMPLE 2393	INDEX 3792 SAMPLE 17284
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PHILLIPS	PHILLIPS
FIELD	GUINN	GUINN DOME	LOVING E
WELL NAME	NOT GIVEN	NO. 3	FED. NO. 2971-2
LOCATION	SEC. 20, T24N, R24E	SEC. 20, T24N, R24E	SEC. 29, T37N, R31E
OWNER	USGS OIL & GAS DIVISION	THORSEN & BULL CREEK DOME CO	PETROLEUM CORP. OF AMERICA
COMPLETED	--/--/38	--/--/00	08/13/83
SAMPLED	--/--/00	09/10/31	05/10/84
FORMATION	CRET-EAGLE	CRET-EAGLE	CRET-BOWDOIN
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	NOT GIVEN	507	1556
WELLHEAD PRESSURE,PSIG	NOT GIVEN	190	530
OPEN FLOW, MCFD	NOT GIVEN	2000	3047
COMPONENT, MOLE PCT			
METHANE	36.8	58.8	93.1
ETHANE	0.5	2.3	0.3
PROPANE	TRACE	---	TRACE
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	61.0	38.8	6.2
OXYGEN	1.0	0.0	TRACE
ARGON	0.5	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.06	0.07
HEATING VALUE*	382	637	948
SPECIFIC GRAVITY	0.819	0.727	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3793 SAMPLE 17285	INDEX 3794 SAMPLE 16256	INDEX 3795 SAMPLE 17161
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PONDERA	PONDERA
FIELD	LOVING E	BOWDOIN DOME AREA	MARIAS RIVER
WELL NAME	FED. NO. 2-0361	ANDERSON NO. 1	U. S. FED. NO. 21-13
LOCATION	SEC. 29, T36N, R31E	SEC. 27, T27N, R2E	SEC. 13, T30N, R2W
OWNER	PETROLEUM CORP. OF AMERICA	D.A.S. RESOURCE VENT., INC.	DIAMOND SHAMROCK EXPL. CO.
COMPLETED	--/--/00	05/09/79	08/26/83
SAMPLED	05/10/84	04/29/81	01/20/84
FORMATION	CRET-BOWDOIN GREENHORN PHIL.	CRET-BOW ISLAND	CRET-BOW ISLAND 4TH
GEOLOGIC PROVINCE CODE	395	500	500
DEPTH, FEET	NOT GIVEN	900	1128
WELLHEAD PRESSURE,PSIG	440	200	150
OPEN FLOW, MCFD	1593	1800	539
COMPONENT, MOLE PCT			
METHANE	93.2	87.7	80.4
ETHANE	0.9	0.4	0.3
PROPANE	TRACE	0.1	0.0
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	6.1	11.4	16.7
OXYGEN	TRACE	0.1	2.4
ARGON	TRACE	0.1	0.2
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.07	0.15	0.22
HEATING VALUE*	951	898	820
SPECIFIC GRAVITY	0.582	0.607	0.642

	INDEX 3796 SAMPLE 2197	INDEX 3797 SAMPLE 11524	INDEX 3798 SAMPLE 14639
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PONDERA	POWDER RIVER	POWDER RIVER
FIELD	PONDERA	BELL CREEK	PUMPKIN CREEK
WELL NAME	NO. 4	BIDDLE NO. 2-33	ALLEN NO. 1
LOCATION	SEC. 16, T27N, R4W	SEC. 33, T8S, R54E	SEC. 24, T1S, R49E
OWNER	MIDWEST REFINING CO.	CONSOLIDATED OIL & GAS, INC.	MCCULLOCH OIL CORP.
COMPLETED	02/28/29	12/22/67	08/--/78
SAMPLED	10/09/30	05/26/68	04/--/76
FORMATION	MISS-MADISON	CRET-MUDDY	CRET-SHANNON
GEOLOGIC PROVINCE CODE	500	515	515
DEPTH, FEET	2029	4438	3058
WELLHEAD PRESSURE,PSIG	10	890	706
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	42000
COMPONENT, MOLE PCT			
METHANE	81.3	95.0	95.3
ETHANE	13.9	0.3	0.3
PROPANE	---	0.8	TRACE
N-BUTANE	---	0.4	TRACE
ISOBUTANE	---	0.4	0.1
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	2.8	2.3	3.9
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.7	TRACE	0.1
HELIUM	0.31	0.01	0.04
HEATING VALUE*	1043	1047	984
SPECIFIC GRAVITY	0.651	0.600	0.578

	INDEX 3799 SAMPLE 16521	INDEX 3800 SAMPLE 11228	INDEX 3801 SAMPLE 11229
STATE	MONTANA	MONTANA	MONTANA
COUNTY	RICHLAND	RICHLAND	RICHLAND
FIELD	CHARLIE CREEK N	FAIRVIEW	FAIRVIEW
WELL NAME	BN NO. 8-33	VANDERHOOF A NO. 1	VANDERHOOF A NO. 1
LOCATION	SEC. 33, T26N, R54E	SEC. 13, T25N, R58E	SEC. 13, T25N, R58E
OWNER	FARMERS UNION CENT. EXCH. IN	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	11/25/81	06/08/67	06/08/67
SAMPLED	03/--/82	10/07/67	10/07/67
FORMATION	ORDO-RED RIVER	DEVO-WINNIPEGOSIS	ORDO-RED RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	11496	11414	12546
WELLHEAD PRESSURE,PSIG	4250	1850	2250
OPEN FLOW, MCFD	3600	200	340
COMPONENT, MOLE PCT			
METHANE	74.7	56.8	63.8
ETHANE	12.4	19.9	18.9
PROPANE	5.3	10.5	9.0
N-BUTANE	1.1	3.2	2.7
ISOBUTANE	1.0	1.3	0.8
N-PENTANE	0.3	0.7	0.8
ISOPENTANE	0.3	0.7	0.9
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	0.7	5.6	2.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.4	0.0	0.0
CARBON DIOXIDE	5.5	0.6	0.8
HELIUM	0.02	0.02	0.06
HEATING VALUE*	1174	1143	1012
SPECIFIC GRAVITY	0.756	0.895	0.842

	INDEX 3802 SAMPLE 12630	INDEX 3803 SAMPLE 16520	INDEX 3804 SAMPLE 12958
STATE	MONTANA	MONTANA	MONTANA
COUNTY	RICHLAND	ROOSEVELT	ROOSEVELT
FIELD	WILDCAT	RED BANK S	WILDCAT
WELL NAME	FORT GILBERT NO. 1	PANASUK NO. 1-5	MCCABE NO. 1
LOCATION	SEC. 32, T24N, R59E	SEC. 5, T28N, R59E	SEC. 1, T29N, R56E
OWNER	CONSOLIDATED OIL & GAS, INC.	SOUTHLAND ROYALTY CO.	CONSOLIDATED OIL & GAS, INC.
COMPLETED	10/30/70	11/--/81	12/23/70
SAMPLED	01/14/71	05/17/82	08/17/71
FORMATION	ORDO-RED RIVER	ORDO-RED RIVER	ORDO-RED RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	12502	12848	12054
WELLHEAD PRESSURE,PSIG	1400	1125	NOT GIVEN
OPEN FLOW, MCFD	1500	1038	320
COMPONENT, MOLE PCT			
METHANE	61.8	54.8	62.8
ETHANE	18.3	18.4	15.7
PROPANE	10.7	12.2	9.7
N-BUTANE	3.7	5.4	3.5
ISOBUTANE	0.9	1.6	1.1
N-PENTANE	1.0	2.3	1.1
ISOPENTANE	0.7	1.5	0.3
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.4	1.1	0.3
NITROGEN	1.5	1.5	4.4
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	1.0
HELIUM	0.04	0.05	0.04
HEATING VALUE*	1484	1668	1400
SPECIFIC GRAVITY	0.880	0.993	0.861

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3805 SAMPLE 3693	INDEX 3806 SAMPLE 9159	INDEX 3807 SAMPLE 9160
STATE	MONTANA	MONTANA	MONTANA
COUNTY	ROSEBUD	STILLWATER	STILLWATER
FIELD	INGOMAR	BIG COULEE	BIG COULEE
WELL NAME	MILLESON NO. 1	N. W. NP- D 1 & 2	NNNPD-2
LOCATION	SEC. 22, T9N, R35E	SEC. 7, T4N, R20E	SEC. 7, T4N, R20E
OWNER	NORTHERN ORDNANCE, INC.	NORTHERN NATURAL GAS PROD. C	NORTHERN NATURAL GAS PROD. C
COMPLETED	10/28/43	09/12/62	--/--/00
SAMPLED	11/20/43	10/23/63	10/23/63
FORMATION	PENN-AMSDEN	CRET-CAT CREEK&JURA-MORRISON	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	510	510
DEPTH, FEET	3800	1955	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1000	904	NOT GIVEN
OPEN FLOW, MCFD	8200	10	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	12.6	90.4	90.5
ETHANE	8.0	0.2	0.3
PROPANE	---	0.2	0.2
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	79.2	8.5	8.0
OXYGEN	0.0	0.0	0.0
ARGON	---	0.1	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.7
HELIUM	0.00	0.20	0.24
HEATING VALUE*	271	925	927
SPECIFIC GRAVITY	0.923	0.596	0.598

	INDEX 3808 SAMPLE 14392	INDEX 3809 SAMPLE 14149	INDEX 3810 SAMPLE 14150
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	STILLWATER
FIELD	BIG COULEE	BIG COULEE S	BIG COULEE S
WELL NAME	D-1	BRICKLEY NO. 1	BRICKLEY NO. 1
LOCATION	SEC. 7, T4N, R20E	SEC. 29, T4N, R20E	SEC. 29, T4N, R20E
OWNER	BURLINGTON NORTHERN, INC.	CIG EXPLORATION, INC.	CIG EXPLORATION, INC.
COMPLETED	--/--/59	04/21/74	04/21/74
SAMPLED	04/15/75	09/13/74	09/13/74
FORMATION	CRET-CAT CREEK 3RD	CRET-FRONTIER	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	1930	1715	2890
WELLHEAD PRESSURE,PSIG	432	650	1050
OPEN FLOW, MCFD	NOT GIVEN	930	1043
COMPONENT, MOLE PCT			
METHANE	89.8	88.9	89.1
ETHANE	0.3	0.2	0.2
PROPANE	TRACE	0.1	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	8.6	9.6	9.5
OXYGEN	0.0	0.1	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.6
HELIUM	0.23	0.25	0.24
HEATING VALUE*	915	907	906
SPECIFIC GRAVITY	0.600	0.603	0.601

	INDEX 3811 SAMPLE 969	INDEX 3812 SAMPLE 9324	INDEX 3813 SAMPLE 887
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	STILLWATER
FIELD	BROADVIEW DOME	DEAN DOME	LAKE BASIN
WELL NAME	NOT GIVEN	ORR NO. 1	HEPP NO. 1
LOCATION	SEC. 13, T3N, R22E	SEC. 18, T5S, R17E	SEC. 26, T1N, R21E
OWNER	SECURITY PRODUCING CO.	TYLER OIL CO.	MID-NORTHERN OIL CO.
COMPLETED	03/--/24	04/24/64	10/14/24
SAMPLED	01/17/25	04/25/64	05/07/24
FORMATION	CRET-FRONTIER	CRET-GREYBULL	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	1462	2060	NOT GIVEN
WELLHEAD PRESSURE,PSIG	600	575	94
OPEN FLOW, MCFD	8000	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.9	95.5	90.6
ETHANE	2.6	0.2	6.9
PROPANE	---	0.4	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	2.2	3.3	2.0
OXYGEN	0.5	0.0	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.7	0.6	0.1
HELIUM	0.23	TRACE	0.05
HEATING VALUE*	998	981	1041
SPECIFIC GRAVITY	0.586	0.579	0.599

	INDEX 3814 SAMPLE 1795	INDEX 3815 SAMPLE 2171	INDEX 3816 SAMPLE 2177
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	STILLWATER
FIELD	LAKE BASIN	LAKE BASIN	LAKE BASIN
WELL NAME	C. D. MOURELL NO. 1	DIAMOND LEUTHOLD NO. 5	LUCE NO. 1
LOCATION	SEC. 26, T1N, R21E	SEC. 24, T1N, R21E	SEC. 35, T1N, R21E
OWNER	LINCO PETROLEUM CO.	RECORD PETROLEUM CO.	RECORD PETROLEUM CO.
COMPLETED	--/--/24	09/22/27	--/--/00
SAMPLED	06/13/29	09/18/30	09/19/30
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-EAGLE
GEOLOGIC PROVINCE CODE	510	510	510
DEPTH, FEET	2995	3105	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	20	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	5500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.1	97.7	97.1
ETHANE	18.2	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.0	1.8	2.6
OXYGEN	0.5	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.4	0.1
HELIUM	0.09	0.00	0.13
HEATING VALUE*	1117	990	984
SPECIFIC GRAVITY	0.662	0.566	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3817 SAMPLE 14017	INDEX 3818 SAMPLE 8178	INDEX 3819 SAMPLE 8604
STATE	MONTANA	MONTANA	MONTANA
COUNTY	STILLWATER	STILLWATER	TETON
FIELD	RAPELJE	WILDCAT	BLACK LEAF CANYON
WELL NAME	STATE NO. 4-16	J. I. OSTRUM NO. 1	GOVT. PEARSON NO. 1
LOCATION	SEC. 16, T2N, R20E	SEC. 9, T6S, R17E	SEC. 26, T27N, R9W
OWNER	CONCEPT RESOURCES, INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/29/79	08/22/61	06/29/62
FORMATION	CRET-EAGLE & VIRGELLE	CRET-DAKOTA	MISS-SUN RIVER
GEOLOGIC PROVINCE CODE	510	510	500
DEPTH, FEET	1230	3133	1079
WELLHEAD PRESSURE,PSIG	539	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	26000	7	220
COMPONENT, MOLE PCT			
METHANE	93.3	95.0	89.1
ETHANE	1.7	0.4	2.0
PROPANE	1.1	TRACE	1.2
N-BUTANE	0.3	TRACE	0.1
ISOBUTANE	0.4	TRACE	0.0
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	2.8	4.2	1.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.1
CARBON DIOXIDE	0.0	0.2	5.9
HELIUM	0.09	0.10	0.06
HEATING VALUE*	1041	970	978
SPECIFIC GRAVITY	0.602	0.575	0.644

	INDEX 3820 SAMPLE 8620	INDEX 3821 SAMPLE 6786	INDEX 3822 SAMPLE 16849
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TETON	TETON	TETON
FIELD	BLACK LEAF CANYON	BLACKLEAF CANYON	HIGHVIEW
WELL NAME	GOVT. PEARSON NO. 1	BLACKLEAF FED. NO. A-1	LARSON NO. 1-34
LOCATION	SEC. 26, T27N, R9W	SEC. 13, T26N, R9W	SEC. 34, T28N, R6W
OWNER	TEXACO INC.	NORTHERN NATURAL GAS CO.	OXY PETROLEUM, INC.
COMPLETED	--/--/00	06/06/58	03/28/83
SAMPLED	07/13/62	--/--/58	03/28/83
FORMATION	MISS-	MISS-	MISS-MADISON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1759	3816	3089
WELLHEAD PRESSURE,PSIG	40	710	NOT GIVEN
OPEN FLOW, MCFD	525	6297	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	46.3	79.3	75.7
ETHANE	2.5	4.2	7.3
PROPANE	0.9	4.4	3.1
N-BUTANE	0.2	0.8	1.1
ISOBUTANE	0.1	0.0	0.5
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	TRACE	0.0	0.5
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.3
NITROGEN	42.3	0.0	6.7
OXYGEN	3.3	TRACE	TRACE
ARGON	0.5	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.4
CARBON DIOXIDE	3.7	10.7	3.5
HELIUM	0.07	0.02	0.27
HEATING VALUE*	547	1047	1089
SPECIFIC GRAVITY	0.812	0.749	0.733

	INDEX 3823 SAMPLE 7626	INDEX 3824 SAMPLE 7627	INDEX 3825 SAMPLE 7611
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TETON	TETON	TOOLE
FIELD	PONDERA COULEE	PONDERA COULEE	ARCH APEX
WELL NAME	CAMPBELL NO. 1	CAMPBELL NO. 2	GORDON CHRISTIAN NO. 1
LOCATION	SEC. 4, T27N, R5W	SEC. 4, T27N, R5W	SEC. 13, T35N, R2E
OWNER	CARDINAL PETROLEUM CO.	CARDINAL PETROLEUM CO.	CARDINAL PETROLEUM CO.
COMPLETED	08/15/59	09/28/59	09/17/59
SAMPLED	07/25/60	07/25/60	07/19/60
FORMATION	MISS-SUN RIVER	MISS-SUN RIVER	JURA-SWIFT
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2489	2475	2217
WELLHEAD PRESSURE,PSIG	200	540	742
OPEN FLOW, MCFD	222	1300	8
COMPONENT, MOLE PCT			
METHANE	78.4	79.3	94.0
ETHANE	5.4	5.2	1.4
PROPANE	3.1	3.0	0.3
N-BUTANE	1.1	0.8	0.2
ISOBUTANE	0.3	0.3	TRACE
N-PENTANE	0.3	0.2	TRACE
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	7.3	7.8	3.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.3	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	2.5	0.3
HELIUM	0.30	0.30	0.10
HEATING VALUE*	1064	1035	997
SPECIFIC GRAVITY	0.707	0.691	0.584

	INDEX 3826 SAMPLE 2150	INDEX 3827 SAMPLE 2156	INDEX 3828 SAMPLE 7946
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	BORDER	BORDER	CUT BANK
WELL NAME	J. FARRO NO. 1	J. FARRO NO. 2	COBB NO. 2
LOCATION	SEC. 1, T37N, R4W	SEC. 2, T37N, R4W	SEC. 30, T37N, R4W
OWNER	INLAND PETROLEUM CO. LTD.	OHIO OIL CO.	MONTANA POWER CO.
COMPLETED	07/23/30	09/05/30	11/28/37
SAMPLED	09/29/30	09/26/30	06/27/61
FORMATION	CRET-VANALTA	CRET-VANALTA	CRET-KOOTENAI
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2477	2488	2596
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	483
OPEN FLOW, MCFD	4000	3000	21000
COMPONENT, MOLE PCT			
METHANE	76.2	88.4	79.9
ETHANE	14.2	4.9	8.5
PROPANE	---	---	3.1
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.0	0.7	4.5
OXYGEN	0.1	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	8.5	5.9	2.3
HELIUM	0.04	0.04	0.10
HEATING VALUE*	1026	983	1093
SPECIFIC GRAVITY	0.712	0.640	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3829 SAMPLE 14948	INDEX 3830 SAMPLE 14394	INDEX 3831 SAMPLE 846
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	CUT BANK	DEVON	KEVIN SUNBURST
WELL NAME	TULE NO. 11-20-36-4	STATE NO. 33	MAYBELLE OIL CO., NO. 1
LOCATION	SEC. 20, T36N, R4W	SEC. 31, T32N, R2E	SEC. 34, T35, R2W
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	MAYBELLE OIL CO.
COMPLETED	02/08/77	07/12/69	--/--/00
SAMPLED	03/18/77	06/06/75	--/--/00
FORMATION	CRET-CUT BANK	CRET-BOW ISLAND	CRET-SUNBURST
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2790	850	1502
WELLHEAD PRESSURE,PSIG	207	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2050	4600	5800
COMPONENT, MOLE PCT			
METHANE	87.0	91.8	90.3
ETHANE	2.3	1.2	4.6
PROPANE	1.5	0.2	---
N-BUTANE	0.7	TRACE	---
ISOBUTANE	0.3	TRACE	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	0.8	6.4	2.8
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	6.8	0.1	1.9
HELIUM	0.03	0.15	0.13
HEATING VALUE*	1017	1057	997
SPECIFIC GRAVITY	0.675	0.588	0.609

	INDEX 3832 SAMPLE 949	INDEX 3833 SAMPLE 1502	INDEX 3834 SAMPLE 1503
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	ADAMS NO. 1	LARSON NO. 2	REIBE NO. 6
LOCATION	SEC. 21, T34N, R1W	SEC. 17, T34N, R1W	SEC. --, T35N, R2W
OWNER	POTLATCH OIL & REFINING CO.	PONDERA VALLEY OIL CO.	HOMESTAKE EXPLORATION CO.
COMPLETED	12/01/29	--/--/00	05/--/27
SAMPLED	--/--/00	09/15/27	09/15/27
FORMATION	CAMB-LIMESTONE	DEVO-	CRET-SUNBURST
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3250	3107	1540
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	3.2	7.6	73.3
ETHANE	6.5	4.2	18.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	79.0	5.8	4.0
OXYGEN	0.6	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	9.4	82.3	4.1
HELIUM	1.20	0.04	0.01
HEATING VALUE*	149	152	1070
SPECIFIC GRAVITY	1.002	1.402	0.704

	INDEX 3835 SAMPLE 1504	INDEX 3836 SAMPLE 1666	INDEX 3837 SAMPLE 1815
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	PEWTERS NO. 38	NO. 1	KITCHEN NO. 1
LOCATION	SEC. 23, T35N, R2W	SEC. 16, T34N, R1W	SEC. 2, T34N, R1W
OWNER	HOMESTAKE EXPLORATION CO.	KALISPELL-BAKER OIL CO.	ROXANA OIL & GAS CO.
COMPLETED	04/--/27	--/--/00	--/--/00
SAMPLED	09/15/27	08/01/28	07/15/29
FORMATION	JURA-ELLIS	MISS-MADISON	CAMB---
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1379	1380	4596
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.9	87.8	0.0
ETHANE	10.0	8.1	4.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	23.7	2.2	43.0
OXYGEN	4.3	0.5	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.1	1.5	52.7
HELIUM	0.11	0.20	0.18
HEATING VALUE*	786	1035	73
SPECIFIC GRAVITY	0.746	0.622	1.268

	INDEX 3838 SAMPLE 1901	INDEX 3839 SAMPLE 2151	INDEX 3840 SAMPLE 2152
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	NO. 1	SWENSON NO. 1	O'MEARA NO. 1
LOCATION	SEC. 23, T33N, R3W	SEC. 12, T33N, R1E	SEC. 1, T32N, R2W
OWNER	ALDES BIG 5 O&G SYNDICATE	F. & F. OIL & GAS CO.	NORTHERN NATURAL GAS DEV. CO
COMPLETED	--/--/00	04/12/30	08/21/27
SAMPLED	12/09/29	09/29/30	09/27/30
FORMATION	CRET-COLORADO	CRET-COLORADO SHALE	CRET-SUNBURST
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1000	770	1430
WELLHEAD PRESSURE,PSIG	102	175	355
OPEN FLOW, MCFD	NOT GIVEN	800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.1	96.2	94.1
ETHANE	3.6	0.0	3.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.5	3.3	1.4
OXYGEN	0.3	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.35	0.13	0.08
HEATING VALUE*	957	975	1025
SPECIFIC GRAVITY	0.606	0.571	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3841 SAMPLE 2153	INDEX 3842 SAMPLE 2193	INDEX 3843 SAMPLE 2194
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	EDWARDS NO. 1	KITCHEN NO. 1	ADAMS NO. 1
LOCATION	SEC. 30, T33N, R1W	SEC. 2, T34N, R1W	SEC. 20, T34N, R1W
OWNER	NORTHERN NATURAL GAS DEV. CO	ADVANCE OIL CO.	BETHAL OIL CO., LTD.
COMPLETED	08/28/27	--/--/00	08/15/28
SAMPLED	09/27/30	10/03/30	10/02/30
FORMATION	CRET-SUNBURST	CARB---	MISS-MADISON
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1210	4596	1438
WELLHEAD PRESSURE,PSIG	375	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	20000	NOT GIVEN	77000
COMPONENT, MOLE PCT			
METHANE	95.8	3.4	98.5
ETHANE	2.6	0.5	0.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	38.9	0.5
OXYGEN	0.1	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	56.8	0.3
HELIUM	0.05	0.73	0.07
HEATING VALUE*	1017	43	1010
SPECIFIC GRAVITY	0.578	1.267	0.564

	INDEX 3844 SAMPLE 2195	INDEX 3845 SAMPLE 10119	INDEX 3846 SAMPLE 14393
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KEVIN SUNBURST
WELL NAME	STATE NO. 50	GOEDDERTZ-AGEN NO. 1	WASHTI-MARMONT
LOCATION	SEC. 36, T35N, R2W	SEC. 16, T36N, R3W	SEC. 28, T35N, R1W
OWNER	TEXAS & PACIFIC COAL & OIL	GRANNELL DRILLING CO.	MONTANA POWER CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/02/30	09/09/65	06/06/75
FORMATION	DEVO-JEFFERSON	DEVO-DUPEROW	CRET-SUNBURST
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	3125	3685	1122
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	93
OPEN FLOW, MCFD	NOT GIVEN	3120	480
COMPONENT, MOLE PCT			
METHANE	0.0	2.4	93.6
ETHANE	0.0	0.7	1.3
PROPANE	---	0.5	0.6
N-BUTANE	---	0.1	0.2
ISOBUTANE	---	0.1	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	4.4	4.0	2.3
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	95.6	91.9	1.2
HELIUM	0.04	0.10	0.06
HEATING VALUE*	0	66	1027
SPECIFIC GRAVITY	1.504	1.482	0.606

	INDEX 3847 SAMPLE 14978	INDEX 3848 SAMPLE 16014	INDEX 3849 SAMPLE 4336
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KEVIN SUNBURST	KEVIN SUNBURST	KICKING HORSE
WELL NAME	LEONARD BASHOR NO. 1	POTLATCH O&R NCT-NO. 1	RANKIN NO. 1
LOCATION	SEC. 34, T35N, R1W	SEC. 29, T34N, R1W	SEC. 8, T36N, R1E
OWNER	ENERGY RESERVES GROUP, INC.	TEXACO INC.	HUSKY REFINING CO.
COMPLETED	11/10/76	10/20/79	08/--/44
SAMPLED	04/19/77	07/17/80	07/22/47
FORMATION	DEVO-NISKU	DEVO-DUPEROW	CRET-U
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2885	2959	1325
WELLHEAD PRESSURE,PSIG	979	730	150
OPEN FLOW, MCFD	1600	10000	600
COMPONENT, MOLE PCT			
METHANE	82.2	5.4	93.8
ETHANE	6.3	0.5	3.6
PROPANE	2.1	0.1	---
N-BUTANE	0.8	0.0	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.3	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	5.8	15.7	2.0
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.0	77.1	0.3
HELIUM	0.14	0.87	0.09
HEATING VALUE*	1053	67	1015
SPECIFIC GRAVITY	0.673	1.370	0.584

	INDEX 3850 SAMPLE 8706	INDEX 3851 SAMPLE 16651	INDEX 3852 SAMPLE 7610
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	KICKING HORSE	LEDGER	MIDDLE BUTTE
WELL NAME	TWISTED NO. 1	CAMPBELL NO. 1-18	MORRIS NO. 1
LOCATION	SEC. 17, T36N, R1E	SEC. 18, T30N, R1W	SEC. 13, T36N, R3E
OWNER	TEXACO INC.	BALCRON OIL CO.	CARDINAL PETROLEUM CO.
COMPLETED	--/--/00	04/29/82	10/17/59
SAMPLED	10/07/62	09/16/82	07/19/60
FORMATION	DEVO-SOURIS RIVER	CRET-BOW ISLAND	CRET-BOW ISLAND
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	4230	1074	1582
WELLHEAD PRESSURE,PSIG	1239	175	343
OPEN FLOW, MCFD	1750	1122	1200
COMPONENT, MOLE PCT			
METHANE	5.2	88.2	93.6
ETHANE	0.8	0.8	1.6
PROPANE	0.3	TRACE	0.4
N-BUTANE	0.3	0.0	0.2
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	12.2	10.9	3.4
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	79.9	TRACE	0.2
HELIUM	0.40	0.42	0.10
HEATING VALUE*	110	899	1042
SPECIFIC GRAVITY	1.406	0.600	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3853 SAMPLE 9786	INDEX 3854 SAMPLE 13101	INDEX 3855 SAMPLE 9978
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	MIDDLE BUTTE	TRAIL CREEK	WHITLASH W
WELL NAME	AGNES LARSON NO. 23-1	JOHNSON NO. 1	ALBERT FRT NO. 1-4
LOCATION	SEC. 23, T36N, R3E	SEC. 1, T36N, R3E	SEC. 4, T37N, R3E
OWNER	MONTANA POWER CO.	WHELESS DRILLING CO.	MESA PETROLEUM CO.
COMPLETED	11/12/64	06/19/70	07/14/65
SAMPLED	03/04/65	11/05/71	07/12/65
FORMATION	CRET-BOW ISLAND	CRET-SUNBURST	CRET-SUNBURST
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	1784	2353	2847
WELLHEAD PRESSURE,PSIG	295	781	600
OPEN FLOW, MCFD	310	4100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	93.1	94.2
ETHANE	0.9	3.1	0.8
PROPANE	0.2	1.0	0.4
N-BUTANE	TRACE	0.2	0.1
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	3.0	1.6	1.3
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.5
HELIUM	0.06	0.06	0.10
HEATING VALUE*	990	1048	1003
SPECIFIC GRAVITY	0.573	0.602	0.591

	INDEX 3856 SAMPLE 9979	INDEX 3857 SAMPLE 15041	INDEX 3858 SAMPLE 16214
STATE	MONTANA	MONTANA	MONTANA
COUNTY	TOOLE	TOOLE	TOOLE
FIELD	WHITLASH W	WHITLASH W	WILLOW RIDGE
WELL NAME	ALBERT FRT NO. 1-9	JOHNSON NO. 31-26	STATE 17079 NO. 1
LOCATION	SEC. 9, T37N, R3E	SEC. 26, T37N, R3E	SEC. 5, T34N, R2E
OWNER	MESA PETROLEUM CO.	FULTON PRODUCING CO.	CROFT PETROLEUM CO.
COMPLETED	11/20/65	07/27/76	04/20/80
SAMPLED	07/12/65	06/22/77	03/23/81
FORMATION	CRET-SUNBURST	CRET-SUNBURST	JURA-SWIFT
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	2802	2692	1794
WELLHEAD PRESSURE,PSIG	590	826	260
OPEN FLOW, MCFD	13000	3000	3000
COMPONENT, MOLE PCT			
METHANE	94.6	81.1	92.6
ETHANE	1.1	1.5	1.9
PROPANE	0.4	0.6	1.1
N-BUTANE	0.1	0.3	0.4
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.4	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	2.7	13.2	2.5
OXYGEN	0.0	2.2	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.9	0.9
HELIUM	0.10	0.06	0.04
HEATING VALUE*	1012	891	1035
SPECIFIC GRAVITY	0.589	0.651	0.609

	INDEX 3859 SAMPLE 2258	INDEX 3860 SAMPLE 9612	INDEX 3861 SAMPLE 2421
STATE	MONTANA	MONTANA	MONTANA
COUNTY	VALLEY	WHEATLAND	WIBAUX
FIELD	BOWDOIN DOME AREA	MUD CREEK	CEDAR CREEK
WELL NAME	MOHAN NO. 1	M. K. GRIFFITH NO. 1	NO. 86
LOCATION	SEC. 10, T31N, R34E	SEC. 12, T6N, R17E	SEC. 15, T11N, R57E
OWNER	JONES OIL CO.	TEXACO INC.	GAS DEVELOPMENT CO.
COMPLETED	--/--/00	03/07/63	09/01/25
SAMPLED	01/14/31	10/20/64	10/10/31
FORMATION	CRET-BOWDOIN	PENN-AMSDEN	CRET-JUDITH RIVER
GEOLOGIC PROVINCE CODE	395	510	395
DEPTH, FEET	755	2295	935
WELLHEAD PRESSURE,PSIG	220	1118	220
OPEN FLOW, MCFD	1000	2490	1500
COMPONENT, MOLE PCT			
METHANE	91.2	96.8	93.4
ETHANE	1.7	0.5	1.3
PROPANE	---	0.1	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	6.8	2.4	4.7
OXYGEN	0.0	0.0	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.07	0.05	0.12
HEATING VALUE*	954	992	969
SPECIFIC GRAVITY	0.594	0.570	0.585

	INDEX 3862 SAMPLE 2422	INDEX 3863 SAMPLE 2423	INDEX 3864 SAMPLE 13219
STATE	MONTANA	MONTANA	NEBRASKA
COUNTY	WIBAUX	WIBAUX	CHEYENNE
FIELD	CEDAR CREEK	CEDAR CREEK	ENGELLAND W
WELL NAME	NO. 89	NO. 87	MARATHON-GOVT. NO. 3
LOCATION	SEC. 22, T11N, R57E	SEC. 9, T11N, R57E	SEC. 36, T15N, R50W
OWNER	GAS DEVELOPMENT CO.	GAS DEVELOPMENT CO.	MARATHON OIL CO.
COMPLETED	07/20/28	05/30/27	12/01/71
SAMPLED	10/10/31	10/10/31	05/25/72
FORMATION	CRET-JUDITH RIVER	CRET-JUDITH RIVER	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	395	395	540
DEPTH, FEET	806	876	4684
WELLHEAD PRESSURE,PSIG	210	210	706
OPEN FLOW, MCFD	2567	12000	1500
COMPONENT, MOLE PCT			
METHANE	91.4	92.6	78.1
ETHANE	0.0	2.0	4.6
PROPANE	---	---	5.3
N-BUTANE	---	---	1.7
ISOBUTANE	---	---	0.9
N-PENTANE	---	---	0.4
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	7.3	5.9	7.4
OXYGEN	0.9	0.3	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.1	0.7
HELIUM	0.14	0.12	0.11
HEATING VALUE*	926	974	1151
SPECIFIC GRAVITY	0.594	0.588	0.731

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3865 SAMPLE 4869	INDEX 3866 SAMPLE 10486	INDEX 3867 SAMPLE 5288
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	HUNTSMAN	HUNTSMAN	NOT GIVEN
WELL NAME	A. L. CRUISE NO. 1	SPARKS A-2	G. E. WOOD NO. 1
LOCATION	SEC. 7, T14N, R49W	SEC. 12, T14N, R50W	SEC. 7, T13N, R49W
OWNER	OHIO OIL CO.	MARATHON OIL CO.	CHICAGO CORP.
COMPLETED	01/19/50	05/01/51	08/14/52
SAMPLED	03/22/50	03/29/66	10/08/52
FORMATION	CRET-DAKOTA	CRET-DAKOTA D	CRET-DAKOTA J
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4742	4692	4850
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1135
OPEN FLOW, MCFD	NOT GIVEN	48	6500
COMPONENT, MOLE PCT			
METHANE	77.2	65.4	75.9
ETHANE	7.1	5.6	7.0
PROPANE	5.0	7.8	5.4
N-BUTANE	1.7	3.7	1.4
ISOBUTANE	1.8	1.4	0.8
N-PENTANE	0.5	1.0	0.3
ISOPENTANE	0.1	1.3	0.2
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.4	0.7	0.1
NITROGEN	4.1	11.4	7.9
OXYGEN	0.1	0.6	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.0	1.2	1.0
HELIUM	0.10	0.10	0.09
HEATING VALUE*	1165	1186	1131
SPECIFIC GRAVITY	0.737	0.863	0.729

	INDEX 3868 SAMPLE 17886	INDEX 3869 SAMPLE 10485	INDEX 3870 SAMPLE 4997
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	PEBBLE	REIMERS	SIDNEY W
WELL NAME	HAWKINS NO. 1	C.SCHERER NO. 1	STATE LAND NO. 1
LOCATION	SEC. 17, T12N, R51W	SEC. 23, T16N, R50W	SEC. 16, T13N, R50W
OWNER	BERENERGY CORP.	MARATHON OIL CO.	INDEPENDENT EXPLORATION CO.
COMPLETED	11/02/84	03/01/51	12/22/50
SAMPLED	10/30/85	03/29/66	01/24/51
FORMATION	CRET-DAKOTA D	CRET-DAKOTA J	CRET-DAKOTA 1ST
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	5054	4820	4802
WELLHEAD PRESSURE,PSIG	420	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2444	170	8800
COMPONENT, MOLE PCT			
METHANE	78.2	80.3	84.0
ETHANE	5.3	4.2	4.5
PROPANE	5.7	6.2	3.6
N-BUTANE	2.1	1.1	0.9
ISOBUTANE	0.6	0.9	0.3
N-PENTANE	0.6	0.3	0.1
ISOPENTANE	0.9	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	5.3	5.2	5.3
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.3	1.0	0.8
HELIUM	0.08	0.06	0.10
HEATING VALUE*	1188	1161	1080
SPECIFIC GRAVITY	0.739	0.719	0.667

	INDEX 3871 SAMPLE 5560	INDEX 3872 SAMPLE 5589	INDEX 3873 SAMPLE 10484
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	SIDNEY W	SIDNEY W	SIDNEY W
WELL NAME	SPICKNAL NO. 1	WESTMAN NO. 1	F. KURZ NO. 1
LOCATION	SEC. 10, T13N, R50W	SEC. 29, T13N, R50W	SEC. 4, T13N, R50W
OWNER	OHIO OIL CO.	OHIO OIL CO.	MARATHON OIL CO.
COMPLETED	11/12/52	11/06/53	09/01/53
SAMPLED	12/17/52	02/05/54	03/29/66
FORMATION	CRET-DAKOTA	CRET-DAKOTA 1ST	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4753	4822	4584
WELLHEAD PRESSURE,PSIG	1213	1120	485
OPEN FLOW, MCFD	NOT GIVEN	8250	6000
COMPONENT, MOLE PCT			
METHANE	79.7	78.8	77.6
ETHANE	6.5	5.0	4.8
PROPANE	4.6	5.5	4.5
N-BUTANE	1.1	1.9	1.5
ISOBUTANE	0.5	1.0	0.7
N-PENTANE	0.4	0.6	0.6
ISOPENTANE	0.0	0.4	0.6
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.1	0.3	1.0
NITROGEN	5.9	5.3	6.8
OXYGEN	0.1	TRACE	0.9
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.9
HELIUM	0.09	0.09	0.10
HEATING VALUE*	1123	1190	1184
SPECIFIC GRAVITY	0.704	0.736	0.752

	INDEX 3874 SAMPLE 10487	INDEX 3875 SAMPLE 4995	INDEX 3876 SAMPLE 5161
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	DEUEL
FIELD	SIDNEY W	SUNOL	BIG SPRINGS
WELL NAME	WESTMAN NO. 1	FENDER NO. 1	TROESTRUP NO. E-1
LOCATION	SEC. 29, T13N, R50W	SEC. 24, T14N, R48W	SEC. 3, T12N, R43W
OWNER	MARATHON OIL CO.	OHIO OIL CO.	CHARLES D. EDMONSON
COMPLETED	10/01/53	12/22/50	--/--/00
SAMPLED	03/29/66	01/24/51	01/30/52
FORMATION	CRET-DAKOTA D	CRET-DAKOTA 1ST	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	4824	4350	3208
WELLHEAD PRESSURE,PSIG	570	1014	NOT GIVEN
OPEN FLOW, MCFD	4500	5800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.5	64.4	90.3
ETHANE	4.9	4.3	0.4
PROPANE	5.3	6.0	0.1
N-BUTANE	1.8	1.0	0.1
ISOBUTANE	0.8	0.7	0.0
N-PENTANE	0.5	0.2	0.0
ISOPENTANE	0.3	0.0	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	TRACE
NITROGEN	5.4	21.8	8.3
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	1.0	0.6
HELIUM	0.09	0.17	0.10
HEATING VALUE*	1176	965	929
SPECIFIC GRAVITY	0.728	0.775	0.601

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3877 SAMPLE 5802	INDEX 3878 SAMPLE 5803	INDEX 3879 SAMPLE 5806
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	DEUEL	DEUEL	DEUEL
FIELD	BIG SPRINGS	BIG SPRINGS	BIG SPRINGS
WELL NAME	MENTER NO. 1	F. ZIMMERMAN NO. 1	TROELSTRUP NO. C-1
LOCATION	SEC. 17, T13N, R42W	SEC. 12, T13N, R43W	SEC. 2, T12N, R43W
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
COMPLETED	10/01/54	10/10/54	11/29/54
SAMPLED	04/07/55	04/13/55	04/21/55
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	3271	3316	3164
WELLHEAD PRESSURE,PSIG	638	637	628
OPEN FLOW, MCFD	3972	3876	2828
COMPONENT, MOLE PCT			
METHANE	92.0	91.4	91.1
ETHANE	0.3	0.3	0.3
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	6.8	7.7	7.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.6
HELIUM	0.10	0.11	0.11
HEATING VALUE*	937	933	929
SPECIFIC GRAVITY	0.588	0.592	0.592

	INDEX 3880 SAMPLE 6520	INDEX 3881 SAMPLE 6987	INDEX 3882 SAMPLE 8533
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	GARDEN	HITCHCOCK	KIMBALL
FIELD	OSHKOSH	BURR OAK	BUKIN STATE
WELL NAME	OLSON NO. 1	M. H. LEWIS NO. 1	FURST NO. 1
LOCATION	SEC. 11, T16N, R44W	SEC. 26, T1N, R32W	SEC. 12, T12N, R54W
OWNER	J. M. HUBER CORP.	SKELLY OIL CO.	CHANDLER & SIMPSON
COMPLETED	05/29/57	12/30/58	02/06/62
SAMPLED	03/13/58	02/25/59	04/19/62
FORMATION	CRET-DAKOTA D	PENN-LANSING	CRET-
GEOLOGIC PROVINCE CODE	540	390	540
DEPTH, FEET	3039	3862	5706
WELLHEAD PRESSURE,PSIG	692	NOT GIVEN	990
OPEN FLOW, MCFD	3300	3	14400
COMPONENT, MOLE PCT			
METHANE	63.7	8.7	77.3
ETHANE	0.3	0.0	5.3
PROPANE	0.7	0.3	7.5
N-BUTANE	0.2	0.6	2.0
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.6	TRACE
HEXANES PLUS	0.1	0.6	TRACE
NITROGEN	32.6	75.5	5.2
OXYGEN	TRACE	0.1	0.3
ARGON	0.1	0.5	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	9.8	1.5
HELIUM	0.50	2.50	0.08
HEATING VALUE*	718	201	1175
SPECIFIC GRAVITY	0.728	1.007	0.740

	INDEX 3883 SAMPLE 5457	INDEX 3884 SAMPLE 5462	INDEX 3885 SAMPLE 16072
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	KIMBALL	KIMBALL	LINCOLN
FIELD	POTTER SW	POTTER SW	WILDCAT
WELL NAME	E. LIPKI NO. 2	KENNEDY JR. NO. 6	BROWN NO. 2
LOCATION	SEC. 10, T13N, R53W	SEC. 3, T13N, R53W	SEC. 19, T16N, R33W
OWNER	SHELL OIL CO.	SHELL OIL CO.	MARSHALL R. YOUNG OIL CO.
COMPLETED	--/--/00	--/--/00	10/10/79
SAMPLED	04/20/53	04/20/53	09/11/80
FORMATION	CRET-MUDDY	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	540	540	390
DEPTH, FEET	5560	5651	1938
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	52.2	72.8	63.6
ETHANE	4.1	5.1	0.3
PROPANE	13.9	8.8	TRACE
N-BUTANE	8.3	2.7	TRACE
ISOBUTANE	4.8	2.2	TRACE
N-PENTANE	5.9	0.9	TRACE
ISOPENTANE	2.9	0.8	0.0
CYCLOPENTANE	0.7	0.5	TRACE
HEXANES PLUS	5.8	0.9	0.1
NITROGEN	3.2	3.7	35.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.5	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.6	0.1
HELIUM	0.03	0.03	0.31
HEATING VALUE*	1982	1360	655
SPECIFIC GRAVITY	1.196	0.837	0.704

	INDEX 3886 SAMPLE 16073	INDEX 3887 SAMPLE 7948	INDEX 3888 SAMPLE 4192
STATE	NEBRASKA	NEBRASKA	NEVADA
COUNTY	LINCOLN	RED WILLOW	CHURCHILL
FIELD	WILDCAT	SLEEPY HOLLOW	NOT GIVEN
WELL NAME	BROWN NO. 2	MAYES LEASE	NOT GIVEN
LOCATION	SEC. 14, T16N, R33W	SEC. 2, T2N, R27W	SEC. 12, T19N, R30E
OWNER	MARSHALL R. YOUNG OIL CO.	PUBCO PETROLEUM CORP.	ELMER WEISHAUPT
COMPLETED	10/10/79	--/--/00	--/--/26
SAMPLED	09/11/80	05/--/61	11/27/46
FORMATION	CRET-NIOBRARA	CAMB-REAGAN	QUAT-LAKE LAHONTAN
GEOLOGIC PROVINCE CODE	390	390	625
DEPTH, FEET	1272	3500	200
WELLHEAD PRESSURE,PSIG	400	18	NOT GIVEN
OPEN FLOW, MCFD	174	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.8	2.6	61.8
ETHANE	0.6	1.4	1.9
PROPANE	0.1	3.0	---
N-BUTANE	TRACE	2.3	---
ISOBUTANE	TRACE	1.7	---
N-PENTANE	TRACE	1.0	---
ISOPENTANE	TRACE	0.6	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	TRACE	0.7	---
NITROGEN	35.1	83.7	35.4
OXYGEN	0.0	0.7	0.6
ARGON	0.1	0.4	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.4	0.8
HELIUM	0.15	1.20	0.03
HEATING VALUE*	668	376	651
SPECIFIC GRAVITY	0.703	1.055	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3889 SAMPLE 1056	INDEX 3890 SAMPLE 15375	INDEX 3891 SAMPLE 15761
STATE	NEVADA	NEVADA	NEVADA
COUNTY	ESMERALDA	WASHOE	WASHOE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NOT GIVEN	SPRING	GAS SEEP
LOCATION	NOT GIVEN	SEC. 16, T23N, R23E	MARBLE BLUFF DAM -
OWNER	COALSDALE MERGER OIL CO.	PYRAMID LAKE INDIAN RES.	INDIAN RESERVATION
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	09/07/78	09/19/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	625	620	620
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.7	84.0	0.5
ETHANE	---	TRACE	0.0
PROPANE	---	TRACE	0.0
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	---	5.8	97.3
OXYGEN	0.7	TRACE	0.0
ARGON	---	0.1	1.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.3	0.0
CARBON DIOXIDE	0.5	9.7	1.2
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1000	855	5
SPECIFIC GRAVITY	0.563	0.675	0.976

	INDEX 3892 SAMPLE 15121	INDEX 3893 SAMPLE 15127	INDEX 3894 SAMPLE 12168
STATE	NEVADA	NEVADA	NEVADA
COUNTY	WASHOE	WASHOE	WHITE PINE
FIELD	PYRAMID LAKE	PYRAMID LAKE	MONTE CRISTO
WELL NAME	GAS SEEP	AUGER HOLE	ODH NO. 27
LOCATION	NW OF TRUKEE R DELTA	SEC. 22, T23N, R23E	NOT GIVEN
OWNER	U.S. BUREAU OF RECLAMATION	U.S. BUREAU OF RECLAMATION	W. R. GRACE & CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/17/77	10/19/77	--/--/00
FORMATION	NOT GIVEN	QUAT-	CAMB-ELDORADO
GEOLOGIC PROVINCE CODE	620	620	625
DEPTH, FEET	NOT GIVEN	45	1476
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	20
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.8	95.6	0.3
ETHANE	0.0	0.0	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.2	3.2	95.1
OXYGEN	0.0	0.1	1.1
ARGON	0.1	0.1	1.4
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	1.0
CARBON DIOXIDE	0.9	1.0	0.05
HELIUM	TRACE	TRACE	5
HEATING VALUE*	981	968	0.982
SPECIFIC GRAVITY	0.573	0.579	

	INDEX 3895 SAMPLE 15967	INDEX 3896 SAMPLE 9410	INDEX 3897 SAMPLE 1209
STATE	NEW JERSEY	NEW MEXICO	NEW MEXICO
COUNTY	OFFSHORE	BERNALILLO	CHAVES
FIELD	MID ATLANTIC	NOT GIVEN	ARTESIA
WELL NAME	FED. WATERS N.J. 18-3	WATER WELL	NO. 1
LOCATION	BLK. 598, OCS-A-0028	SEC. 36, T11N, R6E	SEC. 15, T15S, R29E
OWNER	TEXACO INC.	JIM CROSBY & U.S.G.S.	SOUTHERN PET. EXPL., INC.
COMPLETED	05/14/80	--/--/64	--/--/00
SAMPLED	05/14/80	06/19/64	01/10/26
FORMATION	NOT GIVEN	PENN-MADERA	-SALT & ANHYDRITE
GEOLOGIC PROVINCE CODE	120	460	430
DEPTH, FEET	12974	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	10	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.1	0.1	0.0
ETHANE	2.0	TRACE	14.2
PROPANE	1.8	0.0	---
N-BUTANE	0.1	0.0	---
ISOBUTANE	TRACE	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	1.1	2.1	83.7
OXYGEN	0.0	0.0	1.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	18.9	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.7	78.7	0.3
HELIUM	0.02	0.13	0.49
HEATING VALUE*	1018	60	254
SPECIFIC GRAVITY	0.596	1.237	0.978

	INDEX 3898 SAMPLE 17706	INDEX 3899 SAMPLE 9125	INDEX 3900 SAMPLE 4580
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	BITTER LAKES	BUFFALO VALLEY	CAPROCK
WELL NAME	RUNYON STATE NO. 2	BAETZ NO. 1	OHIO STATE NO. 1
LOCATION	SEC. 24, T9S, R26E	SEC. 35, T14S, R27E	SEC. 11, T13S, R31E
OWNER	ELK OIL CO.	CARPER DRILLING CO., INC.	COOPERATIVE PRODUCING ASSOC.
COMPLETED	01/22/83	12/17/62	09/02/48
SAMPLED	01/13/85	12/25/63	03/27/48
FORMATION	PERM-WOLFCAMP	PENN-	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5142	8182	3022
WELLHEAD PRESSURE,PSIG	1145	1790	480
OPEN FLOW, MCFD	1000	3600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.8	89.1	99.4
ETHANE	5.4	6.6	0.0
PROPANE	2.1	2.2	---
N-BUTANE	0.7	0.7	---
ISOBUTANE	0.9	0.1	---
N-PENTANE	0.5	0.2	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.1	---
NITROGEN	3.4	0.4	0.0
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.18	0.04	0.02
HEATING VALUE*	1108	1135	1007
SPECIFIC GRAVITY	0.652	0.639	0.559

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3901 SAMPLE 4582	INDEX 3902 SAMPLE 7671	INDEX 3903 SAMPLE 13339
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	CAPROCK	CAPROCK	CAPROCK
WELL NAME	MALCO STATE H NO. 1	NEW MEXICO H NO. 1	R. & W. FED. NO. 1
LOCATION	SEC. 36, T12S, R31E	SEC. 19, T15S, R31E	SEC. 20, T12S, R31E
OWNER	COOPERATIVE PRODUCING ASSOC.	SOCONY MOBIL OIL CO., INC.	READING & BATES, INC.
COMPLETED	07/26/44	07/01/55	12/30/70
SAMPLED	03/27/48	08/23/60	07/27/72
FORMATION	PERM-QUEEN	PERM-QUEEN	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3015	3098	2597
WELLHEAD PRESSURE,PSIG	629	180	860
OPEN FLOW, MCFD	NOT GIVEN	700	3400
COMPONENT, MOLE PCT			
METHANE	43.0	33.3	16.5
ETHANE	0.0	8.0	5.2
PROPANE	---	4.1	2.5
N-BUTANE	---	1.2	0.5
ISOBUTANE	---	0.7	0.3
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	0.3	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	52.7	51.6	72.2
OXYGEN	4.3	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.1
HELIUM	0.02	0.10	0.07
HEATING VALUE*	436	691	387
SPECIFIC GRAVITY	0.796	0.897	0.921

	INDEX 3904 SAMPLE 14818	INDEX 3905 SAMPLE 5835	INDEX 3906 SAMPLE 13300
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	DOUBLE L	DRICKEY S	HAYSTACK
WELL NAME	FED. 17 NO. 1	LION NO. 4	HAYSTACK "A" FED. NO. 1
LOCATION	SEC. 17, T15S, R30E	SEC. 5, T15S, R31E	SEC. 28, T6S, R27E
OWNER	MCCLELLAN OIL CORP.	LION OIL CO.	FOREST OIL CORP.
COMPLETED	03/25/75	03/01/55	07/19/71
SAMPLED	10/27/76	05/11/55	07/10/72
FORMATION	PERM-QUEEN	PERM-QUEEN	PENN-CISCO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2018	3000	5832
WELLHEAD PRESSURE,PSIG	350	900	1600
OPEN FLOW, MCFD	3973	5000	29500
COMPONENT, MOLE PCT			
METHANE	25.6	22.4	83.2
ETHANE	6.6	7.2	5.4
PROPANE	3.0	5.3	2.6
N-BUTANE	0.8	2.8	0.8
ISOBUTANE	0.3	1.5	0.5
N-PENTANE	0.2	1.2	0.2
ISOPENTANE	0.2	1.0	0.2
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.1	1.0	0.2
NITROGEN	63.1	56.9	5.9
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.07	0.08	0.34
HEATING VALUE*	315	795	1078
SPECIFIC GRAVITY	0.906	1.015	0.668

	INDEX 3907 SAMPLE 8890	INDEX 3908 SAMPLE 17171	INDEX 3909 SAMPLE 16668
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	LAKE ARTHUR	LESLIE SPRING	LIGHTCAP
WELL NAME	MOOTS FEE NO. 1	CHAVES "A" FEDERAL NO. 1-T	SANDERS NO. 1
LOCATION	SEC. 31, T15S, R27E	SEC. 21, T7S, R26E	SEC. 8, T6S, R30E
OWNER	RALPH LOWE	SUN EXPLORATION & PRODUCTION	AIKMAN PETROLEUM, INC.
COMPLETED	--/--/00	06/--/82	10/--/81
SAMPLED	03/18/63	02/09/84	09/20/82
FORMATION	NOT GIVEN	PERM-WOLFCAMP	ORDO-MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	4508	7900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	754	1385
OPEN FLOW, MCFD	NOT GIVEN	436	2801
COMPONENT, MOLE PCT			
METHANE	70.7	86.7	73.0
ETHANE	5.2	4.6	8.5
PROPANE	1.7	1.7	5.2
N-BUTANE	0.6	0.6	1.5
ISOBUTANE	0.2	0.4	1.0
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	TRACE	0.1	0.5
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	16.4	4.7	4.3
OXYGEN	3.8	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	5.1
HELIUM	0.10	0.28	0.13
HEATING VALUE*	920	1075	1159
SPECIFIC GRAVITY	0.722	0.645	0.776

	INDEX 3910 SAMPLE 8350	INDEX 3911 SAMPLE 1586	INDEX 3912 SAMPLE 9203
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	LOCO HILLS	NOT GIVEN	NOT GIVEN
WELL NAME	KIMES NO. 1	ARENA	STATE 15-1
LOCATION	SEC. 28, T15S, R29E	SEC. 19, T13S, R31E	SEC. 15, T15S, R29E
OWNER	E. J. MCCURDY, JR., OIL ASSO	MANHATTAN OIL CO.	SHELL OIL CO.
COMPLETED	--/--/46	--/--/00	11/13/63
SAMPLED	12/29/61	03/07/28	12/16/63
FORMATION	PERM-QUEEN	NOT GIVEN	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1735	2461	1844
WELLHEAD PRESSURE,PSIG	650	NOT GIVEN	588
OPEN FLOW, MCFD	NOT GIVEN	500	948
COMPONENT, MOLE PCT			
METHANE	22.1	11.8	25.6
ETHANE	5.6	17.3	6.4
PROPANE	2.5	---	2.4
N-BUTANE	0.6	---	0.7
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.3	---	0.4
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.1
NITROGEN	65.1	70.6	63.7
OXYGEN	3.1	0.2	0.0
ARGON	0.2	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.06	0.06	0.10
HEATING VALUE*	436	430	499
SPECIFIC GRAVITY	0.917	0.935	0.902

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3913 SAMPLE 11265	INDEX 3914 SAMPLE 11266	INDEX 3915 SAMPLE 13455
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	LISA FED.	PATRICK FED. NO. 1	OCCIDENTAL FED. NO. 1
LOCATION	SEC. 12, T15S, R29E	SEC. 13, T15S, R29E	SEC. 22, T14S, R30E
OWNER	JACK L. MCCLELLAN	JACK L. MCCLELLAN	COCKRELL CORP.
COMPLETED	04/07/66	09/20/67	10/16/72
SAMPLED	01/30/68	01/30/68	10/22/72
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2000	2000	10674
WELLHEAD PRESSURE,PSIG	650	650	NOT GIVEN
OPEN FLOW, MCFD	5000	6717	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	26.0	25.8	81.5
ETHANE	6.5	6.4	9.7
PROPANE	2.5	2.5	4.7
N-BUTANE	0.6	0.5	1.4
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	63.5	63.1	1.1
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.08	0.08	0.03
HEATING VALUE*	489	481	1215
SPECIFIC GRAVITY	0.894	0.891	0.700

	INDEX 3916 SAMPLE 15365	INDEX 3917 SAMPLE 16480	INDEX 3918 SAMPLE 16796
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	NOT GIVEN	PECOS SLOPE	PECOS SLOPE
WELL NAME	BEAL FED. NO. 1	STANCIL FED. NO. 1	LUKE COM FED. NO. 1
LOCATION	SEC. 17, T11S, R30E	SEC. 23, T15S, R24E	SEC. 24, T10S, R25E
OWNER	DEPCO, INC.	MESA PETROLEUM CO.	MCCLELLAN OIL CORP.
COMPLETED	06/05/77	--/--/80	06/--/82
SAMPLED	08/28/78	03/01/82	03/08/83
FORMATION	PENN-ATOKA	PERM-ABO	PERM-ABO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9096	3786	4600
WELLHEAD PRESSURE,PSIG	1780	1200	1000
OPEN FLOW, MCFD	4741	654	750
COMPONENT, MOLE PCT			
METHANE	79.9	83.9	80.2
ETHANE	5.5	4.7	4.3
PROPANE	2.3	2.0	1.7
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.4	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	7.9	6.8	10.0
OXYGEN	1.6	0.1	1.3
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.1
HELIUM	0.07	0.49	0.44
HEATING VALUE*	1048	1060	996
SPECIFIC GRAVITY	0.688	0.657	0.668

	INDEX 3919 SAMPLE 17170	INDEX 3920 SAMPLE 17600	INDEX 3921 SAMPLE 17667
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	PECOS SLOPE	PECOS SLOPE	RED LAKE RIDGE
WELL NAME	CHAVES "A" FEDERAL NO. 1-C	BRITT NO. 1	LYNX NO. 1
LOCATION	SEC. 21, T7S, R26E	SEC. 3, T11S, R25E	SEC. 19, T8S, R29E
OWNER	SUN EXPLORATION & PRODUCTION	WALLACE OIL & GAS, INC.	STEVENS OPERATING CORP.
COMPLETED	06/--/82	--/--/00	07/16/84
SAMPLED	02/09/84	02/27/85	05/14/85
FORMATION	PERM-ABO	PERM-ABO	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3932	3878	6852
WELLHEAD PRESSURE,PSIG	831	987	2500
OPEN FLOW, MCFD	10474	1094	7075
COMPONENT, MOLE PCT			
METHANE	86.2	81.8	70.2
ETHANE	4.6	4.3	11.9
PROPANE	1.8	1.8	6.6
N-BUTANE	0.6	0.6	2.2
ISOBUTANE	0.4	0.4	0.9
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.3	0.1	0.9
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.4
NITROGEN	5.0	9.3	4.2
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	1.9
HELIUM	0.32	0.81	0.18
HEATING VALUE*	1082	1018	1280
SPECIFIC GRAVITY	0.652	0.661	0.798

	INDEX 3922 SAMPLE 7943	INDEX 3923 SAMPLE 16372	INDEX 3924 SAMPLE 9605
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	T W	WHITE RANCH	WILDCAT
WELL NAME	MANRY ELLIOT NO. 1	WHITE RANCH NO. 1	FED. A NO. 1
LOCATION	SEC. 22, T11S, R31E	SEC. 8, T13S, R30E	SEC. 10, T14S, R28E
OWNER	ROBINSON BROS. OIL PRODUCERS	DEPCO, INC.	MIDWEST OIL CORP.
COMPLETED	03/01/60	02/--/81	08/06/63
SAMPLED	04/28/61	10/28/81	10/19/64
FORMATION	PENN-ATOKA & MORROW	PENN-ATOKA	PERM-PREMIER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10870	NOT GIVEN	1683
WELLHEAD PRESSURE,PSIG	3100	2100	707
OPEN FLOW, MCFD	10000	545000	1000
COMPONENT, MOLE PCT			
METHANE	83.4	79.2	67.0
ETHANE	8.5	9.6	5.6
PROPANE	3.5	5.5	1.8
N-BUTANE	1.1	1.6	0.4
ISOBUTANE	0.9	0.7	0.1
N-PENTANE	0.5	0.3	TRACE
ISOPENTANE	0.0	0.5	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.2	0.1
NITROGEN	0.8	1.9	24.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.1
HELIUM	0.05	0.06	0.06
HEATING VALUE*	1206	1243	859
SPECIFIC GRAVITY	0.694	0.725	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3925 SAMPLE 9970	INDEX 3926 SAMPLE 10209	INDEX 3927 SAMPLE 12951
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	OBRIEN NO. 2-C	B. OBRIEN NO. 2	TERRA-FED. NO. 1
LOCATION	SEC. 23, T8S, R28E	SEC. 3, T8S, R29E	SEC. 17, T12S, R31E
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	READING & BATES, INC.
COMPLETED	--/--/00	10/15/65	08/30/70
SAMPLED	07/08/65	10/13/65	08/13/71
FORMATION	PERM-YATES	PERM-SAN ANDRES	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	875	3056	2675
WELLHEAD PRESSURE,PSIG	500	NOT GIVEN	900
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	11000
COMPONENT, MOLE PCT			
METHANE	0.1	69.2	17.9
ETHANE	0.0	7.0	3.9
PROPANE	0.0	5.2	1.4
N-BUTANE	0.0	1.1	0.3
ISOBUTANE	0.0	0.7	0.1
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.0	0.3	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	99.4	11.9	75.6
OXYGEN	0.0	0.0	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.4	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	3.8	0.3
HELIUM	0.03	0.11	0.07
HEATING VALUE*	2	1067	311
SPECIFIC GRAVITY	0.964	0.775	0.913

	INDEX 3928 SAMPLE 13870	INDEX 3929 SAMPLE 14440	INDEX 3930 SAMPLE 15049
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	PLAINS RADIO NO. 36-1	MIDWEST FED. NO. 1	UNION FED. NO. 1
LOCATION	SEC. 36, T9S, R28E	SEC. 23, T10S, R29E	SEC. 1, T8S, R31E
OWNER	ROY WHITTENBURG	DEPCO, INC.	HOLLY ENERGY, INC.
COMPLETED	01/01/76	09/09/74	11/01/75
SAMPLED	01/19/76	08/18/75	07/06/77
FORMATION	PERM-QUEEN	PENN-MORROW	MISS-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	9277	9542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2200	2750
OPEN FLOW, MCFD	NOT GIVEN	2290	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	28.9	84.6	68.9
ETHANE	7.2	6.1	13.1
PROPANE	3.4	2.9	8.0
N-BUTANE	0.9	0.8	2.9
ISOBUTANE	0.5	0.8	1.8
N-PENTANE	0.2	0.2	0.6
ISOPENTANE	0.2	0.5	1.6
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.2	0.4	0.6
NITROGEN	56.2	2.2	1.8
OXYGEN	1.6	0.3	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.0	0.5
HELIUM	0.12	0.05	0.05
HEATING VALUE*	589	1153	1831
SPECIFIC GRAVITY	0.903	0.685	0.844

	INDEX 3931 SAMPLE 15533	INDEX 3932 SAMPLE 16410	INDEX 3933 SAMPLE 16687
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	O'BRIEN NO. 1	NINE MILE OB	CAMEL STATE NO. 1
LOCATION	SEC. 11, T9S, R29E	SEC. 32, T18S, R25E	SEC. 7, T9S, R27E
OWNER	TEXAS OIL & GAS CORP.	YATES PETROLEUM CORP.	PLAINS RADIO BROADCASTING CO
COMPLETED	06/02/77	02/20/81	06/24/81
SAMPLED	12/01/78	01/19/82	10/--/82
FORMATION	PENN-STRAWN	PERM-PREMIER	PENN-NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8708	1800	6154
WELLHEAD PRESSURE,PSIG	2035	1000	1947
OPEN FLOW, MCFD	4256	250	4186
COMPONENT, MOLE PCT			
METHANE	83.9	65.6	88.6
ETHANE	5.3	9.6	4.0
PROPANE	1.9	2.5	1.3
N-BUTANE	0.4	0.7	0.5
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	5.6	20.2	4.1
OXYGEN	1.0	0.2	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.07	0.05	0.15
HEATING VALUE*	1062	894	1061
SPECIFIC GRAVITY	0.658	0.736	0.634

	INDEX 3934 SAMPLE 16808	INDEX 3935 SAMPLE 16883	INDEX 3936 SAMPLE 16447
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	COLFAX
FIELD	WILDCAT	WILDCAT	NOT GIVEN
WELL NAME	BITTERLAKES PX STATE NO. 1	MANLAD STATE NO. 1	ROBERTS NO. 1
LOCATION	SEC. 16, T10S, R25E	SEC. 13, T8S, R27E	SEC. 7, T28N, R27E
OWNER	YATES PETROLEUM CORP.	RAULT PETROLEUM CORP.	W. C. ROBERTS
COMPLETED	10/--/82	07/09/82	--/--/00
SAMPLED	03/--/83	04/20/83	03/--/82
FORMATION	PERM-ABO	PENN-SAND	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	430	430	455
DEPTH, FEET	3841	6327	420
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2095	NOT GIVEN
OPEN FLOW, MCFD	1800	2650	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.4	89.9	7.7
ETHANE	3.7	3.9	0.0
PROPANE	1.5	1.0	TRACE
N-BUTANE	0.5	0.4	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.2	0.0
NITROGEN	17.6	3.3	3.0
OXYGEN	3.0	TRACE	0.0
ARGON	0.2	TRACE	0.1
HYDROGEN	0.5	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	0.3	89.1
HELIUM	0.75	0.18	0.01
HEATING VALUE*	859	1059	78
SPECIFIC GRAVITY	0.730	0.623	1.435

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3937 SAMPLE 13509	INDEX 3938 SAMPLE 2763	INDEX 3939 SAMPLE 13280
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	COLFAX	DONA ANA	EDDY
FIELD	WILDCAT	NOT GIVEN	AID
WELL NAME	ROBERTS TEST NO. 1	GAS SEEP	AID-STATE COM. NO. 1
LOCATION	SEC. 23, T29N, R24E	NEAR LAS CRUCES	SEC. 24, T17S, R28E
OWNER	W. C. ROBERTS	NOT GIVEN	PENNZOIL CO.
COMPLETED	--/--/00	--/--/00	03/30/71
SAMPLED	--/--/00	08/27/37	06/22/72
FORMATION	CRET-DAKOTA	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	455	455	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	10608
WELLHEAD PRESSURE,PSIG	40	NOT GIVEN	1890
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	99.2	79.6	84.2
ETHANE	TRACE	0.0	9.0
PROPANE	TRACE	---	3.8
N-BUTANE	0.0	---	0.8
ISOBUTANE	0.0	---	0.5
N-PENTANE	0.0	---	0.2
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.1
NITROGEN	0.6	6.5	0.8
OXYGEN	0.1	0.9	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	13.0	0.3
HELIUM	TRACE	0.00	0.03
HEATING VALUE*	1005	806	1175
SPECIFIC GRAVITY	0.558	0.713	0.678

	INDEX 3940 SAMPLE 14809	INDEX 3941 SAMPLE 17160	INDEX 3942 SAMPLE 989
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ANGELL RANCH	ANTELOPE SINK	ARTESIA
WELL NAME	WRIGHT-FED. NO. 1	NEW MEXICO STATE "DE" NO. 1	NO. 2
LOCATION	SEC. 6, T20S, R28E	SEC. 19, T19S, R23E	SEC. 25, T18S, R28E
OWNER	PENROC OIL CORP.	EXXON CO., U.S.A.	ILLINOIS OIL CO.
COMPLETED	08/22/75	03/30/83	06/01/24
SAMPLED	10/15/76	01/26/84	02/24/25
FORMATION	PENN-MORROW	PENN-CISCO CANYON	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10828	6240	1824
WELLHEAD PRESSURE,PSIG	3385	1630	NOT GIVEN
OPEN FLOW, MCFD	3439	1900	500
COMPONENT, MOLE PCT			
METHANE	91.4	87.4	65.7
ETHANE	4.9	5.9	22.1
PROPANE	1.6	2.4	---
N-BUTANE	0.4	0.8	---
ISOBUTANE	0.2	0.6	---
N-PENTANE	0.1	0.3	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.2	0.4	---
NITROGEN	0.4	1.2	11.2
OXYGEN	0.0	TRACE	0.7
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.2	0.4
HELIUM	0.02	0.03	0.18
HEATING VALUE*	1102	1154	1062
SPECIFIC GRAVITY	0.624	0.659	0.718

	INDEX 3943 SAMPLE 1060	INDEX 3944 SAMPLE 1793	INDEX 3945 SAMPLE 1937
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
WELL NAME	BARBOUR	BURCH NO. 2	STATE NO. 1
LOCATION	SEC. 19, T20S, R30E	SEC. 19, T17S, R30E	SEC. 21, T17S, R29E
OWNER	MR. WELLS	GRAYBURG OIL CO.	FORREST LEVERS
COMPLETED	--/--/00	--/--/00	01/23/30
SAMPLED	05/23/29	06/11/29	02/17/30
FORMATION	NOT GIVEN	NOT GIVEN	PERM-ARTESIA PAY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	730	2465	2280
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	100	NOT GIVEN	3600
COMPONENT, MOLE PCT			
METHANE	---	39.4	53.2
ETHANE	4.4	17.1	15.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	94.7	41.4	26.8
OXYGEN	0.4	2.1	4.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.00	0.07	0.09
HEATING VALUE*	79	706	810
SPECIFIC GRAVITY	0.974	0.825	0.769

	INDEX 3946 SAMPLE 2545	INDEX 3947 SAMPLE 2644	INDEX 3948 SAMPLE 2653
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
WELL NAME	MANN NO. 4	STATE NO. 2	NO. 56
LOCATION	SEC. 4, T18S, R27E	SEC. 25, T18S, R27E	SEC. 6, T19S, R28E
OWNER	R. D. COMPTON	FLYNN, WELCH & YATES, INC.	FLYNN, WELCH & YATES, INC.
COMPLETED	--/--/00	--/--/00	03/10/29
SAMPLED	08/26/32	09/01/33	11/02/33
FORMATION	-UPPER GAS	PERM-QUEEN	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1850	1824	690
WELLHEAD PRESSURE,PSIG	NOT GIVEN	440	203
OPEN FLOW, MCFD	2000	2000	90
COMPONENT, MOLE PCT			
METHANE	64.5	51.4	42.1
ETHANE	24.5	36.5	18.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.0	11.7	39.3
OXYGEN	1.2	0.3	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.0	0.1
HELIUM	0.01	0.11	0.22
HEATING VALUE*	1092	1175	754
SPECIFIC GRAVITY	0.727	0.785	0.807

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3949 SAMPLE 2697	INDEX 3950 SAMPLE 2734	INDEX 3951 SAMPLE 2735
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
WELL NAME	VANDAGRIFF NO. 10	STATE NO. 1	ANDREWS-STATE NO. 1
LOCATION	SEC. 8, T17S, R28E	SEC. 15, T17S, R28E	SEC. 2, T17S, R28E
OWNER	PECOS VALLEY GAS CO.	HAMMOND, ET AL.	PECOS VALLEY GAS CO.
COMPLETED	12/29/34	--/--/00	--/--/00
SAMPLED	01/08/35	10/20/36	10/20/36
FORMATION	PERM-	NOT -STRAY	-STRAY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1337	1457	1660
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1450	1000	175
COMPONENT, MOLE PCT			
METHANE	47.6	48.7	48.2
ETHANE	19.4	18.0	15.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	32.8	32.7	35.2
OXYGEN	0.1	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.09	0.09	0.07
HEATING VALUE*	830	816	773
SPECIFIC GRAVITY	0.786	0.782	0.783

	INDEX 3952 SAMPLE 2777	INDEX 3953 SAMPLE 1377	INDEX 3954 SAMPLE 8184
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA E	ATOKA
WELL NAME	NO. 2-B	RAMAGE NO. 2	W. E. FLINT NO. 1
LOCATION	SEC. 10, T17S, R28E	SEC. 31, T17S, R29E	SEC. 22, T18S, R26E
OWNER	TIGNER, ETZ & KEYES	WESTERN DRILLING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	09/13/37	10/13/25	01/20/59
SAMPLED	01/08/38	04/07/27	08/24/61
FORMATION	NOT GIVEN	NOT GIVEN	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1362	2715	9094
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	2707
OPEN FLOW, MCFD	2080	NOT GIVEN	42000
COMPONENT, MOLE PCT			
METHANE	47.6	31.8	89.9
ETHANE	18.8	59.5	5.5
PROPANE	---	---	1.7
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.4
NITROGEN	33.1	8.0	0.5
OXYGEN	0.2	0.6	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.07	0.04	0.03
HEATING VALUE*	819	1388	1124
SPECIFIC GRAVITY	0.787	0.808	0.638

	INDEX 3955 SAMPLE 14437	INDEX 3956 SAMPLE 14431	INDEX 3957 SAMPLE 14531
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ATOKA	AVALON	AVALON
WELL NAME	POKER LAKE UNIT NO. 42	OCOTILLO HILLS NO. 1	FASMEN-FED. NO. 2
LOCATION	SEC. 10, T25S, R30E	SEC. 31, T21S, R26E	SEC. 5, T21S, R26E
OWNER	PERRY R. BASS, INC.	MANAGAN PETROLEUM CORP.	MONSANTO CO.
COMPLETED	09/16/74	12/--/74	08/13/74
SAMPLED	09/13/75	08/11/75	11/14/75
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13732	10978	10734
WELLHEAD PRESSURE,PSIG	6800	3105	3567
OPEN FLOW, MCFD	NOT GIVEN	5000	17100
COMPONENT, MOLE PCT			
METHANE	91.9	96.1	96.0
ETHANE	4.6	2.0	2.2
PROPANE	1.1	0.4	0.4
N-BUTANE	0.2	TRACE	0.1
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	TRACE	TRACE
NITROGEN	0.9	0.4	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.7
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1091	1023	1029
SPECIFIC GRAVITY	0.617	0.578	0.579

	INDEX 3958 SAMPLE 2544	INDEX 3959 SAMPLE 2642	INDEX 3960 SAMPLE 16749
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	BEESON	BEESON AREA	BENSON
WELL NAME	MCINTYRE NO. 1	ROOT NO. 1-A	BENSON DEEP UNIT NO. 2
LOCATION	SEC. 21, T17S, R30E	SEC. 7, T17S, R30E	SEC. 34, T16S, R30E
OWNER	LOCKHART & CO.	C. H. LOCKHART, ET AL.	YATES PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	06/29/82
SAMPLED	08/29/32	08/28/33	01/10/83
FORMATION	NOT GIVEN	PERM-NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1812	1244	11797
WELLHEAD PRESSURE,PSIG	785	NOT GIVEN	3260
OPEN FLOW, MCFD	1000	150	1090
COMPONENT, MOLE PCT			
METHANE	19.8	37.2	82.4
ETHANE	14.7	34.9	8.4
PROPANE	---	---	3.5
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	65.5	24.7	2.2
OXYGEN	0.0	2.8	0.4
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.3	0.7
HELIUM	0.05	0.07	0.03
HEATING VALUE*	464	1002	1158
SPECIFIC GRAVITY	0.898	0.847	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3961 SAMPLE 13670	INDEX 3962 SAMPLE 14044	INDEX 3963 SAMPLE 14451
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	BURTON FLAT	BURTON FLAT	CABIN LAKE
WELL NAME	BURTON FLAT DEEP UNIT NO. 1	FED. GB NO. 1	JAMES E NO. 1
LOCATION	SEC. 5, T21S, R27E	SEC. 8, T21S, R27E	SEC. 11, T22S, R30E
OWNER	MONSANTO CO.	MOBIL OIL CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	11/04/72	09/15/73	05/01/74
SAMPLED	08/09/73	07/10/74	09/12/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11308	11234	13323
WELLHEAD PRESSURE,PSIG	3683	3611	4679
OPEN FLOW, MCFD	30000	7337	3275
COMPONENT, MOLE PCT			
METHANE	98.6	92.8	96.0
ETHANE	0.1	3.4	2.1
PROPANE	0.7	0.9	0.4
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.3	TRACE
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.5	TRACE
NITROGEN	0.4	0.6	0.4
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1044	1080	1027
SPECIFIC GRAVITY	0.593	0.618	0.582

	INDEX 3964 SAMPLE 14205	INDEX 3965 SAMPLE 12483	INDEX 3966 SAMPLE 12484
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	CARLSBAD AREA E	CARLSBAD S	CARLSBAD S
WELL NAME	NIX-YATES NO. 1	MOBIL FED. NO. 1-12	MOBIL FED. NO. 1-12
LOCATION	SEC. 2, T22S, R27E	SEC. 12, T23S, R26E	SEC. 12, T23S, R26E
OWNER	CHAMPLIN PETROLEUM CO.	PENNZOIL UNITED, INC.	PENNZOIL UNITED, INC.
COMPLETED	07/26/74	12/07/68	12/06/68
SAMPLED	10/--/74	10/26/70	10/26/70
FORMATION	PERM-WOLFCAMP	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9714	11453	10842
WELLHEAD PRESSURE,PSIG	2400	3909	4038
OPEN FLOW, MCFD	NOT GIVEN	3310	5900
COMPONENT, MOLE PCT			
METHANE	95.1	96.7	87.4
ETHANE	2.2	1.7	1.6
PROPANE	0.6	0.3	0.2
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.3	0.4	8.4
OXYGEN	0.0	0.0	1.8
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1045	1016	920
SPECIFIC GRAVITY	0.594	0.576	0.613

	INDEX 3967 SAMPLE 13681	INDEX 3968 SAMPLE 13682	INDEX 3969 SAMPLE 14007
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	CARLSBAD S	CARLSBAD S	CARLSBAD S
WELL NAME	DRAG "B" NO. 1	DRAG "B" NO. 1	SUN STATE NO. 1
LOCATION	SEC. 18, T23S, R27E	SEC. 18, T23S, R27E	SEC. 22, T21S, R27E
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	TIPCO
COMPLETED	08/07/72	08/07/72	07/30/73
SAMPLED	08/17/73	08/17/73	05/13/74
FORMATION	PENN-MORROW	PENN-CANYON	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11468	10280	11350
WELLHEAD PRESSURE,PSIG	4251	4874	3450
OPEN FLOW, MCFD	21325	8411	2210
COMPONENT, MOLE PCT			
METHANE	96.7	84.1	94.5
ETHANE	1.2	9.2	3.1
PROPANE	0.5	3.1	0.7
N-BUTANE	TRACE	0.8	0.1
ISOBUTANE	0.1	0.7	0.1
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	TRACE	0.3	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.7	0.9	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.9
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1021	1192	1043
SPECIFIC GRAVITY	0.578	0.679	0.592

	INDEX 3970 SAMPLE 16981	INDEX 3971 SAMPLE 14252	INDEX 3972 SAMPLE 7822
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	CARLSBAD S	CORRAL DRAW	CRAWFORD
WELL NAME	NICHOLS NO. 1	CORRAL DRAW UNIT NO. 1	CRAWFORD NO. 2-27
LOCATION	SEC. 21, T22S, R27E	SEC. 14, T25S, R29E	SEC. 27, T24S, R26E
OWNER	PETRO-LEWIS CORP.	MOBIL OIL CORP.	UNION OIL CO. OF CALIF.
COMPLETED	06/02/82	07/15/74	06/07/60
SAMPLED	06/21/83	01/07/75	12/28/60
FORMATION	PENN-STRAWN	PENN-MORROW	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10319	13621	11188
WELLHEAD PRESSURE,PSIG	4500	5135	3751
OPEN FLOW, MCFD	6483	13694	7200
COMPONENT, MOLE PCT			
METHANE	85.2	97.6	93.8
ETHANE	7.1	0.6	0.4
PROPANE	2.5	0.1	0.1
N-BUTANE	0.8	0.0	TRACE
ISOBUTANE	0.8	0.0	TRACE
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.8	0.0	TRACE
CYCLOPENTANE	0.3	0.0	TRACE
HEXANES PLUS	0.7	0.0	TRACE
NITROGEN	1.0	0.8	4.1
OXYGEN	TRACE	0.1	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.5	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	1.1
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1200	1002	960
SPECIFIC GRAVITY	0.685	0.570	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3973 SAMPLE 14711	INDEX 3974 SAMPLE 16329	INDEX 3975 SAMPLE 15254
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	CROW FLATS	CULEBRA BLUFF	DAGGER DRAW
WELL NAME	AMOCO FED. NO. 1	FEDERAL WEL COM NO.1	C. C. TANK UNIT NO. 1
LOCATION	SEC. 19, T16S, R28E	SEC. 9, T23S, R28E	SEC. 28, T19S, R24E
OWNER	SAMEDAN OIL CORP.	POGO PRODUCING CO.	YATES PETROLEUM CORP.
COMPLETED	--/--/74	03/21/81	06/18/76
SAMPLED	06/27/76	09/05/81	04/06/78
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	6530	8107
WELLHEAD PRESSURE,PSIG	1255	6600	706
OPEN FLOW, MCFD	500	8195	1464
COMPONENT, MOLE PCT			
METHANE	87.4	96.9	83.6
ETHANE	6.9	1.7	8.7
PROPANE	3.1	0.2	3.6
N-BUTANE	0.8	0.1	1.0
ISOBUTANE	0.3	TRACE	0.5
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.3	TRACE	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.5	0.6	1.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.02	0.02	0.09
HEATING VALUE*	1153	1026	1186
SPECIFIC GRAVITY	0.653	0.575	0.685

	INDEX 3976 SAMPLE 1210	INDEX 3977 SAMPLE 13793	INDEX 3978 SAMPLE 15255
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	DIAMOND DOME	EAGLE CREEK	EAGLE CREEK
WELL NAME	ERWIN NO. 1	ARTESIA AIRPORT CF NO. 1	CASKEY "EV" NO. 1
LOCATION	SEC. 8, T16S, R26E	SEC. 11, T17S, R25E	SEC. 30, T17S, R26E
OWNER	COLORADO DRILLING CO.	YATES PETROLEUM CORP.	YATES PETROLEUM CORP.
COMPLETED	12/--/25	12/27/71	01/14/76
SAMPLED	02/01/26	11/02/73	04/06/78
FORMATION	PERM-	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	825	7860	8166
WELLHEAD PRESSURE,PSIG	NOT GIVEN	800	1540
OPEN FLOW, MCFD	2000	200	4400
COMPONENT, MOLE PCT			
METHANE	0.0	89.3	89.9
ETHANE	2.3	5.9	5.4
PROPANE	---	2.6	1.8
N-BUTANE	---	0.1	0.6
ISOBUTANE	---	0.8	0.3
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	97.1	0.6	1.2
OXYGEN	0.4	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.07	0.03	0.06
HEATING VALUE*	41	1127	1116
SPECIFIC GRAVITY	0.971	0.636	0.633

	INDEX 3979 SAMPLE 16411	INDEX 3980 SAMPLE 11761	INDEX 3981 SAMPLE 15334
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	EAGLE CREEK	EMPIRE	EMPIRE S
WELL NAME	PATTERSON EL NO. 1	TRIGG FED. NO. 1	TRAVIS DEEP UNIT NO. 1
LOCATION	SEC. 31, T17S, R26E	SEC. 34, T17S, R27E	SEC. 18, T18S, R29E
OWNER	YATES PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	MEYCO
COMPLETED	01/11/77	10/31/68	03/22/77
SAMPLED	01/20/82	02/10/69	08/03/78
FORMATION	PENN-STRAWN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7900	9626	10844
WELLHEAD PRESSURE,PSIG	1289	2950	1107
OPEN FLOW, MCFD	400	7000	1246
COMPONENT, MOLE PCT			
METHANE	90.4	73.4	87.5
ETHANE	4.8	5.9	6.3
PROPANE	1.6	4.1	2.9
N-BUTANE	0.4	2.0	0.7
ISOBUTANE	0.3	1.1	0.4
N-PENTANE	0.1	0.8	0.2
ISOPENTANE	0.1	0.9	0.3
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	1.0	0.2
NITROGEN	1.5	8.3	0.9
OXYGEN	0.3	1.7	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.03	TRACE	0.02
HEATING VALUE*	1089	1195	1147
SPECIFIC GRAVITY	0.625	0.783	0.653

	INDEX 3982 SAMPLE 14441	INDEX 3983 SAMPLE 1411	INDEX 3984 SAMPLE 11034
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	FORTY NINER RIDGE	GETTY	GOLDEN EAGLE
WELL NAME	FORTY NINER RIDGE NO. 2	GETTY OIL CO. NO.1	PURE FED. NO. 1
LOCATION	SEC. 21, T23S, R30E	SEC. 19, T20S, R29E	SEC. 11, T21S, R25E
OWNER	SKELLY OIL CO.	GETTY OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	12/04/74	04/--/27	12/27/65
SAMPLED	08/19/75	07/12/27	07/20/67
FORMATION	PENN-MORROW	PERM---	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13805	1040	9995
WELLHEAD PRESSURE,PSIG	2800	200	3803
OPEN FLOW, MCFD	2492	10	3708
COMPONENT, MOLE PCT			
METHANE	96.5	56.9	95.2
ETHANE	1.4	4.5	2.4
PROPANE	0.3	---	0.5
N-BUTANE	TRACE	---	0.2
ISOBUTANE	0.1	---	TRACE
N-PENTANE	TRACE	---	0.1
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.9	37.8	0.6
OXYGEN	0.0	0.6	0.1
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.6	0.2	0.7
HELIUM	0.02	0.20	0.02
HEATING VALUE*	1025	657	1042
SPECIFIC GRAVITY	0.580	0.738	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3985 SAMPLE 14675	INDEX 3986 SAMPLE 2004	INDEX 3987 SAMPLE 2465
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	GOLDEN LANE	GRAYBURG JACKSON	GRAYBURG JACKSON
WELL NAME	HARRIS "S" NO. 1	STATE NO. 2	GREEN WELL NO. 1
LOCATION	SEC. 6, T21S, R29E	SEC. 21, T17S, R29E	SEC. 29, T17S, R29E
OWNER	MEADCO PROPERTIES	LEONARD & LEVERS	WESTERN DRILLING CO.
COMPLETED	02/19/75	04/03/30	--/--/00
SAMPLED	05/--/76	06/05/30	01/15/32
FORMATION	PENN-ATOKA	PERM-QUEEN	PERM-GRAYBURG
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11438	2284	2176
WELLHEAD PRESSURE,PSIG	3707	710	700
OPEN FLOW, MCFD	5094	600	3500
COMPONENT, MOLE PCT			
METHANE	81.8	71.4	68.5
ETHANE	10.2	13.9	19.2
PROPANE	3.8	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.5	---	---
NITROGEN	1.2	14.2	11.7
OXYGEN	TRACE	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.02	0.14	0.16
HEATING VALUE*	1207	972	1038
SPECIFIC GRAVITY	0.696	0.685	0.699

	INDEX 3988 SAMPLE 2607	INDEX 3989 SAMPLE 3985	INDEX 3990 SAMPLE 5166
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	GRAYBURG JACKSON	GRAYBURG JACKSON	GRAYBURG JACKSON
WELL NAME	MARY DODD NO. 1	1-BEESON-B	NO. 1-13-9S
LOCATION	SEC. 22, T17S, R29E	SEC. 29, T17S, R30E	SEC. 21, T17S, R29E
OWNER	BARNSDALL OIL CO.	FRANKLIN ASTON & FAIR, INC.	LEONARD OIL CO.
COMPLETED	05/05/33	10/26/44	10/10/51
SAMPLED	02/20/33	10/20/44	02/26/52
FORMATION	PERM-QUEEN	PERM-SEVEN RIVERS	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2280	1685	2310
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6742	500	500
COMPONENT, MOLE PCT			
METHANE	70.2	20.5	75.0
ETHANE	18.1	22.1	8.8
PROPANE	---	---	3.1
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	11.0	56.6	12.8
OXYGEN	0.5	0.0	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.7	0.2
HELIUM	0.11	0.07	0.10
HEATING VALUE*	1035	604	1027
SPECIFIC GRAVITY	0.694	0.904	0.694

	INDEX 3991 SAMPLE 9638	INDEX 3992 SAMPLE 9274	INDEX 3993 SAMPLE 15256
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	HOPE S	INDIAN BASIN	INDIAN BASIN W
WELL NAME	NEW MEXICO STATE A.H. NO. 1	NO. 1	HILLARD "BF" NO. 1
LOCATION	SEC. 30, T18S, R23E	SEC. 10, T21S, R23E	SEC. 14, T21S, R22E
OWNER	SUNRAY DX OIL CO.	MARATHON OIL CO.	YATES PETROLEUM CORP.
COMPLETED	01/17/63	08/10/63	11/19/76
SAMPLED	11/16/64	04/02/64	04/06/78
FORMATION	PENN-STRAWN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7326	9118	8790
WELLHEAD PRESSURE,PSIG	2120	2728	2495
OPEN FLOW, MCFD	20116	6880	7812
COMPONENT, MOLE PCT			
METHANE	92.0	90.3	92.1
ETHANE	4.9	4.8	4.2
PROPANE	1.2	1.7	1.5
N-BUTANE	0.3	0.7	0.4
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.5	0.1
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.6	0.2
NITROGEN	0.4	0.0	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.5
HELIUM	0.06	0.02	0.03
HEATING VALUE*	1085	1143	1094
SPECIFIC GRAVITY	0.611	0.649	0.618

	INDEX 3994 SAMPLE 13953	INDEX 3995 SAMPLE 14449	INDEX 3996 SAMPLE 14450
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	JAMES RANCH	LA HUERTA	LA HUERTA
WELL NAME	JAMES RANCH NO. 3	TRACY A NO. 1	TRACY A NO. 1
LOCATION	SEC. 1, T23S, R30E	SEC. 33, T21S, R27E	SEC. 33, T21S, R27E
OWNER	BELCO PETROLEUM CORP.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	12/08/72	04/15/74	04/15/74
SAMPLED	03/15/74	09/09/75	09/09/75
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12731	9950	10947
WELLHEAD PRESSURE,PSIG	6287	1700	1750
OPEN FLOW, MCFD	18000	11252	10085
COMPONENT, MOLE PCT			
METHANE	86.6	94.9	94.8
ETHANE	6.0	2.8	2.9
PROPANE	2.2	0.6	0.6
N-BUTANE	1.0	0.1	0.1
ISOBUTANE	0.7	0.1	0.1
N-PENTANE	0.7	TRACE	TRACE
ISOPENTANE	0.5	0.1	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.9	0.1	0.1
NITROGEN	0.7	0.5	0.5
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1204	1043	1040
SPECIFIC GRAVITY	0.688	0.592	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 3997 SAMPLE 14719	INDEX 3998 SAMPLE 2657	INDEX 3999 SAMPLE 14469
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	LA HUERTA	LEONARD & LEVERS	LOGAN DRAW
WELL NAME	IVES "A" NO. 1	STATE NO. 9	ARCO B, FED. GAS NO. 1
LOCATION	SEC. 30, T21S, R27E	SEC. 22, T17S, R29E	SEC. 25, T17S, R27E
OWNER	CITIES SERVICE OIL CO.	HARRY LEONARD	AMOCO PRODUCTION CO.
COMPLETED	10/26/75	--/--/00	03/03/74
SAMPLED	07/15/76	11/19/33	08/29/75
FORMATION	PENN-MORROW	-STRAY	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11186	2851	6756
WELLHEAD PRESSURE,PSIG	1550	NOT GIVEN	1953
OPEN FLOW, MCFD	36207	200	34950
COMPONENT, MOLE PCT			
METHANE	93.7	64.8	75.8
ETHANE	3.5	27.2	11.8
PROPANE	0.9	---	5.6
N-BUTANE	0.2	---	1.4
ISOBUTANE	0.2	---	0.7
N-PENTANE	0.0	---	0.3
ISOPENTANE	0.1	---	0.4
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.9	5.9	3.7
OXYGEN	0.0	0.5	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	2.0	0.1
HELIUM	0.02	0.07	0.08
HEATING VALUE*	1058	1144	1239
SPECIFIC GRAVITY	0.602	0.733	0.738

	INDEX 4000 SAMPLE 8640	INDEX 4001 SAMPLE 9806	INDEX 4002 SAMPLE 2007
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	MALAGA	MALCO AREA	MALJAMAR
WELL NAME	U.S.G.S. - 8	FED. CASS RANCH UNIT NO. 1	RUSSELL NO. 5
LOCATION	SEC. 16, T24S, R29E	SEC. 31, T20S, R24E	SEC. 18, T17S, R31E
OWNER	U.S. GEOLOGICAL SURVEY	STANDARD OIL CO. OF TEXAS	PUEBLO OIL CO.
COMPLETED	05/--/39	05/24/63	--/--/00
SAMPLED	08/01/62	03/15/65	06/05/30
FORMATION	PERM-RUSTLER	PENN-	PERM-MALJAMAR
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	199	7648	2885
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1560	1000
COMPONENT, MOLE PCT			
METHANE	0.1	92.7	68.5
ETHANE	TRACE	4.2	16.0
PROPANE	0.0	1.1	---
N-BUTANE	TRACE	0.3	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.3	---
NITROGEN	97.8	0.8	14.9
OXYGEN	TRACE	TRACE	0.3
ARGON	1.2	TRACE	---
HYDROGEN	0.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.2	0.3
HELIUM	TRACE	0.04	0.07
HEATING VALUE*	2	1084	981
SPECIFIC GRAVITY	0.974	0.611	0.700

	INDEX 4003 SAMPLE 2008	INDEX 4004 SAMPLE 2009	INDEX 4005 SAMPLE 13284
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	MALJAMAR	MALJAMAR	MAROON CLIFFS
WELL NAME	LYNCH NO. 1	ROBINSON NO. 1	BIG EDDY UNIT NO. 7
LOCATION	SEC. 22, T17S, R31E	SEC. 25, T16S, R31E	SEC. 19, T20S, R31E
OWNER	SKELLY OIL CO.	TEXAS PRODUCTION CO.	PERRY R. BASS, INC.
COMPLETED	07/15/27	07/16/27	05/03/71
SAMPLED	06/03/30	06/04/30	06/28/72
FORMATION	PERM-	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3750	3884	12656
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	2050
OPEN FLOW, MCFD	200	11700	3800
COMPONENT, MOLE PCT			
METHANE	52.1	69.9	89.1
ETHANE	39.6	17.4	6.0
PROPANE	---	---	2.0
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	6.7	12.1	0.8
OXYGEN	0.3	0.3	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.3	0.1	0.7
HELIUM	0.07	0.17	0.02
HEATING VALUE*	1237	1020	1111
SPECIFIC GRAVITY	0.792	0.692	0.636

	INDEX 4006 SAMPLE 14042	INDEX 4007 SAMPLE 1231	INDEX 4008 SAMPLE 1360
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	MORROW	NOT GIVEN	NOT GIVEN
WELL NAME	FORTY NINER RIDGE NO. 1	ROSE PRINT	VANDEGRIFF
LOCATION	SEC. 16, T23S, R30E	SEC. 31, T24S, R27E	SEC. 5, T17S, R28E
OWNER	SKELLY OIL CO.	EMPIRE GAS & FUEL CO.	DECEM DEVELOPMENT CO.
COMPLETED	12/06/73	02/--/26	--/--/00
SAMPLED	07/10/74	03/01/26	03/08/27
FORMATION	PENN-MORROW	PERM-	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13914	2300	1350
WELLHEAD PRESSURE,PSIG	5112	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3703	70	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.8	84.5	45.6
ETHANE	2.0	10.1	19.1
PROPANE	0.3	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.5	3.8	34.2
OXYGEN	TRACE	1.0	0.9
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.2	0.6	0.2
HELIUM	0.02	0.07	0.04
HEATING VALUE*	1026	1037	804
SPECIFIC GRAVITY	0.585	0.632	0.797

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4009 SAMPLE 1368	INDEX 4010 SAMPLE 1505	INDEX 4011 SAMPLE 1548
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	RUSSELL NO. 18	GOVT. POTASH TEST NO. 3	U.S. GOVT.-POTASH TEST
LOCATION	SEC. 24, T17S, R27E	SEC. 34, T22S, R30E	SEC. 34, T22S, R30E
OWNER	NOT GIVEN	GOVERNMENT PERMIT	NOT GIVEN
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/10/27	09/16/27	11/25/27
FORMATION	NOT GIVEN	PERM-SALT	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	940	782	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1000	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	2.5	2.8	2.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	96.9	96.7	97.5
OXYGEN	0.3	0.1	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.09	0.02	0.02
HEATING VALUE*	45	50	36
SPECIFIC GRAVITY	0.972	0.972	0.979

	INDEX 4012 SAMPLE 1633	INDEX 4013 SAMPLE 1915	INDEX 4014 SAMPLE 2812
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	GYPSY NO. 4	U.S.G.S. POTASH TEST NO. 6	SAMPLE OF MINE GAS
LOCATION	SEC. 9, T22S, R30E	SEC. 34, T21S, R28E	NOT GIVEN
OWNER	ROGERS-GYPSY OIL CO.	NOT GIVEN	UNION POTASH CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/13/28	12/23/29	01/25/39
FORMATION	NOT GIVEN	PERM-SALT	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	429	606	NOT GIVEN
WELLHEAD PRESSURE,PSIG	500	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	2.8
ETHANE	1.4	0.0	2.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	98.0	99.2	94.6
OXYGEN	0.5	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.6	0.0
HELIUM	TRACE	0.05	0.03
HEATING VALUE*	25	0	70
SPECIFIC GRAVITY	0.971	0.969	0.958

	INDEX 4015 SAMPLE 5266	INDEX 4016 SAMPLE 5563	INDEX 4017 SAMPLE 6859
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	GERTRUDE W. DUFFIELD NO. 1	STATE AB NO. 1	FED. D NO. 2
LOCATION	SEC. 21, T16S, R27E	SEC. 29, T17S, R28E	SEC. 12, T24S, R26E
OWNER	CONTINENTAL OIL CO.	STANOLIND OIL & GAS CO.	JOSEPH I. O'NEILL, JR.
COMPLETED	04/27/52	08/14/53	09/17/58
SAMPLED	07/07/52	11/04/53	11/05/58
FORMATION	PENN-A	PENN-	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8700	10102	11566
WELLHEAD PRESSURE,PSIG	2943	4066	3700
OPEN FLOW, MCFD	3800	30000	3600
COMPONENT, MOLE PCT			
METHANE	89.7	90.0	97.0
ETHANE	5.5	6.8	1.1
PROPANE	2.0	2.0	0.1
N-BUTANE	0.5	0.3	TRACE
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.3	0.2	0.8
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.8
HELIUM	0.05	0.03	0.01
HEATING VALUE*	1100	1109	1010
SPECIFIC GRAVITY	0.629	0.622	0.574

	INDEX 4018 SAMPLE 7173	INDEX 4019 SAMPLE 7901	INDEX 4020 SAMPLE 8870
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	JAMES RANCH NO. 1	MCKITTRICK CANYON NO. 1	BIG EDDY UNIT NO. 1
LOCATION	SEC. 36, T22S, R30E	SEC. 25, T22S, R25E	SEC. 3, T20S, R31E
OWNER	SHELL OIL CO.	HONOLULU GAS CO. LTD.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/01/58	--/--/00	06/05/62
SAMPLED	08/03/59	03/16/61	02/22/63
FORMATION	PENN-	PENN-MORROW	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12920	11245	10690
WELLHEAD PRESSURE,PSIG	6600	3541	2205
OPEN FLOW, MCFD	9000	753	10400
COMPONENT, MOLE PCT			
METHANE	70.9	94.4	84.2
ETHANE	3.3	3.5	9.8
PROPANE	1.4	0.6	3.1
N-BUTANE	0.2	0.1	1.0
ISOBUTANE	0.1	0.1	0.4
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.1	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	18.9	0.4	0.8
OXYGEN	4.4	TRACE	0.0
ARGON	0.2	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.2
HELIUM	0.01	0.03	0.02
HEATING VALUE*	833	1052	1183
SPECIFIC GRAVITY	0.700	0.594	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4021 SAMPLE 10823		INDEX 4022 SAMPLE 13815		INDEX 4023 SAMPLE 13816	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	HACKBERRY HILLS UNIT NO. 1		MCMINN-STATE NO. 1		MCMINN-STATE NO. 1	
LOCATION	SEC. 22, T22S, R26E		SEC. 18, T21S, R26E		SEC. 18, T21S, R26E	
OWNER	SINCLAIR OIL & GAS CO.		INEXCO OIL CO.		INEXCO OIL CO.	
COMPLETED	07/16/66		08/01/72		08/01/72	
SAMPLED	12/17/66		11/--/73		11/--/73	
FORMATION	PENN-CANYON		PENN-MORROW		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	10061		10536		9868	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	13574		7300		11700	
COMPONENT, MOLE PCT						
METHANE	79.7		95.7		92.0	
ETHANE	10.9		2.3		4.5	
PROPANE	3.9		0.5		1.2	
N-BUTANE	1.2		0.1		0.2	
ISOBUTANE	0.6		0.1		0.3	
N-PENTANE	0.2		TRACE		TRACE	
ISOPENTANE	0.4		TRACE		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	2.7		0.3		1.1	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.8		0.3	
HELIUM	0.02		0.02		0.03	
HEATING VALUE*	1201		1039		1083	
SPECIFIC GRAVITY	0.709		0.587		0.615	

	INDEX 4024 SAMPLE 14038		INDEX 4025 SAMPLE 14122		INDEX 4026 SAMPLE 14124	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	MALAGA "A" NO. 1		PARKWAY WEST UNIT NO. 1		PARKWAY WEST UNIT NO. 1	
LOCATION	SEC. 2, T24S, R28E		SEC. 28, T19S, R29E		SEC. 28, T19S, R29E	
OWNER	PHILLIPS PETROLEUM CO.		PETROLEUM CORP.		PETROLEUM CORP.	
COMPLETED	03/18/74		03/26/73		03/26/74	
SAMPLED	--/--/00		08/05/74		08/05/74	
FORMATION	PENN-MORROW		PENN-STRAWN		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	12310		10296		10578	
WELLHEAD PRESSURE,PSIG	1500		2740		3660	
OPEN FLOW, MCFD	350		2014		2770	
COMPONENT, MOLE PCT						
METHANE	96.5		78.6		85.3	
ETHANE	1.2		12.9		7.4	
PROPANE	0.1		4.8		3.1	
N-BUTANE	TRACE		1.0		0.8	
ISOBUTANE	0.0		0.5		0.6	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.1		0.2		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	TRACE		0.1		0.2	
NITROGEN	1.0		1.5		1.8	
OXYGEN	0.1		TRACE		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.2		0.2	
HELIUM	0.03		0.02		0.02	
HEATING VALUE*	1010		1225		1160	
SPECIFIC GRAVITY	0.579		0.707		0.669	

	INDEX 4027 SAMPLE 14311		INDEX 4028 SAMPLE 14321		INDEX 4029 SAMPLE 14528	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	FANNING NO. 1		G. CONLEY FED. NO. 1		FLINT NO. 1	
LOCATION	SEC. 4, T19S, R26E		SEC. 33, T20S, R27E		SEC. 25, T17S, R25E	
OWNER	SAMEDAN OIL CORP.		ATLANTIC RICHFIELD CO.		WESTERN OIL PRODUCERS, INC.	
COMPLETED	01/05/75		06/23/74		04/18/74	
SAMPLED	03/31/75		04/--/75		11/12/75	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-CISCO	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	9207		10672		6300	
WELLHEAD PRESSURE,PSIG	2800		3647		1375	
OPEN FLOW, MCFD	2900		3948		4000	
COMPONENT, MOLE PCT						
METHANE	91.4		93.7		86.5	
ETHANE	4.3		3.6		7.3	
PROPANE	1.4		0.9		3.2	
N-BUTANE	0.3		0.1		0.8	
ISOBUTANE	0.3		0.2		0.5	
N-PENTANE	0.1		TRACE		0.2	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	1.3		0.5		1.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.8		0.1	
HELIUM	0.03		0.02		0.05	
HEATING VALUE*	1086		1057		1160	
SPECIFIC GRAVITY	0.622		0.600		0.659	

	INDEX 4030 SAMPLE 14608		INDEX 4031 SAMPLE 14720		INDEX 4032 SAMPLE 14788	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	EDDY		EDDY		EDDY	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	ALLIED B NO. 1		LITTLE BOX CANYON NO. 1		GULF FED. NO. 1	
LOCATION	SEC. 27, T20S, R27E		SEC. 7, T21S, R22E		SEC. 35, T19S, R25E	
OWNER	PENROC OIL CORP.		CITIES SERVICE OIL CO.		MILLIARD OIL & GAS, INC.	
COMPLETED	--/--/00		09/05/75		04/11/74	
SAMPLED	03/10/76		07/15/76		09/28/76	
FORMATION	PERM-BONE SPRING		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	NOT GIVEN		7986		9325	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1500		3020	
OPEN FLOW, MCFD	128		2426		2639	
COMPONENT, MOLE PCT						
METHANE	84.8		93.1		95.5	
ETHANE	6.5		3.8		2.5	
PROPANE	2.6		0.9		0.4	
N-BUTANE	1.2		0.2		0.1	
ISOBUTANE	0.6		0.2		0.1	
N-PENTANE	0.4		TRACE		0.0	
ISOPENTANE	1.2		TRACE		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.5		0.1		TRACE	
NITROGEN	1.1		1.2		0.3	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.0		0.3		0.8	
HELIUM	0.02		0.03		0.03	
HEATING VALUE*	1201		1055		1034	
SPECIFIC GRAVITY	0.699		0.597		0.584	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4033 SAMPLE 16251	INDEX 4034 SAMPLE 11573	INDEX 4035 SAMPLE 11574
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	NOT GIVEN	PADUCA	PADUCA
WELL NAME	LAKE MCMILLAN FED. NO. 1	COTTON DRAW UNIT NO. 65	COTTON DRAW UNIT NO. 65
LOCATION	SEC. 30, T19S, R27E	SEC. 2, T25S, R31E	SEC. 2, T25S, R31E
OWNER	GULF OIL CORP.	TEXACO INC.	TEXACO INC.
COMPLETED	10/18/80	06/03/67	06/03/67
SAMPLED	04/24/81	07/12/68	07/12/68
FORMATION	PERM-WOLFCAMP	PERM-WOLFCAMP	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7870	12851	14867
WELLHEAD PRESSURE, PSIG	1660	2418	5474
OPEN FLOW, MCFD	5971	9592	21230
COMPONENT, MOLE PCT			
METHANE	77.9	87.7	97.4
ETHANE	13.1	7.4	0.7
PROPANE	4.6	2.2	0.1
N-BUTANE	1.0	0.6	0.0
ISOBUTANE	0.4	0.3	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	2.5	0.7	0.8
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.0
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1213	1145	1002
SPECIFIC GRAVITY	0.708	0.649	0.576

	INDEX 4036 SAMPLE 2606	INDEX 4037 SAMPLE 14683	INDEX 4038 SAMPLE 14435
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	PECOS VALLEY	PHANTOM DRAW	GUADALUPE
WELL NAME	VANDAGRIFF NO. 7	PHANTOM DRAW FED. UNIT NO. 1	BIG EDDY UNIT NO. 38
LOCATION	SEC. 5, T17S, R28E	SEC. 20, T26S, R31E	SEC. 34, T21S, R29E
OWNER	PECOS VALLEY GAS CO.	TEXAS PACIFIC OIL CO., ET AL	PERRY R. BASS, INC.
COMPLETED	--/--/00	09/01/75	03/06/74
SAMPLED	02/06/33	05/28/76	08/13/75
FORMATION	-STRAY PAY	PERM-WOLFCAMP	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1340	12670	13068
WELLHEAD PRESSURE, PSIG	NOT GIVEN	7000	950
OPEN FLOW, MCFD	1450	19789	8337
COMPONENT, MOLE PCT			
METHANE	47.5	88.8	95.5
ETHANE	18.5	6.7	2.3
PROPANE	---	1.9	0.5
N-BUTANE	---	0.6	0.1
ISOBUTANE	---	0.4	0.1
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.2	0.0
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	TRACE
NITROGEN	33.1	0.7	0.4
OXYGEN	0.6	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	1.0
HELIUM	0.07	0.01	0.02
HEATING VALUE*	813	1134	1028
SPECIFIC GRAVITY	0.787	0.643	0.585

	INDEX 4039 SAMPLE 17558	INDEX 4040 SAMPLE 9935	INDEX 4041 SAMPLE 11835
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	RED TANK-ATOKA	RIVERSIDE	ROCK TANK
WELL NAME	SEL FED. NO. 2	JEAN M. NO. 1	ROCK TANK UNIT NO. 1
LOCATION	SEC. 12, T22S, R31E	SEC. 31, T16S, R27E	SEC. 7, T23S, R25E
OWNER	POGO PRODUCING CO.	JAHN A. YATES, ET AL.	MONSANTO CO.
COMPLETED	12/21/82	12/19/63	01/21/68
SAMPLED	12/27/84	06/22/65	04/24/69
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13646	8357	9965
WELLHEAD PRESSURE, PSIG	4200	NOT GIVEN	3117
OPEN FLOW, MCFD	1336	2100	6698
COMPONENT, MOLE PCT			
METHANE	92.8	91.0	95.1
ETHANE	2.9	5.1	2.7
PROPANE	0.8	1.5	0.4
N-BUTANE	0.3	0.4	0.2
ISOBUTANE	0.3	0.3	0.0
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	0.7	0.8	0.4
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.9
CARBON DIOXIDE	0.1	0.4	0.7
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1075	1089	1043
SPECIFIC GRAVITY	0.618	0.619	0.589

	INDEX 4042 SAMPLE 11836	INDEX 4043 SAMPLE 11837	INDEX 4044 SAMPLE 13603
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ROCK TANK	ROCK TANK	ROCKY ARROYO
WELL NAME	ROCK TANK UNIT NO. 1	ROCK TANK UNIT NO. 2	REESE CLEVELAND NO. 1-Y
LOCATION	SEC. 7, T23S, R25E	SEC. 6, T23S, R25E	SEC. 33, T21S, R22E
OWNER	MONSANTO CO.	MONSANTO CO.	GREAT WESTERN DRILLING CO.
COMPLETED	01/21/68	07/17/68	12/27/72
SAMPLED	04/24/69	04/24/69	06/01/73
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10290	10405	9126
WELLHEAD PRESSURE, PSIG	3385	3381	2700
OPEN FLOW, MCFD	52351	24566	5195
COMPONENT, MOLE PCT			
METHANE	95.7	93.9	93.4
ETHANE	2.3	2.2	3.6
PROPANE	0.3	0.2	1.1
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.5	1.8	0.3
OXYGEN	0.1	0.4	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.6
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1045	1025	1074
SPECIFIC GRAVITY	0.590	0.596	0.606

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4045 SAMPLE 1349	INDEX 4046 SAMPLE 12293	INDEX 4047 SAMPLE 17583
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	RUSSELL	SAND DUNES	SAND DUNES
WELL NAME	RUSSELL NO. 1A	TODD-FED. 26 NO. 1	TODD FED. 23 NO. 3
LOCATION	SEC. 35, T17S, R27E	SEC. 26, T23S, R31E	SEC. 23, T23S, R31E
OWNER	EMPIRE GAS & FUEL CO.	TEXAS AMERICAN OIL CORP.	TEXAS AMERICAN OIL CORP.
COMPLETED	--/--/00	12/12/69	01/29/83
SAMPLED	02/23/27	06/10/70	02/06/85
FORMATION	PERM-	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1592	13679	14416
WELLHEAD PRESSURE,PSIG	NOT GIVEN	7871	2200
OPEN FLOW, MCFD	NOT GIVEN	75000	515
COMPONENT, MOLE PCT			
METHANE	29.4	94.1	96.4
ETHANE	61.3	3.2	1.2
PROPANE	---	0.6	0.1
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	8.1	1.4	1.2
OXYGEN	1.0	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1396	1034	1009
SPECIFIC GRAVITY	0.899	0.591	0.577

	INDEX 4048 SAMPLE 16370	INDEX 4049 SAMPLE 16371	INDEX 4050 SAMPLE 15364
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	SAND POINT	SAND POINT	SHUGART N
WELL NAME	BIG EDDY UNIT NO. 72	BIG EDDY UNIT NO. 72	LITTLEFIELD EM FED. NO. 1
LOCATION	SEC. 3, T21S, R28E	SEC. 3, T21S, R28E	SEC. 20, T18S, R31E
OWNER	PERRY R. BASS	PERRY R. BASS	GULF OIL EXPL. & PROD. CO.
COMPLETED	05/30/80	05/30/80	04/04/77
SAMPLED	11/04/81	--/--/00	09/06/78
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11674	11265	11102
WELLHEAD PRESSURE,PSIG	1800	1350	2630
OPEN FLOW, MCFD	6068	3416	5310
COMPONENT, MOLE PCT			
METHANE	92.5	92.9	81.7
ETHANE	4.2	3.8	9.1
PROPANE	1.0	0.9	4.1
N-BUTANE	0.3	0.2	1.0
ISOBUTANE	0.1	0.1	0.5
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.5	1.5	2.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.4	0.2
HELIUM	0.02	0.02	0.04
HEATING VALUE*	1065	1065	1183
SPECIFIC GRAVITY	0.609	0.605	0.691

	INDEX 4051 SAMPLE 15366	INDEX 4052 SAMPLE 10981	INDEX 4053 SAMPLE 11883
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	SHUGART N	SPRING	SPRING
WELL NAME	LITTLEFIELD EM FED. NO. 1	SPRINGS UNIT NO. 1	LEWERS-FED. NO. 1
LOCATION	SEC. 20, T18S, R31E	SEC. 34, T20S, R26E	SEC. 2, T21S, R25E
OWNER	GULF OIL EXPL. & PROD. CO.	GULF OIL CORP.	CONTINENTAL OIL CO.
COMPLETED	03/28/77	12/13/66	12/19/68
SAMPLED	09/06/78	05/31/67	09/15/69
FORMATION	PENN-MORROW	PENN-	PENN-CISCO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11567	8004	8088
WELLHEAD PRESSURE,PSIG	2329	2580	2500
OPEN FLOW, MCFD	14900	12292	20455
COMPONENT, MOLE PCT			
METHANE	86.2	86.4	88.0
ETHANE	7.6	6.3	6.2
PROPANE	3.0	2.8	2.6
N-BUTANE	0.7	1.0	0.9
ISOBUTANE	0.4	0.7	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.5	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	0.7	1.0	0.7
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1160	1165	1148
SPECIFIC GRAVITY	0.662	0.676	0.654

	INDEX 4054 SAMPLE 13712	INDEX 4055 SAMPLE 2005	INDEX 4056 SAMPLE 2784
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	SQUARE LAKE	STYRDIS	STYRDIS
WELL NAME	ANDERSON-FEDERAL NO. 1	BURNETT NO. 5	SAPPENFIELD NO. 1
LOCATION	SEC. 7, T17S, R30E	SEC. 5, T17S, R28E	SEC. 4, T16S, R28E
OWNER	DORCHESTER EXPLORATION, INC.	PECOS VALLEY GAS CO.	PECOS VALLEY GAS CO.
COMPLETED	07/26/72	03/28/30	--/--/00
SAMPLED	09/11/73	06/05/30	03/22/38
FORMATION	PENN-MORROW	PERM--	PERM-ARTESIA PAY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10844	1330	1770
WELLHEAD PRESSURE,PSIG	2350	NOT GIVEN	500
OPEN FLOW, MCFD	2111	1200	333
COMPONENT, MOLE PCT			
METHANE	86.2	52.7	5.7
ETHANE	7.7	14.3	2.9
PROPANE	3.0	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	1.1	32.5	90.7
OXYGEN	0.0	0.3	0.5
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.04	0.09	0.10
HEATING VALUE*	1144	790	110
SPECIFIC GRAVITY	0.655	0.763	0.948

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX SAMPLE 4057 15797	INDEX SAMPLE 4058 16064	INDEX SAMPLE 4059 17518
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	TELEDYNE AREA	TURKEY TRACK	UNDESIGNATED
WELL NAME	PARDUE FARMS NO. 1	STATE ML11 NO. 1	EASTERN SHORE "TL" FED. NO.1
LOCATION	SEC. 26, T23S, R28E	SEC. 11, T19S, R29E	SEC. 6, T19S, R27E
OWNER	AMOCO PRODUCTION CO.	TENNECO OIL CO.	YATES PETROLEUM CORP.
COMPLETED	06/28/78	11/09/79	05/13/83
SAMPLED	09/29/79	08/28/80	11/08/84
FORMATION	PENN-STRAWN	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11484	10800	7708
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3500	2410
OPEN FLOW, MCFD	3250	4836	3694
COMPONENT, MOLE PCT			
METHANE	63.3	88.1	68.4
ETHANE	15.8	6.5	7.5
PROPANE	9.2	2.3	5.9
N-BUTANE	3.1	0.5	1.1
ISOBUTANE	3.3	0.4	0.5
N-PENTANE	1.1	0.1	0.2
ISOPENTANE	1.4	0.3	0.5
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	1.6	0.2	0.2
NITROGEN	0.5	1.2	13.4
OXYGEN	0.1	TRACE	2.7
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	TRACE	0.03	0.23
HEATING VALUE*	1175	1150	1026
SPECIFIC GRAVITY	0.918	0.646	0.751

	INDEX SAMPLE 4060 1208	INDEX SAMPLE 4061 2752	INDEX SAMPLE 4062 12482
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	VANDERGRIFF KEYES	VANDERGRIFF KEYES	WHITE CITY AREA
WELL NAME	NO. 1	NO. 1	ALLIED FEDERAL NO. 1-21
LOCATION	SEC. 27, T16S, R28E	SEC. 9, T17S, R28E	SEC. 21, T24S, R36E
OWNER	LANE & HOLLAND	GRANT KEYES	PENNZOIL UNITED, INC.
COMPLETED	08/23/25	06/19/37	03/04/69
SAMPLED	01/10/26	06/22/37	10/26/70
FORMATION	PERM-QUEEN	PERM-QUEEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2210	1697	11085
WELLHEAD PRESSURE,PSIG	NOT GIVEN	740	3846
OPEN FLOW, MCFD	NOT GIVEN	2500	2708
COMPONENT, MOLE PCT			
METHANE	75.0	70.2	97.2
ETHANE	0.0	15.7	1.3
PROPANE	---	---	0.2
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	22.4	13.4	0.4
OXYGEN	1.3	0.6	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.3	0.0	0.8
HELIUM	0.10	0.10	0.02
HEATING VALUE*	780	992	1013
SPECIFIC GRAVITY	0.667	0.690	0.572

	INDEX SAMPLE 4063 2006	INDEX SAMPLE 4064 6186	INDEX SAMPLE 4065 8863
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	WOOLLEY NO. 1	WELCH UNIT NO. 1-X	NO. 1
LOCATION	SEC. 14, T17S, R30E	SEC. 21, T26S, R27E	SEC. 14, T21S, R23E
OWNER	LOCKHART & CO.	EL PASO NATURAL GAS CO.	RALPH LOWE
COMPLETED	03/27/27	10/15/56	--/--/00
SAMPLED	06/03/30	11/20/56	02/15/63
FORMATION	NOT GIVEN	PENN-ATOKA	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1812	12502	8926
WELLHEAD PRESSURE,PSIG	775	3313	NOT GIVEN
OPEN FLOW, MCFD	1000	27000	750
COMPONENT, MOLE PCT			
METHANE	24.4	97.7	87.5
ETHANE	13.1	0.5	4.0
PROPANE	---	0.0	2.7
N-BUTANE	---	0.0	0.6
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.4
NITROGEN	62.4	0.3	3.8
OXYGEN	0.1	0.0	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.2	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	1.2	0.4
HELIUM	0.12	0.03	0.03
HEATING VALUE*	482	1004	1089
SPECIFIC GRAVITY	0.879	0.571	0.648

	INDEX SAMPLE 4066 9022	INDEX SAMPLE 4067 9252	INDEX SAMPLE 4068 13201
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NUAPACHE NO. 10	FED. DOOLEY NO. 1	ROCK ARROYA NO. 1
LOCATION	SEC. 10, T23S, R22E	SEC. 24, T20S, R29E	SEC. 8, T22S, R22E
OWNER	HUMBLE OIL & REFINING CO.	ODESSA NATURAL GASOLINE CO.	EL PASO NATURAL GAS CO.
COMPLETED	05/21/63	10/03/63	11/10/71
SAMPLED	06/25/63	03/09/64	05/07/72
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9572	12102	8956
WELLHEAD PRESSURE,PSIG	3008	3779	2723
OPEN FLOW, MCFD	6	16700	2008
COMPONENT, MOLE PCT			
METHANE	96.3	93.6	95.0
ETHANE	2.1	3.5	3.1
PROPANE	0.3	1.1	0.7
N-BUTANE	0.2	0.3	0.1
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	0.1	0.1	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.5
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1046	1076	1051
SPECIFIC GRAVITY	0.584	0.607	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4069 SAMPLE 13491	INDEX 4070 SAMPLE 13645	INDEX 4071 SAMPLE 13963
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	CEDAR CANYON NO. 1	ROCKY ARROYO NO. 1	LOWE STATE NO. 1
LOCATION	SEC. 9, T29S, R29E	SEC. 8, T22S, R22E	SEC. 16, T24S, R24E
OWNER	SKELLY OIL CO.	EL PASO NATURAL GAS CO.	C & K PETROLEUM, INC.
COMPLETED	08/08/72	11/10/71	10/03/73
SAMPLED	12/26/72	07/12/73	03/13/74
FORMATION	PENN-MORROW	PERM-WOLFCAMP	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13026	6563	8361
WELLHEAD PRESSURE,PSIG	4717	1875	2687
OPEN FLOW, MCFD	32800	20508	46824
COMPONENT, MOLE PCT			
METHANE	96.8	82.4	91.3
ETHANE	1.4	10.7	6.0
PROPANE	0.1	3.4	1.2
N-BUTANE	TRACE	0.6	0.2
ISOBUTANE	TRACE	0.5	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.0	0.3	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.4	1.4	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.4	0.1
HELIUM	0.02	0.05	0.02
HEATING VALUE*	1008	1174	1086
SPECIFIC GRAVITY	0.574	0.678	0.610

	INDEX 4072 SAMPLE 14043	INDEX 4073 SAMPLE 14053	INDEX 4074 SAMPLE 14174
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STATE CK NO. 1	HINKLE-FED. NO. 1	SHELBY FED. NO. 2
LOCATION	SEC. 4, T17S, R26E	SEC. 9, T16S, R29E	SEC. 12, T22S, R34E
OWNER	YATES PETROLEUM CORP.	MCCLELLAN OIL CORP.	SOUTHERN UNION PRODUCTION CO.
COMPLETED	07/11/73	03/12/73	05/11/74
SAMPLED	07/12/74	07/18/74	10/14/74
FORMATION	PENN-MORROW	PERM-PREMIER	PENN-CISCO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7963	2362	7970
WELLHEAD PRESSURE,PSIG	2577	450	2110
OPEN FLOW, MCFD	22856	2207	10430
COMPONENT, MOLE PCT			
METHANE	89.7	50.7	91.6
ETHANE	5.8	4.8	4.5
PROPANE	2.1	1.6	1.3
N-BUTANE	0.5	0.3	0.4
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	0.5	42.1	1.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.2
HELIUM	0.03	0.14	0.02
HEATING VALUE*	1128	662	1056
SPECIFIC GRAVITY	0.637	0.777	0.621

	INDEX 4075 SAMPLE 14290	INDEX 4076 SAMPLE 14428	INDEX 4077 SAMPLE 14436
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SANDY UNIT NO. 1	HAT MOLLOW NO. 1	BIG EDDY UNIT NO. 39
LOCATION	SEC. 24, T23S, R30E	SEC. 11, T26S, R27E	SEC. 29, T21S, R28E
OWNER	PHILLIPS PETROLEUM CO.	GREAT WESTERN DRILLING CO.	PERRY R. BASS, INC.
COMPLETED	07/19/74	04/01/75	01/15/74
SAMPLED	03/12/75	07/07/75	08/13/75
FORMATION	PENN-MORROW	PENN-STRAWN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14494	11611	11762
WELLHEAD PRESSURE,PSIG	4700	5650	4025
OPEN FLOW, MCFD	4000	10866	3715
COMPONENT, MOLE PCT			
METHANE	96.8	94.2	94.6
ETHANE	1.3	3.4	3.4
PROPANE	0.2	0.6	0.7
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.4	0.8	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.4	0.9
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1009	1047	1047
SPECIFIC GRAVITY	0.576	0.591	0.597

	INDEX 4078 SAMPLE 14448	INDEX 4079 SAMPLE 14508	INDEX 4080 SAMPLE 14509
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	GOVT. R NO. 1	ALLIED-COMM. NO. 1	ALLIED-COMM. NO. 1
LOCATION	SEC. 14, T20S, R28E	SEC. 27, T20S, R27E	SEC. 27, T20S, R27E
OWNER	CITIES SERVICE OIL CO.	PENROC OIL CORP.	PENROC OIL CORP.
COMPLETED	09/11/73	05/28/74	05/08/74
SAMPLED	09/09/75	10/24/75	10/24/75
FORMATION	PENN-MORROW	PERM-WOLFCAMP	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11331	8540	10622
WELLHEAD PRESSURE,PSIG	3630	2167	3203
OPEN FLOW, MCFD	11217	3368	2538
COMPONENT, MOLE PCT			
METHANE	94.5	77.8	90.8
ETHANE	3.3	12.5	4.6
PROPANE	0.7	5.1	1.2
N-BUTANE	0.1	1.2	0.3
ISOBUTANE	0.1	0.6	0.3
N-PENTANE	TRACE	0.2	TRACE
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.4	2.0	1.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.1	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1046	1236	1067
SPECIFIC GRAVITY	0.592	0.718	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4081 SAMPLE 14519	INDEX 4082 SAMPLE 14802	INDEX 4083 SAMPLE 15282
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ALLIED-COMM. NO. 1-B	ROSS FED. "E6" NO. 1	PENN-FED. NO. 1
LOCATION	SEC. 27, T20S, R27E	SEC. 20, T19S, R25E	SEC. 31, T20S, R30E
OWNER	PENROC OIL CORP.	YATE PETROLEUM CORP.	PENNZOIL CO.
COMPLETED	--/--/00	06/07/75	06/02/76
SAMPLED	10/24/75	10/12/76	11/18/77
FORMATION	PERM-BONE SPRING	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	9128	11730
WELLHEAD PRESSURE,PSIG	NOT GIVEN	325	4357
OPEN FLOW, MCFD	NOT GIVEN	2025	2046
COMPONENT, MOLE PCT			
METHANE	95.4	93.3	91.8
ETHANE	2.5	5.1	4.4
PROPANE	0.5	0.7	1.3
N-BUTANE	0.1	0.2	0.3
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.5	0.5	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.7	0.2
HELIUM	0.03	0.03	0.02
HEATING VALUE	1031	1052	1073
SPECIFIC GRAVITY	0.583	0.611	0.610

	INDEX 4084 SAMPLE 15557	INDEX 4085 SAMPLE 15558	INDEX 4086 SAMPLE 15716
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	POLK "A" NO. 1	POLK "A" NO. 1	LITTLE SQUAW NO. 1
LOCATION	SEC. 17, T23S, R28E	SEC. 17, T23S, R28E	SEC. 27, T22S, R28E
OWNER	CITIES SERVICE CO.	CITIES SERVICE CO.	J. C. BARNES OIL CO.
COMPLETED	08/25/78	08/25/78	07/30/79
SAMPLED	01/26/79	01/26/79	07/30/79
FORMATION	PENN-STRAWN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11152	12076	12198
WELLHEAD PRESSURE,PSIG	5630	4135	NOT GIVEN
OPEN FLOW, MCFD	2221	7498	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.7	95.3	96.9
ETHANE	3.3	2.4	1.5
PROPANE	0.7	0.4	0.1
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	0.4	0.3
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	1.2
HELIUM	0.02	0.02	0.02
HEATING VALUE	1051	1028	1016
SPECIFIC GRAVITY	0.598	0.587	0.579

	INDEX 4087 SAMPLE 15787	INDEX 4088 SAMPLE 15796	INDEX 4089 SAMPLE 16158
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MCCAW NO. 1-G	TELEDYNE 17 NO. 1	PARDUE FARMS "26" NO. 1
LOCATION	SEC. 8, T17S, R29E	SEC. 17, T23S, R29E	SEC. 26, T23S, R28E
OWNER	BEARD OIL CO.	AMOCO PRODUCTION CO.	MADDOX ENERGY CORP.
COMPLETED	10/--/78	09/12/78	--/--/00
SAMPLED	09/29/78	09/29/78	11/12/80
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-STRAWN U
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7932	12028	11468
WELLHEAD PRESSURE,PSIG	800	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3733	3670	9800
COMPONENT, MOLE PCT			
METHANE	91.1	92.9	96.8
ETHANE	4.4	2.1	1.6
PROPANE	1.6	0.9	0.2
N-BUTANE	0.4	0.1	TRACE
ISOBUTANE	0.4	0.1	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	1.1	3.0	0.8
OXYGEN	0.0	0.6	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.4
HELIUM	0.07	0.02	0.01
HEATING VALUE	1093	1014	1014
SPECIFIC GRAVITY	0.623	0.602	0.570

	INDEX 4090 SAMPLE 16159	INDEX 4091 SAMPLE 16241	INDEX 4092 SAMPLE 16479
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	PARDUE FARMS 26 NO. 1	LAGUNA GRANDE UNIT NO. 3	RAW STATE NO. 1
LOCATION	SEC. 26, T23S, R28E	SEC. 29, T23S, R29E	SEC. 14, T24S, R27E
OWNER	MADDOX ENERGY CORP.	EXXON CO., U.S.A.	POGO PRODUCING CO.
COMPLETED	--/--/00	03/03/81	03/23/82
SAMPLED	11/12/80	04/26/81	05/25/82
FORMATION	PENN-STRAWN L	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11758	12104	11220
WELLHEAD PRESSURE,PSIG	NOT GIVEN	6785	6000
OPEN FLOW, MCFD	10250	1995	2319
COMPONENT, MOLE PCT			
METHANE	89.9	96.4	95.5
ETHANE	5.8	1.8	2.9
PROPANE	1.6	0.3	0.3
N-BUTANE	0.4	0.1	0.1
ISOBUTANE	0.3	TRACE	0.1
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.0	0.9	1.0
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.01	0.02	0.01
HEATING VALUE	1105	1025	1030
SPECIFIC GRAVITY	0.626	0.578	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4093 SAMPLE 15047	INDEX 4094 SAMPLE 2326	INDEX 4095 SAMPLE 2717
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	HARDING	HARDING
FIELD	WILLOW LAKE	BACA	BACA
WELL NAME	WILLOW LAKE UNIT NO. 1	KERLIN NO. 1	BACA NO. 1
LOCATION	SEC. 22, T24N, R28E	SEC. 34, T21N, R30E	SEC. 19, T20N, R31E
OWNER	AMINOIL, U.S.A., INC.	KUMMBACA OIL & GAS CO.	WADDELL & MCFANN, ET AL.
COMPLETED	01/16/76	--/--/00	08/01/36
SAMPLED	07/07/77	05/20/31	08/02/36
FORMATION	PENN-ATOKA	NOT GIVEN	-LAVENDAR LIMES
GEOLOGIC PROVINCE CODE	430	445	445
DEPTH, FEET	11680	940	1706
WELLHEAD PRESSURE,PSIG	4200	NOT GIVEN	400
OPEN FLOW, MCFD	34997	2654	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.2	0.0	0.0
ETHANE	2.8	0.0	0.0
PROPANE	0.5	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.7	1.4	0.6
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	98.2	99.4
HELIUM	0.01	0.00	0.00
HEATING VALUE*	1048	0	0
SPECIFIC GRAVITY	0.590	1.519	1.526

	INDEX 4096 SAMPLE 16910	INDEX 4097 SAMPLE 5807	INDEX 4098 SAMPLE 7212
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	HARDING	HARDING	HARDING
FIELD	BRAVO DOME	BLUEWERDS	NOT GIVEN
WELL NAME	HEIMANN NO. 1 (1933-031M)	POWERS-MARSHELL NO. 1	NO. 1
LOCATION	SEC. 3, T19N, R33E	SEC. 34, T21N, R30E	SEC. 29, T20N, R26E
OWNER	AMOCO PRODUCTION CO. (USA)	POWERS-MARSHALL CO.	LULA GAMBREL
COMPLETED	04/21/83	06/03/54	--/--/00
SAMPLED	04/19/83	04/02/55	09/15/59
FORMATION	PERM-TUBB	-LIMESTONE	TRIA-CHINLE
GEOLOGIC PROVINCE CODE	445	445	445
DEPTH, FEET	2370	1900	1137
WELLHEAD PRESSURE,PSIG	450	520	NOT GIVEN
OPEN FLOW, MCFD	1163	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	0.0	0.1
ETHANE	TRACE	0.0	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	0.2	77.7
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	1.2
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	98.8	99.7	18.8
HELIUM	0.01	0.01	1.80
HEATING VALUE*	0	0	3
SPECIFIC GRAVITY	1.521	1.526	1.061

	INDEX 4099 SAMPLE 9584	INDEX 4100 SAMPLE 13655	INDEX 4101 SAMPLE 12242
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	ANTELOPE RIDGE	ANTELOPE RIDGE	ARENA ROJA
WELL NAME	HARRIS FED. NO. 1	STATE 1 NO.1	MEXICO-FED. NO. 1-P
LOCATION	SEC. 27, T23S, R34E	SEC. 2, T24S, R34E	SEC. 21, T26S, R35E
OWNER	SHELL OIL CO.	SHELL WEST OIL & GAS CORP.	SKELLY OIL CO.
COMPLETED	08/09/62	03/12/73	01/10/69
SAMPLED	10/06/64	07/21/73	--/--/00
FORMATION	DEVO-	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14655	12288	10565
WELLHEAD PRESSURE,PSIG	4509	6600	1905
OPEN FLOW, MCFD	41000	21500	2823
COMPONENT, MOLE PCT			
METHANE	85.4	75.0	93.2
ETHANE	7.6	7.3	1.3
PROPANE	2.5	2.9	1.0
N-BUTANE	0.8	0.7	0.1
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.2	10.2	1.0
OXYGEN	TRACE	2.2	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.2	0.6
HELIUM	0.06	0.01	0.01
HEATING VALUE*	1134	1042	1061
SPECIFIC GRAVITY	0.666	0.711	0.605

	INDEX 4102 SAMPLE 4658	INDEX 4103 SAMPLE 4718	INDEX 4104 SAMPLE 4818
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	ARROWHEAD	BAGLEY	BAGLEY
WELL NAME	MEYER NO. 1	STATE BTA NO. 1	STATE BTC NO. 1
LOCATION	SEC. 23, T22S, R36E	SEC. 2, T12S, R33E	SEC. 35, T11S, R33E
OWNER	CONTINENTAL OIL CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	11/05/48	07/16/49	10/30/49
SAMPLED	02/06/49	08/07/49	02/13/50
FORMATION	PERM-	DEVO-	SILU-DEVO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3175	10950	10770
WELLHEAD PRESSURE,PSIG	1511	4260	600
OPEN FLOW, MCFD	16500	28	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.9	70.8	72.1
ETHANE	7.3	3.3	2.9
PROPANE	2.8	1.7	1.3
N-BUTANE	0.8	0.7	0.5
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	2.9	6.9	7.4
OXYGEN	0.1	0.1	0.1
ARGON	0.0	0.1	0.1
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	15.3	14.6
HELIUM	0.04	0.27	0.29
HEATING VALUE*	1134	930	865
SPECIFIC GRAVITY	0.662	0.805	0.779

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4105 SAMPLE 4942	INDEX 4106 SAMPLE 9725	INDEX 4107 SAMPLE 14129
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BAGLEY	BELL LAKE	BELL LAKE
WELL NAME	N. M. STATE NO. 1-B	BELL LAKE UNIT NO. 2	BELL LAKE UNIT 1 WELL 4
LOCATION	SEC. 2, T12S, R33E	SEC. 30, T23S, R34E	SEC. 6, T24S, R34E
OWNER	TEXAS PACIFIC COAL & OIL CO.	CONTINENTAL OIL CO., ET AL.	CONTINENTAL OIL CO. ET AL.
COMPLETED	--/--/00	10/28/54	07/06/73
SAMPLED	03/31/50	10/28/54	08/15/74
FORMATION	DEVO-	PENN-	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10720	12635	12430
		4455	6906
		13100	69000
WELLHEAD PRESSURE,PSIG	NOT GIVEN		
OPEN FLOW, MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	69.0	83.6	96.3
ETHANE	3.8	9.6	1.8
PROPANE	2.1	3.2	0.4
N-BUTANE	0.9	0.5	0.1
ISOBUTANE	0.4	0.5	0.1
N-PENTANE	0.4	0.1	TRACE
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	6.2	1.5	0.5
OXYGEN	0.1	0.2	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	16.0	0.2	0.4
HELIUM	0.23	0.01	0.02
HEATING VALUE*	920	1159	1032
SPECIFIC GRAVITY	0.820	0.668	0.578

	INDEX 4108 SAMPLE 14498	INDEX 4109 SAMPLE 16145	INDEX 4110 SAMPLE 7588
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BELL LAKE	BELL LAKE N	BELL LAKE N
WELL NAME	BELL LAKE UNIT 4 NO. 15	BELL LAKE NO. 1	BELL LAKE UNIT NO. 6
LOCATION	SEC. 8, T23S, R34E	SEC. 18, T23S, R34E	SEC. 6, T23S, R34E
OWNER	CONTINENTAL OIL CO.	BTA OIL PRODUCERS	CONTINENTAL OIL CO.
COMPLETED	03/06/75	09/20/80	06/23/60
SAMPLED	10/21/75	12/08/80	06/23/60
FORMATION	PENN-MORROW	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13278	14660	14568
			5015
			30500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	
OPEN FLOW, MCFD	4700	4819	
COMPONENT, MOLE PCT			
METHANE	88.6	92.7	91.9
ETHANE	5.2	2.8	2.9
PROPANE	1.8	0.6	0.8
N-BUTANE	0.3	TRACE	0.2
ISOBUTANE	0.4	0.1	TRACE
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.5	1.9	1.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	1.9	1.4	2.2
HELIUM	0.02	0.07	0.10
HEATING VALUE*	1075	1022	1024
SPECIFIC GRAVITY	0.640	0.604	0.613

	INDEX 4111 SAMPLE 4722	INDEX 4112 SAMPLE 7511	INDEX 4113 SAMPLE 15918
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BLINEBRY	BLINEBRY	BLINEBRY
WELL NAME	S. J. SARKEYS NO. 1	J. L. MUNCY NO. 3	OLLIE J. BOYD NO. 2
LOCATION	SEC. 23, T21S, R37E	SEC. 24, T22S, R37E	SEC. 23, T22S, R37E
OWNER	SINCLAIR OIL & GAS CO.	OHIO CO.	ARCO OIL & GAS CO.
COMPLETED	04/12/49	01/03/49	07/26/77
SAMPLED	07/21/49	04/22/60	03/14/80
FORMATION	PERM-BLINEBRY	PERM-BLINEBRY	PERM-BLINEBRY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5760	5419	5368
		1560	571
		6000	2609
WELLHEAD PRESSURE,PSIG	1930		
OPEN FLOW, MCFD	7400		
COMPONENT, MOLE PCT			
METHANE	81.7	81.8	81.0
ETHANE	8.7	9.4	9.8
PROPANE	4.1	3.9	4.6
N-BUTANE	1.1	1.3	1.3
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	2.9	1.7	1.8
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.11	0.03	0.03
HEATING VALUE*	1174	1207	1215
SPECIFIC GRAVITY	0.695	0.698	0.701

	INDEX 4114 SAMPLE 15923	INDEX 4115 SAMPLE 9929	INDEX 4116 SAMPLE 2694
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	BLINEBRY	BOUGH	COOPER
WELL NAME	S. J. SARKEY NO. 1	FED. A NO. 1	BIVINS STA.
LOCATION	SEC. 26, T16S, R37E	SEC. 13, T9S, R35E	INLET
OWNER	ARCO OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	04/12/49	01/18/64	11/07/34
SAMPLED	03/21/80	06/18/65	--/--/00
FORMATION	PERM-BLINEBRY	PERM-SAN ANDRES	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5746	4746	NOT GIVEN
	325	1213	NOT GIVEN
	60	2247	7500
WELLHEAD PRESSURE,PSIG			
OPEN FLOW, MCFD			
COMPONENT, MOLE PCT			
METHANE	79.9	68.3	82.6
ETHANE	9.9	6.2	14.1
PROPANE	4.6	4.2	---
N-BUTANE	1.2	0.8	---
ISOBUTANE	0.7	TRACE	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.7	0.1	---
CYCLOPENTANE	0.4	TRACE	---
HEXANES PLUS	0.7	0.1	---
NITROGEN	1.7	9.3	1.0
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.1	---
CARBON DIOXIDE	0.0	10.6	2.1
HELIUM	0.02	0.11	TRACE
HEATING VALUE*	1255	957	1089
SPECIFIC GRAVITY	0.725	0.789	0.650

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4117 SAMPLE 4435	INDEX 4118 SAMPLE 4546	INDEX 4119 SAMPLE 4714
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	COOPER	COOPER	COOPER
WELL NAME	STEVENS B-12 NO. 1	COOPER NO. 1	VAN ZANDT NO. 1
LOCATION	SEC. 12, T23S, R36E	SEC. 11, T24S, R36E	SEC. 25, T24S, R36E
OWNER	CONTINENTAL OIL CO., ET AL.	R. OLSEN OIL CO.	R. OLSEN OIL CO.
COMPLETED	10/27/47	03/25/48	01/--/49
SAMPLED	01/28/48	07/16/48	04/01/49
FORMATION	PERM-YATES	PERM-YATES	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3140	3127	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1373	1250	1300
OPEN FLOW, MCFD	27900	7120	10000
COMPONENT, MOLE PCT			
METHANE	80.9	82.7	86.8
ETHANE	16.3	14.0	5.5
PROPANE	---	---	2.4
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	2.4	1.2	3.5
OXYGEN	0.2	0.1	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	2.0	0.6
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1112	1089	1091
SPECIFIC GRAVITY	0.648	0.649	0.649

	INDEX 4120 SAMPLE 4725	INDEX 4121 SAMPLE 13467	INDEX 4122 SAMPLE 4798
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	COOPER	CROSBY	DENTON
WELL NAME	NEW MEXICO STATE A NO. 27	CROSBY DEEP NO. 1	J. M. DENTON A-1
LOCATION	SEC. 23, T23S, R36E	SEC. 28, T25S, R37E	SEC. 11, T15S, R37E
OWNER	TEXAS PACIFIC COAL & OIL CO.	UNION TEXAS PETROLEUM CORP.	MCALESTER FUEL CO.
COMPLETED	03/18/49	03/10/72	09/25/49
SAMPLED	06/01/49	11/08/72	10/30/49
FORMATION	PERM-YATES	SILU-FUSSELMAN	DEVO-LIME
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2965	8652	11250
WELLHEAD PRESSURE,PSIG	1195	2400	4800
OPEN FLOW, MCFD	58500	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	73.7	66.6
ETHANE	6.2	14.3	18.7
PROPANE	2.6	5.9	10.0
N-BUTANE	0.7	1.8	3.6
ISOBUTANE	0.4	0.8	1.2
N-PENTANE	0.2	0.5	0.6
ISOPENTANE	0.0	0.2	0.6
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	3.0	0.0	3.6
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.8	---
CARBON DIOXIDE	0.1	1.5	12.6
HELIUM	0.05	TRACE	0.06
HEATING VALUE*	1116	1298	1357
SPECIFIC GRAVITY	0.655	0.766	0.851

	INDEX 4123 SAMPLE 4054	INDEX 4124 SAMPLE 4547	INDEX 4125 SAMPLE 2012
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	DRINKARD	DRINKARD	EUNICE
WELL NAME	A. H. BLINEBRY	BOYD NO. 2	STATE NO. 1
LOCATION	SEC. 19, T22S, R38E	SEC. 23, T22S, R37E	SEC. 34, T21S, R36E
OWNER	TEXAS CO.	R. OLSEN OIL CO.	GYPSY OIL CO.
COMPLETED	--/--/00	12/19/47	03/17/29
SAMPLED	08/18/48	07/16/48	06/06/30
FORMATION	NOT GIVEN	PERM-BLINEBRY	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	5410	3542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1930	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	6150	15000
COMPONENT, MOLE PCT			
METHANE	47.2	72.5	83.0
ETHANE	52.4	24.1	14.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	2.9	2.0
OXYGEN	0.1	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	0.02	0.03	0.05
HEATING VALUE*	1017	1166	1102
SPECIFIC GRAVITY	0.816	0.690	0.640

	INDEX 4126 SAMPLE 2013	INDEX 4127 SAMPLE 2797	INDEX 4128 SAMPLE 7177
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	EUNICE	EUNICE	EUNICE
WELL NAME	BILL MEYERS NO. 1	MYERS B-4 NO. 11 "OIL WELL"	TURNER NO. 13
LOCATION	SEC. 28, T22S, R36E	SEC. 4, T21S, R36E	SEC. 22, T21S, R37E
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	08/14/36	10/03/52
SAMPLED	06/05/30	06/14/38	08/12/59
FORMATION	NOT GIVEN	NOT GIVEN	PERM-BLINEBRY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3227	3823	5510
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1092	1725
OPEN FLOW, MCFD	10000	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	82.6	85.6	70.1
ETHANE	12.1	9.4	7.8
PROPANE	---	---	4.2
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	2.2	0.0	14.1
OXYGEN	0.2	0.5	2.9
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.5	4.5	0.1
HELIUM	0.05	0.00	0.03
HEATING VALUE*	1054	1036	996
SPECIFIC GRAVITY	0.651	0.648	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4129 SAMPLE 7178	INDEX 4130 SAMPLE 2618	INDEX 4131 SAMPLE 13678
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	EUNICE	EUNICE N	EUNICE N
WELL NAME	TAYLOR GLENN NO. 2	LOCKHART NO. 1-A	ALVES A NO. 2
LOCATION	SEC. 3, T21S, R37E	SEC. 10, T21S, R36E	SEC. 8, T21S, R37E
OWNER	SHELL OIL CO.	CONTINENTAL OIL CO.	SOHIO PETROLEUM CO.
COMPLETED	09/12/58	08/09/33	04/27/73
SAMPLED	08/12/59	05/26/33	08/14/73
FORMATION	PERM-TUBB	NOT GIVEN	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6324	2985	4043
WELLHEAD PRESSURE,PSIG	1925	NOT GIVEN	1050
OPEN FLOW, MCFD	2200	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	83.3	71.7	86.0
ETHANE	8.1	21.6	3.1
PROPANE	3.5	---	2.3
N-BUTANE	1.0	---	0.7
ISOBUTANE	0.5	---	0.6
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.5	---	0.4
CYCLOPENTANE	0.1	---	0.2
HEXANES PLUS	0.2	---	0.4
NITROGEN	2.6	3.6	0.5
OXYGEN	0.0	0.7	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.4
CARBON DIOXIDE	0.1	2.4	5.0
HELIUM	0.04	0.03	TRACE
HEATING VALUE*	1170	1113	1085
SPECIFIC GRAVITY	0.682	0.703	0.689

	INDEX 4132 SAMPLE 4451	INDEX 4133 SAMPLE 4628	INDEX 4134 SAMPLE 14549
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	EUNICE S	EUNICE S	FOUR LAKES N
WELL NAME	HARRINGTON NO. 1	H. S. RECORD UNIT NO. 1	SUN STATE NO. 1
LOCATION	SEC. 10, T22S, R36E	SEC. 22, T22S, R36E	SEC. 23, T11S, R34E
OWNER	WESTERN NATURAL GAS CO.	SUN OIL CO.	APCO OIL CORP.
COMPLETED	08/17/47	08/22/48	04/17/75
SAMPLED	03/13/48	11/16/48	12/16/75
FORMATION	NOT GIVEN	PERM-YATES	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3135	3335	11518
WELLHEAD PRESSURE,PSIG	1205	NOT GIVEN	3400
OPEN FLOW, MCFD	24000	1475	2281
COMPONENT, MOLE PCT			
METHANE	78.7	76.3	81.0
ETHANE	19.1	20.6	9.4
PROPANE	---	---	5.1
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.9
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.6	2.8	1.6
OXYGEN	0.2	0.2	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.05	0.05	0.02
HEATING VALUE*	1140	1142	1207
SPECIFIC GRAVITY	0.659	0.670	0.701

	INDEX 4135 SAMPLE 4550	INDEX 4136 SAMPLE 4800	INDEX 4137 SAMPLE 4756
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HARDY	HARE	HIGHTOWER
WELL NAME	TAYLOR-GLENN 1	W. M. TURNER NO. 3	STATE BTB NO. 1
LOCATION	NOT GIVEN	SEC. 29, T21S, R37E	SEC. 26, T12S, R33E
OWNER	SHELL OIL CO.	OHIO OIL CO.	AMERADA PETROLEUM CORP.
COMPLETED	03/01/48	10/01/49	06/30/49
SAMPLED	06/01/48	11/08/49	10/30/49
FORMATION	NOT GIVEN	-LOW	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6720	7825	10155
WELLHEAD PRESSURE,PSIG	2100	NOT GIVEN	850
OPEN FLOW, MCFD	12000	NOT GIVEN	76000
COMPONENT, MOLE PCT			
METHANE	61.6	74.5	39.7
ETHANE	34.7	8.7	12.7
PROPANE	---	4.5	24.2
N-BUTANE	---	0.9	8.3
ISOBUTANE	---	0.7	5.7
N-PENTANE	---	0.3	1.2
ISOPENTANE	---	0.3	2.0
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.0	0.6
NITROGEN	3.3	9.3	1.7
OXYGEN	0.1	0.4	0.1
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	3.6
HELIUM	0.04	0.09	0.06
HEATING VALUE*	1246	1108	1901
SPECIFIC GRAVITY	0.743	0.720	1.193

	INDEX 4138 SAMPLE 4854	INDEX 4139 SAMPLE 4870	INDEX 4140 SAMPLE 2010
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HIGHTOWER	HIGHTOWER	HOBBS
WELL NAME	NMI STATE NO. 1	B. C. ROACH NO. 1	NORTHRUP NO. 1
LOCATION	SEC. 22, T12S, R33E	SEC. 26, T12S, R33E	SEC. 32, T18S, R38E
OWNER	GULF OIL CORP.	AMERADA PETROLEUM CORP.	OHIO OIL CO.
COMPLETED	01/11/50	12/31/49	--/--/00
SAMPLED	04/05/50	04/19/50	06/06/50
FORMATION	PENN---	PENN-LIME	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8470	8660	2830
WELLHEAD PRESSURE,PSIG	2120	3146	NOT GIVEN
OPEN FLOW, MCFD	6000	8300	2000
COMPONENT, MOLE PCT			
METHANE	82.3	81.9	59.4
ETHANE	7.3	7.8	21.5
PROPANE	3.5	3.9	---
N-BUTANE	1.1	1.2	---
ISOBUTANE	0.5	0.5	---
N-PENTANE	0.4	0.4	---
ISOPENTANE	TRACE	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.4	0.3	---
NITROGEN	3.6	3.2	18.6
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.4	0.2
HELIUM	0.11	0.10	0.11
HEATING VALUE*	1150	1165	987
SPECIFIC GRAVITY	0.689	0.692	0.740

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4141 SAMPLE 2099	INDEX 4142 SAMPLE 2134	INDEX 4143 SAMPLE 2435
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HOBBS	HOBBS	HOBBS
WELL NAME	BOWERS A-2A	STATE A-1	MIDWEST BYERS NO. 8
LOCATION	SEC. 30, T18S, R38E	SEC. 29, T18S, R38E	SEC. 4, T19S, R38E
OWNER	HUMBLE OIL & REFINING CO.	CALIFORNIA CO.	MIDWEST REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/30/30	09/17/30	11/20/31
FORMATION	-GAS PAY	NOT GIVEN	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3610	2340	2505
WELLHEAD PRESSURE,PSIG	1200	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.5	---	1.0
ETHANE	21.0	3.4	3.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.4	94.6	94.4
OXYGEN	0.1	0.1	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.04	0.08	TRACE
HEATING VALUE*	969	61	80
SPECIFIC GRAVITY	0.745	0.952	0.967

	INDEX 4144 SAMPLE 2438	INDEX 4145 SAMPLE 2466	INDEX 4146 SAMPLE 2467
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HOBBS	HOBBS	HOBBS
WELL NAME	EAST GRIMES NO. 1	STATE 4-33 NO. 4	STATE 4-33 NO. 5
LOCATION	SEC. 33, T18S, R38E	SEC. 33, T18S, R38E	SEC. 33, T18S, R38E
OWNER	GYPSY OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/01/31	01/27/32	01/27/32
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2300	2393	2395
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	72.8	72.4
ETHANE	6.4	18.8	20.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	92.3	4.9	3.2
OXYGEN	0.9	0.3	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	3.2	3.8
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	115	1074	1101
SPECIFIC GRAVITY	0.976	0.701	0.707

	INDEX 4147 SAMPLE 2557	INDEX 4148 SAMPLE 2579	INDEX 4149 SAMPLE 2795
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HOBBS	HOBBS	HOBBS
WELL NAME	STATE WELL NO. 2	STATE NO. 7	BYERS 33 NE4
LOCATION	SEC. 30, T18S, R38E	SEC. 33, T18S, R38E	SEC. 4, T19S, R38E
OWNER	OHIO OIL CO.	CONTINENTAL OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	08/07/30
SAMPLED	--/--/00	12/23/32	06/20/38
FORMATION	PERM-HOBBS	PERM-BOWERS	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4022	3160	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	998
OPEN FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.0	46.1	78.4
ETHANE	22.8	28.4	15.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.4	25.2	0.8
OXYGEN	1.7	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	5.1
HELIUM	0.05	0.05	0.02
HEATING VALUE*	966	976	1068
SPECIFIC GRAVITY	0.760	0.800	0.685

	INDEX 4150 SAMPLE 2796	INDEX 4151 SAMPLE 4568	INDEX 4152 SAMPLE 1752
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	HOBBS	HOBBS	JAL
WELL NAME	GRIMES NO. 3	WEST GRIMES NO. 4	C. FARNSWORTH NO. 13
LOCATION	SEC. 28, T18S, R38E	SEC. 32, T18S, R38E	SEC. 13, T26E, R36S
OWNER	CONTINENTAL OIL CO.	GULF OIL CORP.	MIDWEST REFINING CO.
COMPLETED	05/17/35	08/20/40	--/--/00
SAMPLED	06/18/38	10/04/48	04/22/29
FORMATION	NOT GIVEN	PERM-BYERS	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4114	3609	2710
WELLHEAD PRESSURE,PSIG	1063	580	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	880	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.2	69.2	82.6
ETHANE	17.1	23.8	14.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.4	6.9	2.0
OXYGEN	0.4	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	4.9	0.2	0.6
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1078	1128	1097
SPECIFIC GRAVITY	0.695	0.702	0.642

*.CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**.DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4153 SAMPLE 2014	INDEX 4154 SAMPLE 2015	INDEX 4155 SAMPLE 2016
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	JAL	JAL	JAL
WELL NAME	LYNN NO. 1	CUSHING NO. 1	EAGLE NO. 1
LOCATION	SEC. 26, T23S, R36E	SEC. 23, T24S, R36E	SEC. 9, T26S, R37E
OWNER	CONTINENTAL OIL CO.	CRANFILL & REYNOLDS	TEXAS PRODUCTION CO.
COMPLETED	01/31/29	--/--/00	01/08/29
SAMPLED	06/06/30	06/06/30	06/04/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3219	3200	3145
WELLHEAD PRESSURE,PSIG	800	1400	1400
OPEN FLOW, MCFD	30000	40000	55000
COMPONENT, MOLE PCT			
METHANE	82.7	77.1	85.5
ETHANE	14.4	17.0	13.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.2	1.5	0.5
OXYGEN	0.1	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	4.1	0.3
HELIUM	0.02	0.00	TRACE
HEATING VALUE*	1096	1086	1106
SPECIFIC GRAVITY	0.641	0.686	0.627

	INDEX 4156 SAMPLE 2017	INDEX 4157 SAMPLE 2018	INDEX 4158 SAMPLE 13639
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	JAL	JAL	JAL W
WELL NAME	RHODES NO. 1	EAVES NO. 1	WESTERN JAL UNIT NO. 1
LOCATION	SEC. 22, T26S, R37E	SEC. 19, T26S, R37E	SEC. 20, T26S, R36E
OWNER	TEXAS PRODUCTION CO.	CONTINENTAL OIL CO.	SKELLY OIL CO.
COMPLETED	11/10/27	07/06/28	12/22/72
SAMPLED	06/04/30	06/04/30	07/11/73
FORMATION	NOT GIVEN	PERM-YATES	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3180	2895	16449
WELLHEAD PRESSURE,PSIG	840	1750	4815
OPEN FLOW, MCFD	23000	42000	16500
COMPONENT, MOLE PCT			
METHANE	88.0	83.2	94.8
ETHANE	10.1	11.5	2.2
PROPANE	---	---	0.4
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	1.0	4.1	0.8
OXYGEN	0.3	0.8	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.3
CARBON DIOXIDE	0.6	0.5	1.2
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1072	1049	1019
SPECIFIC GRAVITY	0.616	0.638	0.589

	INDEX 4159 SAMPLE 9572	INDEX 4160 SAMPLE 16803	INDEX 4161 SAMPLE 14677
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	JENKINS	JOHNSON RANCH	KERNITZ
WELL NAME	S. E. ANDERSON A NO. 1	JACKSON UNIT NO. 1	STATE NO. 13-1
LOCATION	SEC. 19, T9S, R35E	SEC. 22, T24S, R33E	SEC. 13, T16S, R33E
OWNER	AMERADA PETROLEUM CORP.	MESA PETROLEUM CO.	GREAT WESTERN DRILLING CO.
COMPLETED	08/21/63	02/17/82	11/12/75
SAMPLED	10/02/64	03/15/83	05/24/76
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11477	15430	12660
WELLHEAD PRESSURE,PSIG	1940	5770	4200
OPEN FLOW, MCFD	4600	3704	2436
COMPONENT, MOLE PCT			
METHANE	81.7	94.5	83.3
ETHANE	7.5	2.3	7.9
PROPANE	2.7	0.6	2.7
N-BUTANE	0.8	0.2	0.7
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	5.8	2.5	3.8
OXYGEN	TRACE	TRACE	0.5
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	0.3
HELIUM	0.09	0.02	0.05
HEATING VALUE*	1104	1051	1115
SPECIFIC GRAVITY	0.678	0.601	0.669

	INDEX 4162 SAMPLE 4740	INDEX 4163 SAMPLE 13133	INDEX 4164 SAMPLE 15730
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	KNOWLES	LA RICA	LAGUNA
WELL NAME	W. W. HAMILTON NO. 1	PIPELINE FED. NO. 1	LAGUNA DEEP FED. NO. 1
LOCATION	SEC. 35, T16S, R38E	SEC. 4, T19S, R34E	SEC. 35, T19S, R33E
OWNER	AMERADA PETROLEUM CORP.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	05/03/49	08/07/70	02/05/79
SAMPLED	05/20/49	01/05/72	08/24/79
FORMATION	DEVO-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12518	13431	13365
WELLHEAD PRESSURE,PSIG	5159	4200	4250
OPEN FLOW, MCFD	51	26400	2088
COMPONENT, MOLE PCT			
METHANE	61.3	85.1	84.8
ETHANE	9.4	8.7	7.8
PROPANE	11.4	3.4	3.3
N-BUTANE	5.7	0.8	0.8
ISOBUTANE	3.0	0.5	0.7
N-PENTANE	1.2	0.1	0.4
ISOPENTANE	1.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.6	0.2	0.6
NITROGEN	2.7	0.5	0.9
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	0.10	0.02	0.02
HEATING VALUE*	1516	1169	1199
SPECIFIC GRAVITY	0.955	0.666	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4165 SAMPLE 15707	INDEX 4166 SAMPLE 3882	INDEX 4167 SAMPLE 4440
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	LANGLEY	LANGLIE	LANGLIE-MATTIX
WELL NAME	LANGLEY DEEP NO. 1	STUART NO. 2	MARTIN NO. B-1
LOCATION	SEC. 28, T22S, R36E	SEC. 14, T25S, R37E	SEC. 31, T24S, R37E
OWNER	ARCO OIL & GAS CO.	ANDERSON-PRICHARD OIL CORP.	CULBERTSON & IRWIN, INC.
COMPLETED	04/07/78	09/13/38	10/06/47
SAMPLED	07/25/79	07/14/44	01/16/48
FORMATION	ORDO-ELLENBURGER	PERM-	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15320	3410	2880
WELLHEAD PRESSURE,PSIG	1550	NOT GIVEN	1200
OPEN FLOW, MCFD	1700	NOT GIVEN	9000
COMPONENT, MOLE PCT			
METHANE	83.4	81.5	83.3
ETHANE	8.8	17.4	14.9
PROPANE	3.6	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	1.5	0.3	1.3
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.7	0.3
HELIUM	0.07	0.03	0.03
HEATING VALUE*	1186	1137	1111
SPECIFIC GRAVITY	0.681	0.649	0.638

	INDEX 4168 SAMPLE 4548	INDEX 4169 SAMPLE 4717	INDEX 4170 SAMPLE 4724
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	LANGLIE-MATTIX	LANGLIE-MATTIX	LANGLIE-MATTIX
WELL NAME	WIMBERLEY	LYNN NO. 3	E. E. JACK B-15 NO. 1
LOCATION	SEC. 23, T25S, R37E	SEC. 26, T23S, R36E	SEC. 15, T24S, R37E
OWNER	R. OLSEN OIL CO.	CONTINENTAL OIL CO.	W. G. CO.
COMPLETED	10/25/47	04/23/49	02/07/49
SAMPLED	07/16/48	07/29/49	08/01/49
FORMATION	PERM-GLORIETA U	PERM-YATES & SEVEN RIVERS	PERM-SEVEN RIVERS
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4740	2957	3389
WELLHEAD PRESSURE,PSIG	2170	1235	514
OPEN FLOW, MCFD	2820	11400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.9	86.2	82.3
ETHANE	19.2	6.4	8.5
PROPANE	---	2.8	4.6
N-BUTANE	---	0.8	1.2
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.4	0.5
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.5	0.6
NITROGEN	2.3	2.6	1.9
OXYGEN	0.1	0.1	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.5	0.0	0.3
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1123	1138	1204
SPECIFIC GRAVITY	0.674	0.665	0.702

	INDEX 4171 SAMPLE 2817	INDEX 4172 SAMPLE 8708	INDEX 4173 SAMPLE 8811
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	LOVINGTON S	LUSK	LUSK
WELL NAME	STATE 182-WELL NO. 2-A	SOC. CALIF. FED. NO. 1	SOC. CALIF. FED. NO. 1
LOCATION	SEC. 31, T16S, R37E	SEC. 29, T19S, R32E	SEC. 29, T19S, R32W
OWNER	REPOLLO OIL CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	--/--/00	07/14/62	07/14/62
SAMPLED	04/28/39	10/15/62	12/19/62
FORMATION	PERM-	PENN-STRAWN	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	11410	12448
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2870	4200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	18250
COMPONENT, MOLE PCT			
METHANE	0.0	73.4	86.1
ETHANE	1.4	16.4	5.8
PROPANE	---	5.7	2.4
N-BUTANE	---	1.2	0.7
ISOBUTANE	---	0.5	0.4
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.3	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	97.9	1.6	3.0
OXYGEN	0.6	TRACE	0.6
ARGON	---	0.0	TRACE
HYDROGEN	---	0.3	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.06	0.03	0.03
HEATING VALUE*	25	1270	1098
SPECIFIC GRAVITY	0.970	0.737	0.653

	INDEX 4174 SAMPLE 1271	INDEX 4175 SAMPLE 1327	INDEX 4176 SAMPLE 1887
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MALJAMAR	MALJAMAR	MALJAMAR
WELL NAME	NO. 1	OHIO OIL NO. 1	BAISH NO. 2
LOCATION	SEC. 21, T17S, R32E	SEC. 18, T17S, R32E	SEC. 21, T17S, R32E
OWNER	MALJAMAR OIL CORP.	OHIO OIL CO.	MALJAMAR OIL CORP.
COMPLETED	04/04/26	--/--/00	--/--/00
SAMPLED	04/14/26	11/30/26	10/28/29
FORMATION	PERM-SAN ANDRES	PERM---	PERM-MALJAMAR
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3115	3210	3104
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7000	250	8000
COMPONENT, MOLE PCT			
METHANE	33.2	0.0	20.6
ETHANE	18.3	11.8	5.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	47.4	87.5	73.9
OXYGEN	0.3	0.4	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.3	0.2
HELIUM	0.09	0.14	0.09
HEATING VALUE*	664	211	309
SPECIFIC GRAVITY	0.850	0.979	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4177 SAMPLE 2005	INDEX 4178 SAMPLE 2011	INDEX 4179 SAMPLE 2798
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MALJAMAR	MONUMENT	MONUMENT
WELL NAME	MCA UNIT NO.29	SDPMIA MEYERS NO. 1	STATE F NO. 1
LOCATION	SEC. 21, T17S, R32E	SEC. 26, T20S, R37E	SEC. 17, T20S, R37E
OWNER	MALJAMAR OIL CORP.	CONTINENTAL OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/16/29	02/21/29	02/26/37
SAMPLED	06/05/30	06/04/30	06/20/38
FORMATION	PERM-GRAYBURG	PERM-QUEEN	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3115	3570	3773
WELLHEAD PRESSURE,PSIG	900	1340	1170
OPEN FLOW, MCFD	10000	1500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.0	84.2	82.1
ETHANE	0.3	14.9	12.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	38.4	0.5	1.4
OXYGEN	0.1	0.2	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.2	3.4
HELIUM	0.12	TRACE	0.02
HEATING VALUE*	625	1120	1052
SPECIFIC GRAVITY	0.717	0.633	0.659

	INDEX 4180 SAMPLE 4741	INDEX 4181 SAMPLE 4742	INDEX 4182 SAMPLE 4910
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MONUMENT	MONUMENT	NADINE
WELL NAME	J. R. PHILLIPS NO. 7	STATE D NO. 6	A. L. FOSTER C NO. 1
LOCATION	SEC. 1, T20S, R36E	SEC. 1, T20S, R36E	SEC. 23, T19S, R38E
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	STANOLIND OIL & GAS CO.
COMPLETED	04/08/49	04/20/49	08/29/50
SAMPLED	05/20/49	05/20/49	08/29/50
FORMATION	PERM-WICHITA L	PERM-WICHITA U	PERM-DRINKARD BASAL
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7490	7140	7300
WELLHEAD PRESSURE,PSIG	2928	2800	2485
OPEN FLOW, MCFD	125	125	53
COMPONENT, MOLE PCT			
METHANE	77.2	60.9	68.1
ETHANE	10.5	16.0	11.4
PROPANE	4.2	10.4	9.9
N-BUTANE	1.5	3.9	3.7
ISOBUTANE	1.0	1.9	1.2
N-PENTANE	0.6	0.8	0.8
ISOPENTANE	0.2	1.4	0.8
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.6	0.5	0.5
NITROGEN	2.8	0.8	2.7
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.3	3.3	0.5
HELIUM	0.04	0.01	0.08
HEATING VALUE*	1226	1493	1413
SPECIFIC GRAVITY	0.744	0.919	0.846

	INDEX 4183 SAMPLE 1779	INDEX 4184 SAMPLE 1881	INDEX 4185 SAMPLE 4538
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NEW MEXICO	NOT GIVEN	NOT GIVEN
WELL NAME	S. MEYER NO. 1	EMPIRE-CLOSSON	LEONARD NICHOLES ILES NO. 5
LOCATION	SEC. 26, T20S, R37E	SEC. 6, T22S, R36E	SEC. 3, T17S, R32E
OWNER	MARLAND PRODUCTION CO.	EMPIRE GAS & FUEL CO.	A. W. GOLDEN
COMPLETED	03/07/29	--/--/00	--/--/00
SAMPLED	05/18/29	09/27/29	08/--/48
FORMATION	NOT GIVEN	PERM-	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3840	3575	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1400	1400	NOT GIVEN
OPEN FLOW, MCFD	1500	125000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	81.8	51.0
ETHANE	15.6	14.0	41.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.8	1.1	6.6
OXYGEN	0.1	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.7	2.8	0.3
HELIUM	0.03	0.03	0.05
HEATING VALUE*	1089	1080	1266
SPECIFIC GRAVITY	0.667	0.657	0.792

	INDEX 4186 SAMPLE 4567	INDEX 4187 SAMPLE 4715	INDEX 4188 SAMPLE 4855
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	JANDA B NO. 1	Z. A. MCMILLAN	MAUD SAUNDERS NO. 1
LOCATION	SEC. 24, T23S, R36E	SEC. 3, T19S, R37E	SEC. 34, T14S, R33E
OWNER	GULF OIL CORP.	TEXAS CO.	GULF OIL CORP.
COMPLETED	06/03/48	08/16/49	01/11/50
SAMPLED	10/04/48	08/17/49	04/05/50
FORMATION	PERM-YATES	PERM-YATES	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2870	2980	9865
WELLHEAD PRESSURE,PSIG	1295	1600	3523
OPEN FLOW, MCFD	15000	719	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.3	38.3	64.7
ETHANE	16.4	6.5	13.6
PROPANE	---	3.0	9.8
N-BUTANE	---	0.8	3.6
ISOBUTANE	---	0.1	1.4
N-PENTANE	---	0.2	0.9
ISOPENTANE	---	0.1	0.7
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.5
NITROGEN	0.9	50.1	1.4
OXYGEN	0.2	0.1	0.1
ARGON	---	TRACE	0.0
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	3.2
HELIUM	0.03	0.07	0.03
HEATING VALUE*	1128	635	1420
SPECIFIC GRAVITY	0.642	0.849	0.878

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4189 SAMPLE 5015	INDEX 4190 SAMPLE 5379	INDEX 4191 SAMPLE 5904
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	CHARLOTTE NO. 2	MARSHALL NO. 1-D	BELL LAKE UNIT NO. 1-AD
LOCATION	SEC. 32, T20S, R36E	SEC. 13, T21S, R36E	SEC. 31, T23S, R34E
OWNER	WILSON OIL CO.	TIDEWATER ASSOC. OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	10/17/52	04/13/55
SAMPLED	03/01/51	01/23/53	08/03/55
FORMATION	PERM-YATES L	PERM-QUEEN	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3847	3552	15025
WELLHEAD PRESSURE,PSIG	1270	NOT GIVEN	5100
OPEN FLOW, MCFD	NOT GIVEN	1100	15500
COMPONENT, MOLE PCT			
METHANE	78.6	83.8	95.6
ETHANE	9.8	6.7	1.3
PROPANE	4.6	3.4	0.2
N-BUTANE	1.4	1.3	0.1
ISOBUTANE	0.7	0.4	0.0
N-PENTANE	0.3	0.5	0.1
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	3.8	1.2	1.3
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	2.7	1.3
HELIUM	0.08	0.01	0.07
HEATING VALUE*	1196	1141	1005
SPECIFIC GRAVITY	0.715	0.691	0.584

	INDEX 4192 SAMPLE 5927	INDEX 4193 SAMPLE 6404	INDEX 4194 SAMPLE 7532
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	U.S. GEO. NFU-64-A	AUSTIN NO. 1	NO. 1
LOCATION	SEC. 4, T21S, R31E	SEC. 17, T14S, R36E	SEC. 6, T19S, R35E
OWNER	FARM CHEMICAL RES. DEV. CORP	PHILLIPS PETROLEUM CO.	OHIO OIL CO.
COMPLETED	--/--/00	04/07/57	01/22/60
SAMPLED	09/01/55	09/24/57	05/02/60
FORMATION	PERM-SALADO	MISS-	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	13194	13033
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3650	3392
OPEN FLOW, MCFD	NOT GIVEN	4925	3750
COMPONENT, MOLE PCT			
METHANE	1.4	86.0	78.3
ETHANE	0.1	6.4	9.6
PROPANE	0.0	2.4	5.4
N-BUTANE	TRACE	0.4	2.0
ISOBUTANE	0.0	0.6	0.9
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	0.0	0.1	1.3
CYCLOPENTANE	TRACE	0.5	0.5
HEXANES PLUS	TRACE	1.3	0.7
NITROGEN	97.1	0.8	0.7
OXYGEN	0.8	0.0	TRACE
ARGON	0.2	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.3	0.4
HELIUM	0.08	0.03	0.03
HEATING VALUE*	20	1180	1319
SPECIFIC GRAVITY	0.967	0.688	0.760

	INDEX 4195 SAMPLE 8465	INDEX 4196 SAMPLE 8959	INDEX 4197 SAMPLE 13656
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	U.S.A. MARY NELLIS NO. 1	BUFFALO OPER. AREA NO. 5	SHEARN FED. NO. 1
LOCATION	SEC. 2, T19S, R33E	SEC. 2, T19S, R33E	SEC. 15, T19S, R37E
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	SUN OIL CO.
COMPLETED	11/08/61	12/07/62	05/08/72
SAMPLED	03/16/62	05/15/63	07/24/73
FORMATION	PENN-	PENN-	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13234	13110	12231
WELLHEAD PRESSURE,PSIG	4353	4025	3229
OPEN FLOW, MCFD	1800	24500	2331
COMPONENT, MOLE PCT			
METHANE	90.9	83.4	77.2
ETHANE	4.6	8.2	10.9
PROPANE	1.9	3.1	6.0
N-BUTANE	0.5	1.1	1.4
ISOBUTANE	0.3	0.7	1.0
N-PENTANE	0.1	0.5	0.2
ISOPENTANE	0.2	0.4	0.5
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.1	0.8	0.1
NITROGEN	0.8	0.8	2.4
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.3
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1097	1224	1249
SPECIFIC GRAVITY	0.624	0.704	0.734

	INDEX 4198 SAMPLE 16092	INDEX 4199 SAMPLE 13197	INDEX 4200 SAMPLE 11290
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	OSUDO	OSUDO N
WELL NAME	STATE NO. 1	STATE-M NO. 1	ALVES NO. 1
LOCATION	SEC. 2, T19S, R34E	SEC. 32, T20S, R36E	SEC. 6, T20S, R36E
OWNER	KNOX INDUSTRIES, INC.	WESTERN OIL PRODUCERS, INC.	MALLARD PETROLEUM, INC.
COMPLETED	05/21/80	12/22/71	10/15/67
SAMPLED	10/13/80	04/24/72	02/17/68
FORMATION	PENN-MORROW	DEVO-	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13571	12600	12150
WELLHEAD PRESSURE,PSIG	4216	5747	6000
OPEN FLOW, MCFD	8090	14500	2800
COMPONENT, MOLE PCT			
METHANE	55.3	85.6	85.3
ETHANE	21.6	4.6	7.3
PROPANE	12.4	1.7	3.7
N-BUTANE	2.8	0.6	1.1
ISOBUTANE	1.7	0.4	0.6
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.6	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	3.1	4.7	0.9
OXYGEN	0.9	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.4	0.3
HELIUM	TRACE	0.07	0.02
HEATING VALUE*	1488	1064	1180
SPECIFIC GRAVITY	0.908	0.661	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4201 SAMPLE 7513	INDEX 4202 SAMPLE 15156	INDEX 4203 SAMPLE 17868
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	PADDOCK	PEARL N	PITCHFORK
WELL NAME	LOU WORTHAN NO. 8	HENRY RECORD NO. 1	DIAMOND 6 FED. NO. 1
LOCATION	SEC. 11, T22S, R37E	SEC. 26, T19S, R35E	SEC. 6, T25S, R34E
OWNER	OHIO CO.	DORCHESTER EXPLORATION, INC.	MMG OIL CO.
COMPLETED	10/27/45	11/13/79	11/08/82
SAMPLED	04/22/60	11/--/77	11/03/85
FORMATION	-PADDOCK	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5092	12529	15234
WELLHEAD PRESSURE,PSIG	925	3955	1300
OPEN FLOW, MCFD	NOT GIVEN	3846	1600
COMPONENT, MOLE PCT			
METHANE	82.5	82.6	95.5
ETHANE	9.0	6.3	2.5
PROPANE	3.4	4.3	0.5
N-BUTANE	0.8	1.4	0.1
ISOBUTANE	0.4	0.7	0.0
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.7	TRACE
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	2.2	0.8	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.2
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.3	0.7
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1144	1239	1042
SPECIFIC GRAVITY	0.678	0.709	0.589

	INDEX 4204 SAMPLE 17869	INDEX 4205 SAMPLE 11675	INDEX 4206 SAMPLE 12217
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	PITCHFORK	QUAIL RIDGE	QUAIL RIDGE
WELL NAME	VACA 13 FED. NO. 1	MESCALERO RIDGE UNIT NO. 31	MESCALERO RIDGE UNIT NO. 1
LOCATION	SEC. 13, T25S, R33E	SEC. 21, T19S, R34E	SEC. 20, T19S, R34E
OWNER	MMG OIL CO.	SINCLAIR OIL CORP.	PENNZOIL UNITED, INC.
COMPLETED	02/22/84	06/28/68	09/26/69
SAMPLED	11/05/85	10/25/68	03/12/70
FORMATION	PENN-ATOKA	PERM-YATES	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14495	3958	13460
WELLHEAD PRESSURE,PSIG	1100	1075	4500
OPEN FLOW, MCFD	730	3939	8955
COMPONENT, MOLE PCT			
METHANE	93.8	63.1	83.2
ETHANE	3.2	5.8	9.3
PROPANE	0.6	2.9	4.6
N-BUTANE	0.2	0.8	0.7
ISOBUTANE	0.1	0.4	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.0	26.2	1.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.4
HELIUM	0.01	0.26	0.02
HEATING VALUE*	1061	882	1169
SPECIFIC GRAVITY	0.602	0.748	0.673

	INDEX 4207 SAMPLE 15537	INDEX 4208 SAMPLE 11163	INDEX 4209 SAMPLE 9714
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	QUERECHE PLAINS	RANGER LAKE W	RED HILLS
WELL NAME	FED. "E" NO. 1	WEST RANGER UNIT NO. 2	NO. 1
LOCATION	SEC. 27, T18S, R32E	SEC. 23, T12S, R34E	SEC. 32, T25S, R33E
OWNER	MEWBOURNE OIL CO.	TEXAS PACIFIC OIL CO.	PURE OIL CO.
COMPLETED	03/22/77	08/13/66	12/26/64
SAMPLED	12/10/78	10/11/67	01/22/65
FORMATION	PENN-MORROW	DEVO-	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12620	12907	11643
WELLHEAD PRESSURE,PSIG	4004	3450	8022
OPEN FLOW, MCFD	2446	2270	15750
COMPONENT, MOLE PCT			
METHANE	86.7	68.0	88.5
ETHANE	7.3	7.4	7.3
PROPANE	3.1	3.8	2.1
N-BUTANE	0.7	1.8	TRACE
ISOBUTANE	0.3	1.0	0.7
N-PENTANE	0.1	0.6	0.1
ISOPENTANE	0.2	1.4	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.7	0.1
NITROGEN	0.7	12.3	1.0
OXYGEN	0.0	1.9	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.8	0.2
HELIUM	0.03	0.07	0.01
HEATING VALUE*	1145	1139	1115
SPECIFIC GRAVITY	0.655	0.804	0.633

	INDEX 4210 SAMPLE 15335	INDEX 4211 SAMPLE 13649	INDEX 4212 SAMPLE 4569
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	REEVES N	SAND DUNES S	SAWYER
WELL NAME	HANLOD-STATE NO. 1	SUNDANCE FEDERAL NO. 1	LANDRETH NO. 1
LOCATION	SEC. 2, T18S, R35E	SEC. 14, T24S, R31E	SEC. 18, T9S, R38E
OWNER	METCO	EL PASO NATURAL GAS CO.	DEVONIAN CO.
COMPLETED	09/16/77	06/22/72	05/31/48
SAMPLED	08/03/78	07/19/73	10/06/48
FORMATION	PERM-QUEEN	PENN-ATOKA & MORROW	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4212	13691	4938
WELLHEAD PRESSURE,PSIG	1303	6553	1300
OPEN FLOW, MCFD	2415	3376	2750
COMPONENT, MOLE PCT			
METHANE	34.2	94.7	64.9
ETHANE	4.1	3.0	20.7
PROPANE	2.0	0.6	---
N-BUTANE	0.7	0.0	---
ISOBUTANE	0.3	0.0	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.2	0.0	---
NITROGEN	57.9	1.1	7.1
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.6	6.9
HELIUM	0.18	0.02	0.09
HEATING VALUE*	537	1029	1028
SPECIFIC GRAVITY	0.863	0.586	0.755

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4213 SAMPLE 4960	INDEX 4214 SAMPLE 15848	INDEX 4215 SAMPLE 16407
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	SAWYER	SHOEBAR	TALCO
WELL NAME	UNION FED. NO. 3	NEW MEXICO STATE 28 NO. 1	TALCO UNIT NO. 1
LOCATION	SEC. 31, T9S, R38E	SEC. 28, T16S, R35E	SEC. 11, T26S, R35E
OWNER	GEORGE P LIVERMORE, INC.	HNG OIL CO.	ATAPCO
COMPLETED	08/08/50	07/25/79	07/--/81
SAMPLED	11/08/50	11/20/79	12/18/81
FORMATION	PERM-SAN ANDRES	PENN-ATOKA	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4910	12453	14900
WELLHEAD PRESSURE,PSIG	1350	4325	6500
OPEN FLOW, MCFD	385	8173	7107
COMPONENT, MOLE PCT			
METHANE	69.8	88.2	93.1
ETHANE	6.1	6.6	1.8
PROPANE	2.6	2.1	0.3
N-BUTANE	0.6	0.4	0.1
ISOBUTANE	0.2	0.3	TRACE
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	11.3	1.3	2.7
OXYGEN	0.1	0.0	1.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	8.8	0.4	0.5
HELIUM	0.14	0.03	0.02
HEATING VALUE*	925	1121	1014
SPECIFIC GRAVITY	0.764	0.642	0.600

	INDEX 4216 SAMPLE 8214	INDEX 4217 SAMPLE 15261	INDEX 4218 SAMPLE 4850
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	VACUUM	VACUUM N	WARREN MCKEE
WELL NAME	STATE F NO. 1	STATE SEC. 7 NO. 1	WARREN UNIT B-28 NO. 2
LOCATION	SEC. 36, T17S, R33E	SEC. 7, T17S, R35E	SEC. 28, T20S, R38E
OWNER	TEXAS GULF PRODUCING CO.	MARATHON OIL CO.	CONTINENTAL OIL CO.
COMPLETED	02/15/55	--/--/00	--/--/00
SAMPLED	09/27/61	04/17/78	04/03/50
FORMATION	PERM-QUEEN	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3843	12000	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1025	3577	NOT GIVEN
OPEN FLOW, MCFD	91000	13738	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	46.2	88.9	84.2
ETHANE	4.6	6.0	7.5
PROPANE	2.0	1.9	3.5
N-BUTANE	1.0	0.8	1.0
ISOBUTANE	0.6	0.2	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	44.4	1.4	2.4
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.5	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	0.17	0.03	0.05
HEATING VALUE*	678	1109	1148
SPECIFIC GRAVITY	0.819	0.635	0.669

	INDEX 4219 SAMPLE 1369	INDEX 4220 SAMPLE 5786	INDEX 4221 SAMPLE 6100
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	INGLEFIELD-BRIDGES	AMERICAN REP. FED. NO. 1	NEW MEXICO STATE G-4
LOCATION	SEC. 4, T17, R34	SEC. 28, T25S, R37E	SEC. 7, T18S, R34E
OWNER	INGLEFIELD-BRIDGES	ANDERSON-PRICHARD OIL CORP.	SUNRAY MID-CONTINENT OIL CO.
COMPLETED	--/--/00	01/18/55	06/05/56
SAMPLED	03/24/27	03/03/55	07/05/56
FORMATION	NOT GIVEN	DEVO-	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4707	8270	4354
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3233	1100
OPEN FLOW, MCFD	NOT GIVEN	67500	7000
COMPONENT, MOLE PCT			
METHANE	11.1	88.7	52.4
ETHANE	46.6	5.0	5.5
PROPANE	---	1.8	2.7
N-BUTANE	---	0.5	0.6
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.0	0.2
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.6	0.2
NITROGEN	38.6	1.5	37.5
OXYGEN	2.5	0.1	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	TRACE	0.0
CARBON DIOXIDE	1.3	0.9	0.1
HELIUM	0.02	0.04	0.15
HEATING VALUE*	948	1117	761
SPECIFIC GRAVITY	0.971	0.649	0.792

	INDEX 4222 SAMPLE 10118	INDEX 4223 SAMPLE 11017	INDEX 4224 SAMPLE 13297
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	CUSTER MOUNTAIN UNIT NO. 1	COTTON DRAW NO. 64	SHELL-STATE COM. NO. 1
LOCATION	SEC. 9, T24S, R35E	SEC. 18, T25S, R32E	SEC. 6, T13S, R35E
OWNER	MIDWEST OIL CORP.	TEXACO INC.	UNION TEXAS PETROLEUM CORP.
COMPLETED	04/28/64	05/19/66	06/11/71
SAMPLED	09/14/65	06/29/67	07/11/72
FORMATION	PENN-MORROW	DEVO-	DEVO---
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14000	16490	13096
WELLHEAD PRESSURE,PSIG	6500	5407	2914
OPEN FLOW, MCFD	8000	NOT GIVEN	3571
COMPONENT, MOLE PCT			
METHANE	92.9	96.0	83.4
ETHANE	4.3	0.5	5.8
PROPANE	1.1	0.1	3.0
N-BUTANE	0.1	0.0	1.0
ISOBUTANE	0.2	0.0	1.3
N-PENTANE	0.1	0.0	0.5
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.3
NITROGEN	0.5	1.5	2.9
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.6	1.7
HELIUM	0.02	0.05	0.10
HEATING VALUE*	1071	984	1141
SPECIFIC GRAVITY	0.604	0.579	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4225 SAMPLE 16306	INDEX 4226 SAMPLE 16307	INDEX 4227 SAMPLE 9927
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	WILDCAT	WILDCAT	WILSON S
WELL NAME	GETTY FEDERAL "24" NO. 1	GETTY "32" NO. 1	NO. 1
LOCATION	SEC. 24, T22S, R31E	SEC. 32, T21S, R32E	SEC. 23, T21S, R34E
OWNER	GETTY OIL CO.	GETTY OIL CO.	SINCLAIR OIL & GAS CO.
COMPLETED	12/28/80	12/20/80	03/19/64
SAMPLED	07/30/81	07/30/81	06/17/65
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13528	14394	12624
WELLHEAD PRESSURE,PSIG	7000	4950	4567
OPEN FLOW, MCFD	5039	3703	2050
COMPONENT, MOLE PCT			
METHANE	94.1	91.2	89.8
ETHANE	3.3	4.8	5.4
PROPANE	0.6	1.3	2.3
N-BUTANE	0.1	0.2	0.8
ISOBUTANE	TRACE	0.2	0.5
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	1.0	0.5
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1045	1066	1125
SPECIFIC GRAVITY	0.592	0.614	0.637

	INDEX 4228 SAMPLE 16229	INDEX 4229 SAMPLE 12722	INDEX 4230 SAMPLE 11401
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	MCKINLEY	MCKINLEY
FIELD	YOUNG	HOSPAH LONE PINE	NOT GIVEN
WELL NAME	YOUNG DEEP UNIT NO. 1	SANTA FE PACIFIC RR NO. 2	HOSPAH NO. 10
LOCATION	SEC. 10, T18S, R32E	SEC. 13, T17N, R9W	SEC. 12, T17N, R19W
OWNER	HARVEY E. YATES CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	04/18/80	09/10/70	05/18/67
SAMPLED	04/10/81	03/17/71	03/25/68
FORMATION	PENN-MORROW	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	430	580	580
DEPTH, FEET	12845	2547	2498
WELLHEAD PRESSURE,PSIG	200	900	895
OPEN FLOW, MCFD	245	4350	384
COMPONENT, MOLE PCT			
METHANE	78.5	71.3	74.0
ETHANE	11.2	14.3	14.2
PROPANE	5.8	6.3	5.2
N-BUTANE	1.7	0.9	0.9
ISOBUTANE	0.7	1.0	0.9
N-PENTANE	0.4	0.0	0.2
ISOPENTANE	0.4	0.4	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.8	5.4	3.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.1
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1272	1228	1227
SPECIFIC GRAVITY	0.733	0.748	0.733

	INDEX 4231 SAMPLE 17790	INDEX 4232 SAMPLE 1078	INDEX 4233 SAMPLE 1099
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MORA	MORA
FIELD	UNDESIGNATED	WAGON MOUND	WAGON MOUND
WELL NAME	LUDWICK NO. 1	C. F. CRUSE NO. 1	C. F. CRUSE NO. 1
LOCATION	SEC. T, T19N, R5W	SEC. 11, T19N, R21E	SEC. 11, T19N, R21E
OWNER	JAMES L. LUDWICK	ARKANSAS FUEL OIL CO.	ARKANSAS FUEL OIL CO.
COMPLETED	05/08/84	--/--/26	02/05/26
SAMPLED	07/31/85	06/15/25	08/05/25
FORMATION	CRET-MESAVERDE	TRIA-	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	455	455
DEPTH, FEET	1844	1425	1425
WELLHEAD PRESSURE,PSIG	600	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	450	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	---	---
ETHANE	6.3	---	---
PROPANE	1.2	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	5.2	6.7	7.8
OXYGEN	0.0	1.1	2.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	92.2	90.0
HELIUM	0.11	0.02	0.15
HEATING VALUE*	1045	0	0
SPECIFIC GRAVITY	0.632	1.487	1.478

	INDEX 4234 SAMPLE 9115	INDEX 4235 SAMPLE 17549	INDEX 4236 SAMPLE 17080
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MORA	QUAY	QUAY
FIELD	WILDCAT	NOT GIVEN	WILDCAT
WELL NAME	NO. 1	Y-4 CATTLE CO. NO. 1	WICHITA STATE NO. 1
LOCATION	SEC. 28, T21N, R21E	SEC. 5, T10N, R27E	SEC. 36, T5N, R30E
OWNER	STATE OF NEW MEXICO	YATES PETROLEUM CO.	DESANA CORP.
COMPLETED	09/25/63	--/--/00	03/25/83
SAMPLED	10/20/65	12/12/84	08/09/83
FORMATION	CRET-DAKOTA	PENN-NOT GIVEN	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	455	435	435
DEPTH, FEET	321	7005	2070
WELLHEAD PRESSURE,PSIG	10	1450	680
OPEN FLOW, MCFD	NOT GIVEN	1100	519
COMPONENT, MOLE PCT			
METHANE	48.5	68.3	25.4
ETHANE	0.0	11.2	2.1
PROPANE	0.0	5.3	1.4
N-BUTANE	0.0	1.3	0.3
ISOBUTANE	0.0	0.7	0.3
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	50.6	11.6	69.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.6	TRACE	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.1
HELIUM	0.03	0.19	0.21
HEATING VALUE*	491	1133	378
SPECIFIC GRAVITY	0.770	0.761	0.883

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4237 SAMPLE 5173	INDEX 4238 SAMPLE 10262	INDEX 4239 SAMPLE 6869
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	ABIQUIN	BALLARD	BASIN DAKOTA
WELL NAME	MORTEN NO. 1	AXI APACHE A-9	FARMING E
LOCATION	SEC. 24, T24N, R5E	SEC. 10, T23N, R5W	SEC. 2, T24N, R6W
OWNER	LOWRY, ET AL.	CONTINENTAL OIL CO.	SKELLY OIL CO.
COMPLETED	02/10/52	08/29/65	10/17/58
SAMPLED	02/10/52	11/03/65	11/10/58
FORMATION	PENN-NOT GIVEN	CRET-PICTURED CLIFFS	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1732	2254	6994
WELLHEAD PRESSURE, PSIG	690	715	2050
OPEN FLOW, MCFD	25	3700	10
COMPONENT, MOLE PCT			
METHANE	0.0	87.6	84.1
ETHANE	0.1	5.4	8.8
PROPANE	0.1	2.8	2.7
N-BUTANE	0.0	0.7	0.6
ISOBUTANE	0.0	0.6	0.9
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.4	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	1.7	2.1	2.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	1.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	96.5	TRACE	0.6
HELIUM	0.41	0.04	0.10
HEATING VALUE*	18	1132	1171
SPECIFIC GRAVITY	1.497	0.652	0.677

	INDEX 4240 SAMPLE 7314	INDEX 4241 SAMPLE 7604	INDEX 4242 SAMPLE 8070
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	SAN JUAN NO. 33-17	MCKENZIE-FED. NO. 1	APACHE FED. NO. 12
LOCATION	SEC. 17, T28N, R5W	SEC. 25, T25N, R6W	SEC. 17, T24N, R5W
OWNER	EL PASO NATURAL GAS CO.	KERN COUNTY LAND CO.	GULF OIL CORP.
COMPLETED	06/08/59	10/07/59	05/15/61
SAMPLED	12/17/59	07/12/60	07/14/61
FORMATION	CRET-MESAVERDE	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5361	6907	6673
WELLHEAD PRESSURE, PSIG	1090	2310	2216
OPEN FLOW, MCFD	4761	2066	8821
COMPONENT, MOLE PCT			
METHANE	84.4	87.9	79.2
ETHANE	9.0	8.3	13.4
PROPANE	3.5	1.8	4.2
N-BUTANE	0.8	0.5	0.8
ISOBUTANE	0.4	0.2	1.0
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.5	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.4	0.9	TRACE
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.3	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	0.03	0.10	0.10
HEATING VALUE*	1175	1143	1249
SPECIFIC GRAVITY	0.670	0.642	0.711

	INDEX 4243 SAMPLE 8697	INDEX 4244 SAMPLE 17508	INDEX 4245 SAMPLE 6451
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BASIN DAKOTA	BASIN DAKOTA-UNDES. GALLUP	BLANCO
WELL NAME	SAN JUAN NO. 28-6-100	ROSA UNIT NO. 87	LINDRITH UNIT NO. 19
LOCATION	SEC. 13, T28N, R6W	SEC. 12, T31N, R4W	SEC. 12, T24N, R5W
OWNER	EL PASO NATURAL GAS CO.	AMOCO PRODUCTION CO.	EL PASO NATURAL GAS CO.
COMPLETED	12/09/61	12/09/82	04/12/57
SAMPLED	10/05/62	10/30/84	12/02/57
FORMATION	CRET-DAKOTA	CRET-GALLUP	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7550	7056	3280
WELLHEAD PRESSURE, PSIG	2326	2670	939
OPEN FLOW, MCFD	7554	2469	8273
COMPONENT, MOLE PCT			
METHANE	94.5	96.0	84.2
ETHANE	2.8	0.1	5.9
PROPANE	0.8	TRACE	2.7
N-BUTANE	0.1	0.0	0.6
ISOBUTANE	0.1	0.0	0.6
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	0.4	1.2	4.3
OXYGEN	TRACE	0.3	1.1
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	2.3	0.1
HELIUM	0.04	TRACE	0.01
HEATING VALUE*	1039	974	1096
SPECIFIC GRAVITY	0.592	0.583	0.668

	INDEX 4246 SAMPLE 8192	INDEX 4247 SAMPLE 14882	INDEX 4248 SAMPLE 15321
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	SAN JUAN 30-5 UNIT NO. 35	SAN JUAN 29-6 UNIT NO. 4A	MOTT NO. 2-A
LOCATION	SEC. 7, T30N, R5W	SEC. 17, T29N, R6W	SEC. 5, T26N, R4W
OWNER	EL PASO NATURAL GAS CO.	NORTHWEST PIPELINE CORP.	CONSOLIDATED OIL & GAS, INC.
COMPLETED	05/26/61	10/05/76	12/27/77
SAMPLED	09/12/61	12/28/76	07/20/78
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5310	5068	6126
WELLHEAD PRESSURE, PSIG	1196	1224	1070
OPEN FLOW, MCFD	3193	12911	3129
COMPONENT, MOLE PCT			
METHANE	96.0	84.7	82.9
ETHANE	1.8	8.7	9.6
PROPANE	0.5	3.5	3.8
N-BUTANE	0.1	0.8	0.9
ISOBUTANE	0.1	0.6	0.7
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.2	0.9	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.7	0.4
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1030	1174	1197
SPECIFIC GRAVITY	0.585	0.672	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4249 SAMPLE 17570	INDEX 4250 SAMPLE 11094	INDEX 4251 SAMPLE 11095
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	BLANCO MESAVERDE	CHOZA MESA	CHOZA MESA
WELL NAME	JICARILLA CONTRACT NO.155-33	GASBUGGY NO. 1	GASBUGGY NO. 1
LOCATION	SEC. 29, T26N, R5W	SEC. 36, T29N, R4W	SEC. 36, T29N, R4W
OWNER	AMOCO PRODUCTION CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	08/29/84	03/19/67	03/19/67
SAMPLED	08/29/84	06/08/67	05/19/67
FORMATION	CRET-MESAVERDE	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5377	3915	3915
WELLHEAD PRESSURE,PSIG	740	845	845
OPEN FLOW, MCFD	993	100	100
COMPONENT, MOLE PCT			
METHANE	78.8	85.2	85.1
ETHANE	10.5	7.3	7.2
PROPANE	6.6	3.7	3.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	2.6	0.8	0.8
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.9	0.9	1.0
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	0.03	0.04	0.02
HEATING VALUE*	1268	1175	1181
SPECIFIC GRAVITY	0.727	0.672	0.677

	INDEX 4252 SAMPLE 17297	INDEX 4253 SAMPLE 5113	INDEX 4254 SAMPLE 11937
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	DEVILS FORK	DOSWELL-PETTIGREW	GAVILAN
WELL NAME	CANYON LARGO UNIT NO. 325	FED. NO. B-1	JICARILLA D NO. 13
LOCATION	SEC. 33, T25N, R6W	SEC. 15, T26N, R6W	SEC. 14, T26N, R3W
OWNER	HARRISON & BAYLESS	LOWRY, ET AL.	MOBIL OIL CORP.
COMPLETED	02/22/84	05/25/51	04/27/69
SAMPLED	05/22/84	10/05/51	06/17/69
FORMATION	CRET-GALLUP	CRET-U	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4679	2857	3748
WELLHEAD PRESSURE,PSIG	1075	NOT GIVEN	778
OPEN FLOW, MCFD	744	NOT GIVEN	1946
COMPONENT, MOLE PCT			
METHANE	74.7	85.2	83.2
ETHANE	11.4	6.9	8.1
PROPANE	6.8	3.9	4.6
N-BUTANE	2.3	0.8	1.0
ISOBUTANE	0.9	0.6	0.5
N-PENTANE	0.7	0.2	0.2
ISOPENTANE	0.6	0.1	0.4
CYCLOPENTANE	0.2	0.0	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.7	1.7	1.5
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.2	TRACE
HELIUM	0.06	0.02	0.03
HEATING VALUE*	1319	1159	1198
SPECIFIC GRAVITY	0.774	0.668	0.687

	INDEX 4255 SAMPLE 14881	INDEX 4256 SAMPLE 16108	INDEX 4257 SAMPLE 6095
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	GAVILAN	GOBERNADOR	HAYSTACK DOME
WELL NAME	JICARILLA 93 NO. 5	SAN JUAN 29-5 UNIT NO. 97	NAVAJO C NO. 1
LOCATION	SEC. 34, T27N, R3W	SEC. 15, T29N, R5W	SEC. 8, T23N, R5W
OWNER	NORTHWEST PIPELINE CORP.	NORTHWEST PIPELINE CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	11/19/75	06/18/80	--/--/00
SAMPLED	12/28/76	10/22/80	07/10/56
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	MISS-MADISON
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3922	3782	8070
WELLHEAD PRESSURE,PSIG	949	953	15
OPEN FLOW, MCFD	2088	3047	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.7	89.2	1.5
ETHANE	8.6	5.3	0.2
PROPANE	3.9	2.6	0.0
N-BUTANE	0.9	0.7	0.1
ISOBUTANE	0.7	0.4	0.0
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.1	0.9	8.2
OXYGEN	TRACE	0.2	0.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	88.1
HELIUM	0.04	TRACE	1.16
HEATING VALUE*	1192	1121	41
SPECIFIC GRAVITY	0.681	0.639	1.455

	INDEX 4258 SAMPLE 6472	INDEX 4259 SAMPLE 5473	INDEX 4260 SAMPLE 11740
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	JICARILLA	JICARILLA	JICARILLA
WELL NAME	N3-5	NR-8	JICARILLA APACHE NO. 14
LOCATION	SEC. 5, T26N, R4W	SEC. 8, T26N, R4W	SEC. 34, T26N, R5W
OWNER	NORTHWEST PRODUCTION CORP.	NORTHWEST PRODUCTION CORP.	MARATHON OIL CO.
COMPLETED	05/--/57	06/03/57	11/06/68
SAMPLED	01/08/58	01/08/58	01/17/69
FORMATION	CRET-PICTURED CLIFFS	CRET-MESAVERDE	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4030	5156	2865
WELLHEAD PRESSURE,PSIG	1000	1070	597
OPEN FLOW, MCFD	37388	2275	2076
COMPONENT, MOLE PCT			
METHANE	87.1	82.8	82.5
ETHANE	6.9	10.1	7.5
PROPANE	3.1	3.9	4.4
N-BUTANE	0.8	1.0	1.1
ISOBUTANE	0.7	0.7	1.0
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	0.7	0.0	1.9
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.02	0.04	TRACE
HEATING VALUE*	1155	1210	1213
SPECIFIC GRAVITY	0.654	0.689	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4261 SAMPLE 11741	INDEX 4262 SAMPLE 6077	INDEX 4263 SAMPLE 6078
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	JICARILLA	JICARILLA APACHE AREA	JICARILLA APACHE AREA
WELL NAME	JICARILLA APACHE NO. 14	JICARILLA APACHE A NO. 3	JICARILLA APACHE A NO. 3
LOCATION	SEC. 34, T26N, R5W	SEC. 23, T25N, R5W	SEC. 23, T25N, R5W
OWNER	MARATHON OIL CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	11/06/68	11/10/55	11/10/55
SAMPLED	01/17/69	05/26/56	05/26/56
FORMATION	CRET-DAKOTA	CRET-LA VENTANA	CRET-GRANEROS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7942	3784	7132
WELLHEAD PRESSURE,PSIG	2340	1475	1350
OPEN FLOW, MCFD	5661	NOT GIVEN	1723
COMPONENT, MOLE PCT			
METHANE	82.0	85.4	78.2
ETHANE	8.6	6.5	10.7
PROPANE	3.8	3.9	6.2
N-BUTANE	1.0	1.0	1.6
ISOBUTANE	0.4	0.7	0.9
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.4	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.9	1.2	0.6
OXYGEN	0.7	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.5
HELIUM	0.07	0.05	0.06
HEATING VALUE*	1143	1185	1274
SPECIFIC GRAVITY	0.685	0.677	0.734

	INDEX 4264 SAMPLE 5013	INDEX 4265 SAMPLE 5101	INDEX 4266 SAMPLE 5076
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	LARGO CANYON	LINDRETH	NOT GIVEN
WELL NAME	G. W. NICKSON NO. 1	WHITE NO. 1	JICARILLA APACHE
LOCATION	SEC. 33, T28N, R7W	SEC. 36, T25N, R2W	SEC. 28, T24N, R5W
OWNER	BYRD-FROST, INC.	A. G. HILL OIL PRODUCER	AMERADA PETROLEUM CORP.
COMPLETED	11/30/50	--/--/00	--/--/00
SAMPLED	05/09/51	11/23/51	09/07/51
FORMATION	CRET-U	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4878	3654	2228
WELLHEAD PRESSURE,PSIG	820	975	30
OPEN FLOW, MCFD	487	600	110
COMPONENT, MOLE PCT			
METHANE	81.7	84.7	85.9
ETHANE	11.0	8.3	6.2
PROPANE	4.5	3.7	3.4
N-BUTANE	1.1	0.8	0.6
ISOBUTANE	0.6	0.6	1.0
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.0	1.2	2.2
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1223	1172	1145
SPECIFIC GRAVITY	0.694	0.676	0.665

	INDEX 4267 SAMPLE 5135	INDEX 4268 SAMPLE 6223	INDEX 4269 SAMPLE 7235
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	SE. DULCE NO. 1	CORE DRILL HOLE	EVANS FED. NO. 1
LOCATION	SEC. 6, T28N, R2W	SEC. 34, T26N, R3E	SEC. 18, T23N, R1W
OWNER	CONTINENTAL OIL CO.	A. J. SIMON	SOCONY MOBIL OIL CO., INC.
COMPLETED	--/--/00	08/28/56	06/08/59
SAMPLED	09/20/51	01/05/57	10/05/59
FORMATION	CRET-MESAVERDE	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	235	2997
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	940
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1093
COMPONENT, MOLE PCT			
METHANE	86.2	0.1	75.7
ETHANE	7.5	0.1	5.0
PROPANE	2.0	0.0	5.0
N-BUTANE	0.4	0.0	0.6
ISOBUTANE	0.5	0.0	0.8
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.0	0.0	0.5
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	0.2
NITROGEN	1.0	90.4	10.5
OXYGEN	0.2	2.9	2.9
ARGON	TRACE	1.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.5	3.5	0.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1121	3	1039
SPECIFIC GRAVITY	0.658	0.997	0.713

	INDEX 4270 SAMPLE 11950	INDEX 4271 SAMPLE 12256	INDEX 4272 SAMPLE 16617
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	NOT GIVEN	NOT GIVEN	OJITO GALLUP
WELL NAME	SOUTHERN PETROLEUM COM NO. 4	COM FIELDS NO. 1	FLORANCE NO. 11
LOCATION	SEC. 32, T26N, R6W	SEC. 31, T26N, R6W	SEC. 5, T25N, R3W
OWNER	U.S. BUREAU OF MINES	R. L. BAYLESS	PETRO-LEWIS CORP.
COMPLETED	--/--/00	--/--/00	01/--/82
SAMPLED	01/07/69	05/03/70	08/10/82
FORMATION	CRET-CHACRA	CRET-CHACRA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	3700	8139
WELLHEAD PRESSURE,PSIG	439	775	650
OPEN FLOW, MCFD	NOT GIVEN	500	500
COMPONENT, MOLE PCT			
METHANE	85.7	86.9	73.5
ETHANE	7.4	6.7	14.9
PROPANE	3.6	3.2	6.4
N-BUTANE	0.7	0.7	1.5
ISOBUTANE	0.6	0.6	0.9
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.1	1.3	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.7
HELIUM	0.02	0.02	0.05
HEATING VALUE*	1174	1150	1312
SPECIFIC GRAVITY	0.667	0.656	0.761

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4273 SAMPLE 6782	INDEX 4274 SAMPLE 6785	INDEX 4275 SAMPLE 8762
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	OTERO	OTERO	OTERO
WELL NAME	JICARILLA CONTRACT 148 NO. 9	JICARILLA CONTRACT 146 NO. 9	JICARILLA CONTRACT 146 NO.14
LOCATION	SEC. 15, T25N, R5W	SEC. 10, T25N, R5W	SEC. 9, T25N, R5W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/11/57	08/19/57	09/05/61
SAMPLED	07/22/58	07/22/58	11/09/62
FORMATION	CRET-GRANEROS	CRET-GRANEROS	CRET-CHACRA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7220	7354	3831
WELLHEAD PRESSURE,PSIG	2260	2384	926
OPEN FLOW, MCFD	1350	251	1309
COMPONENT, MOLE PCT			
METHANE	84.3	76.9	85.3
ETHANE	10.3	9.5	7.9
PROPANE	3.1	4.6	3.5
N-BUTANE	0.5	1.4	0.9
ISOBUTANE	0.0	1.4	0.7
N-PENTANE	0.0	0.7	0.2
ISOPENTANE	0.7	1.4	0.4
CYCLOPENTANE	0.0	0.7	0.1
HEXANES PLUS	0.2	2.0	0.2
NITROGEN	0.2	0.7	0.7
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.6	0.2
HELIUM	TRACE	0.10	0.02
HEATING VALUE*	1176	1301	1185
SPECIFIC GRAVITY	0.671	0.680	0.674

	INDEX 4276 SAMPLE 11939	INDEX 4277 SAMPLE 5348	INDEX 4278 SAMPLE 7220
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	OTERO	ROSA UNIT	TAPACITOS
WELL NAME	CANYON LARGO UNIT NO. 142	ROSA UNIT NO. 4	W. F. HURT NO. 3
LOCATION	SEC. 23, T25N, R6W	SEC. 27, T31N, R4W	SEC. 14, T25N, R3W
OWNER	EL PASO NATURAL GAS CO.	COLORADO OIL & GAS CORP.	SKELLY OIL CO.
COMPLETED	--/--/00	--/--/00	06/25/59
SAMPLED	01/07/69	12/09/52	09/25/59
FORMATION	CRET-CHACRA	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3372	NOT GIVEN	3904
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	997
OPEN FLOW, MCFD	1714	NOT GIVEN	36052
COMPONENT, MOLE PCT			
METHANE	85.4	94.8	80.7
ETHANE	6.9	2.8	5.6
PROPANE	3.6	0.7	2.8
N-BUTANE	0.8	0.1	0.6
ISOBUTANE	0.6	0.2	0.5
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.1	0.0	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.1
NITROGEN	1.5	0.1	6.6
OXYGEN	0.0	TRACE	1.4
ARGON	0.0	TRACE	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.2	0.1
HELIUM	0.27	TRACE	0.01
HEATING VALUE*	1166	1039	1076
SPECIFIC GRAVITY	0.667	0.591	0.683

	INDEX 4279 SAMPLE 17120	INDEX 4280 SAMPLE 16757	INDEX 4281 SAMPLE 4723
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	UNDESIGNATED	UNDESIGNATED GALLUP	WILDCAT
WELL NAME	DIVIDE NO. 1	CHICOSA CANYON NO. 1	ROSA UNIT NO. 1
LOCATION	SEC. 35, T26N, R2W	SEC. 35, T31N, R4W	SEC. 11, T31N, R6W
OWNER	DUGAN PRODUCTION CORP.	SOUTHLAND ROYALTY CO.	STANOLIND OIL & GAS CO.
COMPLETED	05/13/83	09/13/81	06/13/49
SAMPLED	10/22/83	01/26/83	06/28/49
FORMATION	CRET-MESAVERDE & MANCOS	CRET-GALLUP	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6234	7532	7865
WELLHEAD PRESSURE,PSIG	1485	3150	2905
OPEN FLOW, MCFD	825	1321	170
COMPONENT, MOLE PCT			
METHANE	80.1	96.1	96.4
ETHANE	10.6	0.2	0.4
PROPANE	5.0	TRACE	0.1
N-BUTANE	1.3	0.0	TRACE
ISOBUTANE	0.9	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.6	0.0	0.2
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.5	0.2	0.5
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	3.1	2.4
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1252	978	994
SPECIFIC GRAVITY	0.721	0.586	0.588

	INDEX 4282 SAMPLE 5246	INDEX 4283 SAMPLE 5247	INDEX 4284 SAMPLE 5342
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MOWELL NO. 2-B	REAMS NO. 1	ABRAHAM NO. 1
LOCATION	SEC. 3, T30N, R7W	SEC. 28, T26N, R6W	SEC. 13, T30N, R6W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	02/04/52	04/15/51	06/30/52
SAMPLED	06/23/53	06/23/52	12/04/52
FORMATION	CRET-U	CRET-U	CRET-FRUITLAND
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4969	2325	2955
WELLHEAD PRESSURE,PSIG	1270	1015	1468
OPEN FLOW, MCFD	800	264	2530
COMPONENT, MOLE PCT			
METHANE	90.3	88.0	87.9
ETHANE	5.1	6.1	6.8
PROPANE	1.8	3.1	2.6
N-BUTANE	0.3	0.6	0.7
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.6	0.8	TRACE
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.2	0.7
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1107	1145	1156
SPECIFIC GRAVITY	0.627	0.650	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 4285 SAMPLE 5400	INDEX 4286 SAMPLE 6323	INDEX 4287 SAMPLE 16168
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	RIO ARRIBA	RIO ARRIBA	RIO ARRIBA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HARRINGTON NO. 1	JICARILLA NO. 6-E	FEDERAL NO. 31-12
LOCATION	SEC. 4, T27N, R5W	SEC. 21, T26N, R4W	SEC. 12, T24N, R2W
OWNER	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.	KENAI OIL & GAS, INC.
COMPLETED	05/21/52	01/06/57	--/--/80
SAMPLED	02/23/53	05/07/57	01/13/81
FORMATION	CRET-DAKOTA	CRET-TOCITO	TERT-NACIMIENTO
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7708	7140	2380
WELLHEAD PRESSURE,PSIG	2852	1732	520
OPEN FLOW, MCFD	4380	9750	3569
COMPONENT, MOLE PCT			
METHANE	93.4	79.1	96.2
ETHANE	3.2	11.9	1.4
PROPANE	0.7	4.0	0.1
N-BUTANE	0.3	1.0	0.1
ISOBUTANE	0.2	0.8	0.1
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	1.6	1.7
OXYGEN	TRACE	0.5	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.5	TRACE
HELIUM	0.02	0.05	0.01
HEATING VALUE*	1058	1211	1027
SPECIFIC GRAVITY	0.609	0.710	0.581

	INDEX 4288 SAMPLE 13290	INDEX 4289 SAMPLE 16667	INDEX 4290 SAMPLE 9924
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	ROOSEVELT	ROOSEVELT	ROOSEVELT
FIELD	BLUITT	PETERSON	PRAIRIE S
WELL NAME	LIGHT NO. 1	E.R.&.G. CRUME NO. 1	FED. N.M. B NO. 1
LOCATION	SEC. 15, T8S, R37E	NOT GIVEN	SEC. 21, T8S, R36E
OWNER	TOM L. INGRAM	ENERGY RESERVES GROUP, INC.	LONE STAR PRODUCING CO.
COMPLETED	03/27/71	08/--/81	02/18/64
SAMPLED	07/01/72	09/22/82	06/17/65
FORMATION	PERM-SAN ANDRES	PENN-CISCO	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4630	7542	12053
WELLHEAD PRESSURE,PSIG	1100	1300	2535
OPEN FLOW, MCFD	500	1600	1420
COMPONENT, MOLE PCT			
METHANE	74.9	68.2	75.9
ETHANE	7.3	9.8	12.3
PROPANE	3.3	6.7	5.2
N-BUTANE	0.8	2.4	1.2
ISOBUTANE	0.5	1.1	0.9
N-PENTANE	0.3	0.8	0.1
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.2	0.8	0.1
NITROGEN	7.2	8.7	3.1
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.3	0.1	0.7
HELIUM	1.05	0.32	0.07
HEATING VALUE*	1046	1263	1217
SPECIFIC GRAVITY	0.737	0.805	0.729

	INDEX 4291 SAMPLE 6407	INDEX 4292 SAMPLE 7568	INDEX 4293 SAMPLE 17088
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	ROOSEVELT	SAN JUAN	SAN JUAN
FIELD	WILDCAT	ANGELS PEAK	ARMENTA
WELL NAME	STATE AE NO. 1	PHILLIPS NO. 2	STATE GAS COM. BZ NO. 1
LOCATION	SEC. 36, T8S, R36E	SEC. 22, T28N, R11W	SEC. 32, T29N, R10W
OWNER	ATLANTIC REFINING CO.	REDFERN & HERD	AMOCO PRODUCTION CO. (USA)
COMPLETED	09/14/57	06/29/59	05/05/83
SAMPLED	10/03/57	06/02/60	10/12/83
FORMATION	PENN-	CRET-DAKOTA	CRET-GALLUP
GEOLOGIC PROVINCE CODE	430	580	580
DEPTH, FEET	9650	6203	5412
WELLHEAD PRESSURE,PSIG	1260	2094	988
OPEN FLOW, MCFD	NOT GIVEN	13950	130
COMPONENT, MOLE PCT			
METHANE	61.6	84.7	85.9
ETHANE	14.7	9.4	6.5
PROPANE	10.9	1.3	1.3
N-BUTANE	4.9	0.4	0.7
ISOBUTANE	2.4	1.1	0.8
N-PENTANE	1.2	TRACE	0.0
ISOPENTANE	1.2	0.4	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.9	0.1	TRACE
NITROGEN	1.5	1.0	2.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	2.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.3	0.1
HELIUM	0.02	0.05	0.08
HEATING VALUE*	1371	1059	1064
SPECIFIC GRAVITY	0.929	0.664	0.615

	INDEX 4294 SAMPLE 2357	INDEX 4295 SAMPLE 5794	INDEX 4296 SAMPLE 6117
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	AZTEC	AZTEC	AZTEC
WELL NAME	NO. 2	CAIN NO. 4	MCCLANAHAN NO. 5
LOCATION	SEC. 34, T30N, R11W	SEC. 31, T29N, R9W	SEC. 13, T28N, R10W
OWNER	R. C. OSWELL	AZTEC OIL & GAS CO.	AZTEC OIL & GAS CO.
COMPLETED	--/--/00	11/28/54	03/31/56
SAMPLED	06/07/31	03/18/55	08/01/56
FORMATION	-STRAY SAND	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	373	2098	1930
WELLHEAD PRESSURE,PSIG	35	681	646
OPEN FLOW, MCFD	NOT GIVEN	2	4514
COMPONENT, MOLE PCT			
METHANE	87.2	90.7	88.1
ETHANE	10.0	5.3	6.5
PROPANE	---	2.0	2.7
N-BUTANE	---	0.4	0.7
ISOBUTANE	---	0.3	0.5
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	1.4	0.7	0.1
OXYGEN	0.9	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.7
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1063	1103	1151
SPECIFIC GRAVITY	0.628	0.623	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4297 SAMPLE 11972	INDEX 4298 SAMPLE 12119	INDEX 4299 SAMPLE 12182
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	AZTEC	AZTEC	AZTEC
WELL NAME	MCCULLEY NO. 6	PIERCE NO. 3	EAST NO. 16
LOCATION	SEC. 15, T28N, R9W	SEC. 30, T31N, R10W	SEC. 26, T31N, R12W
OWNER	EL PASO NATURAL GAS CO.	AZTEC OIL & GAS CO.	AZTEC OIL & GAS CO.
COMPLETED	05/08/69	--/--/00	06/21/69
SAMPLED	07/09/69	--/--/00	01/30/70
FORMATION	CRET-PICTURED CLIFFS	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2241	NOT GIVEN	2439
WELLHEAD PRESSURE,PSIG	713	NOT GIVEN	619
OPEN FLOW, MCFD	3483	NOT GIVEN	5272
COMPONENT, MOLE PCT			
METHANE	88.9	89.2	86.3
ETHANE	5.6	5.8	7.6
PROPANE	2.5	2.4	3.4
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.4	0.1	0.5
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.9	0.7	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1127	1128	1162
SPECIFIC GRAVITY	0.640	0.637	0.656

	INDEX 4300 SAMPLE 17627	INDEX 4301 SAMPLE 16452	INDEX 4302 SAMPLE 3083
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	AZTEC	AZTEC FRUITLAND	BARKER CREEK
WELL NAME	STATE COM NO. C-6	MANLEY NO. 3	NO. 1
LOCATION	SEC. 32, T29N, R9W	SEC. 18, T29N, R10W	SEC. 21, T32N, R14W
OWNER	TENNECO OIL EXPL. & PROD. CO	PETROLEUM CORP. OF TEXAS	SOUTHERN UNION PRODUCTION CO
COMPLETED	--/--/00	10/08/81	01/30/42
SAMPLED	03/21/85	03/16/82	02/12/42
FORMATION	CRET-CHACRA	CRET-FRUITLAND	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	1654	2398
WELLHEAD PRESSURE,PSIG	350	500	675
OPEN FLOW, MCFD	50	4166	15000
COMPONENT, MOLE PCT			
METHANE	87.0	85.2	85.9
ETHANE	7.1	7.7	12.9
PROPANE	3.1	3.4	---
N-BUTANE	0.8	0.9	---
ISOBUTANE	0.6	0.7	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.4	---
NITROGEN	0.3	1.1	0.5
OXYGEN	TRACE	0.0	0.5
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.0	0.1
HELIUM	0.01	0.01	0.07
HEATING VALUE*	1172	1188	1101
SPECIFIC GRAVITY	0.663	0.676	0.624

	INDEX 4303 SAMPLE 3679	INDEX 4304 SAMPLE 3936	INDEX 4305 SAMPLE 3956
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BARKER CREEK	BARKER CREEK
WELL NAME	CREVICE NEAR FAULT	BARKER NO. 9	BARKER NO. 9
LOCATION	SEC. 16, T32N, R14W	SEC. 21, T32N, R14W	SEC. 21, T32N, R14W
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	01/21/45	02/01/45
FORMATION	NOT GIVEN	PENN-DOLOMITE	PENN-DOLOMITE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	8443	8630
WELLHEAD PRESSURE,PSIG	NOT GIVEN	50	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.2	86.7	86.1
ETHANE	0.8	2.9	2.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	83.5	0.1	2.5
OXYGEN	0.0	0.2	---
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	15.5	10.4	8.6
HELIUM	TRACE	0.23	0.27
HEATING VALUE*	16	921	917
SPECIFIC GRAVITY	1.054	0.668	0.660

	INDEX 4306 SAMPLE 4064	INDEX 4307 SAMPLE 4292	INDEX 4308 SAMPLE 4685
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BARKER CREEK	BARKER CREEK
WELL NAME	BARKER CREEK NO. 11	BARKER NO. 18	SOUTHERN UNION NO. 19
LOCATION	SEC. 16, T32N, R14W	SEC. 11, T32N, R14W	SEC. 21, T32N, R14W
OWNER	SOUTHERN UNION GAS CO.	DELHI OIL CORP.	SOUTHERN UNION GAS CO.
COMPLETED	09/06/85	04/05/47	03/17/49
SAMPLED	08/24/85	04/21/47	04/05/49
FORMATION	PENN-PARADOX	PENN-	PENN-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	8660	8925	8985
WELLHEAD PRESSURE,PSIG	2940	3000	2770
OPEN FLOW, MCFD	27000	74800	63000
COMPONENT, MOLE PCT			
METHANE	78.7	85.3	80.2
ETHANE	6.8	4.0	1.2
PROPANE	---	---	0.5
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	2.1	1.5	1.7
OXYGEN	0.0	0.5	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	12.1	8.5	15.5
HELIUM	0.25	0.20	0.20
HEATING VALUE*	919	936	865
SPECIFIC GRAVITY	0.713	0.665	0.732

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 4309 SAMPLE 9017	INDEX 4310 SAMPLE 6572	INDEX 4311 SAMPLE 6702
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	NATONI NO. 1	P. L. DAVIS NO. 1	WIERSON NO. 1
LOCATION	SEC. 7, T31N, R19W	SEC. 26, T26N, R11W	SEC. 19, T30N, R13W
OWNER	MONSANTO CHEMICAL CO.	SKELLY OIL CO.	MONSANTO CHEMICAL CO.
COMPLETED	06/05/63	12/27/57	12/03/57
SAMPLED	06/05/63	04/19/58	--/--/00
FORMATION	PENN-PARADOX	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6504	6176	5974
WELLHEAD PRESSURE,PSIG	15	1729	1962
OPEN FLOW, MCFD	1622	1900	5620
COMPONENT, MOLE PCT			
METHANE	91.7	80.4	81.6
ETHANE	3.0	10.9	10.3
PROPANE	1.1	4.1	4.2
N-BUTANE	0.7	0.9	1.2
ISOBUTANE	0.2	0.8	0.9
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	TRACE	0.3	0.5
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.1	0.3
NITROGEN	1.5	1.9	0.4
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.0
HELIUM	0.20	0.10	0.20
HEATING VALUE*	1097	1196	1240
SPECIFIC GRAVITY	0.629	0.697	0.702

	INDEX 4312 SAMPLE 6780	INDEX 4313 SAMPLE 6781	INDEX 4314 SAMPLE 6783
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	O. M. RANDEL A NO. 1	J. C. GORDON D NO. 1	MARTIN GU NO. 1
LOCATION	SEC. 9, T26N, R11W	SEC. 22, T27N, R10W	SEC. 15, T27N, R10W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/29/58	10/18/52	03/17/52
SAMPLED	08/12/58	07/18/58	07/18/58
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6186	6492	6648
WELLHEAD PRESSURE,PSIG	2040	1029	1339
OPEN FLOW, MCFD	9864	1120	2863
COMPONENT, MOLE PCT			
METHANE	78.1	79.8	81.3
ETHANE	9.7	11.3	11.3
PROPANE	3.1	4.3	3.9
N-BUTANE	1.5	1.1	0.6
ISOBUTANE	1.2	1.3	1.0
N-PENTANE	1.3	0.0	0.0
ISOPENTANE	1.7	0.5	0.7
CYCLOPENTANE	0.4	0.1	0.0
HEXANES PLUS	1.5	0.4	0.2
NITROGEN	0.6	0.3	0.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.9
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1356	1249	1221
SPECIFIC GRAVITY	0.785	0.718	0.701

	INDEX 4315 SAMPLE 6784	INDEX 4316 SAMPLE 7012	INDEX 4317 SAMPLE 8049
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	G. L. DAVIES NO. 1	HUERFANO 103 D	PUBCO STATE NO. 29
LOCATION	SEC. 27, T28N, R13W	SEC. 3, T26N, R10W	SEC. 36, T29N, R10W
OWNER	PAN AMERICAN PETROLEUM CORP.	EL PASO NATURAL GAS CO.	PUBCO PETROLEUM CORP.
COMPLETED	12/08/56	12/08/58	06/04/61
SAMPLED	07/08/58	03/24/59	07/03/61
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6195	6880	6962
WELLHEAD PRESSURE,PSIG	1674	1714	1971
OPEN FLOW, MCFD	1141	5303	10313
COMPONENT, MOLE PCT			
METHANE	85.7	81.1	78.6
ETHANE	7.7	11.1	12.8
PROPANE	2.6	4.0	4.7
N-BUTANE	0.7	0.7	1.0
ISOBUTANE	0.6	0.4	1.0
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	0.3	1.1	0.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	1.1
HELIUM	0.10	0.10	0.04
HEATING VALUE*	1176	1189	1242
SPECIFIC GRAVITY	0.674	0.690	0.718

	INDEX 4318 SAMPLE 8111	INDEX 4319 SAMPLE 8185	INDEX 4320 SAMPLE 8416
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	GALLEGOS CANYON UNIT NO. 89	MICHENER NO. 6-A	NAVAJO NO. 2
LOCATION	SEC. 6, T27N, R12W	SEC. 31, T28N, R9W	SEC. 28, T26N, R11W
OWNER	PAN AMERICAN PETROLEUM CORP.	EL PASO NATURAL GAS CO.	DELHI-TAYLOR OIL CORP.
COMPLETED	05/31/61	06/28/61	10/26/59
SAMPLED	08/08/61	08/29/61	02/24/62
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5957	6472	5958
WELLHEAD PRESSURE,PSIG	2113	2054	1376
OPEN FLOW, MCFD	11381	8778	4050
COMPONENT, MOLE PCT			
METHANE	87.0	59.8	80.0
ETHANE	8.2	13.8	11.8
PROPANE	2.5	9.8	4.2
N-BUTANE	0.5	5.0	0.8
ISOBUTANE	0.4	3.6	0.6
N-PENTANE	0.1	2.1	0.1
ISOPENTANE	0.1	1.9	0.3
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.2	1.9	0.1
NITROGEN	0.4	0.9	1.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.2	0.4
HELIUM	0.10	0.04	0.06
HEATING VALUE*	1146	1681	1200
SPECIFIC GRAVITY	0.651	0.995	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4321 SAMPLE 11394	INDEX 4322 SAMPLE 11684	INDEX 4323 SAMPLE 14928
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN DAKOTA	BASIN DAKOTA
WELL NAME	PRICE NO. 2	FED. GAS COM L NO. 1	STATE 16 NO. 1
LOCATION	SEC. 14, T28N, R8W	SEC. 19, T30N, R11W	SEC. 16, T26N, R 8W
OWNER	JEROME P. MCHUGH	PAN AMERICAN PETROLEUM CORP.	PALMER OIL & GAS CO.
COMPLETED	11/14/67	10/07/68	09/17/76
SAMPLED	03/19/68	11/19/68	03/02/77
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7450	6759	6664
WELLHEAD PRESSURE,PSIG	2155	2077	1872
OPEN FLOW, MCFD	1567	6898	2829
COMPONENT, MOLE PCT			
METHANE	74.7	89.7	76.8
ETHANE	10.2	4.7	13.2
PROPANE	3.5	1.4	5.7
N-BUTANE	0.8	0.4	1.2
ISOBUTANE	0.6	0.4	0.6
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	0.6	0.2
NITROGEN	7.0	0.5	0.9
OXYGEN	1.5	0.1	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	0.7
HELIUM	0.02	0.04	0.07
HEATING VALUE*	1105	1112	1258
SPECIFIC GRAVITY	0.720	0.648	0.731

	INDEX 4324 SAMPLE 17741	INDEX 4325 SAMPLE 6566	INDEX 4326 SAMPLE 13011
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN DAKOTA	BASIN GALLUP	BASIN PICTURED CLIFFS
WELL NAME	GALLEGOS CANYON NO. 89-E	P. L. DAVIS NO. 1	SUNRAY-B NO. 4
LOCATION	SEC. 6, T27N, R12W	SEC. 26, T26N, R11W	SEC. 1, T30N, R10W
OWNER	AMOCO PRODUCTION CO.	SKELLY OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	03/09/85	12/27/57	05/13/71
SAMPLED	07/05/85	04/19/58	09/17/71
FORMATION	CRET-DAKOTA	CRET-GALLUP	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5900	5332	3338
WELLHEAD PRESSURE,PSIG	510	1257	925
OPEN FLOW, MCFD	1373	1400	7282
COMPONENT, MOLE PCT			
METHANE	80.5	80.3	82.8
ETHANE	9.6	11.1	5.4
PROPANE	5.3	4.1	2.2
N-BUTANE	1.3	0.9	0.5
ISOBUTANE	0.9	0.7	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.1	1.6	6.2
OXYGEN	0.1	TRACE	1.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.6
HELIUM	0.02	0.10	0.01
HEATING VALUE*	1243	1204	1037
SPECIFIC GRAVITY	0.717	0.700	0.663

	INDEX 4327 SAMPLE 13012	INDEX 4328 SAMPLE 13375	INDEX 4329 SAMPLE 13468
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BASIN PICTURED CLIFFS	BASIN PICTURED CLIFFS	BASIN PICTURED CLIFFS
WELL NAME	SUNRAY B-5	DAY NO. 6	MORTON NO. 5
LOCATION	SEC. 1, T30N, R10W	SEC. 17, T29N, R8W	SEC. 35, T32N, R11W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	05/05/71	08/02/71	07/25/72
SAMPLED	09/17/71	09/01/72	11/06/72
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3223	2996	2861
WELLHEAD PRESSURE,PSIG	925	995	964
OPEN FLOW, MCFD	5397	3695	2613
COMPONENT, MOLE PCT			
METHANE	89.3	91.0	87.1
ETHANE	5.8	4.9	7.2
PROPANE	2.4	2.2	3.0
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.6	0.1	0.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.7
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1118	1127	1160
SPECIFIC GRAVITY	0.637	0.632	0.660

	INDEX 4330 SAMPLE 9829	INDEX 4331 SAMPLE 9828	INDEX 4332 SAMPLE 9830
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BEAUTIFUL MOUNTAIN	BEAUTIFUL MOUNTAIN AREA	BEAUTIFUL MOUNTAIN AREA
WELL NAME	NAVAJO TRACT NO. 381 NO. 1	NAVAJO TRACT NO. 381 NO. 1	NAVAJO TRACT NO. 381 NO. 1
LOCATION	SEC. 5, T26N, R19W	SEC. 5, T26N, R19W	SEC. 5, T26N, R19W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	04/09/65	04/09/65	04/09/65
SAMPLED	04/02/65	03/23/65	03/30/65
FORMATION	MISS---	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5812	4864	5560
WELLHEAD PRESSURE,PSIG	3274	2692	3233
OPEN FLOW, MCFD	245	105	16
COMPONENT, MOLE PCT			
METHANE	1.7	26.4	8.0
ETHANE	0.1	2.4	0.8
PROPANE	0.5	1.2	0.5
N-BUTANE	0.0	0.6	0.2
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.5	0.2
NITROGEN	92.2	63.7	83.8
OXYGEN	0.0	0.0	0.0
ARGON	0.9	0.6	0.8
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.0
HELIUM	4.10	3.83	5.42
HEATING VALUE*	32	419	137
SPECIFIC GRAVITY	0.936	0.866	0.907

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4333 SAMPLE 9847	INDEX 4334 SAMPLE 9848	INDEX 4335 SAMPLE 17089
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BEAUTIFUL MOUNTAIN AREA	BEAUTIFUL MOUNTAIN AREA	BEAUTIFUL MOUNTAIN N
WELL NAME	NAVAJO TRACT NO. 381 NO. 1	NAVAJO TRACT NO. 381 NO. 1	NAVAJO NO. 2-32
LOCATION	SEC. 5, T26N, R19W	SEC. 5, T26N, R19W	SEC. 32, T27N, R19W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	PETROLEUM ENERGY, INC.
COMPLETED	04/08/65	04/08/65	--/--/00
SAMPLED	04/06/65	04/08/65	10/13/83
FORMATION	DEVO-MCCRACKEN	DEVO-ANETH	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6100	6230	6022
WELLHEAD PRESSURE,PSIG	3368	3608	2208
OPEN FLOW, MCFD	87	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	1.3	1.4	41.2
ETHANE	0.1	0.3	4.3
PROPANE	0.1	0.4	1.9
N-BUTANE	0.1	0.4	0.7
ISOBUTANE	0.1	0.2	0.4
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	93.2	91.1	45.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.9	0.9	0.9
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.9
HELIUM	4.05	4.16	4.05
HEATING VALUE*	29	98	603
SPECIFIC GRAVITY	0.936	0.957	0.805

	INDEX 4336 SAMPLE 6076	INDEX 4337 SAMPLE 6169	INDEX 4338 SAMPLE 6170
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BISTI	BISTI	BISTI
WELL NAME	KELLY STATE NO. 1	NEW MEXICO FED. 8 NO. 3	NEW MEXICO FED. C NO. 15
LOCATION	SEC. 16, T25N, R12W	SEC. 16, T25N, R12W	SEC. 8, T25N, R12W
OWNER	EL PASO NATURAL GAS CO.	SUNRAY MID-CONTINENT OIL CO.	SUNRAY MID-CONTINENT OIL CO.
COMPLETED	09/22/55	07/15/56	07/21/56
SAMPLED	05/29/56	10/29/56	10/21/56
FORMATION	CRET-GALLUP	CRET-GALLUP L	CRET-GALLUP L
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4725	4795	4790
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.2	63.7	44.2
ETHANE	11.1	12.6	15.8
PROPANE	5.7	5.7	9.9
N-BUTANE	0.9	3.3	6.9
ISOBUTANE	0.3	3.3	6.8
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.2	2.7	4.7
CYCLOPENTANE	0.1	0.2	0.4
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	1.6	5.9	7.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.2
HYDROGEN	0.2	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.8	3.0
HELIUM	0.03	0.05	0.02
HEATING VALUE*	1221	1389	1682
SPECIFIC GRAVITY	0.708	0.883	1.106

	INDEX 4339 SAMPLE 6410	INDEX 4340 SAMPLE 6479	INDEX 4341 SAMPLE 6940
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BISTI	BISTI	BISTI
WELL NAME	ES-M-NEL-E-WOOD NO. 2	BLACKROCK FED. NO. 1	CARSON 113-17
LOCATION	SEC. 22, T25N, R11W	SEC. 20, T26N, R11W	SEC. 17, T25N, R11W
OWNER	SUNRAY MID-CONTINENT OIL CO.	GULF OIL CORP.	SHELL OIL CO.
COMPLETED	05/10/57	02/17/57	--/--/00
SAMPLED	09/30/57	01/14/58	03/03/59
FORMATION	CRET-GALLUP L	CRET-GALLUP	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4906	5036	5980
WELLHEAD PRESSURE,PSIG	1340	1232	NOT GIVEN
OPEN FLOW, MCFD	9000	970	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.0	81.8	76.5
ETHANE	8.0	8.6	13.1
PROPANE	5.2	4.3	4.8
N-BUTANE	3.2	1.3	1.1
ISOBUTANE	1.7	0.6	0.8
N-PENTANE	2.0	0.2	0.3
ISOPENTANE	2.4	0.6	0.4
CYCLOPENTANE	0.9	0.2	0.1
HEXANES PLUS	2.3	0.5	0.5
NITROGEN	1.6	1.5	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	1.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	2.0
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1512	1226	1261
SPECIFIC GRAVITY	0.889	0.710	0.723

	INDEX 4342 SAMPLE 2000	INDEX 4343 SAMPLE 2257	INDEX 4344 SAMPLE 4618
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	NO. 1	NO. 1	ANNIE L. ELLIOT NO. B-1
LOCATION	SEC. 29, T30N, R9W	SEC. 29, T30N, R9W	SEC. 19, T29N, R9W
OWNER	DOROTHY OIL CO.	DOROTHY OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/28	10/01/25	08/24/48
SAMPLED	06/02/30	01/17/31	11/11/48
FORMATION	CRET-FARMINGTON	NOT GIVEN	CRET-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2515	4152	4900
WELLHEAD PRESSURE,PSIG	600	1200	1212
OPEN FLOW, MCFD	230	600	3300
COMPONENT, MOLE PCT			
METHANE	73.3	66.2	11.3
ETHANE	25.7	32.9	86.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	0.4	1.5
OXYGEN	0.3	0.0	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1203	1260	1663
SPECIFIC GRAVITY	0.690	0.724	0.995

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4345 SAMPLE 4654	INDEX 4346 SAMPLE 4784	INDEX 4347 SAMPLE 4789
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	DELHI-RIDDLE-FED. NO. 1	RIDDLE-FED. NO. 2	CAIN NO. 3
LOCATION	SEC. 21, T30N, R9W	SEC. 17, T30N, R9W	SEC. 30, T29N, R9W
OWNER	DELHI OIL CORP., ET AL.	DELHI OIL CORP.	SOUTHERN UNION PRODUCTION CO
COMPLETED	02/02/49	07/06/49	--/--/00
SAMPLED	03/06/49	09/18/49	06/13/49
FORMATION	NOT GIVEN	CRET-POINT LOOKOUT	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4905	4895	4700
WELLHEAD PRESSURE,PSIG	1090	1092	1008
OPEN FLOW, MCFD	9000	15560	500
COMPONENT, MOLE PCT			
METHANE	84.9	82.6	79.1
ETHANE	8.8	9.8	11.9
PROPANE	3.2	3.9	5.2
N-BUTANE	0.8	1.0	1.9
ISOBUTANE	0.3	0.5	0.7
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.8	0.7	0.8
OXYGEN	0.2	0.1	0.1
ARGON	0.0	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.5	0.4
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1154	1196	1241
SPECIFIC GRAVITY	0.662	0.685	0.718

	INDEX 4348 SAMPLE 5027	INDEX 4349 SAMPLE 5224	INDEX 4350 SAMPLE 5299
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	ATLANTIC-FED. NO. 1	CATHERINE F. MOORE NO. 1	JERNIGAN NO. 1
LOCATION	SEC. 25, T31N, R10W	SEC. 8, T30S, R8W	SEC. 24, T27N, R9W
OWNER	DELHI OIL CORP.	DELHI OIL CORP.	AZTEC OIL & GAS CO.
COMPLETED	10/13/50	02/16/51	06/18/52
SAMPLED	03/27/51	03/24/52	10/27/52
FORMATION	NOT GIVEN	CRET-POINT LOOKOUT	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4945	5435	2029
WELLHEAD PRESSURE,PSIG	1040	NOT GIVEN	599
OPEN FLOW, MCFD	1000	555	627
COMPONENT, MOLE PCT			
METHANE	89.6	85.0	88.2
ETHANE	6.1	8.3	5.7
PROPANE	1.9	3.4	2.6
N-BUTANE	0.4	0.6	0.7
ISOBUTANE	0.3	0.7	0.7
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.0	0.8	1.5
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.1	0.6	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1110	1159	1124
SPECIFIC GRAVITY	0.633	0.666	0.644

	INDEX 4351 SAMPLE 5300	INDEX 4352 SAMPLE 5303	INDEX 4353 SAMPLE 5305
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	WHITLEY NO. 1-A	MANSFIELD NO. 1	SCHWERDTFEGER NO. 2
LOCATION	SEC. 17, T27N, R11W	SEC. 29, T30N, R9W	SEC. 27, T31N, R9W
OWNER	AZTEC OIL & GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	06/01/52	07/14/52	07/11/52
SAMPLED	10/27/52	10/17/52	10/17/52
FORMATION	CRET-PICTURED CLIFFS	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1860	4178	4847
WELLHEAD PRESSURE,PSIG	462	1017	1095
OPEN FLOW, MCFD	116	303	1006
COMPONENT, MOLE PCT			
METHANE	89.6	85.0	84.9
ETHANE	5.7	7.1	7.5
PROPANE	2.4	2.8	2.8
N-BUTANE	0.6	0.8	0.8
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	TRACE	0.5	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.5
NITROGEN	0.6	2.0	1.0
OXYGEN	TRACE	0.3	0.1
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.4	0.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1115	1148	1178
SPECIFIC GRAVITY	0.630	0.671	0.684

	INDEX 4354 SAMPLE 5319	INDEX 4355 SAMPLE 5320	INDEX 4356 SAMPLE 5333
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	UTE NO. 1-B	LAWSON NO. 1	SHANE G.U. NO. 1
LOCATION	SEC. 11, T32N, R11W	SEC. 12, T31N, R11W	SEC. 14, T29N, R9W
OWNER	SOUTHERN UNION GAS CO.	AZTEC OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	07/26/52	04/18/52	07/05/52
SAMPLED	11/15/52	11/15/52	11/22/52
FORMATION	CRET-POINT LOOKOUT	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5175	4256	4625
WELLHEAD PRESSURE,PSIG	1068	1100	998
OPEN FLOW, MCFD	1930	6800	2610
COMPONENT, MOLE PCT			
METHANE	89.9	83.6	87.5
ETHANE	5.9	7.7	6.7
PROPANE	1.7	2.8	2.7
N-BUTANE	0.3	0.8	0.7
ISOBUTANE	0.3	0.6	0.6
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.3	2.6	0.5
OXYGEN	0.1	0.5	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.1	0.5
HELIUM	TRACE	0.01	0.16
HEATING VALUE*	1090	1129	1156
SPECIFIC GRAVITY	0.627	0.679	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4357 SAMPLE 5334	INDEX 4358 SAMPLE 6708	INDEX 4359 SAMPLE 8171
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	E. E. ELLIOTT B NO. 1	BLANCO NO. 3	VALENTINE G.U. NO. 1
LOCATION	SEC. 27, T30N, R9W	SEC. 35, T31N, R8W	SEC. 32, T32N, R10W
OWNER	STANOLIND OIL & GAS CO.	PACIFIC NORTHWEST PIPELINE	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/10/52	02/24/58	10/--/53
SAMPLED	11/22/52	07/14/58	08/09/61
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4144	5092	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1071	1048	227
OPEN FLOW, MCFD	5020	6362	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.4	91.9	87.0
ETHANE	21.0	4.5	7.4
PROPANE	15.0	1.5	2.5
N-BUTANE	3.6	0.3	0.7
ISOBUTANE	2.4	0.3	0.6
N-PENTANE	0.8	0.1	0.1
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	0.8	0.8	0.8
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.7
HELIUM	TRACE	0.01	0.10
HEATING VALUE*	1609	1089	1149
SPECIFIC GRAVITY	0.941	0.617	0.656

	INDEX 4360 SAMPLE 12082	INDEX 4361 SAMPLE 12763	INDEX 4362 SAMPLE 13218
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	DAY NO. 5	GRAMBLING C NO. 7	CANEPLE GAS COM B NO. 1
LOCATION	SEC. 18, T29N, R8W	SEC. 12, T30N, R10W	SEC. 13, T31N, R11W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	AMOCO PRODUCTION CO.
COMPLETED	07/09/69	09/08/70	01/--/72
SAMPLED	10/10/69	04/14/71	05/26/72
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3079	3072	2450
WELLHEAD PRESSURE,PSIG	767	NOT GIVEN	1100
OPEN FLOW, MCFD	3641	NOT GIVEN	2519
COMPONENT, MOLE PCT			
METHANE	91.3	87.9	90.0
ETHANE	4.3	6.5	5.7
PROPANE	2.1	2.6	2.5
N-BUTANE	0.5	0.6	0.5
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.8	0.8	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1114	1142	1119
SPECIFIC GRAVITY	0.625	0.654	0.629

	INDEX 4363 SAMPLE 13450	INDEX 4364 SAMPLE 14883	INDEX 4365 SAMPLE 15142
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO
WELL NAME	WASALY FED. NO. 1-T	COX CANYON UNIT NO. 1A	YAGER NO. 2
LOCATION	SEC. 31, T32N, R11W	SEC. 16, T32N, R11W	SEC. 20, T32N, R6W
OWNER	AZTEC OIL & GAS CO.	NORTHWEST PIPELINE CORP.	PALMER OIL & GAS CO.
COMPLETED	04/24/72	09/07/76	11/01/77
SAMPLED	10/17/72	01/05/77	11/09/77
FORMATION	CRET-POINT LOOKOUT	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5380	5160	4000
WELLHEAD PRESSURE,PSIG	766	831	1000
OPEN FLOW, MCFD	10075	10392	3500
COMPONENT, MOLE PCT			
METHANE	82.4	86.4	96.4
ETHANE	10.0	6.3	1.5
PROPANE	3.7	2.2	0.2
N-BUTANE	0.9	0.5	0.0
ISOBUTANE	0.6	0.4	0.0
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.8	0.2	0.5
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	1.6
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1183	1129	1005
SPECIFIC GRAVITY	0.687	0.656	0.580

	INDEX 4366 SAMPLE 15447	INDEX 4367 SAMPLE 15448	INDEX 4368 SAMPLE 17740
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	BLANCO	BLANCO MESAVERDE
WELL NAME	YAGER NO. 4	YAGER NO. 2	ABRAMS "K" NO. 1
LOCATION	SEC. 10, T31N, R7W	SEC. 20, T32N, R6W	SEC. 26, T29N, R10W
OWNER	PALMER OIL & GAS CO.	PALMER OIL & GAS CO.	AMOCO PRODUCTION CO.
COMPLETED	02/23/78	07/06/77	03/26/85
SAMPLED	10/22/78	10/22/78	07/05/85
FORMATION	CRET-PICTURED CLIFFS	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3602	5823	4000
WELLHEAD PRESSURE,PSIG	1075	1008	980
OPEN FLOW, MCFD	2653	5254	5363
COMPONENT, MOLE PCT			
METHANE	89.9	96.0	67.5
ETHANE	3.5	1.5	9.2
PROPANE	1.6	0.2	2.6
N-BUTANE	0.4	0.0	0.8
ISOBUTANE	0.3	0.0	0.3
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	0.0	0.3
NITROGEN	0.5	0.5	18.5
OXYGEN	0.0	0.0	2.9
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	1.8	0.2
HELIUM	TRACE	TRACE	0.04
HEATING VALUE*	1068	1005	945
SPECIFIC GRAVITY	0.639	0.583	0.739

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4369 SAMPLE 11754	INDEX 4370 SAMPLE 1179	INDEX 4371 SAMPLE 16013
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO S	BLOOMFIELD	BLOOMFIELD
WELL NAME	HOWELL NO. 6	NOT GIVEN	DAVIS GAS COM-G NO. 1
LOCATION	SEC. 26, T28N, R8W	T29N, R11W	SEC. 27, T29N, R11W
OWNER	EL PASO NATURAL GAS CO.	NOT GIVEN	AMOCO PRODUCTION CO.
COMPLETED	10/09/68	--/--/00	05/--/80
SAMPLED	02/04/69	11/05/25	07/17/80
FORMATION	CRET-PICTURED CLIFFS	NOT GIVEN	CRET-CHACRA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2364	NOT GIVEN	2827
WELLHEAD PRESSURE,PSIG	1049	NOT GIVEN	1120
OPEN FLOW, MCFD	2170	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.2	69.9	85.4
ETHANE	4.4	26.2	6.3
PROPANE	2.3	---	2.8
N-BUTANE	0.6	---	0.7
ISOBUTANE	0.4	---	0.5
N-PENTANE	0.2	---	0.2
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	0.3	0.9	3.7
OXYGEN	TRACE	0.4	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.6	TRACE
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	1127	1213	1117
SPECIFIC GRAVITY	0.631	0.706	0.660

	INDEX 4372 SAMPLE 17026	INDEX 4373 SAMPLE 3121	INDEX 4374 SAMPLE 3123
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	FLORA VISTA	FULCHER BASIN	FULCHER BASIN
WELL NAME	THOMPSON NO. 13	NO. 2	NO. 1
LOCATION	SEC. 28, T31N, R12W	SEC. 13, T29N, R12W	SEC. 11, T29N, R12W
OWNER	SOUTHLAND ROYALTY CO.	SOUTHERN UNION PRODUCTION CO	CARROLL & CORNELL
COMPLETED	01/08/83	08/10/41	09/05/40
SAMPLED	08/22/83	03/03/42	03/03/42
FORMATION	CRET-FRUITLAND	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2270	1730	1855
WELLHEAD PRESSURE,PSIG	763	583	576
OPEN FLOW, MCFD	655	4190	1100
COMPONENT, MOLE PCT			
METHANE	86.3	81.8	84.5
ETHANE	4.4	17.9	14.4
PROPANE	3.1	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	1.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.7	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	2.5	0.1	0.5
OXYGEN	0.1	0.1	0.5
ARGON	TRACE	---	---
HYDROGEN	0.3	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	TRACE	0.00
HEATING VALUE*	1153	1149	1114
SPECIFIC GRAVITY	0.672	0.645	0.631

	INDEX 4375 SAMPLE 4460	INDEX 4376 SAMPLE 4570	INDEX 4377 SAMPLE 12181
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	FULCHER BASIN	FULCHER BASIN	FULCHER-KUTZ
WELL NAME	COZZENS NO. 4	S. U. P. BECK NO. 1	COOPER NO. 6
LOCATION	SEC. 20, T29N, R11W	SEC. 2, T29N, R12W	SEC. 6, T29N, R11W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO	AZTEC OIL & GAS CO.
COMPLETED	01/20/48	05/14/48	06/26/69
SAMPLED	04/05/48	10/04/48	01/30/70
FORMATION	CRET-PICTURED CLIFFS	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1711	2125	2074
WELLHEAD PRESSURE,PSIG	446	416	352
OPEN FLOW, MCFD	700	189	3327
COMPONENT, MOLE PCT			
METHANE	80.9	75.8	88.1
ETHANE	17.1	23.7	6.1
PROPANE	---	---	2.8
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	0.8	0.0	0.9
OXYGEN	0.8	0.2	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1126	1193	1138
SPECIFIC GRAVITY	0.651	0.676	0.646

	INDEX 4378 SAMPLE 17777	INDEX 4379 SAMPLE 6043	INDEX 4380 SAMPLE 5260
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	FULCHER-KUTZ	GALLEGOS	MOBBACK
WELL NAME	COUNTRY CLUB NO. 1	NELSON NO. 1	UTE-G, NO. 13
LOCATION	SEC. 30, T30N, R12W	SEC. 8, T26N, R12W	SEC. 19, T29N, R16W
OWNER	BURR, JOEL B., JR.	EL PASO NATURAL GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	11/23/82	07/06/55	--/--/00
SAMPLED	07/16/85	03/26/56	09/24/52
FORMATION	CRET-FRUITLAND	CRET-GALLUP	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1352	4850	7000
WELLHEAD PRESSURE,PSIG	458	1317	NOT GIVEN
OPEN FLOW, MCFD	900	4385	15000
COMPONENT, MOLE PCT			
METHANE	87.8	81.4	5.8
ETHANE	5.4	8.5	0.9
PROPANE	2.3	5.0	1.7
N-BUTANE	0.6	1.1	1.1
ISOBUTANE	0.4	0.5	1.2
N-PENTANE	0.2	0.1	0.8
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.3	0.1	1.3
NITROGEN	2.4	2.3	60.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.5
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.4	20.3
HELIUM	0.01	0.13	5.10
HEATING VALUE*	1120	1187	330
SPECIFIC GRAVITY	0.649	0.695	1.104

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4381 SAMPLE 5261	INDEX 4382 SAMPLE 5340	INDEX 4383 SAMPLE 5607
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MOGBACK	MOGBACK	MOGBACK
WELL NAME	U.S.G. NO. 13	U.S.G. NO. 13	U.S.G. NO. 13
LOCATION	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	10/06/52	--/--/00
SAMPLED	10/03/52	12/02/52	04/13/54
FORMATION	MISS---	MISS---	PENN---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6930	6930	6166
WELLHEAD PRESSURE,PSIG	300	2900	970
OPEN FLOW, MCFD	15000	15	7000
COMPONENT, MOLE PCT			
METHANE	6.1	5.8	24.7
ETHANE	0.9	5.9	2.5
PROPANE	1.5	2.7	1.8
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.0	0.4	1.0
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.9	TRACE	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	63.5	58.4	59.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.5	1.1	0.7
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	20.0	19.3	1.6
HELIUM	5.10	5.05	7.41
HEATING VALUE*	214	306	414
SPECIFIC GRAVITY	1.059	1.061	0.854

	INDEX 4384 SAMPLE 5716	INDEX 4385 SAMPLE 6093	INDEX 4386 SAMPLE 6094
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MOGBACK	MOGBACK	MOGBACK
WELL NAME	U.S.G. NO. 13	MOGBACK FIELD NO. 1	M. M. GARRETT
LOCATION	SEC. 19, T29N, R16W	SEC. 25, T29N, R17W	SEC. 25, T29N, R17W
OWNER	STANOLIND OIL & GAS CO.	M. M. GARRETT	M. M. GARRETT
COMPLETED	10/13/52	--/--/00	--/--/00
SAMPLED	03/11/54	07/04/56	07/06/56
FORMATION	PENN---	PENN-HERMOSA L	PENN-HERMOSA L
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6166	6828	6931
WELLHEAD PRESSURE,PSIG	1068	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	29.1	62.9	42.5
ETHANE	2.8	3.3	4.9
PROPANE	1.8	1.2	3.1
N-BUTANE	0.7	0.6	1.8
ISOBUTANE	0.5	0.1	1.3
N-PENTANE	0.2	0.3	0.7
ISOPENTANE	0.2	0.1	0.8
CYCLOPENTANE	TRACE	0.2	0.5
HEXANES PLUS	0.1	0.3	1.3
NITROGEN	54.6	16.5	37.6
OXYGEN	0.0	0.1	0.0
ARGON	0.8	0.4	0.5
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	8.1	0.1
HELIUM	7.20	5.67	4.60
HEATING VALUE*	454	791	858
SPECIFIC GRAVITY	0.833	0.738	0.869

	INDEX 4387 SAMPLE 6112	INDEX 4388 SAMPLE 6450	INDEX 4389 SAMPLE 6454
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MOGBACK	MOGBACK	MOGBACK
WELL NAME	NAVAJO NO. 1	U.S.G. SEC. 19, NO. 17	USG SEC. 19, NO. 17
LOCATION	SEC. 25, T29N, R17W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	M. M. GARRETT	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/15/56	--/--/00	--/--/00
SAMPLED	07/15/56	12/04/57	12/11/57
FORMATION	MISS---	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7376	6170	6335
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	52	2416
COMPONENT, MOLE PCT			
METHANE	12.0	30.6	32.5
ETHANE	2.5	3.2	3.2
PROPANE	3.6	2.4	2.6
N-BUTANE	2.6	0.9	1.1
ISOBUTANE	1.4	0.9	0.9
N-PENTANE	0.9	0.4	0.7
ISOPENTANE	0.7	0.2	0.1
CYCLOPENTANE	0.4	0.1	0.5
HEXANES PLUS	1.0	0.4	1.6
NITROGEN	68.4	53.7	48.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.6	0.6	0.6
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.0	1.5
HELIUM	5.04	6.40	6.80
HEATING VALUE*	520	540	651
SPECIFIC GRAVITY	0.998	0.844	0.877

	INDEX 4390 SAMPLE 6458	INDEX 4391 SAMPLE 6463	INDEX 4392 SAMPLE 6481
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MOGBACK	MOGBACK	MOGBACK
WELL NAME	USG SEC. 19, NO. 17	USG SEC. 19, NO. 17	USG SEC. 19, NO. 17
LOCATION	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/16/57	12/26/57	01/15/58
FORMATION	PENN---	MISS---	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6520	6936	6396
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1600
OPEN FLOW, MCFD	5011	5816	8050
COMPONENT, MOLE PCT			
METHANE	6.6	6.3	32.7
ETHANE	1.9	0.9	2.1
PROPANE	4.8	2.5	0.9
N-BUTANE	5.3	0.8	0.5
ISOBUTANE	4.3	0.3	0.3
N-PENTANE	2.3	0.4	0.3
ISOPENTANE	2.5	0.1	0.2
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	1.9	0.4	0.6
NITROGEN	61.9	62.7	52.7
OXYGEN	TRACE	0.1	TRACE
ARGON	0.6	0.5	0.6
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	19.6	1.3
HELIUM	6.00	5.48	7.70
HEATING VALUE*	865	228	473
SPECIFIC GRAVITY	1.152	1.054	0.812

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4393 SAMPLE 6533	INDEX 4394 SAMPLE 6798	INDEX 4395 SAMPLE 6800
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK
WELL NAME	USG SEC. 19, NO. 13	USG SEC. 19, NO. 17	USG SEC. 19, NO. 17
LOCATION	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W	SEC. 19, T29N, R16W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/08/58	01/30/58	09/02/58
SAMPLED	03/28/58	08/23/58	09/08/58
FORMATION	PENN-L	PENN-PARADOX	PENN---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6514	6045	6643
WELLHEAD PRESSURE,PSIG	325	NOT GIVEN	2650
OPEN FLOW, MCFD	425	NOT GIVEN	613
COMPONENT, MOLE PCT			
METHANE	12.8	29.1	3.7
ETHANE	1.9	3.5	0.6
PROPANE	2.0	1.8	1.2
N-BUTANE	1.1	1.2	0.9
ISOBUTANE	1.0	1.1	0.9
N-PENTANE	0.9	0.4	0.0
ISOPENTANE	0.3	0.5	0.6
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.6	0.6	0.2
NITROGEN	70.1	54.8	79.9
OXYGEN	0.1	TRACE	2.6
ARGON	0.1	0.6	0.8
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.5	1.2
HELIUM	8.00	5.70	7.30
HEATING VALUE*	351	559	180
SPECIFIC GRAVITY	0.917	0.873	0.947

	INDEX 4396 SAMPLE 6801	INDEX 4397 SAMPLE 7735	INDEX 4398 SAMPLE 7734
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK	HOGBACK	HOGBACK N
WELL NAME	USG SEC. 19, NO. 13	NAVAJO TRIBE K NO. 2	NAVAJO K NO. 2
LOCATION	SEC. 19, T29N, R16W	SEC. 31, T30N, R16W	SEC. 31, T30N, R16W
OWNER	PAN AMERICAN PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/01/58	--/--/00	--/--/00
SAMPLED	09/08/58	10/06/60	10/15/60
FORMATION	PENN---	PENN-HERMOSA	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6620	6100	6554
WELLHEAD PRESSURE,PSIG	1550	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	55	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	6.8	67.7	35.2
ETHANE	1.1	5.6	4.2
PROPANE	2.4	3.1	2.5
N-BUTANE	1.5	1.5	1.1
ISOBUTANE	1.6	1.2	0.9
N-PENTANE	0.7	0.6	0.4
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.6	0.7	0.6
NITROGEN	76.2	17.4	44.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.9	0.1	0.5
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	0.1	4.0
HELIUM	5.18	1.40	6.00
HEATING VALUE*	328	1044	632
SPECIFIC GRAVITY	0.993	0.762	0.863

	INDEX 4399 SAMPLE 7745	INDEX 4400 SAMPLE 6453	INDEX 4401 SAMPLE 6478
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	HOGBACK N	HORSESHOE	HUERFANO S
WELL NAME	NAVAJO K-2	CHIMNEY ROCK NO. 1	SOUTH HUERFANO NO. 1-X
LOCATION	SEC. 31, T30S, R16W	SEC. 23, T31N, R17W	SEC. 15, T24N, R9W
OWNER	HUMBLE OIL & REFINING CO.	EL PASO NATURAL GAS CO.	GULF OIL CORP.
COMPLETED	11/19/60	12/06/57	09/30/57
SAMPLED	10/24/60	12/10/57	01/14/58
FORMATION	MISS-MADISON	CRET-GALLUP	CRET-GALLUP
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7340	963	5266
WELLHEAD PRESSURE,PSIG	NOT GIVEN	158	1258
OPEN FLOW, MCFD	NOT GIVEN	1160	3
COMPONENT, MOLE PCT			
METHANE	0.1	77.6	80.5
ETHANE	0.0	11.5	8.1
PROPANE	3.6	6.8	6.5
N-BUTANE	TRACE	1.5	1.4
ISOBUTANE	0.0	0.8	0.9
N-PENTANE	0.0	0.2	0.6
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	6.2	1.0	2.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	88.5	0.1	0.3
HELIUM	1.40	0.10	0.20
HEATING VALUE*	99	1268	1219
SPECIFIC GRAVITY	1.476	0.729	0.718

	INDEX 4402 SAMPLE 16339	INDEX 4403 SAMPLE 17862	INDEX 4404 SAMPLE 1997
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	IGNACIO DISTRICT	KUTZ	KUTZ CANYON
WELL NAME	SAN JUAN 32-7 NO. 72	GALLEGOS CANYON UNIT NO. 361	GARLAND S NO. 3
LOCATION	SEC. 33, T32N, R7W	SEC. 15, T28N, R12W	SEC. 11, T28N, R11W
OWNER	NORTHWEST PIPELINE CORP.	BHP PETROLEUM AMERICAS, INC.	ANGELS PEAK OIL CO.
COMPLETED	04/02/81	07/29/85	03/19/30
SAMPLED	09/17/81	10/11/85	05/31/30
FORMATION	CRET-PICTURED CLIFFS	CRET-FRUITLAND	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	1200	1827
WELLHEAD PRESSURE,PSIG	1491	480	600
OPEN FLOW, MCFD	12568	2639	1470
COMPONENT, MOLE PCT			
METHANE	85.6	86.4	86.5
ETHANE	8.6	7.0	13.1
PROPANE	3.1	2.9	---
N-BUTANE	0.7	0.8	---
ISOBUTANE	0.6	0.5	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.2	0.4	---
NITROGEN	0.1	1.0	0.2
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1181	1173	1111
SPECIFIC GRAVITY	0.668	0.669	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4405 SAMPLE 4293	INDEX 4406 SAMPLE 4296	INDEX 4407 SAMPLE 4447
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	HARTMAN NO. 1	SUMMITT NO. 5 B	FEASEL NO. 1
LOCATION	SEC. 28, T29N, R11W	SEC. 33, T29N, R11W	SEC. 32, T28N, R10W
OWNER	SOUTHERN UNION PRODUCTION CO	SUMMITT OIL CO.	KUTZ CANYON OIL & GAS CO.
COMPLETED	02/28/47	04/01/47	11/27/47
SAMPLED	04/21/47	05/09/47	03/27/48
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1533	1626	1950
WELLHEAD PRESSURE,PSIG	487	448	560
OPEN FLOW, MCFD	887	1620	2240
COMPONENT, MOLE PCT			
METHANE	82.8	81.9	80.9
ETHANE	15.6	14.8	16.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.1	2.7	1.2
OXYGEN	0.2	0.2	0.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1118	1095	1113
SPECIFIC GRAVITY	0.640	0.644	0.651

	INDEX 4408 SAMPLE 4462	INDEX 4409 SAMPLE 4515	INDEX 4410 SAMPLE 4686
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	NEWMAN NO. 4	S. U. P. MANGUM NO. 1	NEWMAN NO. 5-B
LOCATION	SEC. 19, T28N, R10W	SEC. 29, T29N, R11W	SEC. 30, T28N, R10W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO
COMPLETED	12/09/47	06/04/47	10/12/48
SAMPLED	04/05/48	05/04/48	01/13/49
FORMATION	NOT GIVEN	CRET-PICTURED CLIFFS	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1975	1597	1945
WELLHEAD PRESSURE,PSIG	434	492	451
OPEN FLOW, MCFD	1160	2750	1930
COMPONENT, MOLE PCT			
METHANE	83.6	84.0	88.1
ETHANE	14.9	15.3	6.8
PROPANE	---	---	2.7
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	0.4	0.2	0.4
OXYGEN	0.5	0.1	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.4	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1114	1125	1140
SPECIFIC GRAVITY	0.638	0.635	0.645

	INDEX 4411 SAMPLE 4687	INDEX 4412 SAMPLE 4750	INDEX 4413 SAMPLE 4751
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	NEWMAN NO. 6-A	VILES NO. 6-B	HUBBELL NO. 1
LOCATION	SEC. 19, T28N, R10W	SEC. 29, T29N, R11W	SEC. 29, T28N, R10W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO
COMPLETED	01/2/49	01/--/49	03/31/49
SAMPLED	03/12/49	05/20/49	05/20/49
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2062	1626	2095
WELLHEAD PRESSURE,PSIG	468	380	535
OPEN FLOW, MCFD	686	150	1930
COMPONENT, MOLE PCT			
METHANE	88.1	88.5	87.7
ETHANE	6.3	5.9	6.8
PROPANE	2.5	2.6	2.7
N-BUTANE	0.6	0.9	0.7
ISOBUTANE	0.6	0.5	0.2
N-PENTANE	0.2	0.4	0.1
ISOPENTANE	0.0	0.1	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	0.4	0.6	0.6
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.1	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1138	1154	1147
SPECIFIC GRAVITY	0.656	0.654	0.653

	INDEX 4414 SAMPLE 4788	INDEX 4415 SAMPLE 4805	INDEX 4416 SAMPLE 4853
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	HANKS NO. 2	HANKS NO. 3	DAVIDSON NO. 1-B
LOCATION	SEC. 6, T27N, R9W	SEC. 12, T27N, R10W	SEC. 28, T28N, R10W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION PRODUCTION CO	BYRD-FROST, INC.
COMPLETED	08/01/49	09/19/49	12/07/49
SAMPLED	09/12/49	10/28/49	03/06/50
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2001	1936	2118
WELLHEAD PRESSURE,PSIG	619	589	529
OPEN FLOW, MCFD	450	822	857
COMPONENT, MOLE PCT			
METHANE	89.4	88.6	88.3
ETHANE	6.2	6.3	7.0
PROPANE	2.4	2.6	2.7
N-BUTANE	0.9	0.7	0.7
ISOBUTANE	TRACE	0.4	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	0.2	0.3	0.0
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.5	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1131	1139	1150
SPECIFIC GRAVITY	0.635	0.645	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4417 SAMPLE 4864	INDEX 4418 SAMPLE 4866	INDEX 4419 SAMPLE 4890
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ CANYON
WELL NAME	JOHNSON NO. 1	DAVIDSON NO. 1-F	GALT NO. 1-A
LOCATION	SEC. 21, T27N, R10W	SEC. 27, T28N, R10W	SEC. 6, T27N, R10W
OWNER	BYRD-FROST, INC.	BYRD-FROST, INC.	BYRD-FROST, INC.
COMPLETED	10/25/48	12/19/49	03/14/50
SAMPLED	03/20/50	03/20/50	05/22/50
FORMATION	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1858	1905	1714
WELLHEAD PRESSURE, PSIG	480	610	571
OPEN FLOW, MCFD	500	1471	228
COMPONENT, MOLE PCT			
METHANE	93.0	88.4	89.0
ETHANE	3.4	6.8	6.6
PROPANE	1.3	2.6	2.8
N-BUTANE	0.3	0.5	0.7
ISOBUTANE	0.2	0.5	0.0
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.8	0.2	0.0
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.5
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1071	1143	1125
SPECIFIC GRAVITY	0.605	0.646	0.635

	INDEX 4420 SAMPLE 4891	INDEX 4421 SAMPLE 5025	INDEX 4422 SAMPLE 7433
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	KUTZ CANYON	KUTZ W
WELL NAME	GALT NO. 1-B	OAUM NO. 1	GLENN H. CALLOW NO. 8
LOCATION	SEC. 6, T27N, R10W	SEC. 32, T28N, R9W	SEC. 27, T29N, R13W
OWNER	BYRD-FROST, INC.	DELHI OIL CORP.	TENNESSEE GAS TRANSMISSION C
COMPLETED	02/07/50	11/09/50	09/05/59
SAMPLED	05/22/50	03/27/51	03/10/60
FORMATION	CRET-PICTURED CLIFFS	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1832	2142	5762
WELLHEAD PRESSURE, PSIG	544	570	6030
OPEN FLOW, MCFD	155	200	2210
COMPONENT, MOLE PCT			
METHANE	88.5	90.6	86.4
ETHANE	6.0	5.8	8.0
PROPANE	2.8	2.3	2.6
N-BUTANE	0.7	0.4	0.7
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.4	0.0	0.3
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.1	0.7
HELIUM	0.01	0.01	0.05
HEATING VALUE*	1143	1123	1158
SPECIFIC GRAVITY	0.649	0.626	0.660

	INDEX 4423 SAMPLE 4806	INDEX 4424 SAMPLE 4851	INDEX 4425 SAMPLE 4881
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LA PLATA	LA PLATA	LA PLATA
WELL NAME	RICHARDSON NO. 1	V. EAST NO. 1	O. B. DAVIS NO. 1
LOCATION	SEC. 10, T31N, R12W	SEC. 14, T31N, R12W	SEC. 11, T31N, R12W
OWNER	SOUTHERN UNION PRODUCTION CO	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	09/15/49	--/--/00	12/07/49
SAMPLED	10/28/49	03/03/50	03/03/50
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5320	5430	5404
WELLHEAD PRESSURE, PSIG	1090	1083	1065
OPEN FLOW, MCFD	3000	400	396
COMPONENT, MOLE PCT			
METHANE	81.7	84.0	82.7
ETHANE	10.5	9.9	9.6
PROPANE	4.0	3.6	3.8
N-BUTANE	1.1	1.0	0.8
ISOBUTANE	0.4	0.3	0.7
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.8	0.0	0.8
OXYGEN	0.1	0.1	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.4	0.7
HELIUM	0.02	0.02	0.09
HEATING VALUE*	1201	1196	1186
SPECIFIC GRAVITY	0.694	0.678	0.690

	INDEX 4426 SAMPLE 4893	INDEX 4427 SAMPLE 5038	INDEX 4428 SAMPLE 5178
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LA PLATA	LA PLATA	LA PLATA
WELL NAME	CULPEPPER MARTIN NO. 1	DAVIS NO. 3	VANDERSLICE NO. 1
LOCATION	SEC. 21, T32N, R12W	SEC. 1, T31N, R12W	SEC. 19, T32N, R10W
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	04/14/50	--/--/00	09/04/51
SAMPLED	05/22/50	04/23/51	01/24/52
FORMATION	CRET-U	CRET-	CRET-POINT LOOKOUT
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4645	NOT GIVEN	5210
WELLHEAD PRESSURE, PSIG	932	894	965
OPEN FLOW, MCFD	1000	2785	2190
COMPONENT, MOLE PCT			
METHANE	82.3	83.9	86.9
ETHANE	10.3	9.5	6.2
PROPANE	4.1	3.6	1.8
N-BUTANE	1.1	0.8	0.2
ISOBUTANE	0.6	0.4	0.0
N-PENTANE	0.4	0.3	0.0
ISOPENTANE	0.1	0.1	1.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	0.0	TRACE	2.7
OXYGEN	0.1	0.1	0.6
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	1.0	0.4
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1221	1181	1095
SPECIFIC GRAVITY	0.700	0.678	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4429 SAMPLE 5034	INDEX 4430 SAMPLE 5012	INDEX 4431 SAMPLE 16350
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LARGO	LARGO CANYON	LOS PINOS S
WELL NAME	NO. 1, M. E. ROELOFS	B. D. DAY NO. 1	NORTHEAST BLANCO UNIT 208
LOCATION	SEC. 22, T29N, R8W	SEC. 17, T29N, R8W	SEC. 12, T31N, R7W
OWNER	BYRD-FROST, INC.	BYRD-FROST, INC.	BLACKWOOD & NICHOLS CO.
COMPLETED	01/09/51	11/20/50	06/05/81
SAMPLED	04/06/51	03/09/51	10/07/81
FORMATION	NOT GIVEN	CRET-U	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5610	5204	3477
WELLHEAD PRESSURE,PSIG	1060	1075	1440
OPEN FLOW, MCFD	5800	1086	4055
COMPONENT, MOLE PCT			
METHANE	82.3	83.3	79.0
ETHANE	10.8	9.7	11.7
PROPANE	4.2	4.3	5.8
N-BUTANE	1.0	1.0	1.3
ISOBUTANE	0.5	0.5	0.9
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.6	0.8	0.3
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.6	0.4
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	1203	1202	1261
SPECIFIC GRAVITY	0.691	0.685	0.721

	INDEX 4432 SAMPLE 17638	INDEX 4433 SAMPLE 17786	INDEX 4434 SAMPLE 8193
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MOUNT NEBO	MOUNT NEBO	NAVAJO
WELL NAME	PAYNE NO.6	LEPPER GAS COM-D NO. 1-R	NAVAJO TRACT 27 NO. 1
LOCATION	SEC. 20, T32N, R10W	AUX. 4, T32N, R10W	SEC. 32, T26N, R15W
OWNER	UNION TEXAS PETROLEUM CORP.	AMOCO PRODUCTION CO.	PURE OIL CO.
COMPLETED	08/11/84	10/12/84	09/23/61
SAMPLED	03/29/85	07/25/85	09/12/61
FORMATION	CRET-CEDAR HILL	CRET-FRUITLAND	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3120	2608	10120
WELLHEAD PRESSURE,PSIG	134	1020	NOT GIVEN
OPEN FLOW, MCFD	140	479	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.2	92.4	1.1
ETHANE	0.2	0.2	0.1
PROPANE	TRACE	TRACE	0.0
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.2	TRACE
NITROGEN	2.1	TRACE	2.0
OXYGEN	0.4	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	6.9	96.2
HELIUM	TRACE	TRACE	0.43
HEATING VALUE*	958	958	13
SPECIFIC GRAVITY	0.596	0.631	1.498

	INDEX 4435 SAMPLE 15914	INDEX 4436 SAMPLE 15915	INDEX 4437 SAMPLE 8190
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NAVAJO CITY	NAVAJO CITY	NAVAJO TRACT 27
WELL NAME	LIVELY NO. 7Y	LIVELY NO. 7Y	NO. 1
LOCATION	SEC. 35, T30N, R8W	SEC. 35, T30N, R8W	SEC. 32, T26N, R15W
OWNER	LIVELY EXPLORATION CO.	LIVELY EXPLORATION CO.	PURE OIL CO.
COMPLETED	04/19/74	04/19/74	--/--/00
SAMPLED	03/06/80	03/06/80	09/12/61
FORMATION	CRET-DAKOTA	CRET-CHACRA	MISS-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7249	3700	10079
WELLHEAD PRESSURE,PSIG	NOT GIVEN	748	NOT GIVEN
OPEN FLOW, MCFD	1817	4545	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.9	88.9	1.2
ETHANE	6.1	6.2	0.1
PROPANE	2.4	2.3	0.1
N-BUTANE	0.6	0.6	TRACE
ISOBUTANE	0.5	0.4	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.5	0.2	TRACE
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.2	0.8	2.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	95.3
HELIUM	0.01	0.01	0.45
HEATING VALUE*	1153	1132	34
SPECIFIC GRAVITY	0.659	0.646	1.499

	INDEX 4438 SAMPLE 890	INDEX 4439 SAMPLE 913	INDEX 4440 SAMPLE 914
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	UTE NO. 1	AZTEC NO. 2	UTE NO. 1
LOCATION	SEC. 35, T32N, R14W	SEC. 16, T30N, R11W	SEC. 35, T32N, R14W
OWNER	MIDWEST REFINING CO.	NOT GIVEN	MIDWEST REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	08/06/24	08/09/24
FORMATION	NOT GIVEN	CRET-OJO ALAMO	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	1006	2325
WELLHEAD PRESSURE,PSIG	NOT GIVEN	50	400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1188
COMPONENT, MOLE PCT			
METHANE	72.6	63.5	76.4
ETHANE	25.7	20.4	19.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.1	12.1	3.1
OXYGEN	0.2	3.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.04	TRACE	0.05
HEATING VALUE*	1196	1009	1125
SPECIFIC GRAVITY	0.688	0.727	0.667

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4441 SAMPLE 3658	INDEX 4442 SAMPLE 3659	INDEX 4443 SAMPLE 4620
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	BITLABITO NO. 1	BITLABITO NO. 1	UTE NO. 3
LOCATION	SEC. 13, T30N, R21W	SEC. 13, T30N, R21W	SEC. 36, T32N, R14W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	12/13/47
SAMPLED	08/08/43	08/11/43	11/11/48
FORMATION	TRIA-CHINLE	TRIA-CHINLE	CRET-
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	975	975	2370
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	192
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2840
COMPONENT, MOLE PCT			
METHANE	13.6	14.4	80.0
ETHANE	2.9	6.4	19.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	73.9	70.0	0.4
OXYGEN	0.3	0.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	9.10	8.92	0.06
HEATING VALUE*	190	261	1151
SPECIFIC GRAVITY	0.840	0.841	0.655

	INDEX 4444 SAMPLE 7445	INDEX 4445 SAMPLE 8641	INDEX 4446 SAMPLE 9635
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	W. O. BERGER NO. 2	NAVAJO N NO. 1	NAVAJO TRACT 9 NO. 1
LOCATION	SEC. 23, T26N, R11W	SEC. 23, T28N, R15W	SEC. 20, T27N, R17W
OWNER	TENNESSEE GAS TRANSMISSION C	SKELLY OIL CO.	AMERADA PETROLEUM CORP.
COMPLETED	01/15/59	06/27/62	11/18/64
SAMPLED	03/10/60	08/19/62	11/14/64
FORMATION	CRET-DAKOTA	CRET-GALLUP	DEVO--
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6196	4560	7850
WELLHEAD PRESSURE,PSIG	1631	1250	NOT GIVEN
OPEN FLOW, MCFD	2499	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	52.9	80.2	1.4
ETHANE	15.7	7.4	0.4
PROPANE	13.8	4.7	1.2
N-BUTANE	5.2	1.3	1.9
ISOBUTANE	3.7	0.5	1.6
N-PENTANE	1.8	0.2	1.2
ISOPENTANE	2.9	0.3	0.5
CYCLOPENTANE	0.4	0.1	0.5
HEXANES PLUS	1.4	0.2	1.5
NITROGEN	0.5	4.8	85.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.1
HELIUM	0.04	0.15	4.40
HEATING VALUE*	1797	1158	325
SPECIFIC GRAVITY	1.059	0.702	1.032

	INDEX 4447 SAMPLE 11697	INDEX 4448 SAMPLE 12203	INDEX 4449 SAMPLE 17787
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	J. W. GODDARD NO. 3	ATLANTIC B NO. 10	CHAVEZ GAS COM-F NO.1
LOCATION	SEC. 11, T26N, R12W	SEC. 5, T30N, R10W	SEC. 23, T29N, R10W
OWNER	SKELLY OIL CO.	EL PASO NATURAL GAS CO.	AMOCO PRODUCTION CO.
COMPLETED	09/27/68	01/06/70	05/21/85
SAMPLED	12/06/68	02/18/70	07/25/85
FORMATION	CRET-FRUITLAND	CRET-PICTURED CLIFFS	CRET-CHACRA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1184	3102	2956
WELLHEAD PRESSURE,PSIG	374	954	1040
OPEN FLOW, MCFD	1814	2595	2813
COMPONENT, MOLE PCT			
METHANE	96.0	88.8	83.8
ETHANE	0.4	5.9	6.2
PROPANE	0.1	2.5	3.0
N-BUTANE	0.0	0.6	0.9
ISOBUTANE	0.0	0.4	0.4
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.2	0.3
CYCLOPENTANE	0.0	0.1	0.3
HEXANES PLUS	0.0	0.2	0.6
NITROGEN	3.2	0.9	4.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	985	1135	1149
SPECIFIC GRAVITY	0.570	0.646	0.684

	INDEX 4450 SAMPLE 17541	INDEX 4451 SAMPLE 17563	INDEX 4452 SAMPLE 9067
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	OTERO	OTERO	PAJARITO
WELL NAME	BROWNING-STEWART NO. 4	STATE GAS COM CA NO. 1	NAVAJO TRACT 20 NO. 1
LOCATION	SEC. 14, T26N, R11W	SEC. 16, T29N, R11W	SEC. 31, T29N, R17W
OWNER	SOUTHLAND ROYALTY CO.	AMOCO PRODUCTION CO.	AMERADA PETROLEUM CORP.
COMPLETED	09/09/84	06/19/84	05/23/63
SAMPLED	12/12/84	01/10/85	08/19/63
FORMATION	CRET-CHACRA	CRET-CHACRA	PENN-PARADOX C
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2950	2950	7198
WELLHEAD PRESSURE,PSIG	1230	767	1850
OPEN FLOW, MCFD	1295	1556	169
COMPONENT, MOLE PCT			
METHANE	87.1	81.4	40.7
ETHANE	6.2	6.2	9.9
PROPANE	2.8	2.8	7.3
N-BUTANE	0.7	0.7	2.4
ISOBUTANE	0.5	0.4	1.6
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.3	0.8
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.7	7.7	22.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.3
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	12.9
HELIUM	0.03	0.01	1.20
HEATING VALUE*	1142	1068	980
SPECIFIC GRAVITY	0.658	0.673	0.983

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4453 SAMPLE 9102	INDEX 4454 SAMPLE 6044	INDEX 4455 SAMPLE 6045
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	PAJARITO	PARADOX BASIN	PARADOX BASIN
WELL NAME	NAVAJO TRACT 20 NO. 2	NAVAJO INDIANS B-1	NAVAJO INDIANS B-1
LOCATION	SEC. 30, T29N, R17W	SEC. 29, T32N, R20W	SEC. 29, T32N, R20W
OWNER	AMERADA PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/04/63	--/--/00	--/--/00
SAMPLED	10/04/63	03/10/56	03/01/56
FORMATION	PENN-PARADOX B	PENN-PARADOX L	PENN-PARADOX U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6850	5968	5539
WELLHEAD PRESSURE,PSIG	25	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.1	66.8	79.4
ETHANE	11.4	10.2	9.2
PROPANE	11.7	8.5	4.2
N-BUTANE	5.0	2.8	1.3
ISOBUTANE	1.3	1.0	0.7
N-PENTANE	1.7	0.6	0.4
ISOPENTANE	1.2	0.9	0.6
CYCLOPENTANE	0.4	0.2	0.3
HEXANES PLUS	1.7	0.4	0.6
NITROGEN	1.2	1.5	3.0
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	8.1	6.8	0.0
HELIUM	0.10	0.19	0.19
HEATING VALUE*	1515	1301	1231
SPECIFIC GRAVITY	1.013	0.861	0.723

	INDEX 4456 SAMPLE 15874	INDEX 4457 SAMPLE 10917	INDEX 4458 SAMPLE 2092
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	PICTURED CLIFFS	PINON	RATTLESNAKE
WELL NAME	NORTHEAST BLANCO NO. 204	GALLEGOS CANYON UNIT NO. 220	NO. 17
LOCATION	SEC. 1, T31N, R7W	SEC. 13, T28N, R12W	SEC. 2, T29N, R19W
OWNER	BLACKWOOD & NICHOLS CO.	PAN AMERICAN PETROLEUM CORP.	SANTA FE CO.
COMPLETED	08/21/79	06/14/66	04/28/29
SAMPLED	01/04/80	04/09/67	08/16/30
FORMATION	CRET-FRUITLAND	CRET-FRUITLAND	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3404	1228	6769
WELLHEAD PRESSURE,PSIG	1420	549	NOT GIVEN
OPEN FLOW, MCFD	5914	4551	1471
COMPONENT, MOLE PCT			
METHANE	87.2	88.3	46.9
ETHANE	6.7	6.7	48.6
PROPANE	2.8	2.6	---
N-BUTANE	0.5	1.0	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.4	0.3	3.7
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.4	0.1	0.5
HELIUM	TRACE	0.01	0.25
HEATING VALUE*	1124	1158	1346
SPECIFIC GRAVITY	0.652	0.650	0.815

	INDEX 4459 SAMPLE 2227	INDEX 4460 SAMPLE 2229	INDEX 4461 SAMPLE 3712
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	SANTA FE NO. 17	NOT GIVEN	NO. 111
LOCATION	SEC. 2, T29, R19W	NOT GIVEN	SEC. 2, T29N, R19W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/29	--/--/00	12/29/43
SAMPLED	10/30/30	10/30/30	--/--/00
FORMATION	PENN-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6769	NOT GIVEN	725
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3000	NOT GIVEN	150
COMPONENT, MOLE PCT			
METHANE	44.8	0.0	96.6
ETHANE	53.6	36.8	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	0.4	2.9
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.19	0.00	0.00
HEATING VALUE*	1414	659	979
SPECIFIC GRAVITY	0.830	0.395	0.570

	INDEX 4462 SAMPLE 5484	INDEX 4463 SAMPLE 5586	INDEX 4464 SAMPLE 5587
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	RATTLESNAKE NO. 1-6	RATTLESNAKE NO. 1-6	RATTLESNAKE NO. 1-6
LOCATION	SEC. 13, T29N, R19W	SEC. 13, T29N, R19W	SEC. 13, T29N, R19W
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	08/26/43	01/--/54	01/--/54
SAMPLED	03/02/53	01/08/54	01/11/54
FORMATION	DEVO-OURAY	DEVO-OURAY	DEVO-OURAY
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7004	6980	6980
WELLHEAD PRESSURE,PSIG	700	3000	3000
OPEN FLOW, MCFD	NOT GIVEN	7000	7000
COMPONENT, MOLE PCT			
METHANE	10.4	10.1	10.1
ETHANE	1.1	1.2	1.1
PROPANE	0.7	0.6	0.9
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	75.9	76.9	76.6
OXYGEN	0.1	TRACE	TRACE
ARGON	0.8	0.9	0.9
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.2	1.9
HELIUM	7.99	7.55	7.81
HEATING VALUE*	180	162	169
SPECIFIC GRAVITY	0.888	0.861	0.889

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4465 SAMPLE 5596	INDEX 4466 SAMPLE 5795	INDEX 4467 SAMPLE 6886
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	NAVAJO NO. 1	RATTLESNAKE 1-G	RATTLESNAKE NO. 135
LOCATION	SEC. 13, T29N, R19W	SEC. 13, T29N, R19W	SEC. 1, T29N, R19W
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	CONTINENTAL OIL CO.
COMPLETED	08/--/42	08/26/43	--/--/00
SAMPLED	02/04/58	03/22/55	12/10/58
FORMATION	DEVO-OURAY	DEVO-OURAY	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6950	7004	6602
WELLHEAD PRESSURE,PSIG	2956	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	11700	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	13.7	19.8	71.0
ETHANE	1.4	6.7	5.9
PROPANE	0.7	5.9	4.3
N-BUTANE	0.2	2.5	1.9
ISOBUTANE	0.2	2.3	0.7
N-PENTANE	0.1	1.3	0.4
ISOPENTANE	0.0	0.6	0.3
CYCLOPENTANE	TRACE	0.2	0.2
HEXANES PLUS	0.2	1.5	0.4
NITROGEN	71.3	48.2	1.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	1.0	0.8	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.8	7.8	14.8
HELIUM	7.49	2.45	0.10
HEATING VALUE*	210	801	1061
SPECIFIC GRAVITY	0.890	1.068	0.829

	INDEX 4468 SAMPLE 8219	INDEX 4469 SAMPLE 8484	INDEX 4470 SAMPLE 8485
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	NO. 136	NO. 140	NO. 141
LOCATION	SEC. 2, T29N, R19W	SEC. 11, T29N, R19W	SEC. 12, T29N, R19W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	02/17/62	03/27/62
SAMPLED	09/25/61	03/29/62	03/29/62
FORMATION	PENN-HERMOSA	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	6658	6627
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1125	NOT GIVEN
OPEN FLOW, MCFD	435	3000	700
COMPONENT, MOLE PCT			
METHANE	72.9	80.1	61.3
ETHANE	11.0	8.5	15.8
PROPANE	5.9	3.2	10.1
N-BUTANE	2.4	0.8	3.9
ISOBUTANE	1.6	0.9	3.0
N-PENTANE	0.6	0.1	0.9
ISOPENTANE	1.0	0.2	1.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.5	0.1	0.9
NITROGEN	3.5	5.4	2.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.36	0.36	0.07
HEATING VALUE*	1321	1126	1542
SPECIFIC GRAVITY	0.789	0.687	0.918

	INDEX 4471 SAMPLE 8486	INDEX 4472 SAMPLE 8487	INDEX 4473 SAMPLE 9280
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATTLESNAKE	RATTLESNAKE	RATTLESNAKE
WELL NAME	NO. 139	NO. 136	NO. 136
LOCATION	SEC. 2, T29N, R19W	SEC. 2, T29N, R19W	SEC. 2&11, T29N, R19W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	01/12/62	12/28/60	--/--/62
SAMPLED	03/29/62	03/29/62	04/10/64
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-B
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6573	6726	NOT GIVEN
WELLHEAD PRESSURE,PSIG	600	NOT GIVEN	1880
OPEN FLOW, MCFD	700	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.9	70.3	87.3
ETHANE	10.3	15.4	5.7
PROPANE	4.0	7.1	2.2
N-BUTANE	1.0	2.1	1.0
ISOBUTANE	1.1	2.0	0.5
N-PENTANE	0.3	0.5	0.4
ISOPENTANE	0.4	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	5.1	3.1	1.8
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.20	0.11	0.15
HEATING VALUE*	1182	1142	1138
SPECIFIC GRAVITY	0.722	0.690	0.656

	INDEX 4474 SAMPLE 13139	INDEX 4475 SAMPLE 4969	INDEX 4476 SAMPLE 4970
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	SNAKE EYES	TABLE MESA	TABLE MESA
WELL NAME	SNAKE EYES NO. 1	TRIBAL NO. 17	TABLE MESA NO. 17
LOCATION	SEC. 20, T21N, R8W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	DAVIS OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	08/11/71	--/--/00	--/--/00
SAMPLED	01/--/72	01/10/51	01/05/51
FORMATION	CRET-DAKOTA	MISS-MADISON & DEVO-OURAY	MISS-MADISON & DEVO-OURAY
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4597	7450	7450
WELLHEAD PRESSURE,PSIG	1750	1060	1060
OPEN FLOW, MCFD	2553	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.0	5.9	5.8
ETHANE	8.2	0.8	0.8
PROPANE	1.3	0.9	0.9
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.3	83.2	83.0
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.7	0.7
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	1.4	1.4
HELIUM	0.08	5.73	5.64
HEATING VALUE*	1122	142	160
SPECIFIC GRAVITY	0.643	0.925	0.937

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4477 SAMPLE 4971	INDEX 4478 SAMPLE 5038	INDEX 4479 SAMPLE 5031
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	TRIBAL NO. 17	NO. 17	TABLE MESA NO. 17
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	01/05/51	03/17/51	03/19/51
FORMATION	MISS-MADISON & DEVO-OURAY	MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7434	7580	7500
WELLHEAD PRESSURE, PSIG	1060	3900	3900
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	6.5	6.2	5.9
ETHANE	1.0	0.8	0.8
PROPANE	1.1	0.8	0.8
N-BUTANE	0.8	0.0	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.5	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.4	0.8	0.8
NITROGEN	81.6	83.3	83.8
OXYGEN	0.1	0.2	0.1
ARGON	0.7	0.7	0.7
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.3	1.6	1.4
HELIUM	5.52	5.60	5.70
HEATING VALUE*	200	334	331
SPECIFIC GRAVITY	0.945	0.929	0.928

	INDEX 4480 SAMPLE 5032	INDEX 4481 SAMPLE 5558	INDEX 4482 SAMPLE 5728
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	TABLE MESA NO. 17	NO. 17	NO. 1
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/21/51	10/12/53	11/03/54
FORMATION	MISS-MADISON	PENN-HERMOSA	PENN-HERMOSA U
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	7010	6840
WELLHEAD PRESSURE, PSIG	NOT GIVEN	3025	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	5.7	15.3	25.1
ETHANE	0.8	2.7	4.5
PROPANE	0.9	1.9	2.9
N-BUTANE	---	0.9	0.9
ISOBUTANE	---	0.5	0.6
N-PENTANE	---	0.4	0.3
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	1.0	0.3	0.5
NITROGEN	83.9	71.0	58.9
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	0.7	0.5
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	0.3	1.0
HELIUM	5.70	5.60	4.73
HEATING VALUE*	140	357	507
SPECIFIC GRAVITY	0.932	0.952	0.888

	INDEX 4483 SAMPLE 6025	INDEX 4484 SAMPLE 8039	INDEX 4485 SAMPLE 8048
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 3-18
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R15W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/25/61	--/--/00	--/--/00
SAMPLED	06/16/61	06/24/61	07/--/61
FORMATION	PENN-PARADOX	NOT GIVEN	PENN-PARADOX L
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7096	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	1037	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	21500	21500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	15.6	17.5	17.3
ETHANE	3.1	3.0	3.1
PROPANE	2.6	1.7	1.7
N-BUTANE	2.6	0.6	0.6
ISOBUTANE	2.3	0.5	0.5
N-PENTANE	2.3	0.2	0.2
ISOPENTANE	1.2	TRACE	0.1
CYCLOPENTANE	0.5	TRACE	TRACE
HEXANES PLUS	2.1	0.1	0.1
NITROGEN	62.1	69.8	69.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.5	0.7	0.7
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	4.70	5.50	5.50
HEATING VALUE*	720	327	330
SPECIFIC GRAVITY	1.040	0.883	0.885

	INDEX 4486 SAMPLE 8218	INDEX 4487 SAMPLE 8371	INDEX 4488 SAMPLE 8382
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 24	NO. 24
LOCATION	SEC. 3, T27N, R17W	SEC. 4, T27N, R17W	SEC. 4, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/26/61	01/12/62	01/25/62
FORMATION	NOT GIVEN	PENN---	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	7187	NOT GIVEN
WELLHEAD PRESSURE, PSIG	3050	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	17.5	19.9	17.9
ETHANE	2.9	4.5	2.1
PROPANE	1.6	2.1	2.2
N-BUTANE	0.7	1.6	1.3
ISOBUTANE	0.5	1.1	1.0
N-PENTANE	0.2	TRACE	0.7
ISOPENTANE	0.2	1.0	0.5
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	TRACE	0.8
NITROGEN	71.7	64.9	68.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.6	0.6
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.3	0.4	TRACE
HELIUM	3.54	4.92	3.61
HEATING VALUE*	342	437	470
SPECIFIC GRAVITY	0.908	0.899	0.950

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4489 SAMPLE 8462	INDEX 4490 SAMPLE 8585	INDEX 4491 SAMPLE 8586
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 24	NO. 3-18	NO. 3-18
LOCATION	SEC. 4, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	03/--/62	05/31/61	05/31/61
SAMPLED	03/14/62	06/20/62	06/20/62
FORMATION	MISS---	PENN---	PENN---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7676	7100	7100
WELLHEAD PRESSURE,PSIG	3000	3150	3150
OPEN FLOW, MCFD	300	22000	22000
COMPONENT, MOLE PCT			
METHANE	20.8	17.5	17.6
ETHANE	2.1	2.9	2.9
PROPANE	2.0	1.7	1.7
N-BUTANE	1.9	0.7	0.7
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	68.1	69.6	69.6
OXYGEN	TRACE	0.1	0.1
ARGON	0.6	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.3
HELIUM	3.69	5.46	5.46
HEATING VALUE*	370	341	337
SPECIFIC GRAVITY	0.893	0.891	0.888

	INDEX 4492 SAMPLE 8587	INDEX 4493 SAMPLE 8588	INDEX 4494 SAMPLE 8589
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 3-18
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T17W, R27N
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	06/20/62	06/20/62	06/20/62
FORMATION	PENN---	PENN---	PENN---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3150	3150	3150
OPEN FLOW, MCFD	22000	22000	22000
COMPONENT, MOLE PCT			
METHANE	17.5	17.5	17.4
ETHANE	2.9	2.9	2.9
PROPANE	1.7	1.7	1.8
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	69.6	69.6	69.6
OXYGEN	TRACE	0.1	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	5.49	5.47	5.50
HEATING VALUE*	341	341	346
SPECIFIC GRAVITY	0.890	0.891	0.893

	INDEX 4495 SAMPLE 8590	INDEX 4496 SAMPLE 8591	INDEX 4497 SAMPLE 8592
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 3-18
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/62
SAMPLED	06/20/62	06/20/62	06/20/62
FORMATION	PENN---	PENN---	PENN---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3150	3150	3150
OPEN FLOW, MCFD	22000	22000	22000
COMPONENT, MOLE PCT			
METHANE	17.3	17.3	17.4
ETHANE	2.9	2.9	2.9
PROPANE	1.7	1.8	1.8
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	69.7	69.6	69.6
OXYGEN	0.1	0.1	TRACE
ARGON	0.7	0.6	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	5.49	5.48	5.48
HEATING VALUE*	343	349	346
SPECIFIC GRAVITY	0.893	0.894	0.893

	INDEX 4498 SAMPLE 8593	INDEX 4499 SAMPLE 8594	INDEX 4500 SAMPLE 8748
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 3-18	NO. 3-18	NO. 24
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 4, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/62	05/31/61	--/--/00
SAMPLED	06/20/62	06/20/62	10/29/62
FORMATION	PENN---	PENN---	PENN---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3150	3150	1480
OPEN FLOW, MCFD	22000	22000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	17.4	17.5	20.0
ETHANE	2.9	2.9	3.4
PROPANE	1.7	1.7	2.0
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	69.9	69.7	66.5
OXYGEN	TRACE	0.1	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	5.50	5.48	5.25
HEATING VALUE*	327	336	382
SPECIFIC GRAVITY	0.885	0.889	0.884

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4501 SAMPLE 8749	INDEX 4502 SAMPLE 8790	INDEX 4503 SAMPLE 8791
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 24	NO. 3-18	NO. 24
LOCATION	SEC. 4, T27N, R17W	SEC. 3, T27N, R17W	SEC. 4, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	05/31/61	11/01/62
SAMPLED	10/29/62	11/29/62	11/29/62
FORMATION	PENN---	PENN-TABLE MESA	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	7097	7208
WELLHEAD PRESSURE,PSIG	1460	3000	1500
OPEN FLOW, MCFD	NOT GIVEN	3100	800
COMPONENT, MOLE PCT			
METHANE	20.2	17.3	19.8
ETHANE	3.5	2.9	3.6
PROPANE	2.1	1.7	2.1
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	66.3	69.7	66.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.7	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.9
HELIUM	5.21	5.72	5.28
HEATING VALUE*	330	334	381
SPECIFIC GRAVITY	0.881	0.887	0.875

	INDEX 4504 SAMPLE 8792	INDEX 4505 SAMPLE 9165	INDEX 4506 SAMPLE 10230
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	NO. 24	TABLE MESA 28	3-18,
LOCATION	SEC. 4, T27N, R17W	SEC. 33, T28N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	05/31/61
SAMPLED	11/29/62	11/13/63	10/21/65
FORMATION	PENN-TABLE MESA	NOT GIVEN	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7208	7208	7100
WELLHEAD PRESSURE,PSIG	1500	NOT GIVEN	3363
OPEN FLOW, MCFD	800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	19.8	22.3	14.9
ETHANE	3.4	3.9	2.5
PROPANE	1.9	2.0	1.6
N-BUTANE	0.7	0.8	0.9
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	66.9	63.7	72.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.7	0.6	0.7
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.3
HELIUM	5.33	5.20	5.65
HEATING VALUE*	366	407	303
SPECIFIC GRAVITY	0.879	0.874	0.897

	INDEX 4507 SAMPLE 10231	INDEX 4508 SAMPLE 10232	INDEX 4509 SAMPLE 10233
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	3-18,	3-18,	3-18,
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	10/21/65	10/21/65	10/21/65
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3363	3363	3363
OPEN FLOW, MCFD	NOT GIVEN	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	10.4	14.7	14.6
ETHANE	2.0	2.5	2.4
PROPANE	1.9	1.5	1.4
N-BUTANE	1.3	0.6	0.6
ISOBUTANE	0.9	0.2	0.3
N-PENTANE	1.1	0.1	0.2
ISOPENTANE	0.8	0.3	0.2
CYCLOPENTANE	0.7	TRACE	0.1
HEXANES PLUS	2.4	0.2	0.3
NITROGEN	72.8	73.1	73.2
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.4	0.4
HELIUM	3.80	5.69	5.64
HEATING VALUE*	495	287	293
SPECIFIC GRAVITY	1.027	0.894	0.899

	INDEX 4510 SAMPLE 10234	INDEX 4511 SAMPLE 10235	INDEX 4512 SAMPLE 10236
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	3-18,	3-18, COMPRESSOR OUTLET	3-18,
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	10/21/65	10/21/65	10/21/65
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3363	3363	3363
OPEN FLOW, MCFD	NOT GIVEN	5000	5000
COMPONENT, MOLE PCT			
METHANE	14.7	14.8	14.6
ETHANE	2.5	2.6	2.3
PROPANE	1.4	1.3	1.2
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.2	0.1	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	73.1	73.2	73.5
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	5.71	5.83	5.88
HEATING VALUE*	295	276	273
SPECIFIC GRAVITY	0.896	0.889	0.891

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4513 SAMPLE 10237	INDEX 4514 SAMPLE 10238	INDEX 4515 SAMPLE 10239
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	3-18,	3-18,	3-18,
LOCATION	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W	SEC. 3, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	05/31/61	05/31/61
SAMPLED	10/21/65	10/21/65	10/21/65
FORMATION	PENN-TABLE MESA	PENN-TABLE MESA	PENN-TABLE MESA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7100	7100
WELLHEAD PRESSURE,PSIG	3363	3363	3363
OPEN FLOW, MCFD	NOT GIVEN	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	14.8	15.0	15.2
ETHANE	2.5	2.4	2.4
PROPANE	1.4	1.3	1.1
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	73.1	73.2	72.7
OXYGEN	0.0	0.0	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	5.60	5.77	5.99
HEATING VALUE*	289	275	283
SPECIFIC GRAVITY	0.896	0.888	0.888

	INDEX 4516 SAMPLE 10240	INDEX 4517 SAMPLE 10413	INDEX 4518 SAMPLE 10414
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	3-18,	TABLE MESA NO. 29	TABLE MESA NO. 29
LOCATION	SEC. 3, T27N, R17W	SEC. 9, T27N, R17W	SEC. 9, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	05/31/61	--/--/03	--/--/03
SAMPLED	10/21/65	02/21/66	02/21/66
FORMATION	PENN-TABLE MESA	MISS---	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7100	7455	7455
WELLHEAD PRESSURE,PSIG	3363	3100	3100
OPEN FLOW, MCFD	NOT GIVEN	5000	5000
COMPONENT, MOLE PCT			
METHANE	14.6	4.7	5.1
ETHANE	2.2	0.8	0.8
PROPANE	1.1	1.3	1.1
N-BUTANE	0.3	1.0	0.9
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	TRACE	0.6	0.6
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	1.0	0.8
NITROGEN	74.0	81.8	81.9
OXYGEN	0.0	0.9	0.1
ARGON	0.7	0.7	0.7
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.3	1.3
HELIUM	6.05	5.93	6.04
HEATING VALUE*	241	241	216
SPECIFIC GRAVITY	0.879	0.970	0.958

	INDEX 4519 SAMPLE 10419	INDEX 4520 SAMPLE 11911	INDEX 4521 SAMPLE 11912
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
WELL NAME	TABLE MESA NO. 29	TABLE MESA NO. 29	NO. 29
LOCATION	SEC. 9, T27N, R17W	SEC. 9, T27N, R17W	SEC. 9, T27N, R17W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/01	05/07/67	12/29/66
SAMPLED	02/07/66	05/07/69	05/07/69
FORMATION	PENN-TABLE MESA	PENN---	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6979	7037	7461
WELLHEAD PRESSURE,PSIG	2805	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	430	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	12.2	13.5	5.2
ETHANE	2.3	2.5	0.9
PROPANE	1.4	2.0	1.1
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.2	0.8	0.6
N-PENTANE	0.4	0.4	0.9
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.5	0.5	0.3
NITROGEN	74.9	72.7	82.4
OXYGEN	0.0	0.1	1.4
ARGON	0.7	0.7	0.8
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	1.4
HELIUM	5.85	5.58	4.67
HEATING VALUE*	293	338	178
SPECIFIC GRAVITY	0.917	0.921	0.955

	INDEX 4522 SAMPLE 11913	INDEX 4523 SAMPLE 9634	INDEX 4524 SAMPLE 9636
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA S	TABLE MESA S
WELL NAME	TABLE MESA NO. 18	NAVAJO TRACT 4 NO. 1	NAVAJO TRACT 4 NO. 1
LOCATION	SEC. 3, T27N, R17W	SEC. 20, T27N, R17W	SEC. 20, T27N, R17W
OWNER	CONTINENTAL OIL CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	05/25/61	--/--/00	--/--/00
SAMPLED	05/07/69	11/07/64	11/06/64
FORMATION	PENN---	MISS----	MISS----
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7097	7520	7420
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	45
COMPONENT, MOLE PCT			
METHANE	16.0	0.9	1.4
ETHANE	3.2	0.2	0.2
PROPANE	2.4	0.9	0.5
N-BUTANE	0.9	2.5	0.4
ISOBUTANE	0.8	1.6	0.2
N-PENTANE	0.5	1.0	0.2
ISOPENTANE	0.4	0.9	TRACE
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.8	0.9	0.4
NITROGEN	68.4	85.3	90.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	5.31	4.96	5.81
HEATING VALUE*	430	306	84
SPECIFIC GRAVITY	0.931	1.024	0.939

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4525 SAMPLE 11425	INDEX 4526 SAMPLE 11436	INDEX 4527 SAMPLE 9291
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA S	TABLE MESA S	TOCITO
WELL NAME	NAVAJO TRACT 4 NO. 1	NAVAJO TRACT 4 NO. 1	NAVAJO "AL" NO. 1
LOCATION	SEC. 20, T27N, R17W	SEC. 20, T27N, R17W	SEC. 28, T26N, R18W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	TEXACO INC.
COMPLETED	03/19/68	03/19/68	--/--/00
SAMPLED	03/30/68	04/05/68	04/12/64
FORMATION	MISS---	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7454	7080	6215
WELLHEAD PRESSURE,PSIG	3209	2175	3325
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1800
COMPONENT, MOLE PCT			
METHANE	1.7	9.3	67.1
ETHANE	0.3	1.7	10.8
PROPANE	0.2	1.5	6.6
N-BUTANE	0.4	0.8	4.5
ISOBUTANE	0.1	0.5	1.8
N-PENTANE	0.2	0.5	2.2
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	0.2	0.5
HEXANES PLUS	0.2	0.6	2.2
NITROGEN	89.3	77.8	3.3
OXYGEN	0.0	0.3	0.1
ARGON	0.7	0.7	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.6
HELIUM	6.14	5.70	0.23
HEATING VALUE*	64	271	1483
SPECIFIC GRAVITY	0.927	0.934	0.895

	INDEX 4528 SAMPLE 9393	INDEX 4529 SAMPLE 3641	INDEX 4530 SAMPLE 3687
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO	TOCITO DOME	TOCITO DOME
WELL NAME	NAVAJO "AL" TRIBAL NO. 2	TOCITO NO. 1	TOCITO NO. 1
LOCATION	SEC. 28, T26N, R18W	SEC. 17, T26N, R18W	SEC. 17, T26N, R18W
OWNER	TEXACO INC.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/12/64	05/25/43	10/30/43
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-OURAY
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6640
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2505
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	69.8	2.6	2.8
ETHANE	11.7	0.8	0.3
PROPANE	6.3	---	---
N-BUTANE	2.9	---	---
ISOBUTANE	1.5	---	---
N-PENTANE	0.8	---	---
ISOPENTANE	1.1	---	---
CYCLOPENTANE	0.4	---	---
HEXANES PLUS	1.3	---	---
NITROGEN	3.1	89.0	90.2
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.9	0.3	0.2
HELIUM	0.15	7.27	7.06
HEATING VALUE*	1191	41	26
SPECIFIC GRAVITY	0.839	0.898	0.902

	INDEX 4531 SAMPLE 8907	INDEX 4532 SAMPLE 9321	INDEX 4533 SAMPLE 9669
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO DOME	TOCITO DOME	TOCITO DOME
WELL NAME	NAVAJO TRIBAL N NO. 1	NAVAJO AL NO. 1	NAVAJO TRIBAL 3-N
LOCATION	SEC. 17, T26N, R18W	SEC. 28, T26N, R18W	SEC. 17, T26N, R18W
OWNER	PAN AMERICAN PETROLEUM CORP.	TEXACO INC.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	10/12/64
SAMPLED	03/21/63	04/29/64	12/17/64
FORMATION	MISS---	NOT GIVEN	PENN-D
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6634	NOT GIVEN	6253
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2602
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5120
COMPONENT, MOLE PCT			
METHANE	0.8	0.9	79.9
ETHANE	0.1	0.0	7.4
PROPANE	0.2	0.2	2.3
N-BUTANE	TRACE	0.0	0.4
ISOBUTANE	TRACE	0.0	0.3
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	90.0	90.0	7.9
OXYGEN	0.0	0.0	0.3
ARGON	0.9	1.0	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	TRACE	0.8
HELIUM	6.56	7.81	0.54
HEATING VALUE*	15	15	1030
SPECIFIC GRAVITY	0.924	0.903	0.668

	INDEX 4534 SAMPLE 15122	INDEX 4535 SAMPLE 10968	INDEX 4536 SAMPLE 14443
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOCITO DOME	TOCITO N	TOCITO N
WELL NAME	NAVAJO-TOCITO NO. 3	NAVAJO TRIBAL 141 NO. 1	STAVER-NAVAJO NO. 1
LOCATION	SEC. 3, T26N, R18W	SEC. 34, T27N, R18W	SEC. 34, T27N, R18W
OWNER	MOBIL OIL CORP.	SINCLAIR OIL & GAS CO.	CONSOLIDATED OIL & GAS, INC.
COMPLETED	--/--/00	01/09/63	06/21/75
SAMPLED	10/06/77	05/25/67	08/15/75
FORMATION	PENN-D	PENN-PARADOX	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6414	6812	6796
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3537	2842
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3349
COMPONENT, MOLE PCT			
METHANE	60.0	1.3	1.5
ETHANE	5.8	0.1	0.2
PROPANE	1.9	TRACE	TRACE
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	0.2	0.0	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	25.9	90.1	89.9
OXYGEN	0.0	0.0	0.0
ARGON	0.3	1.0	0.9
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	0.1	0.1
HELIUM	1.47	7.07	7.16
HEATING VALUE*	811	32	30
SPECIFIC GRAVITY	0.762	0.915	0.910

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4537 SAMPLE 12189	INDEX 4538 SAMPLE 10901	INDEX 4539 SAMPLE 11830
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UNDESIGNATED FRUITLAND	UNDESIGNATED GALLUP	UNDESIGNATED GALLUP
WELL NAME	ALLEN NO. 1	SHIPROCK NO. 5	L. C. KELLY NO. 3
LOCATION	SEC. 12, T26N, R12W	SEC. 14, T32N, R18W	SEC. 5, T30N, R12W
OWNER	THOMAS A. DUGAN	THOMAS A. DUGAN	PAN AMERICAN PETROLEUM CORP.
COMPLETED	12/12/69	03/02/67	02/07/69
SAMPLED	02/10/70	03/10/67	04/18/69
FORMATION	CRET-FRUITLAND	CRET-GALLUP	CRET-GALLUP
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	1156	380	5996
WELLHEAD PRESSURE,PSIG	299	166	1136
OPEN FLOW, MCFD	2135	1200	7027
COMPONENT, MOLE PCT			
METHANE	98.5	92.6	80.9
ETHANE	0.5	1.1	11.2
PROPANE	0.1	TRACE	4.3
N-BUTANE	0.0	0.0	1.1
ISOBUTANE	0.0	0.0	0.6
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.8	1.4	0.6
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.6	0.0
CARBON DIOXIDE	TRACE	4.7	0.5
HELIUM	0.01	0.01	0.04
HEATING VALUE*	1010	958	1215
SPECIFIC GRAVITY	0.561	0.613	0.697

	INDEX 4540 SAMPLE 1998	INDEX 4541 SAMPLE 1999	INDEX 4542 SAMPLE 4619
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UTE DOME	UTE DOME	UTE DOME
WELL NAME	MIDWEST NO. 1	MIDWEST NO. 2	UTE NO. 2
LOCATION	SEC. 36, T32N, R14W	SEC. 36, T32N, R14W	SEC. 36, T32N, R14W
OWNER	MIDWEST REFINING CO.	MIDWEST REFINING CO.	STANOLIND OIL & GAS CO.
COMPLETED	10/23/21	06/30/22	04/23/23
SAMPLED	06/02/30	06/02/30	11/11/48
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2190	2365	2340
WELLHEAD PRESSURE,PSIG	730	730	170
OPEN FLOW, MCFD	7000	14000	1525
COMPONENT, MOLE PCT			
METHANE	84.1	90.8	78.8
ETHANE	15.0	8.2	19.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.4	0.2	0.5
OXYGEN	0.2	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.04	0.08	0.08
HEATING VALUE*	1121	1067	1155
SPECIFIC GRAVITY	0.634	0.602	0.660

	INDEX 4543 SAMPLE 4621	INDEX 4544 SAMPLE 4622	INDEX 4545 SAMPLE 6577
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UTE DOME	UTE DOME	UTE DOME
WELL NAME	UTE NO. 5	P & R NO. 6	UTE MOUNTAIN TRIBAL D NO. 1
LOCATION	SEC. 35, T32N, R14W	SEC. 1, T31N, R14W	SEC. 10, T31N, R14W
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	04/23/23	--/--/00
SAMPLED	11/11/48	11/11/48	05/10/58
FORMATION	CRET-DAKOTA	CRET-DAKOTA	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	2232	2160	9322
WELLHEAD PRESSURE,PSIG	112	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2355	NOT GIVEN	1141
COMPONENT, MOLE PCT			
METHANE	75.9	79.8	8.7
ETHANE	23.0	17.7	0.1
PROPANE	---	---	0.0
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	0.4	1.7	2.4
OXYGEN	0.3	0.2	TRACE
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.5	88.0
HELIUM	0.05	0.08	0.60
HEATING VALUE*	1181	1126	93
SPECIFIC GRAVITY	0.676	0.655	1.422

	INDEX 4546 SAMPLE 6583	INDEX 4547 SAMPLE 6606	INDEX 4548 SAMPLE 6607
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	UTE DOME	UTE DOME	UTE DOME
WELL NAME	UTE MOUNTAIN TRIBAL D NO. 1	UTE MOUNTAIN TRIBAL D NO. 1	UTE MOUNTAIN TRIBAL D NO. 1
LOCATION	SEC. 10, T31N, R14W	SEC. 10, T31N, R14W	SEC. 10, T31N, R14W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/15/58	05/31/58	05/31/58
FORMATION	MISS---	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	9466	8644	8248
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	7025	10400	9600
COMPONENT, MOLE PCT			
METHANE	8.7	65.0	67.3
ETHANE	0.1	0.5	0.5
PROPANE	0.2	0.0	0.0
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	2.4	1.7	1.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	1.3	1.5
CARBON DIOXIDE	88.0	30.9	28.5
HELIUM	0.50	0.30	0.20
HEATING VALUE*	95	688	713
SPECIFIC GRAVITY	1.423	0.878	0.856

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4549 SAMPLE 6608		INDEX 4550 SAMPLE 10526		INDEX 4551 SAMPLE 13504	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	UTE DOME		UTE DOME		UTE DOME	
WELL NAME	UTE MOUNTAIN TRIBAL D NO. 1		UTE MOUNTAIN TRIBAL-K NO. 1		MOUNTAIN UTE G.U."E"ND. 1	
LOCATION	SEC. 10, T31N, R14W		SEC. 33, T32N, R14W		SEC. 10, T31N, R14W	
OWNER	PAN AMERICAN PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.		AMOCO PRODUCTION CO.	
COMPLETED	--/--/00		--/--/06		10/27/72	
SAMPLED	05/30/58		04/14/66		01/10/73	
FORMATION	PENN-PARADOX		PENN-PARADOX		CRET-DAKOTA	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	8762		9141		2920	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		3372		715	
OPEN FLOW, MCFD	8150		4200		3739	
COMPONENT, MOLE PCT						
METHANE	64.7		62.0		84.0	
ETHANE	0.5		0.5		9.5	
PROPANE	0.0		0.1		3.6	
N-BUTANE	0.1		0.1		0.8	
ISOBUTANE	0.1		0.1		0.6	
N-PENTANE	TRACE		0.1		0.2	
ISOPENTANE	TRACE		TRACE		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	1.7		2.5		0.5	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	1.3		0.1		0.0	
CARBON DIOXIDE	31.2		33.7		0.4	
HELIUM	0.30		0.41		0.04	
HEATING VALUE*	685		665		1180	
SPECIFIC GRAVITY	0.680		0.908		0.672	

	INDEX 4552 SAMPLE 1147		INDEX 4553 SAMPLE 9292		INDEX 4554 SAMPLE 4919	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	UTE RESERVATION		WHITE MILLS W		WILDCAT	
WELL NAME	NO. 1		NAVAJO TRIBAL NO. 1-21		ALLISON UNIT NO. 1	
LOCATION	SEC. 16, T32N, R14W		SEC. 35, T31N, R18W		SEC. 17, T32N, R6W	
OWNER	GYPSY OIL CO.		STANDARD OIL CO. OF TEXAS		AMERADA PETROLEUM CORP.	
COMPLETED	--/--/00		--/--/00		10/--/50	
SAMPLED	09/22/25		04/14/64		09/18/50	
FORMATION	NOT GIVEN		PENN-PARADOX		CRET-DAKOTA	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	3171		6672		8070	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1000		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		57	
COMPONENT, MOLE PCT						
METHANE	11.1		79.1		94.8	
ETHANE	6.8		7.6		0.3	
PROPANE	---		4.9		0.1	
N-BUTANE	---		1.8		0.1	
ISOBUTANE	---		1.2		0.0	
N-PENTANE	---		0.9		0.1	
ISOPENTANE	---		0.6		0.0	
CYCLOPENTANE	---		0.3		TRACE	
HEXANES PLUS	---		0.9		0.1	
NITROGEN	80.5		2.6		0.4	
OXYGEN	1.5		0.1		0.1	
ARGON	---		0.0		TRACE	
HYDROGEN	---		0.0		---	
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	0.1		0.8		4.1	
HELIUM	0.00		0.11		0.01	
HEATING VALUE*	234		1264		977	
SPECIFIC GRAVITY	0.930		0.753		0.606	

	INDEX 4555 SAMPLE 4947		INDEX 4556 SAMPLE 4953		INDEX 4557 SAMPLE 5058	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	LACKEY FED. NO. 1		ALLISON UNIT NO. 1		CRANDELL NO. 1	
LOCATION	SEC. 26, T28N, R9W		SEC. 17, T32N, R6W		SEC. 19, T31N, R10W	
OWNER	JAMES D. HANCOCK & CO., LTD.		AMERADA PETROLEUM CORP.		SOUTHERN UNION GAS CO.	
COMPLETED	04/03/50		10/--/50		04/29/51	
SAMPLED	07/27/50		09/16/50		06/15/51	
FORMATION	CRET-POINT LOOKOUT		CRET-DAKOTA		CRET-U	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	4739		8001		4950	
WELLHEAD PRESSURE,PSIG	1075		NOT GIVEN		1075	
OPEN FLOW, MCFD	NOT GIVEN		6		4	
COMPONENT, MOLE PCT						
METHANE	80.9		93.4		85.6	
ETHANE	11.1		0.3		8.6	
PROPANE	4.9		0.3		3.0	
N-BUTANE	1.0		0.1		0.7	
ISOBUTANE	0.6		0.0		0.6	
N-PENTANE	0.2		0.0		0.3	
ISOPENTANE	0.1		0.0		0.0	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.3	
NITROGEN	0.4		1.3		0.4	
OXYGEN	0.3		0.0		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		---		0.0	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.2		2.6		0.1	
HELIUM	0.03		TRACE		0.01	
HEATING VALUE*	1224		968		1171	
SPECIFIC GRAVITY	0.698		0.601		0.661	

	INDEX 4558 SAMPLE 5062		INDEX 4559 SAMPLE 5092		INDEX 4560 SAMPLE 5180	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	ROBINSON NO. 1		HUERFANO UNIT NO. 2		NAVAJO NO. 1	
LOCATION	SEC. 22, T28N, R13W		SEC. 25, T26N, R10W		SEC. 34, T31N, R17W	
OWNER	SOUTHERN UNION GAS CO.		STANOLIND OIL & GAS CO.		TEXAS CO.	
COMPLETED	03/25/51		--/--/50		--/--/00	
SAMPLED	06/14/51		06/23/51		04/25/52	
FORMATION	CRET-U		CRET-PICTURED CLIFFS		PENN-PARADOX	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	1620		2033		6874	
WELLHEAD PRESSURE,PSIG	294		645		NOT GIVEN	
OPEN FLOW, MCFD	108		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	89.8		94.5		82.9	
ETHANE	5.6		2.3		7.3	
PROPANE	2.2		0.2		3.7	
N-BUTANE	0.5		0.1		1.1	
ISOBUTANE	0.3		0.0		0.9	
N-PENTANE	0.2		0.0		0.4	
ISOPENTANE	0.2		0.0		0.6	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.0		0.2		0.2	
NITROGEN	0.7		2.2		2.1	
OXYGEN	0.2		0.2		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.3		0.4		0.2	
HELIUM	0.01		0.02		0.35	
HEATING VALUE*	1112		1014		1191	
SPECIFIC GRAVITY	0.631		0.589		0.693	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4561 SAMPLE 5182	INDEX 4562 SAMPLE 5183	INDEX 4563 SAMPLE 5218
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO NO. 1	NAVAJO NO. 1	NAVAJO NO. 1
LOCATION	SEC. 34, T31N, R17W	SEC. 34, T31N, R17W	SEC. 34, T31N, R17W
OWNER	TEXAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/02/52	08/02/52	04/18/52
FORMATION	PENN-PARADOX	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7068	7061	6788
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		
COMPONENT, MOLE PCT			
METHANE	83.0	86.5	87.2
ETHANE	6.8	6.2	4.6
PROPANE	2.7	2.1	2.3
N-BUTANE	0.6	0.5	0.9
ISOBUTANE	0.7	0.2	0.8
N-PENTANE	0.4	TRACE	0.3
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	3.9	3.1	2.7
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.5	0.3	0.2
HELIUM	0.73	0.76	0.26
HEATING VALUE*	1117	1075	1124
SPECIFIC GRAVITY	0.684	0.634	0.657

	INDEX 4564 SAMPLE 5304	INDEX 4565 SAMPLE 5321	INDEX 4566 SAMPLE 5322
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SCHWERDTFERGER	NAVAJO NO. 1	NAVAJO NO. 1
LOCATION	SEC. 27, T31N, R9W	SEC. 5, T30N, R17W	SEC. 5, T30N, R17W
OWNER	EL PASO NATURAL GAS CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	07/08/52	--/--/00	--/--/00
SAMPLED	10/17/52	11/13/52	11/13/52
FORMATION	CRET-MESAVERDE	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4644	6779	6779
WELLHEAD PRESSURE,PSIG	1067	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2013	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.2	47.2	49.8
ETHANE	7.6	5.0	4.9
PROPANE	2.9	2.2	2.3
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.4	0.3
NITROGEN	2.1	22.7	19.5
OXYGEN	0.4	0.3	0.1
ARGON	TRACE	0.3	0.3
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	16.7	17.9
HELIUM	0.01	3.16	3.09
HEATING VALUE*	1135	722	734
SPECIFIC GRAVITY	0.671	0.894	0.884

	INDEX 4567 SAMPLE 5353	INDEX 4568 SAMPLE 5354	INDEX 4569 SAMPLE 5355
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO NO. 1, DST. NO. 3	NAVAJO NO. 1, DST. NO. 5	NAVAJO NO. 1, DST. NO. 7
LOCATION	SEC. 27, T31N, R17W	SEC. 27, T31N, R17W	SEC. 27, T31N, R17W
OWNER	THREE STATES NATURAL GAS CO.	THREE STATES NATURAL GAS CO.	THREE STATES NATURAL GAS CO.
COMPLETED	--/--/00	12/31/52	12/31/52
SAMPLED	11/13/52	11/20/52	12/07/52
FORMATION	PENN-DOLOMITE LIME	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6912	7035	7278
WELLHEAD PRESSURE,PSIG	1750	3500	820
OPEN FLOW, MCFD	168	280	15
COMPONENT, MOLE PCT			
METHANE	91.4	74.4	73.1
ETHANE	3.1	2.2	4.7
PROPANE	1.5	1.1	2.6
N-BUTANE	0.6	0.4	1.2
ISOBUTANE	0.5	0.2	0.8
N-PENTANE	0.4	0.3	0.6
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.5	0.3	0.6
NITROGEN	1.7	9.3	10.8
OXYGEN	TRACE	TRACE	1.2
ARGON	0.0	0.2	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	10.8	3.0
HELIUM	0.09	0.66	0.52
HEATING VALUE*	1109	877	1041
SPECIFIC GRAVITY	0.632	0.743	0.750

	INDEX 4570 SAMPLE 5387	INDEX 4571 SAMPLE 5398	INDEX 4572 SAMPLE 5399
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	AZTEC NAVAJO NO. 1-A	NAVAJO NO. 1-A	AZTEC NAVAJO NO. 1-A
LOCATION	SEC. 36, T32N, R18W	SEC. 36, T32N, R18W	SEC. 36, T32N, R18W
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.
COMPLETED	02/25/53	--/--/00	02/25/53
SAMPLED	02/06/53	02/19/53	02/20/53
FORMATION	PENN-PARADOX	PENN-HERMOSA	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7570	7700	7662
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	179	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.5	15.6	53.8
ETHANE	2.2	1.3	1.8
PROPANE	1.0	0.3	0.3
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.4	0.0	0.1
NITROGEN	1.0	68.6	36.2
OXYGEN	TRACE	2.3	0.1
ARGON	0.0	0.3	0.1
HYDROGEN	0.0	11.5	7.2
HYDROGEN SULFIDE**	0.6	0.0	0.0
CARBON DIOXIDE	6.9	0.0	0.1
HELIUM	0.14	0.00	0.10
HEATING VALUE*	1010	238	630
SPECIFIC GRAVITY	0.679	0.813	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4573 SAMPLE 5402	INDEX 4574 SAMPLE 5438	INDEX 4575 SAMPLE 5439
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	AZTEC NAVAJO NO. 1-A	AZTEC NAVAJO NO. 1-A	AZTEC NAVAJO NO. 1-A
LOCATION	SEC. 36, T32N, R18W	SEC. 36, T32N, R18W	SEC. 36, T32N, R18W
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS & TEXAS C	SOUTHERN UNION GAS & TEXAS C
COMPLETED	02/25/53	02/25/53	02/25/53
SAMPLED	02/22/53	03/13/53	03/31/53
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	7623	7604	7604
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3009	3000
OPEN FLOW, MCFD	4000	13900	13900
COMPONENT, MOLE PCT			
METHANE	81.1	90.3	85.0
ETHANE	1.5	1.6	1.4
PROPANE	3.6	0.6	0.9
N-BUTANE	0.7	0.3	0.3
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.8	0.2	0.2
NITROGEN	0.4	1.2	0.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.3	0.1
HYDROGEN SULFIDE**	0.7	0.0	0.4
CARBON DIOXIDE	10.3	5.4	10.5
HELIUM	0.16	0.18	0.16
HEATING VALUE*	1040	988	940
SPECIFIC GRAVITY	0.747	0.634	0.691

	INDEX 4576 SAMPLE 6031	INDEX 4577 SAMPLE 6032	INDEX 4578 SAMPLE 6306
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	CHACO UNIT NO. 2	CHACO UNIT NO. 1	BLANCO 30-12 NO. 4-10
LOCATION	SEC. 16, T23N, R8W	SEC. 14, T23N, R9W	SEC. 10, T30N, R12W
OWNER	GREAT WESTERN DRILLING CO.	GREAT WESTERN DRILLING CO.	NORTHWEST PRODUCTION CORP.
COMPLETED	05/19/55	05/09/55	02/17/57
SAMPLED	03/06/56	03/06/56	04/17/57
FORMATION	CRET-TOCITO	CRET-TOCITO	CRET-FRUITLAND
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4910	4630	1816
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	692
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5946
COMPONENT, MOLE PCT			
METHANE	75.9	73.2	88.8
ETHANE	9.3	10.1	5.0
PROPANE	6.5	7.7	2.9
N-BUTANE	2.0	2.1	0.6
ISOBUTANE	0.7	0.9	0.9
N-PENTANE	0.4	0.4	0.1
ISOPENTANE	0.6	0.7	0.2
CYCLOPENTANE	0.2	0.2	TRACE
HEXANES PLUS	0.4	0.4	0.2
NITROGEN	3.3	3.8	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	TRACE
HELIUM	0.16	0.12	0.02
HEATING VALUE*	1266	1298	1138
SPECIFIC GRAVITY	0.754	0.779	0.644

	INDEX 4579 SAMPLE 6465	INDEX 4580 SAMPLE 6981	INDEX 4581 SAMPLE 6986
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	USG SEC. 19, NO. 17	NAVAJO C NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 19, T29N, R16W	SEC. 1, T29N, R17W	SEC. 1, T29N, R17W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	04/21/58	04/21/59
SAMPLED	01/03/58	02/23/59	03/01/59
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6530	5937	6110
WELLHEAD PRESSURE,PSIG	1340	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5500	64	209
COMPONENT, MOLE PCT			
METHANE	9.2	66.4	66.4
ETHANE	0.7	5.8	5.2
PROPANE	1.6	3.0	2.7
N-BUTANE	0.8	1.2	1.1
ISOBUTANE	0.8	0.8	0.5
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	TRACE	0.2	0.2
HEXANES PLUS	0.2	0.6	0.7
NITROGEN	80.7	18.6	18.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.8	0.2	0.2
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.1
HELIUM	6.20	2.40	2.70
HEATING VALUE*	192	990	977
SPECIFIC GRAVITY	0.923	0.743	0.739

	INDEX 4582 SAMPLE 6990	INDEX 4583 SAMPLE 6994	INDEX 4584 SAMPLE 6995
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MARRAN NO. 1	MARRAN NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 11, T29N, R17W	SEC. 11, T29N, R17W	SEC. 1, T29N, R17W
OWNER	SAN JUAN DRILLING CO.	SAN JUAN DRILLING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	04/21/59
SAMPLED	03/04/59	03/09/59	03/08/59
FORMATION	NOT GIVEN	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	6827	6287
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	25	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.4	16.5	58.9
ETHANE	7.0	10.5	5.2
PROPANE	3.5	4.2	2.7
N-BUTANE	1.4	1.3	1.1
ISOBUTANE	1.0	1.1	0.8
N-PENTANE	0.5	0.4	0.4
ISOPENTANE	0.6	0.2	0.3
CYCLOPENTANE	0.3	0.1	0.2
HEXANES PLUS	0.9	0.5	0.7
NITROGEN	10.8	59.4	24.5
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.7	0.4
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.1	0.1
HELIUM	1.70	4.90	4.70
HEATING VALUE*	1115	600	898
SPECIFIC GRAVITY	0.765	0.942	0.756

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4585 SAMPLE 6997	INDEX 4586 SAMPLE 7003	INDEX 4587 SAMPLE 7004
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO C NO. 1	HAMRAH NO. 1	HAMRAH NO. 1
LOCATION	SEC. 1, T29N, R17W	SEC. 11, T29N, R17W	SEC. 11, T29N, R17W
OWNER	PAN AMERICAN PETROLEUM CORP.	SAN JUAN DRILLING CO.	SAN JUAN DRILLING CO.
COMPLETED	04/21/59	--/--/00	--/--/00
SAMPLED	03/15/59	03/14/59	03/15/59
FORMATION	PENN-PARADOX	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6360	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	209		
COMPONENT, MOLE PCT			
METHANE	37.4	65.4	23.2
ETHANE	4.3	6.0	8.9
PROPANE	2.9	2.6	4.6
N-BUTANE	TRACE	0.8	1.8
ISOBUTANE	0.0	0.6	1.3
N-PENTANE	1.1	0.3	0.5
ISOPENTANE	2.2	0.1	0.6
CYCLOPENTANE	0.5	0.2	0.2
HEXANES PLUS	0.5	0.5	0.7
NITROGEN	42.0	19.2	50.9
OXYGEN	0.1	0.0	TRACE
ARGON	0.5	0.3	0.6
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	1.2	2.2
HELIUM	5.70	2.70	4.50
HEATING VALUE*	705	935	709
SPECIFIC GRAVITY	0.857	0.737	0.951

	INDEX 4588 SAMPLE 7005	INDEX 4589 SAMPLE 7010	INDEX 4590 SAMPLE 7013
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO C NO. 1	NAVAJO C NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 1, T29N, R17W	SEC. 1, T29N, R17W	SEC. 1, T29N, R17W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	04/21/59	04/21/59	04/21/59
SAMPLED	03/18/59	03/21/59	03/29/59
FORMATION	PENN-PARADOX	PENN-PARADOX	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6435	6585	6950
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.1	1.6	11.8
ETHANE	6.5	TRACE	0.8
PROPANE	3.5	0.7	4.3
N-BUTANE	1.4	1.2	0.9
ISOBUTANE	1.0	0.8	0.5
N-PENTANE	0.5	0.4	0.3
ISOPENTANE	0.4	0.4	0.0
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	0.9	0.6	0.7
NITROGEN	21.5	84.6	40.8
OXYGEN	0.0	TRACE	0.1
ARGON	0.3	0.7	0.5
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.7	38.2
HELIUM	4.30	6.90	2.110
HEATING VALUE*	983	174	311
SPECIFIC GRAVITY	0.776	0.967	1.169

	INDEX 4591 SAMPLE 7020	INDEX 4592 SAMPLE 7025	INDEX 4593 SAMPLE 7026
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BICLABITO NO. 1	NAVAJO C NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 13, T30N, R21W	SEC. 1, T29N, R17W	SEC. 1, T29N, R17W
OWNER	CONTINENTAL OIL CO.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	08/03/43	04/21/59	04/21/59
SAMPLED	04/07/59	04/18/59	04/19/59
FORMATION	MISS-DEVO-OURAY	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	990	6366	6366
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2925	3000
OPEN FLOW, MCFD	NOT GIVEN	9900	8949
COMPONENT, MOLE PCT			
METHANE	22.9	37.0	36.8
ETHANE	1.4	4.2	4.2
PROPANE	0.5	2.7	2.8
N-BUTANE	0.2	1.1	1.2
ISOBUTANE	0.1	0.9	0.9
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	0.0	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.5	0.6
NITROGEN	66.4	42.3	41.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.7	0.5	0.5
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	4.3	4.3
HELIUM	7.50	5.79	5.77
HEATING VALUE*	295	643	664
SPECIFIC GRAVITY	0.828	0.855	0.863

	INDEX 4594 SAMPLE 7038	INDEX 4595 SAMPLE 7079	INDEX 4596 SAMPLE 8071
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO C NO. 1	BECLABITO NO. 1	NAVAJO E NO. 1
LOCATION	SEC. 1, T29N, R17W	SEC. 23, T30N, R20W	SEC. 15, T31N, R20W
OWNER	PAN AMERICAN PETROLEUM CORP.	PURE OIL CO.	BRITISH AMERICAN OIL PROD. C
COMPLETED	04/21/59	--/--/00	--/--/00
SAMPLED	04/20/59	05/20/59	07/13/61
FORMATION	PENN-PARADOX	MISS-	PENN-BLUFF
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5690
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.0	0.4	86.9
ETHANE	4.2	0.0	5.2
PROPANE	2.8	0.0	2.7
N-BUTANE	1.1	0.0	1.0
ISOBUTANE	0.8	0.0	0.9
N-PENTANE	0.4	0.0	0.5
ISOPENTANE	0.5	0.0	0.2
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.4	0.0	0.5
NITROGEN	42.7	96.7	1.5
OXYGEN	TRACE	0.0	TRACE
ARGON	0.5	1.2	0.0
HYDROGEN	0.0	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.0	1.3	0.4
HELIUM	5.60	0.10	0.20
HEATING VALUE*	641	5	1167
SPECIFIC GRAVITY	0.853	0.974	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4597 SAMPLE 8102		INDEX 4598 SAMPLE 8910		INDEX 4599 SAMPLE 9045	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	BRITISH AMERICAN NO. 1		NAVAJO TRIBAL N NO. 1		NAVAJO TRIBAL 141 NO. 1	
LOCATION	SEC. 15, T31N, R20W		SEC. 17, T26N, R18W		SEC. 34, T27N, R18W	
OWNER	BRITISH AMERICAN OIL PROD. C		PAN AMERICAN PETROLEUM CORP.		SINCLAIR OIL & GAS CO.	
COMPLETED	--/--/00		--/--/00		08/23/63	
SAMPLED	07/26/61		04/03/63		07/16/63	
FORMATION	MISS---		PENN-PARADOX L		MISS---	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	6810		6392		6812	
WELLHEAD PRESSURE,PSIG	1615		NOT GIVEN		3170	
OPEN FLOW, MCFD	NOT GIVEN		5190		1005	
COMPONENT, MOLE PCT						
METHANE	14.4		77.6		1.1	
ETHANE	1.2		8.0		0.1	
PROPANE	0.9		3.4		TRACE	
N-BUTANE	0.2		1.3		0.1	
ISOBUTANE	0.1		0.6		TRACE	
N-PENTANE	0.1		0.4		TRACE	
ISOPENTANE	TRACE		0.4		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.3		0.1	
NITROGEN	56.5		6.8		90.3	
OXYGEN	TRACE		0.0		TRACE	
ARGON	0.7		TRACE		1.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	19.2		0.8		0.1	
HELIUM	6.60		0.68		7.00	
HEATING VALUE*	710		1131		21	
SPECIFIC GRAVITY	0.977		0.714		0.911	

	INDEX 4600 SAMPLE 9050		INDEX 4601 SAMPLE 9055		INDEX 4602 SAMPLE 9063	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NAVAJO TRACT 24 NO. 1		NAVAJO 24 NO. 1		NAVAJO 24 NO. 1	
LOCATION	SEC. 15, T31N, R18W		SEC. 15, T31N, R18W		SEC. 15, T31N, R18W	
OWNER	HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	12/16/63		12/16/63		12/16/63	
SAMPLED	07/29/63		08/04/63		08/08/63	
FORMATION	PENN-DESERT CREEK		CRET-BARKER CREEK		PENN---	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	NOT GIVEN		7324		7585	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	90.3		88.5		90.9	
ETHANE	4.1		4.7		3.4	
PROPANE	1.5		2.4		1.1	
N-BUTANE	0.8		1.2		0.4	
ISOBUTANE	0.1		0.3		0.3	
N-PENTANE	0.3		0.2		TRACE	
ISOPENTANE	0.4		0.5		0.3	
CYCLOPENTANE	0.2		0.1		TRACE	
HEXANES PLUS	0.7		0.3		0.1	
NITROGEN	1.0		1.5		3.0	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.1		0.1	
HELIUM	0.10		0.10		0.30	
HEATING VALUE*	1133		1113		1052	
SPECIFIC GRAVITY	0.644		0.654		0.613	

	INDEX 4603 SAMPLE 9571		INDEX 4604 SAMPLE 9841		INDEX 4605 SAMPLE 9881	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NAVAJO NO. 49		NAVAJO TRIBE AP-IX		NAVAJO AP 1-X	
LOCATION	SEC. 23, T26N, R18W		SEC. 8, T30N, R18W		SEC. 8, T30N, R18W	
OWNER	SINCLAIR OIL & GAS CO.		TEXACO INC.		TEXACO INC.	
COMPLETED	10/02/64		05/11/65		--/--/00	
SAMPLED	09/30/64		06/07/65		04/10/65	
FORMATION	MISS---		PENN-ISMAY		PENN-	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	8757		6390		6650	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		3005		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		13		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	2.3		88.0		83.2	
ETHANE	0.1		4.1		6.3	
PROPANE	0.1		2.1		3.0	
N-BUTANE	0.1		0.8		0.7	
ISOBUTANE	TRACE		0.4		0.6	
N-PENTANE	TRACE		0.2		0.2	
ISOPENTANE	TRACE		0.4		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.4		0.1	
NITROGEN	93.6		3.0		5.2	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.7		TRACE		TRACE	
HYDROGEN	0.2		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		0.4	
HELIUM	2.54		0.25		0.03	
HEATING VALUE*	37		1113		1109	
SPECIFIC GRAVITY	0.941		0.649		0.670	

	INDEX 4606 SAMPLE 9893		INDEX 4607 SAMPLE 10093		INDEX 4608 SAMPLE 10242	
STATE	NEW MEXICO		NEW MEXICO		NEW MEXICO	
COUNTY	SAN JUAN		SAN JUAN		SAN JUAN	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	NAVAJO AP NO. 1-X		TABLE MESA NO. 1		TABLE MESA NO. 2	
LOCATION	SEC. 8, T30N, R18W		SEC. 27, T28N, R17W		SEC. 27, T28N, R17W	
OWNER	TEXACO INC.		SUNRAY DX OIL CO.		SUNRAY DX OIL CO.	
COMPLETED	05/11/65		--/--/00		--/--/00	
SAMPLED	05/11/65		08/29/65		10/22/65	
FORMATION	PENN-		PENN-TABLE MESA		PENN-TABLE MESA	
GEOLOGIC PROVINCE CODE	580		580		580	
DEPTH, FEET	6680		7399		7291	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		1100		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	87.6		28.9		21.6	
ETHANE	4.8		8.2		3.3	
PROPANE	2.0		5.6		1.7	
N-BUTANE	0.8		2.4		0.5	
ISOBUTANE	0.7		1.4		0.3	
N-PENTANE	0.4		0.4		0.1	
ISOPENTANE	0.2		1.1		0.2	
CYCLOPENTANE	0.3		0.1		0.1	
HEXANES PLUS	0.8		0.5		0.2	
NITROGEN	1.2		47.3		65.5	
OXYGEN	0.1		0.0		0.2	
ARGON	0.0		0.7		0.7	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.0		1.5		0.8	
HELIUM	0.12		1.90		*.83	
HEATING VALUE*	1154		807		776	
SPECIFIC GRAVITY	0.672		0.960		0.878	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4609 SAMPLE 10253	INDEX 4610 SAMPLE 10274	INDEX 4611 SAMPLE 10275
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NO. 1 NAVAJO-HUMBLE	TABLE MESA NO. 2	TABLE MESA NO. 1
LOCATION	SEC. 16, T25N, R19W	SEC. 27, T28N, R17W	SEC. 21, T28N, R17W
OWNER	CHAMPLIN PETROLEUM CO.	SUNRAY DX OIL CO.	SUNRAY DX OIL CO.
COMPLETED	--/--/00	11/07/65	09/18/65
SAMPLED	10/30/65	11/08/65	11/08/65
FORMATION	DEVO-ANETH	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	6220	7295	7411
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	1100
OPEN FLOW, MCFD	111	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	2.5	22.9	25.6
ETHANE	0.5	6.1	6.7
PROPANE	0.6	4.8	7.7
N-BUTANE	0.5	2.4	4.1
ISOBUTANE	0.2	1.3	2.3
N-PENTANE	0.4	0.6	1.1
ISOPENTANE	0.2	1.0	1.2
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.6	0.6	0.8
NITROGEN	90.7	54.3	43.1
OXYGEN	0.1	0.0	0.2
ARGON	0.7	0.6	0.6
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	1.2	2.0
HELIUM	2.87	3.89	2.39
HEATING VALUE*	134	697	978
SPECIFIC GRAVITY	0.970	0.964	1.033

	INDEX 4612 SAMPLE 10292	INDEX 4613 SAMPLE 10320	INDEX 4614 SAMPLE 10321
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	RAVEN NO. 1	TABLE MESA NO. 1	TABLE MESA NO. 2
LOCATION	SEC. 6, T27N, R14W	SEC. 27, T28N, R17W	SEC. 27, T28N, R17W
OWNER	THOMAS A. DUGAN	SUNRAY DX OIL CO.	SUNRAY DX OIL CO.
COMPLETED	10/23/65	09/18/65	11/07/65
SAMPLED	11/26/65	12/09/65	12/09/65
FORMATION	CRET-DAKOTA	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5470	7411	7295
WELLHEAD PRESSURE,PSIG	1446	1150	1200
OPEN FLOW, MCFD	1398	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.7	24.2	23.8
ETHANE	9.4	7.7	6.3
PROPANE	5.3	7.5	5.0
N-BUTANE	1.7	4.7	2.3
ISOBUTANE	0.7	2.2	1.1
N-PENTANE	0.9	1.5	0.6
ISOPENTANE	0.8	1.4	0.9
CYCLOPENTANE	0.3	0.3	0.2
HEXANES PLUS	0.5	1.3	0.6
NITROGEN	1.4	42.4	53.2
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.6	0.6
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	3.0	1.6
HELIUM	0.07	3.08	3.72
HEATING VALUE*	1264	1012	700
SPECIFIC GRAVITY	0.739	1.063	0.960

	INDEX 4615 SAMPLE 10451	INDEX 4616 SAMPLE 10469	INDEX 4617 SAMPLE 10746
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO AW NO. 1	NAVAJO AW NO. 1	SHIPROCK NO. 3
LOCATION	SEC. 7, T27N, R20W	SEC. 7, T27N, R20W	SEC. 14, T30N, R18W
OWNER	TEXACO INC.	TEXACO INC.	THOMAS A. DUGAN
COMPLETED	--/--/00	03/17/66	--/--/00
SAMPLED	03/04/66	03/17/66	10/14/66
FORMATION	PENN---	DEVO---	CRET-TOCITO
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	5160	6020	370
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	17.1	0.6	92.4
ETHANE	2.1	0.0	1.1
PROPANE	1.3	0.0	TRACE
N-BUTANE	0.5	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	72.0	90.5	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.7	1.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	5.4
HELIUM	5.20	7.80	TRACE
HEATING VALUE*	297	6	956
SPECIFIC GRAVITY	0.885	0.905	0.617

	INDEX 4618 SAMPLE 11152	INDEX 4619 SAMPLE 11291	INDEX 4620 SAMPLE 11910
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO I NO. 1	NAVAJO TRIBAL AD NO. 1	NAVAJO BB NO. 1
LOCATION	SEC. 34, T24N, R20W	SEC. 13, T30N, R21W	SEC. 25, T26N, R20W
OWNER	KERR-MCGEE CORP.	PAN AMERICAN PETROLEUM CORP.	GULF OIL CO.
COMPLETED	--/--/00	12/05/67	--/--/00
SAMPLED	10/05/67	02/16/68	06/05/69
FORMATION	CAMB-	PERM-CUTLER	MISS-LIMESTONE
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	3902	1858	6600
WELLHEAD PRESSURE,PSIG	648	710	2635
OPEN FLOW, MCFD	NOT GIVEN	3620	64
COMPONENT, MOLE PCT			
METHANE	0.6	82.8	5.3
ETHANE	0.0	4.3	0.5
PROPANE	TRACE	1.8	0.6
N-BUTANE	0.0	0.5	0.4
ISOBUTANE	0.0	0.4	0.2
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.3
NITROGEN	92.9	9.0	87.4
OXYGEN	0.0	0.1	1.0
ARGON	0.7	0.1	0.8
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	5.50	0.52	2.55
HEATING VALUE*	6	1003	132
SPECIFIC GRAVITY	0.924	0.648	0.950

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4621 SAMPLE 13125	INDEX 4622 SAMPLE 9254	INDEX 4623 SAMPLE 17062
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SANDOVAL	SANDOVAL
FIELD	WILDCAT	NACIMIENTO	RUSTY
WELL NAME	ASHCROFT NO. 1	OIL TEST	DOME FED. 1-21-7 NO. 1
LOCATION	SEC. 26, T23N, R12W	SEC. 1, T16N, R1W	SEC. 1, T21N, R7W
OWNER	APACHE CORP.	ZIA PUEBLOS	DOME PETROLEUM CORP.
COMPLETED	--/--/00	10/--/26	09/01/82
SAMPLED	12/22/71	03/14/64	09/13/83
FORMATION	CRET-DAKOTA	NOT GIVEN	CRET-CHACRA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	4547	NOT GIVEN	2000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	225	488
OPEN FLOW, MCFD	NOT GIVEN	790	750
COMPONENT, MOLE PCT			
METHANE	46.7	0.0	87.9
ETHANE	23.0	0.1	5.9
PROPANE	19.4	0.0	2.2
N-BUTANE	3.9	0.0	0.5
ISOBUTANE	3.3	0.0	0.3
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	2.1	0.0	0.2
CYCLOPENTANE	0.3	0.0	TRACE
HEXANES PLUS	0.8	0.0	0.1
NITROGEN	0.0	11.8	2.2
OXYGEN	TRACE	0.4	TRACE
ARGON	TRACE	0.2	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	86.4	0.2
HELIUM	TRACE	1.09	0.02
HEATING VALUE*	1781	2	1099
SPECIFIC GRAVITY	1.044	1.445	0.635

	INDEX 4624 SAMPLE 1414	INDEX 4625 SAMPLE 1547	INDEX 4626 SAMPLE 2247
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	TORRANCE	TORRANCE	TORRANCE
FIELD	ESTANCIA VALLEY	ESTANCIA VALLEY	TORRANCE
WELL NAME	PACE NO. 1	PACE NO. 1	J. B. WITT TEXT
LOCATION	NOT GIVEN	SEC. 12, T6N, R7E	SEC. 12, T7N, R7E
OWNER	E. PACE HEIRS	NOT GIVEN	SINDCO OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/29/27	11/25/27	12/01/30
FORMATION	PENN-	CAMB-	PENN-MAGDALENA
GEOLOGIC PROVINCE CODE	460	460	460
DEPTH, FEET	1640	1640	1293
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	250
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	0.0	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.6	1.0	2.1
OXYGEN	0.0	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	98.4	99.0	97.4
HELIUM	0.04	0.03	0.08
HEATING VALUE*	0	0	0
SPECIFIC GRAVITY	1.520	1.523	1.510

	INDEX 4627 SAMPLE 16909	INDEX 4628 SAMPLE 2246	INDEX 4629 SAMPLE 2641
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	UNION	UNION	UNION
FIELD	BRAVO DOME	NOT GIVEN	NOT GIVEN
WELL NAME	CAIN NO. E-1 (1935-2216)	GAS SEEP	GAS SEEP
LOCATION	SEC. 22, T22N, R16W	SEC. 19, T23N, R32E	SEC. 17, T23N, R34E
OWNER	AMOCO PRODUCTION CO. (USA)	NOT GIVEN	M. C. GILLILAND
COMPLETED	04/--/83	--/--/00	--/--/00
SAMPLED	04/19/83	12/04/30	09/04/33
FORMATION	PERM-TUBB	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	445	445	445
DEPTH, FEET	2060	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1770	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	88.0	51.2
ETHANE	TRACE	0.0	9.9
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.8	9.0	30.8
OXYGEN	TRACE	1.3	0.7
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	99.0	1.7	7.4
HELIUM	0.02	0.00	0.00
HEATING VALUE*	0	891	636
SPECIFIC GRAVITY	1.521	0.615	0.807

	INDEX 4630 SAMPLE 2661	INDEX 4631 SAMPLE 2670	INDEX 4632 SAMPLE 2698
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	UNION	UNION	UNION
FIELD	NOT GIVEN	NOT GIVEN	SIERRA GRANDE
WELL NAME	GAS SEEP	GAS SEEP	ROGERS NO. 1
LOCATION	SEC. 6, T22N, R34E	SEC. 6, T22N, R34E	SEC. 4, T29N, R29E
OWNER	W. E. FRENCH	W. E. FRENCH	SIERRA GRANDE OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/13/33	--/--/00	04/24/35
FORMATION	NOT GIVEN	NOT GIVEN	TRIA-SANTA ROSA
GEOLOGIC PROVINCE CODE	445	445	445
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1188
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.7	72.1	0.0
ETHANE	9.1	4.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.1	12.9	1.2
OXYGEN	2.6	2.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.5	8.5	98.4
HELIUM	0.00	0.02	0.00
HEATING VALUE*	840	802	0
SPECIFIC GRAVITY	0.698	0.724	1.521

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4633 SAMPLE 9186	INDEX 4634 SAMPLE 9185	INDEX 4635 SAMPLE 9101
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	VALENCIA	VALENCIA	VALENCIA
FIELD	COMANCHE DRAW	SPRING N OF MESA LUCERO	WATER WELL
WELL NAME	SPRING	SPRING	NOT GIVEN
LOCATION	SEC. 35, T6N, R3W	SEC. 15, T8N, R3W	SEC. 12, T9N, R5W
OWNER	USGS, QUALITY OF WATER BRANC	USGS, QUALITY OF WATER BRANC	U.S. BUREAU OF INDIAN AFFAIR
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/30/63	11/29/63	10/04/63
FORMATION	PENN-MADERA	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	1300	1650
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	TRACE
ETHANE	0.0	0.0	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.6	7.1	44.1
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.1	0.6
HYDROGEN	0.0	0.0	31.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	98.4	92.1	21.4
HELIUM	0.01	0.60	2.00
HEATING VALUE*	0	8	105
SPECIFIC GRAVITY	1.519	1.480	0.787

	INDEX 4636 SAMPLE 9106	INDEX 4637 SAMPLE 9624	INDEX 4638 SAMPLE 12220
STATE	NEW MEXICO	NEW MEXICO	NEW YORK
COUNTY	VALENCIA	VALENCIA	ALLEGANY
FIELD	WATER WELL	INDIAN WATER WELL OF MESITA	HILL E
WELL NAME	ARTESIAN WATER WELL IN SEC12	SEC. 12, T9N, R5W	ALLEN RAMSEY NO. 1
LOCATION	SEC. 12, T9N, R5W	U.S. BUREAU OF INDIAN AFFAIR	SCT0 TWP.
OWNER	U.S. BUREAU OF INDIAN AFFAIR	--/--/00	PROFESSIONAL PETROLEUM EXPL.
COMPLETED	09/27/63	11/13/64	--/--/00
SAMPLED	10/07/63	PERM-SAN ANDRES	02/27/70
FORMATION	PERM-SAN ANDRES	580	DEVO-CANEADEA
GEOLOGIC PROVINCE CODE	580	1725	160
DEPTH, FEET	1665	NOT GIVEN	902
WELLHEAD PRESSURE,PSIG	170	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN		8
COMPONENT, MOLE PCT			
METHANE	0.0	0.5	82.2
ETHANE	0.0	0.1	10.4
PROPANE	0.0	0.0	3.7
N-BUTANE	0.0	0.0	0.7
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	46.0	44.6	1.5
OXYGEN	1.6	TRACE	0.1
ARGON	0.7	0.7	0.0
HYDROGEN	4.7	0.0	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	42.7	52.1	0.0
HELIUM	2.30	2.00	0.11
HEATING VALUE*	15	7	1169
SPECIFIC GRAVITY	1.151	1.244	0.670

	INDEX 4639 SAMPLE 12304	INDEX 4640 SAMPLE 12305	INDEX 4641 SAMPLE 9611
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	ALLEGANY
FIELD	HILL E	HILL E	INDEPENDENCE LOT 106
WELL NAME	ALLEN RAMSEY NO. 1	ALLEN RAMSEY NO. 1	C. A. WILSON NO. 2304
LOCATION	SCT0 TWP.	SCT0 TWP.	INDEPENDENCE TWP.
OWNER	PROFESSIONAL PETROLEUM EXPL.	PROFESSIONAL PETROLEUM EXPL.	IROQUOIS GAS CORP.
COMPLETED	03/30/70	03/30/70	05/31/40
SAMPLED	06/17/70	06/17/70	10/14/64
FORMATION	NOT GIVEN	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	3849	4612
WELLHEAD PRESSURE,PSIG	415	1360	1824
OPEN FLOW, MCFD	46	7100	16000
COMPONENT, MOLE PCT			
METHANE	82.4	84.1	93.5
ETHANE	11.1	11.2	5.6
PROPANE	2.7	2.9	0.4
N-BUTANE	0.5	0.5	TRACE
ISOBUTANE	0.3	0.5	0.1
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	2.1	0.3	0.1
OXYGEN	0.5	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.04	0.04	0.02
HEATING VALUE*	1141	1181	1061
SPECIFIC GRAVITY	0.663	0.664	0.589

	INDEX 4642 SAMPLE 9615	INDEX 4643 SAMPLE 14725	INDEX 4644 SAMPLE 15896
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	ALLEGANY
FIELD	INDEPENDENCE LOT 67	NEW ORISKANY	NOT GIVEN
WELL NAME	MOSES NO. 2171	BEERS NO. 1	BENTLEY 20614-C
LOCATION	INDEPENDENCE TWP.	LOT 30, BOLIVAR TWP.	TOWN OF GRANGER
OWNER	IROQUOIS GAS CORP.	THOMAS E. HUNGERFORD	COLUMBIA GAS TRANS. CORP.
COMPLETED	09/01/17	07/01/76	01/24/79
SAMPLED	10/14/64	07/22/76	01/28/80
FORMATION	DEVO-U	DEVO-TULLY	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	788	4200	NOT GIVEN
WELLHEAD PRESSURE,PSIG	39	1130	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.9	81.2	79.1
ETHANE	8.9	12.1	13.3
PROPANE	3.2	4.2	4.4
N-BUTANE	1.0	1.0	1.3
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.4	0.7	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.05	0.02
HEATING VALUE*	1193	1213	1249
SPECIFIC GRAVITY	0.674	0.688	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4645 SAMPLE 15897	INDEX 4646 SAMPLE 10243	INDEX 4647 SAMPLE 16499
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	ALLEGANY
FIELD	NOT GIVEN	STATE LINE	WANDERMARK-HARDING
WELL NAME	BENTLEY 20614-T	LEE HARDER NO. 1	BLACK NO. 1
LOCATION	TOWN OF GRANGER	TOWN OF ALMA	WELLSVILLE N QUAD, WARD TWP
OWNER	COLUMBIA GAS TRANS. CORP.	CONSOLIDATED GAS SUPPLY CORP	WANDERMARK ASSOC.
COMPLETED	01/24/79	--/--/00	09/13/81
SAMPLED	01/28/80	10/21/65	04/20/82
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3050	4840	4199
WELLHEAD PRESSURE,PSIG	NOT GIVEN	530	1390
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2100
COMPONENT, MOLE PCT			
METHANE	74.7	93.1	88.5
ETHANE	15.8	4.4	9.0
PROPANE	7.0	0.7	1.9
N-BUTANE	1.3	0.2	0.2
ISOBUTANE	0.7	0.1	0.1
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.0	0.9	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	TRACE
HELIUM	TRACE	0.02	0.04
HEATING VALUE*	1107	1044	1108
SPECIFIC GRAVITY	0.741	0.601	0.622

	INDEX 4648 SAMPLE 14312	INDEX 4649 SAMPLE 10773	INDEX 4650 SAMPLE 11577
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ALLEGANY	ALLEGANY	ALLEGANY
FIELD	WATER WELL	WILDCAT	WILDCAT
WELL NAME	NO. 1	LYTLE NO. 1	CLAIR NO. 1
LOCATION	BELMONT	CANASERAGA QUAD.	ALMA TWP.
OWNER	N.Y. DEPT. OF TRANSPORTATIO	GREAT LAKES GAS CORP.	QUAKER STATE OIL REF. CORP.
COMPLETED	--/--/00	11/05/66	07/11/68
SAMPLED	04/02/75	11/05/66	07/08/68
FORMATION	NOT GIVEN	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	400	3486	4652
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1160
OPEN FLOW, MCFD	NOT GIVEN	2	1700
COMPONENT, MOLE PCT			
METHANE	76.2	84.0	87.5
ETHANE	TRACE	10.8	9.6
PROPANE	TRACE	2.6	1.8
N-BUTANE	0.0	0.6	0.5
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	21.7	1.4	0.3
OXYGEN	1.4	0.0	0.0
ARGON	0.4	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	TRACE	0.03	0.14
HEATING VALUE*	772	1153	1122
SPECIFIC GRAVITY	0.658	0.658	0.629

	INDEX 4651 SAMPLE 10252	INDEX 4652 SAMPLE 14407	INDEX 4653 SAMPLE 15207
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	ALLEGANY STATE PARK	BRADFORD	BRADFORD
WELL NAME	LENA LOCKWOOD NO. 5	COMBO	W-15
LOCATION	NOT GIVEN	OLEAN	NOT GIVEN
OWNER	FELMONT OIL CORP.	THROPP OIL & GAS CO.	QUAKER STATE OIL REF. CORP.
COMPLETED	12/13/65	06/16/75	08/10/77
SAMPLED	10/26/65	06/16/75	02/02/78
FORMATION	DEVO-ORISKANY	NOT GIVEN	DEVO-BRADFORD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4279	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1100	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	8000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.1	40.7	44.0
ETHANE	10.2	14.8	25.4
PROPANE	2.9	6.4	17.6
N-BUTANE	0.7	4.1	5.8
ISOBUTANE	0.5	0.0	2.9
N-PENTANE	0.2	0.0	1.3
ISOPENTANE	0.1	20.8	1.6
CYCLOPENTANE	TRACE	0.3	0.2
HEXANES PLUS	0.2	0.0	0.8
NITROGEN	1.9	10.1	TRACE
OXYGEN	0.0	0.9	TRACE
ARGON	TRACE	0.3	0.0
HYDROGEN	0.0	TRACE	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.7	TRACE
HELIUM	0.04	0.03	0.02
HEATING VALUE*	1173	1879	1824
SPECIFIC GRAVITY	0.668	1.229	1.066

	INDEX 4654 SAMPLE 15906	INDEX 4655 SAMPLE 15945	INDEX 4656 SAMPLE 9960
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	BRADFORD	BRADFORD	MCCLURE HOLLOW
WELL NAME	Q. S. NO. 3	QUINLAN E NO. 2	FRED SMITH NO. 1
LOCATION	TOWN OF OLEAN	TOWN OF OLEAN	ALLEGANY TWP.
OWNER	BARNUM 100 DEVELOPMENT	PENNZOIL CO.	THROPP OIL AND GAS CORP.
COMPLETED	--/--/00	01/20/80	05/01/65
SAMPLED	02/23/80	04/29/80	07/03/65
FORMATION	DEVO-BRADFORD	DEVO-	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3927
WELLHEAD PRESSURE,PSIG	40	NOT GIVEN	1815
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2100
COMPONENT, MOLE PCT			
METHANE	71.2	79.9	82.9
ETHANE	17.1	12.7	10.6
PROPANE	7.3	4.3	3.7
N-BUTANE	1.7	1.0	0.9
ISOBUTANE	0.9	0.5	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.4	1.2	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.03	0.02	0.05
HEATING VALUE*	1341	1220	1196
SPECIFIC GRAVITY	0.766	0.698	0.680

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4657 SAMPLE 6280	INDEX 4658 SAMPLE 15168	INDEX 4659 SAMPLE 15844
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	SENECA NO. 1	GAS SEEP IN LAKE	SEEP
LOCATION	COLD SPRING TWP.	ELLICOTTVILLE QUAD.	TOWN OF OTTO
OWNER	DEVONIAN GAS & OIL CO.	BOB WESTFALL	WESLEY FARMER
COMPLETED	03/05/57	--/--/00	--/--/00
SAMPLED	03/15/57	12/03/77	11/15/79
FORMATION	DEVO-CHEMUNG	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	155	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	76.4	71.2
ETHANE	6.6	0.0	0.3
PROPANE	2.1	TRACE	TRACE
N-BUTANE	0.4	0.0	TRACE
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	1.3	2.0	27.8
OXYGEN	TRACE	1.0	TRACE
ARGON	0.0	0.1	0.5
HYDROGEN	0.5	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	20.6	0.2
HELIUM	0.19	TRACE	0.02
HEATING VALUE*	1107	774	727
SPECIFIC GRAVITY	0.629	0.770	0.677

	INDEX 4660 SAMPLE 10826	INDEX 4661 SAMPLE 17279	INDEX 4662 SAMPLE 17280
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	OLEAN N POOL	RANDOLPH	RANDOLPH
WELL NAME	FELMONT OIL NO. 1 FEE	MEADE NO. 1	SENN NO. 2
LOCATION	OLEAN QUAD.	SEC.C IVORT QUAD,RANDOLPH TW	SEC.C,RANDOLPH QUAD,RANDOLPH
OWNER	FELMONT OIL CORP.	PAUL & MARJORIE MEADE	DALE S. & WILDA SENN
COMPLETED	11/21/66	06/01/82	06/03/82
SAMPLED	12/14/66	09/08/84	09/08/84
FORMATION	DEVO-	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	998	4570	4210
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1250	1200
OPEN FLOW, MCFD	10	1237	2768
COMPONENT, MOLE PCT			
METHANE	48.1	93.9	93.8
ETHANE	22.8	2.2	2.2
PROPANE	16.2	0.2	0.2
N-BUTANE	5.6	0.1	0.1
ISOBUTANE	2.9	0.0	0.0
N-PENTANE	1.6	0.1	TRACE
ISOPENTANE	0.6	TRACE	TRACE
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.9	0.1	0.1
NITROGEN	0.7	3.1	3.4
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.02	0.10	0.11
HEATING VALUE*	1751	1012	1003
SPECIFIC GRAVITY	1.028	0.587	0.585

	INDEX 4663 SAMPLE 15842	INDEX 4664 SAMPLE 15843	INDEX 4665 SAMPLE 11457
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CATTARAUGUS	CATTARAUGUS	CATTARAUGUS
FIELD	UTLEY BROOK	UTLEY BROOK	WILDCAT
WELL NAME	ZOAR VALLEY NO. 1163A	ZOAR VALLEY NO. 1163A	COUNTRY SIDE S&G NO. 1
LOCATION	UTLEY BROOK	TOWN OF OTTO	NEW ALBION TWP.
OWNER	FLINT OIL & GAS, INC.	FLINT OIL & GAS, INC.	DAN GERNOTT
COMPLETED	06/06/77	06/06/77	02/01/68
SAMPLED	11/15/79	11/15/79	04/16/68
FORMATION	DEVO-SHALE	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	300	2700	3172
WELLHEAD PRESSURE,PSIG	120	1000	802
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	93
COMPONENT, MOLE PCT			
METHANE	83.6	91.5	89.0
ETHANE	10.1	2.3	3.8
PROPANE	3.1	0.2	0.3
N-BUTANE	0.7	0.1	0.3
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.5	5.5	6.1
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.06	0.18	0.16
HEATING VALUE*	1157	986	988
SPECIFIC GRAVITY	0.666	0.596	0.607

	INDEX 4666 SAMPLE 9042	INDEX 4667 SAMPLE 15682	INDEX 4668 SAMPLE 14459
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CAYUGA	CAYUGA	CAYUGA
FIELD	AUBURN	AUBURN W	WATER WELL
WELL NAME	O'HARA NO. 2	FEE NO. 1	SAM OSARO NO. 1
LOCATION	NOT GIVEN	UNION SPRINGS TWP.	NOT GIVEN
OWNER	MIDWEST OIL CORP.	N. Y. CONFERENCE OF 7TH DAY	SAM OSARO
COMPLETED	09/03/62	04/18/78	08/--/75
SAMPLED	07/10/63	06/29/79	--/--/00
FORMATION	SILU-MEDINA & ORDO-QUEENSTON	ORDO-QUEENSTON	SILU-LOCKPORT
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1510	1950	NOT GIVEN
WELLHEAD PRESSURE,PSIG	615	610	NOT GIVEN
OPEN FLOW, MCFD	1500	441	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	96.3	73.1
ETHANE	1.1	1.5	0.1
PROPANE	0.1	0.1	0.0
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.4	1.5	24.9
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.10	0.11	1.37
HEATING VALUE*	1007	1011	742
SPECIFIC GRAVITY	0.566	0.571	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4669 SAMPLE 13505	INDEX 4670 SAMPLE 10880	INDEX 4671 SAMPLE 15559
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	BUSTI	BUSTI E	BUSTI GAS
WELL NAME	CLARENCE NELSON NO. 1	ANDERSON-COONS UNIT NO. 1	HOLLIDAY NO. 1
LOCATION	JAMESTOWN USGS QUAD.	JAMESTOWN QUAD.	TOWN OF BUSTI
OWNER	KIN TEX DRILLING	GEORGE L. COONS	BOUNTY OIL & GAS, INC.
COMPLETED	10/02/68	01/18/67	07/16/78
SAMPLED	01/15/73	03/01/67	01/30/79
FORMATION	DEVO-GLADE	DEVO-	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	390	661	4446
WELLHEAD PRESSURE,PSIG	NOT GIVEN	215	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	10	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.6	86.4	89.8
ETHANE	3.0	7.9	3.5
PROPANE	0.5	1.8	0.8
N-BUTANE	TRACE	0.5	0.3
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	0.2	2.3	4.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.7	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	17.6	0.2	TRACE
HELIUM	0.04	0.17	0.13
HEATING VALUE*	863	1083	1030
SPECIFIC GRAVITY	0.796	0.632	0.614

	INDEX 4672 SAMPLE 17481	INDEX 4673 SAMPLE 9792	INDEX 4674 SAMPLE 17464
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	CHERRY CREEK	DEWITTVILLE	ELLINGTON
WELL NAME	LANGLESS NO. 1	BOSWELL NO. 1	WEHRENBERG NO. 1
LOCATION	SEC. D CHERRY CRK. QD.&TWP.	ELLERY TWP.	SEC.E,KENNEDY QUAD,ELLINGTON
OWNER	SEIS-TEX, GEOPHYSICAL, LTD.	MINARD RUN OIL CO.	TRAHAN PETROLEUM, INC.
COMPLETED	02/25/82	02/04/65	10/26/82
SAMPLED	10/10/84	03/10/65	10/01/84
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3850	3515	4118
WELLHEAD PRESSURE,PSIG	1075	970	1230
OPEN FLOW, MCFD	2320	580	1250
COMPONENT, MOLE PCT			
METHANE	92.3	93.0	92.7
ETHANE	2.4	2.8	2.7
PROPANE	0.2	0.3	0.2
N-BUTANE	0.1	TRACE	0.1
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	4.6	3.6	3.8
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.14	0.13	0.11
HEATING VALUE*	996	1003	1005
SPECIFIC GRAVITY	0.594	0.587	0.592

	INDEX 4675 SAMPLE 17498	INDEX 4676 SAMPLE 17701	INDEX 4677 SAMPLE 17799
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	FRENCH CREEK-MEDINA	GERRY	GERRY
WELL NAME	C. WOLK NO. 1	TOMPSETT NO. 4	FORBES NO. 6
LOCATION	FRENCH CREEK TOWNSHIP	GERRY TOWNSHIP	GERRY TOWNSHIP
OWNER	ENVIROGAS, INC.	BEREA OIL & GAS CORP.	BEREA OIL & GAS CORP.
COMPLETED	06/23/82	12/11/84	04/04/85
SAMPLED	10/15/84	06/07/85	08/06/85
FORMATION	SILU-MEDINA	DEVO-BASS ISLAND	DEVO-BASS ISLAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4080	2846	2310
WELLHEAD PRESSURE,PSIG	1235	450	480
OPEN FLOW, MCFD	900	25	1500
COMPONENT, MOLE PCT			
METHANE	88.2	59.9	79.8
ETHANE	4.5	19.7	11.4
PROPANE	1.0	10.4	4.2
N-BUTANE	0.3	3.3	1.0
ISOBUTANE	0.2	1.1	0.3
N-PENTANE	0.1	1.0	0.2
ISOPENTANE	0.1	0.7	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	4.9	3.2	2.2
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.20	0.01	0.05
HEATING VALUE*	1031	1484	1197
SPECIFIC GRAVITY	0.619	0.886	0.699

	INDEX 4678 SAMPLE 17845	INDEX 4679 SAMPLE 17497	INDEX 4680 SAMPLE 15523
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	GERRY TOWNSHIP	KIANTONE-MEDINA	LAKE SHORE
WELL NAME	MOREY 6287 NO. 1	T. NORDLAND NO. 1A	SHALLOW GAS SEEP
LOCATION	SEC. A, GERRY QUAD	KIANTONE TOWNSHIP	CASSADAGA LAKE
OWNER	EMPIRE EXPLORATION, INC.	ENVIROGAS, INC.	MARVIN LEWIS
COMPLETED	02/21/83	01/15/82	--/--/00
SAMPLED	09/25/85	10/15/84	11/21/78
FORMATION	DEVO-ONONDAGA	SILU-MEDINA	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2636	4200	NOT GIVEN
WELLHEAD PRESSURE,PSIG	725	1210	NOT GIVEN
OPEN FLOW, MCFD	6000	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.3	93.7	60.6
ETHANE	11.3	2.4	1.4
PROPANE	4.7	0.2	0.2
N-BUTANE	1.2	0.1	0.1
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	3.1	3.2	35.2
OXYGEN	0.1	TRACE	1.7
ARGON	TRACE	TRACE	0.4
HYDROGEN	0.2	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.13	0.09	0.06
HEATING VALUE*	1196	1001	653
SPECIFIC GRAVITY	0.707	0.583	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4681 SAMPLE 15562	INDEX 4682 SAMPLE 15588	INDEX 4683 SAMPLE 15637
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	LAKE SHORE	LAKE SHORE	LAKE SHORE
WELL NAME	R. CASH UNIT NO. 1	ASSUMPTION NO. 104	ROBERTSON NO. 540
LOCATION	TOWN OF ARKWRIGHT	POMFRET TWP.	ARKWRIGHT TWP.
OWNER	PARAGON RESOURCES, INC.	PARAGON RESOURCES, INC.	PARAGON RESOURCES, INC.
COMPLETED	09/05/74	10/22/74	05/03/79
SAMPLED	02/07/79	03/23/79	06/01/79
FORMATION	DEVO-SHALE	DEVO-SHALE	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2500	3180	NOT GIVEN
WELLHEAD PRESSURE,PSIG	70	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	116	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	82.9	83.9	87.0
ETHANE	9.1	8.4	5.7
PROPANE	3.7	3.4	1.7
N-BUTANE	1.1	0.7	0.4
ISOBUTANE	0.3	0.2	0.1
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.8	2.3	4.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.3	0.4	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.15	0.15	0.23
HEATING VALUE*	1173	1134	1060
SPECIFIC GRAVITY	0.675	0.658	0.629

	INDEX 4684 SAMPLE 15686	INDEX 4685 SAMPLE 15793	INDEX 4686 SAMPLE 15794
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	LAKE SHORE	LAKE SHORE	LAKE SHORE
WELL NAME	MANCUSO NO. 1, 31-013-13209	MID MEADOWS UNIT 406	NOTARO UNIT 505
LOCATION	CHARLOTTE TWP.	TOWN OF CHAUTAUQUA	TOWN OF CHAUTAUQUA
OWNER	DESERT GAS EXPLORATION	PARAGON RESOURCES, INC.	PARAGON RESOURCES, INC.
COMPLETED	--/--/00	05/10/77	05/20/77
SAMPLED	07/07/79	09/27/78	09/27/79
FORMATION	DEVO-SHALE	SILU-MEDINA	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1700	3400	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	145
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.8	92.3	86.0
ETHANE	7.5	3.2	6.4
PROPANE	2.7	0.4	2.7
N-BUTANE	0.7	0.1	0.7
ISOBUTANE	0.2	TRACE	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.1	3.6	2.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.10	0.15	0.17
HEATING VALUE*	1122	1015	1110
SPECIFIC GRAVITY	0.648	0.594	0.644

	INDEX 4687 SAMPLE 15813	INDEX 4688 SAMPLE 17479	INDEX 4689 SAMPLE 17876
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	LAKE SHORE	LAKE SHORE	LAKE SHORE
WELL NAME	KNIGHT-KOFOED 31-013-14420	HOWARD GILBERT NO. 1	BOLIBRUCH NO. 1
LOCATION	TOWN OF RIPLEY	SEC. 6-HAMLET QD CHAROTTE TP	SEC. 8, HAMLET QUAD., CHARLO
OWNER	J. M. RESOURCES	GREAT WESTERN DEV. CO.	U.S. ENERGY DEVELOPMENT CORP
COMPLETED	10/02/79	--/--/83	--/--/00
SAMPLED	10/25/79	10/04/84	10/24/85
FORMATION	SILU-MEDINA	SILU-MEDINA	DEVO-ORISKANY & BASS ISLAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2500	147	2700
WELLHEAD PRESSURE,PSIG	730	880	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1813	2800
COMPONENT, MOLE PCT			
METHANE	91.0	91.7	76.9
ETHANE	3.4	3.0	10.4
PROPANE	0.6	0.4	4.0
N-BUTANE	0.2	0.1	1.1
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	TRACE	TRACE	0.3
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	4.3	4.4	5.3
OXYGEN	0.0	0.0	0.8
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.15	0.14	0.13
HEATING VALUE*	1018	1005	1152
SPECIFIC GRAVITY	0.603	0.602	0.711

	INDEX 4690 SAMPLE 14857	INDEX 4691 SAMPLE 15635	INDEX 4692 SAMPLE 16468
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	CHAUTAUQUA 4 NO. 1	S. Z. PAK NO. 1 31-013-12717	N.Y. REF. AREA 1 NO. 8
LOCATION	PANAMA QUAD.	POMFRET TWP.	HAMLET QUAD. CHERRY CRK TWP.
OWNER	SEIS-EX, GEOPHYSICAL, LTD.	GAILBERT EXPLORATIONS	BEREA OIL & GAS CORP.
COMPLETED	11/03/76	05/22/77	10/20/81
SAMPLED	11/03/76	06/01/79	03/26/82
FORMATION	SILU-MEDINA	DEVO-ONONDAGA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4237	1025	3970
WELLHEAD PRESSURE,PSIG	1150	510	1150
OPEN FLOW, MCFD	NOT GIVEN	25000	1500
COMPONENT, MOLE PCT			
METHANE	87.8	81.2	92.3
ETHANE	3.7	11.9	2.5
PROPANE	0.9	3.8	0.2
N-BUTANE	0.3	0.7	0.1
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	6.7	2.1	4.5
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	TRACE
HELIUM	0.15	0.17	0.12
HEATING VALUE*	1010	1167	998
SPECIFIC GRAVITY	0.623	0.678	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4693 SAMPLE 17797	INDEX 4694 SAMPLE 17798	INDEX 4695 SAMPLE 17496
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	NOT GIVEN	NOT GIVEN	POLAND-MEDINA
WELL NAME	CHAUTAUQUA COUNTY NO. 8	WINTON NO.5	J. HILL NO. 1
LOCATION	ELLERY TOWNSHIP	ELLERY TOWNSHIP	POLAND TOWNSHIP
OWNER	BEREA OIL & GAS CORP.	BEREA OIL & GAS CORP.	ENVIROGAS, INC.
COMPLETED	01/20/85	02/06/85	07/07/82
SAMPLED	08/06/85	08/06/85	10/15/84
FORMATION	DEVO-BASS ISLAND	DEVO-BASS ISLAND	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2730	2818	3910
WELLHEAD PRESSURE,PSIG	830	590	1345
OPEN FLOW, MCFD	3900	3500	5000
COMPONENT, MOLE PCT			
METHANE	94.6	80.8	92.9
ETHANE	1.5	10.4	2.2
PROPANE	TRACE	3.7	0.2
N-BUTANE	0.0	0.8	0.1
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	3.1	2.9	4.1
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.19	0.16	0.12
HEATING VALUE*	986	1152	995
SPECIFIC GRAVITY	0.573	0.676	0.588

	INDEX 4696 SAMPLE 15812	INDEX 4697 SAMPLE 14615	INDEX 4698 SAMPLE 15151
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHAUTAUQUA
FIELD	RIPLEY	WILDCAT	WILDCAT
WELL NAME	KNIGHT-KOFOED 31-013-14420	LEGTERS BROTHERS NO. 1	SIMMENTAL NO. 1
LOCATION	TOWN OF RIPLEY	NOT GIVEN	PANAMA (T)
OWNER	J. M. RESOURCES	EDGECLIFF RESOURCES, INC.	BOUNTY OIL & GAS, INC.
COMPLETED	10/02/79	--/--/00	10/26/77
SAMPLED	10/25/79	03/11/76	11/18/77
FORMATION	DEVO-SHALE	SILU-MEDINA	SILU-GRIMSBY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	460	3828	4366
WELLHEAD PRESSURE,PSIG	100	825	NOT GIVEN
OPEN FLOW, MCFD	3	50	73
COMPONENT, MOLE PCT			
METHANE	80.0	90.3	90.8
ETHANE	10.4	4.2	3.1
PROPANE	4.7	0.8	0.4
N-BUTANE	1.1	0.2	0.1
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.4	4.0	5.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.05	0.14	0.14
HEATING VALUE*	1189	1034	998
SPECIFIC GRAVITY	0.692	0.611	0.609

	INDEX 4699 SAMPLE 15566	INDEX 4700 SAMPLE 15567	INDEX 4701 SAMPLE 8532
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHAUTAUQUA	CHAUTAUQUA	CHEMUNG
FIELD	WILDCAT	WILDCAT	VAN ETTEN
WELL NAME	MILLER NO. 1	MILLER NO. 1	N-833
LOCATION	TOWN OF KIANTONE	TOWN OF KIANTONE	NOT GIVEN
OWNER	SEIS-EX, GEOPHYSICAL, LTD.	SEIS-EX, GEOPHYSICAL, LTD.	NEW YORK STATE NAT. GAS CORP
COMPLETED	01/--/79	01/--/79	01/05/62
SAMPLED	02/14/79	02/14/79	06/24/62
FORMATION	DEVO-GLADE	SILU-MEDINA	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	500	4500	3376
WELLHEAD PRESSURE,PSIG	350	NOT GIVEN	1360
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3355
COMPONENT, MOLE PCT			
METHANE	91.4	92.7	97.9
ETHANE	4.0	2.6	1.7
PROPANE	0.8	0.3	TRACE
N-BUTANE	0.2	TRACE	TRACE
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	3.0	4.1	0.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.11	0.08	0.04
HEATING VALUE*	1039	999	1022
SPECIFIC GRAVITY	0.603	0.589	0.562

	INDEX 4702 SAMPLE 10256	INDEX 4703 SAMPLE 13744	INDEX 4704 SAMPLE 15641
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	CHENANGO	DELAWARE	ERIE
FIELD	SMITHFIELD FLATS	WILDCAT	AKRON
WELL NAME	DECKER NO. 2	WEICKERT NO. 1	FEE NO. 1
LOCATION	WILBUR DECKER FARM	MOBART QUAD. TWP.	NEWSTEAD TWP.
OWNER	BENEGAM'SLET OIL & GAS CO.	ANSCHUTZ CORP.	AKRON CENTRAL SCHOOL
COMPLETED	01/01/64	--/--/00	05/12/79
SAMPLED	10/28/65	10/08/73	06/08/79
FORMATION	SILU-DECKER	SILU-ONEIDA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2020	5350	800
WELLHEAD PRESSURE,PSIG	565	42	405
OPEN FLOW, MCFD	2500	160	1350
COMPONENT, MOLE PCT			
METHANE	97.3	97.9	85.6
ETHANE	1.8	1.5	8.0
PROPANE	0.2	0.1	1.9
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.3	0.3	3.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.06	0.03	0.23
HEATING VALUE*	1024	1022	1090
SPECIFIC GRAVITY	0.565	0.563	0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4705 SAMPLE 15841	INDEX 4706 SAMPLE 9534	INDEX 4707 SAMPLE 10228
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ERIE	ERIE	ERIE
FIELD	BUFFALO	FOUR MILE LEVEL	GLENWOOD E
WELL NAME	FEE NO. 1	EELS NO. 1671	MANCHER NO. 1790
LOCATION	CHEEKTOWAGA	COLLINS TWP. R8	GOLDEN TWP.
OWNER	MOTHER OF DIVINE CHURCH	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.
COMPLETED	--/--/00	06/13/27	03/08/62
SAMPLED	11/16/79	08/11/64	10/18/65
FORMATION	SILU-LOCKPORT	SILU-MEDINA, WHITE	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	2341	2748
WELLHEAD PRESSURE,PSIG	NOT GIVEN	124	818
OPEN FLOW, MCFD	NOT GIVEN	1592	6200
COMPONENT, MOLE PCT			
METHANE	84.2	91.0	93.2
ETHANE	5.2	2.5	2.2
PROPANE	1.1	0.4	0.2
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.2	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	6.6	5.6	4.2
OXYGEN	0.7	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	0.21	0.21	0.17
HEATING VALUE*	1020	986	989
SPECIFIC GRAVITY	0.642	0.596	0.584

	INDEX 4708 SAMPLE 372	INDEX 4709 SAMPLE 374	INDEX 4710 SAMPLE 375
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ERIE	ERIE	ERIE
FIELD	LAWTONS	LAWTONS	LAWTONS
WELL NAME	GORMAN NO. 1 WELL NO. 514	DILLINGTON NO. 1 NO. 517	HEAVY NO. 1 WELL NO. 468
LOCATION	NOT GIVEN	20 MI. SE HAMBURG	24 MI. SE HAMBURG
OWNER	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.
COMPLETED	--/--/17	--/--/17	--/--/16
SAMPLED	06/22/20	06/22/20	06/22/20
FORMATION	SILU-MEDINA	SILU-MEDINA	DEVO-FLINT
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2450	2400	1550
WELLHEAD PRESSURE,PSIG	360	320	500
OPEN FLOW, MCFD	1500	2000	700
COMPONENT, MOLE PCT			
METHANE	94.7	85.7	75.5
ETHANE	1.9	1.0	23.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.7	10.0	0.6
OXYGEN	1.3	2.9	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.24	0.25	0.24
HEATING VALUE*	993	886	1179
SPECIFIC GRAVITY	0.578	0.618	0.673

	INDEX 4711 SAMPLE 376	INDEX 4712 SAMPLE 9533	INDEX 4713 SAMPLE 15939
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ERIE	ERIE	ERIE
FIELD	LAWTONS	MARSHFIELD	NOT GIVEN
WELL NAME	HOUVER NO. 1 WELL NO. 526	DIBLASI NO. 669	NATURAL SEEP
LOCATION	25 MI. SE HAMBURG	COLLINS TWP. R7	TOWN OF EDEN
OWNER	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.	N. Y. BUREAU OF MINERAL RESO
COMPLETED	--/--/16	01/11/23	--/--/00
SAMPLED	06/22/20	08/1/64	04/08/80
FORMATION	DEVO-FLINT	DEVO-ONONDAGA	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1500	1840	NOT GIVEN
WELLHEAD PRESSURE,PSIG	500	245	NOT GIVEN
OPEN FLOW, MCFD	750	150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.9	79.0	71.3
ETHANE	16.5	12.3	15.1
PROPANE	---	4.8	7.8
N-BUTANE	---	1.1	1.6
ISOBUTANE	---	0.5	0.6
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.4	0.1
NITROGEN	6.5	1.7	2.2
OXYGEN	2.7	TRACE	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.7
HELIUM	0.28	0.15	0.02
HEATING VALUE*	1060	1221	1296
SPECIFIC GRAVITY	0.689	0.704	0.769

	INDEX 4714 SAMPLE 17619	INDEX 4715 SAMPLE 425	INDEX 4716 SAMPLE 15895
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ERIE	GENESEE	GENESEE
FIELD	ORCHARD PARK	ALDEN	INDIAN FALLS
WELL NAME	OAR NO. 1	EWELL NO. T	KLOTZBACH
LOCATION	SEC. A; GOLDEN QUAD	TOWNSITE	TOWN OF ALABAMA
OWNER	EASTERN MINERALS ASSOC.	REPUBLIC LT., HEAT & PRODUCI	JUD NOBLE & ASSOC.
COMPLETED	07/06/85	--/--/94	10/25/74
SAMPLED	08/24/85	09/07/20	01/30/80
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1790	1300	940
WELLHEAD PRESSURE,PSIG	360	170	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.4	87.7	85.3
ETHANE	2.8	9.5	8.4
PROPANE	0.2	---	2.0
N-BUTANE	0.1	---	0.4
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	4.3	1.5	3.1
OXYGEN	TRACE	0.7	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.4	TRACE
HELIUM	0.21	0.18	0.28
HEATING VALUE*	994	1059	1099
SPECIFIC GRAVITY	0.594	0.615	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4717 SAMPLE 13585	INDEX 4718 SAMPLE 367	INDEX 4719 SAMPLE 9197
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	GENESEE	LIVINGSTON	LIVINGSTON
FIELD	WILDCAT	CALEDONIA	LEICESTER
WELL NAME	KERN UNIT NO. 1	MCGOVERN NO. 1	PARNELL N-883
LOCATION	NOT GIVEN	1 MI. N CALEDONIA	NOT GIVEN
OWNER	JUD NOBLE & ASSOC.	CALEDONIA NATURAL GAS CO.	NEW YORK STATE NAT. GAS CORP
COMPLETED	09/--/72	--/--/01	08/05/63
SAMPLED	04/23/73	06/19/20	10/16/63
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	720	1090	1964
WELLHEAD PRESSURE,PSIG	360	80	550
OPEN FLOW, MCFD	288	350	582
COMPONENT, MOLE PCT			
METHANE	84.6	75.2	85.6
ETHANE	8.5	6.4	6.9
PROPANE	2.2	---	1.5
N-BUTANE	0.3	---	0.3
ISOBUTANE	0.5	---	0.1
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	3.2	16.0	4.8
OXYGEN	0.0	1.9	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.22	0.24	0.20
HEATING VALUE*	1107	876	1061
SPECIFIC GRAVITY	0.648	0.662	0.638

	INDEX 4720 SAMPLE 17362	INDEX 4721 SAMPLE 15808	INDEX 4722 SAMPLE 9811
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	LIVINGSTON	LIVINGSTON	MADISON
FIELD	UMLET CORNERS	WILDCAT	HAMILTON
WELL NAME	ROGERS NO. 1 LRC NO. 93	EVERMAN-FEE NO. 1	W. ALBIE NO. 1 N-939
LOCATION	SEC. H, LEROY QUAD, YORK TWP	WEST SPARTA, N.Y.	MADISON TWP.
OWNER	LENAPE RESOURCES CORP.	M. EVERMAN	NEW YORK STATE NAT. GAS CORP
COMPLETED	06/18/82	--/--/00	12/29/64
SAMPLED	07/24/84	10/15/79	03/16/65
FORMATION	SILU-MEDINA	DEVO-HAMILTON	SILU-HERKIMER SAUQUOIT&ONEI-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1509	600	2133
WELLHEAD PRESSURE,PSIG	200	150	710
OPEN FLOW, MCFD	1043	NOT GIVEN	192
COMPONENT, MOLE PCT			
METHANE	85.4	93.7	98.1
ETHANE	7.0	0.2	1.3
PROPANE	1.6	TRACE	0.0
N-BUTANE	0.3	0.1	0.0
ISOBUTANE	0.2	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	4.8	3.4	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	2.4	TRACE
HELIUM	0.24	0.01	0.03
HEATING VALUE*	1058	961	1017
SPECIFIC GRAVITY	0.637	0.598	0.562

	INDEX 4723 SAMPLE 10254	INDEX 4724 SAMPLE 9938	INDEX 4725 SAMPLE 9246
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ONEIDA	ONTARIO	ONTARIO
FIELD	SANGER	BLOOMFIELD E	CANANDAIGUA
WELL NAME	DOUGLAS ELLIOT NO. 1	C. MURPHY NO. 1	SANDERS NO. 1
LOCATION	EASTERN DIST.	BLOOMFIELD TWP.	BRISTOL
OWNER	CONSOLIDATED GAS SUPPLY CORP	BRADLEY PRODUCING CORP.	DR. W. FRANCHOT & CO., INC.
COMPLETED	05/19/59	02/08/62	09/16/60
SAMPLED	10/27/65	06/22/65	02/04/64
FORMATION	SILU-HERKIMER	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1600	2203	3038
WELLHEAD PRESSURE,PSIG	645	590	410
OPEN FLOW, MCFD	264000	1500	3500
COMPONENT, MOLE PCT			
METHANE	97.2	89.9	95.0
ETHANE	1.2	5.6	3.0
PROPANE	0.1	0.6	0.5
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.4	3.0	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.05	0.20	0.30
HEATING VALUE*	1009	1049	1009
SPECIFIC GRAVITY	0.567	0.610	0.585

	INDEX 4726 SAMPLE 10923	INDEX 4727 SAMPLE 420	INDEX 4728 SAMPLE 421
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ONTARIO	ONTARIO	ONTARIO
FIELD	NOT GIVEN	ONTARIO	ONTARIO
WELL NAME	ONDERDONK NO. 1	MORROW NO. 1	HAYES NO. 1
LOCATION	SENECA TWP.	BLK. 37, W BLOOMFIELD TWP.	BLK. 36, BRISTOL TWP.
OWNER	OKLAHOMA FUEL & ENERGY CORP.	REPUBLIC LT., HEAT & PRODUCI	REPUBLIC LT., HEAT & PRODUCI
COMPLETED	02/20/67	--/--/12	--/--/08
SAMPLED	04/10/67	09/07/20	09/07/20
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2210	2088	2190
WELLHEAD PRESSURE,PSIG	600	90	210
OPEN FLOW, MCFD	1400	35	75
COMPONENT, MOLE PCT			
METHANE	95.7	91.2	93.4
ETHANE	1.2	6.3	3.9
PROPANE	0.1	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	2.6	2.0	1.8
OXYGEN	0.1	0.0	0.8
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.0
HELIUM	0.15	0.18	0.23
HEATING VALUE*	997	1037	1016
SPECIFIC GRAVITY	0.575	0.597	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4729 SAMPLE 428	INDEX 4730 SAMPLE 429	INDEX 4731 SAMPLE 434
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	ONTARIO	ONTARIO	OSWEGO
FIELD	ONTARIO	ONTARIO	PULASKI
WELL NAME	MAYES NO. 2	DAVIDSON NO. 1	PINE GROVE NO. 1
LOCATION	BLK. 36, BRISTOL TWP.	BLK. 76, BLOOMFIELD TWP.	RICHLAND TWP.5 MI NW PULASKI
OWNER	REPUBLIC LT., HEAT & PRODUCI	REPUBLIC LT., HEAT & PRODUCI	PULASKI GAS & OIL CO.
COMPLETED	--/--/10	--/--/16	--/--/14
SAMPLED	09/07/20	09/07/20	09/10/20
FORMATION	DEVO-HAMILTON	DEVO-HAMILTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2005	445	600
WELLHEAD PRESSURE,PSIG	25	34	50
OPEN FLOW, MCFD	135	700	500
COMPONENT, MOLE PCT			
METHANE	82.8	69.3	96.9
ETHANE	3.5	27.0	2.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	13.0	0.0	0.1
OXYGEN	0.7	0.7	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	3.3	0.2
HELIUM	TRACE	TRACE	0.10
HEATING VALUE*	981	1186	1019
SPECIFIC GRAVITY	0.634	0.726	0.569

	INDEX 4732 SAMPLE 436	INDEX 4733 SAMPLE 14276	INDEX 4734 SAMPLE 2374
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	OSWEGO	RENSSELAER	SCHUYLER
FIELD	SANDY CREEK	NOT GIVEN	DUNDEE-WAYNE
WELL NAME	MOLLIS NO. 4	JOHN BUONO WATER WELL	E. PULVER NO. 1
LOCATION	2 MI. E SANDY CREEK	ROUTE 9J, SCHODACK LANDING	NOT GIVEN
OWNER	SANDY CREEK OIL & GAS CO.	JOHN L. BUONO	BELMONT QUADRANGLE DRILLING
COMPLETED	--/--/14	08/17/73	02/26/30
SAMPLED	09/10/20	02/21/75	08/14/31
FORMATION	ORDO-TRENTON	DEVO-BLACK SHALE	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	100	160
DEPTH, FEET	670	383	2075
WELLHEAD PRESSURE,PSIG	5	NOT GIVEN	700
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5500
COMPONENT, MOLE PCT			
METHANE	97.3	82.8	90.8
ETHANE	1.4	TRACE	6.5
PROPANE	---	TRACE	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	1.2	16.7	1.7
OXYGEN	0.0	TRACE	0.6
ARGON	---	0.3	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	TRACE	0.4
HELIUM	0.14	0.05	0.04
HEATING VALUE*	1031	839	1036
SPECIFIC GRAVITY	0.566	0.625	0.601

	INDEX 4735 SAMPLE 2375	INDEX 4736 SAMPLE 15900	INDEX 4737 SAMPLE 2431
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	SCHUYLER	SCHUYLER	SCHUYLER
FIELD	DUNDEE-WAYNE	NOT GIVEN	WAYNE
WELL NAME	G. SPROUL NO. 1	PRATT NO. 20611-T	A. LENT NO. 1
LOCATION	NOT GIVEN	TOWN OF READING	NOT GIVEN
OWNER	BELMONT QUADRANGEL DRILLING	COLUMBIA GAS TRANS. CORP.	BELMONT QUADRANGLE DRILLING
COMPLETED	05/12/31	05/23/79	05/29/31
SAMPLED	08/14/31	02/08/80	10/23/31
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2038	2300	1721
WELLHEAD PRESSURE,PSIG	720	NOT GIVEN	705
OPEN FLOW, MCFD	9500	NOT GIVEN	3500
COMPONENT, MOLE PCT			
METHANE	89.3	97.1	95.0
ETHANE	8.3	1.9	2.1
PROPANE	---	0.1	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	1.9	0.8	2.5
OXYGEN	0.3	TRACE	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1053	1020	1000
SPECIFIC GRAVITY	0.607	0.568	0.578

	INDEX 4738 SAMPLE 2432	INDEX 4739 SAMPLE 10385	INDEX 4740 SAMPLE 9763
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	SCHUYLER	SENECA	SENECA
FIELD	WAYNE	ROSE HILL	WATERLOO
WELL NAME	A. LENT NO. 2	GARRETT NO. 2	G. CHRISTENSEN NO. 1
LOCATION	NOT GIVEN	TOWN OF FAYETTE	FAYETTE TWP.
OWNER	BELMONT QUADRANGLE DRILLING	CONSOLIDATED GAS SUPPLY CORP	NEW YORK STATE NAT. GAS CORP
COMPLETED	05/29/31	10/29/62	01/12/65
SAMPLED	10/23/31	01/28/66	02/17/65
FORMATION	DEVO-ORISKANY	ORDO-QUEENSTON	ORDO-QUEENSTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1721	1800	1747
WELLHEAD PRESSURE,PSIG	705	640	410
OPEN FLOW, MCFD	3500	668000	219
COMPONENT, MOLE PCT			
METHANE	90.5	96.4	95.5
ETHANE	2.3	1.2	1.3
PROPANE	---	0.2	0.1
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	6.8	2.1	2.7
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.03	0.11	0.13
HEATING VALUE*	958	1003	998
SPECIFIC GRAVITY	0.597	0.571	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4741 SAMPLE 14380	INDEX 4742 SAMPLE 13452	INDEX 4743 SAMPLE 15162
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	STEUBEN	STEUBEN	STEUBEN
FIELD	STONE HILL	ADRIAN	CORNING N
WELL NAME	W. J. FULLER UNIT NO. 1	W. RAISH NO. 1	SARA CASS NO. 1
LOCATION	SEC. D; MASKINVILLE QUAD.	SEC. C; GREENWOOD QUAD.	CORNING QUAD.
OWNER	CONSOLIDATED GAS SUPPLY CORP	ANDERSON OIL, LTD.	J.V.P. EXPLORATION
COMPLETED	08/01/73	06/29/71	11/23/77
SAMPLED	06/04/75	10/12/72	11/23/77
FORMATION	DEVO-HELDERBURG	DEVO-ONONDAGA	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3432	4156	3620
WELLHEAD PRESSURE,PSIG	1324	1640	1728
OPEN FLOW, MCFD	12169	29000	13300
COMPONENT, MOLE PCT			
METHANE	84.0	83.9	96.7
ETHANE	11.0	10.5	2.4
PROPANE	3.3	3.2	0.1
N-BUTANE	0.7	0.8	0.0
ISOBUTANE	0.3	0.6	0.0
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.3	0.5	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.04	0.02	0.03
HEATING VALUE*	1185	1190	1025
SPECIFIC GRAVITY	0.667	0.673	0.570

	INDEX 4744 SAMPLE 10286	INDEX 4745 SAMPLE 10460	INDEX 4746 SAMPLE 17184
STATE	NEW YORK	NEW YORK	NEW YORK
COUNTY	STEUBEN	STEUBEN	WYOMING
FIELD	HOWARD	UNION W	WILDCAT
WELL NAME	HANLEY & BIRD ROOSA NO. 2312	HAMILTON WELL NO. 2063	GEORGE UNIT NO. 1-A
LOCATION	HOWARD TWP. LOT 26	LOT 67 WEST UNION TWP.	WETHERSFIELD TWP.
OWNER	IROQUOIS GAS CORP.	IROQUOIS GAS CORP.	LENAPE RESOURCES CORP.
COMPLETED	05/27/41	06/27/41	10/18/79
SAMPLED	11/12/85	03/24/66	02/20/84
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3589	4967	3256
WELLHEAD PRESSURE,PSIG	280	1100	700
OPEN FLOW, MCFD	880	9300	331
COMPONENT, MOLE PCT			
METHANE	87.9	97.0	91.2
ETHANE	9.2	2.5	2.3
PROPANE	1.8	0.1	0.2
N-BUTANE	0.3	0.0	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.4	0.3	5.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.04	0.03	0.21
HEATING VALUE*	1125	1030	979
SPECIFIC GRAVITY	0.630	0.568	0.592

	INDEX 4747 SAMPLE 17246	INDEX 4748 SAMPLE 427	INDEX 4749 SAMPLE 10734
STATE	NEW YORK	NEW YORK	NORTH CAROLINA
COUNTY	WYOMING	YATES	BERTIE
FIELD	WILDCAT	BRANCHPORT	FARM POND
WELL NAME	BARNES NO. 1	EVANS NO. 1	GAS SEEP
LOCATION	ATTICA QUAD; BENNINGTON TWP.	1/2 MI. W BRANCHPORT	1/2 MI. W OF POWELLSVILLE
OWNER	GYPSUM ENERGY MANAGEMENT CO.	E. E. EVANS, SR.	L. E. DAILEY, JR.
COMPLETED	12/23/81	--/--/06	--/--/00
SAMPLED	04/10/84	09/10/20	09/29/66
FORMATION	SILU-MEDINA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	120
DEPTH, FEET	2350	800	NOT GIVEN
WELLHEAD PRESSURE,PSIG	610	65	NOT GIVEN
OPEN FLOW, MCFD	902	100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	91.7	81.7
ETHANE	3.0	2.1	0.0
PROPANE	0.4	---	TRACE
N-BUTANE	0.1	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	5.6	5.0	1.0
OXYGEN	0.0	1.0	0.0
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	17.1
HELIUM	0.24	0.10	0.01
HEATING VALUE*	995	967	828
SPECIFIC GRAVITY	0.602	0.590	0.730

	INDEX 4750 SAMPLE 11125	INDEX 4751 SAMPLE 15936	INDEX 4752 SAMPLE 17419
STATE	NORTH CAROLINA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BERTIE	BILLINGS	BILLINGS
FIELD	FARM POND	BIG STICK W	ROOSEVELT
WELL NAME	GAS SEEP	FED. NO. 8-24	CENEX FED. NO. 34-4
LOCATION	1/2 MI. W OF POWELLSVILLE	SEC. 24, T142N, R101W	SEC. 4, T142N, R102W
OWNER	L. E. DAILEY, JR.	KOCH EXPLORATION CO.	DIAMOND SHAMROCK EXPL. CO.
COMPLETED	--/--/00	01/13/80	--/--/81
SAMPLED	09/16/67	04/09/80	09/16/84
FORMATION	NOT GIVEN	MISS-FRYBURG	DEVO-DUPEROW
GEOLOGIC PROVINCE CODE	120	395	395
DEPTH, FEET	NOT GIVEN	9600	10790
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1500	1415
OPEN FLOW, MCFD	NOT GIVEN	2200	130
COMPONENT, MOLE PCT			
METHANE	63.8	45.6	56.5
ETHANE	0.0	20.8	17.6
PROPANE	TRACE	14.1	12.0
N-BUTANE	0.0	5.5	5.3
ISOBUTANE	0.0	2.9	2.9
N-PENTANE	0.0	1.1	1.6
ISOPENTANE	0.0	2.1	1.7
CYCLOPENTANE	0.0	0.2	0.4
HEXANES PLUS	0.0	0.6	0.9
NITROGEN	4.1	0.7	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	2.8	0.0
CARBON DIOXIDE	32.0	4.0	0.5
HELIUM	0.04	0.01	0.01
HEATING VALUE*	646	1660	1678
SPECIFIC GRAVITY	0.884	1.058	0.987

*: CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**: DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4753 SAMPLE 16896	INDEX 4754 SAMPLE 9051	INDEX 4755 SAMPLE 16434
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BILLINGS	BILLINGS	BILLINGS
FIELD	ROUGH RIDER	SCORIA	TREE TOP
WELL NAME	FED. NO. 6-2	NO. 6	FED. NO. 1-28
LOCATION	SEC. 6, T144N, R101W	SEC. 10, T139N, R101W	SEC. 28, T142N, R100W
OWNER	FLORIDA EXPLORATION CO.	AMERADA PETROLEUM CORP.	PATRICK PETROLEUM CO.
COMPLETED	03/16/81	--/--/00	01/15/81
SAMPLED	04/27/83	07/24/53	02/23/82
FORMATION	DEVO-DUPEROW	ORDO-RED RIVER	MISS-MISSION CANYON
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	11044	11901	9600
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2060	1300
OPEN FLOW, MCFD	1500	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	64.3	77.0	46.1
ETHANE	14.9	14.0	21.4
PROPANE	9.5	4.7	13.5
N-BUTANE	3.7	1.3	5.4
ISOBUTANE	1.8	0.7	3.2
N-PENTANE	1.2	0.4	1.5
ISOPENTANE	1.9	0.2	1.9
CYCLOPENTANE	0.2	TRACE	0.4
HEXANES PLUS	0.6	0.2	1.0
NITROGEN	0.9	0.5	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	2.3
HELIUM	0.01	0.10	TRACE
HEATING VALUE*	1522	1296	1717
SPECIFIC GRAVITY	0.894	0.730	1.065

	INDEX 4756 SAMPLE 16568	INDEX 4757 SAMPLE 5555	INDEX 4758 SAMPLE 10425
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BILLINGS	BILLINGS	BOTTINEAU
FIELD	WHITETAIL	WILDCAT	NEWBURG
WELL NAME	TOURK NO. 1	HERMAN MAY NO. 1	ARNOLD NERMYR A. NO. 2
LOCATION	SEC. 9, T143N, R99W	SEC. 9, T139N, R100W	NOT GIVEN
OWNER	AMOCO PRODUCTION CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	06/18/81	09/23/53	06/10/59
SAMPLED	12/15/81	09/23/53	03/01/66
FORMATION	ORDO-RED RIVER	MISS-MADISON	TRIA-SPEARFISH
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	13650	9903	3222
WELLHEAD PRESSURE,PSIG	2168	200	NOT GIVEN
OPEN FLOW, MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.3	48.4	11.8
ETHANE	9.2	21.7	1.5
PROPANE	2.4	14.8	35.2
N-BUTANE	0.6	5.3	12.5
ISOBUTANE	0.5	2.9	4.6
N-PENTANE	0.2	1.6	3.2
ISOPENTANE	0.2	1.0	2.4
CYCLOPENTANE	TRACE	0.2	0.3
HEXANES PLUS	0.1	0.8	2.5
NITROGEN	0.9	1.3	26.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.2	0.0	0.0
CARBON DIOXIDE	1.1	1.9	0.0
HELIUM	0.05	0.01	0.04
HEATING VALUE*	1142	1700	2015
SPECIFIC GRAVITY	0.665	1.032	1.457

	INDEX 4759 SAMPLE 10426	INDEX 4760 SAMPLE 2560	INDEX 4761 SAMPLE 10567
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BOTTINEAU	BOWMAN	BURKE
FIELD	NEWBURG	CEDAR CREEK	BLACK SLOUGH
WELL NAME	ROLLIN STAIRS TR-2 NO. 4	GAS DEVELOPMENT CO. NO. 38	H. HERMANSON NO. 1-8
LOCATION	NOT GIVEN	SEC. 3, T130N, R107W	SEC. 14, T162N, R92W
OWNER	AMERADA PETROLEUM CORP.	GAS DEVELOPMENT CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	11/09/58	07/08/29	03/30/63
SAMPLED	03/01/66	09/27/32	05/09/66
FORMATION	MISS-CHARLES	CRET-EAGLE	MISS-RIVAL
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	3311	1180	6300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	450	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	540	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	27.6	96.3	65.9
ETHANE	20.8	0.0	14.3
PROPANE	18.8	---	7.1
N-BUTANE	7.6	---	2.8
ISOBUTANE	2.6	---	0.9
N-PENTANE	1.0	---	0.7
ISOPENTANE	2.9	---	1.1
CYCLOPENTANE	0.1	---	0.3
HEXANES PLUS	0.6	---	0.7
NITROGEN	17.6	3.2	3.2
OXYGEN	0.3	0.4	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.5
CARBON DIOXIDE	0.0	0.0	2.4
HELIUM	0.06	0.05	0.03
HEATING VALUE*	1685	976	1360
SPECIFIC GRAVITY	1.167	0.569	0.849

	INDEX 4762 SAMPLE 10565	INDEX 4763 SAMPLE 14036	INDEX 4764 SAMPLE 17146
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BURKE	BURKE	DIVIDE
FIELD	LIGNITE	STONEVIEW	PAULSON
WELL NAME	C. S. STAALESON NO. 1	MOLTE-BANK OF ND NO. 1	GIN-MAN PARTNERSHIP NO. 1
LOCATION	SEC. 5, T162N, R91W	SEC. 31, T161N, R94W	SEC. 11, T163N, R97W
OWNER	PAN AMERICAN PETROLEUM CORP.	HUNT, H. L. & PHILLIPS PET.	TEXACO INC.
COMPLETED	01/02/58	07/02/72	12/27/83
SAMPLED	05/09/66	08/18/74	12/27/83
FORMATION	MISS-MIDALE	DEVO-& ORDO COMMINGLED	ORDO-RED RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	6060	10714	10610
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3650	2500
OPEN FLOW, MCFD	NOT GIVEN	340000	3300
COMPONENT, MOLE PCT			
METHANE	46.6	43.1	70.5
ETHANE	44.3	4.7	15.5
PROPANE	6.2	1.8	5.9
N-BUTANE	0.9	0.5	1.2
ISOBUTANE	0.0	0.5	0.9
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.0	0.3	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	1.3	46.8	4.8
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.9	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.5
HELIUM	0.01	0.37	0.08
HEATING VALUE*	1457	637	1242
SPECIFIC GRAVITY	0.860	0.829	0.760

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4765 SAMPLE 16846	INDEX 4766 SAMPLE 16712	INDEX 4767 SAMPLE 16841
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	DUNN	DUNN	DUNN
FIELD	BEAR CREEK	JIM CREEK	LITTLE KNIFE
WELL NAME	KNUTSON-WERRE 34 NO. 1	SKACHENKO NO. A-1	FREDERICK SKACHENKO NO. A-1
LOCATION	SEC. 34, T148N, R96W	SEC. 30, T146N, R95W	SEC. 29, T144N, R97W
OWNER	MESA PETROLEUM CO.	AMOCO PRODUCTION CO.	APACHE OIL CORP.
COMPLETED	05/31/82	10/27/81	11/07/82
SAMPLED	03/--/83	11/19/82	03/23/83
FORMATION	ORDO-RED RIVER	DEVO-DUPEROW	MISS-MISSION CANYON
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	13864	11302	9550
WELLHEAD PRESSURE,PSIG	2700	350	1325
OPEN FLOW, MCFD	4969	1357	201
COMPONENT, MOLE PCT			
METHANE	74.4	55.7	27.8
ETHANE	14.5	18.0	21.8
PROPANE	5.4	13.0	15.9
N-BUTANE	1.2	4.6	5.5
ISOBUTANE	0.9	2.7	2.4
N-PENTANE	0.4	1.2	0.8
ISOPENTANE	0.2	2.2	2.3
CYCLOPENTANE	0.3	0.4	0.3
HEXANES PLUS	0.6	0.9	0.6
NITROGEN	0.9	0.8	0.3
OXYGEN	TRACE	TRACE	0.8
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	18.5
CARBON DIOXIDE	0.9	0.5	2.9
HELIUM	0.03	0.01	TRACE
HEATING VALUE*	1293	1677	1645
SPECIFIC GRAVITY	0.755	0.988	1.173

	INDEX 4768 SAMPLE 17401	INDEX 4769 SAMPLE 16227	INDEX 477D SAMPLE 14454
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	DUNN	DUNN	EMMONS
FIELD	RUSSIAN CREEK	UNNAMED	NOT GIVEN
WELL NAME	BULLINGER NO. 1-30	VOLENSKY NO. 1	HUBER NO. 1
LOCATION	SEC. 30, T142N, R96W	SEC. 34, T141N, R98W	SEC. 29, T133N, R74W
OWNER	VANDENBILT RESOURCES CORP.	MOSBACHER PRODUCTION CO.	KELSCH & DONLIN
COMPLETED	01/12/82	01/05/80	--/--/00
SAMPLED	09/04/84	03/31/81	--/--/00
FORMATION	ORDO-RED RIVER	ORDO-RED RIVER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	13042	12792	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2500	2100	NOT GIVEN
OPEN FLOW, MCFD	900	6239	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.2	76.3	85.2
ETHANE	8.2	7.9	0.1
PROPANE	2.6	3.3	TRACE
N-BUTANE	0.8	2.4	0.0
ISOBUTANE	0.7	1.6	0.0
N-PENTANE	0.3	0.7	0.0
ISOPENTANE	0.2	1.0	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	0.6	0.9	13.4
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.6	0.4	0.0
HYDROGEN SULFIDE**	1.3	4.2	0.0
CARBON DIOXIDE	0.8	0.9	0.7
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1158	1255	865
SPECIFIC GRAVITY	0.676	0.767	0.620

	INDEX 4771 SAMPLE 14458	INDEX 4772 SAMPLE 10465	INDEX 4773 SAMPLE 10466
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	EMMONS	MCKENZIE	MCKENZIE
FIELD	NOT GIVEN	ANTELOPE	ANTELOPE
WELL NAME	LOEB NO. 1	ANTELOPE UNIT E NO. 1	MILDRED BANCROFT NO. 1
LOCATION	SEC. 10, T133N, R75W	SEC. 32, T153N, R94W	SEC. 6, T152N, R94W
OWNER	KELSCH & DONLIN	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	0./S./1.	03/27/63	07/08/59
SAMPLED	--/--/00	03/15/66	03/15/66
FORMATION	CRET-MUDDY	SILU-	DEVO-SAMISH
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	2276	11917	10241
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1135	1045
OPEN FLOW, MCFD	NOT GIVEN	1023	1052
COMPONENT, MOLE PCT			
METHANE	86.4	56.7	70.3
ETHANE	0.1	19.5	18.5
PROPANE	TRACE	9.7	5.8
N-BUTANE	0.0	4.1	1.3
ISOBUTANE	0.0	3.3	0.6
N-PENTANE	0.0	2.7	0.3
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	0.3	0.1
HEXANES PLUS	0.0	1.9	0.4
NITROGEN	12.2	5.0	1.9
OXYGEN	0.5	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.7
HELIUM	0.04	0.02	0.02
HEATING VALUE*	877	1577	1300
SPECIFIC GRAVITY	0.613	0.972	0.767

	INDEX 4774 SAMPLE 10467	INDEX 4775 SAMPLE 10468	INDEX 4776 SAMPLE 17839
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	MCKENZIE	MCKENZIE	MCKENZIE
FIELD	ANTELOPE	ANTELOPE	BIEGEGAL CREEK
WELL NAME	E-518, E. BRENNA TR-1 NO. 1	ANTELOPE UNIT C NO. 1	FEDERAL STORM NO. 13-6
LOCATION	SEC. 1, T152N, R95W	SEC. 21 T152N, R95W	SEC. 6, T149N, R99W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	ADOBE OIL & GAS CORP.
COMPLETED	10/19/56	12/23/62	04/--/83
SAMPLED	03/15/66	03/15/66	09/--/85
FORMATION	MISS-MADISON	DEVO-	ORDO-RED RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	8690	10888	13661
WELLHEAD PRESSURE,PSIG	1350	NOT GIVEN	2050
OPEN FLOW, MCFD	1585	776	3000
COMPONENT, MOLE PCT			
METHANE	54.0	69.6	77.7
ETHANE	16.1	14.7	7.5
PROPANE	10.3	8.0	2.7
N-BUTANE	5.6	2.2	1.0
ISOBUTANE	2.3	1.5	0.8
N-PENTANE	1.9	0.7	0.5
ISOPENTANE	1.5	0.6	0.3
CYCLOPENTANE	0.5	0.3	0.1
HEXANES PLUS	1.4	0.6	0.3
NITROGEN	2.2	0.9	1.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	1.7	0.0	0.0
CARBON DIOXIDE	2.5	0.9	1.6
HELIUM	0.01	TRACE	0.04
HEATING VALUE*	1616	1398	1195
SPECIFIC GRAVITY	1.011	0.821	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4777 SAMPLE 17499		INDEX 4778 SAMPLE 10464		INDEX 4779 SAMPLE 16062	
STATE	NORTH DAKOTA		NORTH DAKOTA		NORTH DAKOTA	
COUNTY	MCKENZIE		MCKENZIE		MCKENZIE	
FIELD	BURNING MINE		CHARLSON		CHARLSON	
WELL NAME	BURNING MINE BUTTE NO. 4-33		M. L. SLAATEN UNIT NO. 1		SILURIAN UNIT S NO. 1	
LOCATION	SEC. 4, T147N, R102W		SEC. 8, T153N, R95W		SEC. 34,T154N, R95W	
OWNER	ABRAXAS PETROLEUM CORP.		TEXACO INC.		TEXACO INC.	
COMPLETED	05/--/82		11/13/65		--/--/00	
SAMPLED	10/12/84		03/16/66		09/02/80	
FORMATION	ORDO-RED RIVER B		PENN-MINNELUSA		SILU-INTERLAKE	
GEOLOGIC PROVINCE CODE	395		395		395	
DEPTH, FEET	13216		6974		11408	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		2800		2500	
OPEN FLOW, MCFD	NOT GIVEN		24589		2000	
COMPONENT, MOLE PCT						
METHANE	69.9		0.4		75.4	
ETHANE	13.1		0.0		8.3	
PROPANE	7.7		0.0		4.3	
N-BUTANE	2.8		0.0		1.7	
ISOBUTANE	2.1		0.0		1.2	
N-PENTANE	0.8		0.0		0.6	
ISOPENTANE	0.8		0.0		0.5	
CYCLOPENTANE	0.2		0.0		0.1	
HEXANES PLUS	0.9		0.0		0.4	
NITROGEN	0.0		98.0		5.0	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	1.1		0.0		3.8	
CARBON DIOXIDE	0.6		1.5		0.6	
HELIUM	0.02		0.06		0.05	
HEATING VALUE*	1437		4		1217	
SPECIFIC GRAVITY	0.840		0.973		0.757	

	INDEX 4780 SAMPLE 16786		INDEX 4781 SAMPLE 15634		INDEX 4782 SAMPLE 17830	
STATE	NORTH DAKOTA		NORTH DAKOTA		NORTH DAKOTA	
COUNTY	MCKENZIE		MCKENZIE		MCKENZIE	
FIELD	CHARLSON		CHERRY CREEK		CHERRY CREEK	
WELL NAME	CHARLSON DEEP UNIT NO. 2		PETERSON NO. 1		MORK NO. 1	
LOCATION	SEC. 5, T153N, R95W		SEC. 10, T149N, R99W		SEC. 8, T149N, R99W	
OWNER	TEXACO INC.		ALPAR RESOURCES INC.		APACHE CORP.	
COMPLETED	05/07/82		09/29/78		--/--/00	
SAMPLED	03/03/83		05/29/79		09/16/85	
FORMATION	ORDO-RED RIVER		ORDO-RED RIVER		ORDO-RED RIVER	
GEOLOGIC PROVINCE CODE	395		395		395	
DEPTH, FEET	13129		14034		14006	
WELLHEAD PRESSURE,PSIG	4250		5050		NOT GIVEN	
OPEN FLOW, MCFD	1500		7200		600	
COMPONENT, MOLE PCT						
METHANE	73.5		83.0		75.7	
ETHANE	5.1		7.1		5.9	
PROPANE	1.7		2.0		1.8	
N-BUTANE	0.6		0.5		0.8	
ISOBUTANE	0.6		0.6		0.5	
N-PENTANE	0.2		0.2		0.4	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.3		0.2		0.3	
NITROGEN	2.7		0.4		0.2	
OXYGEN	0.6		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.2		TRACE		0.1	
HYDROGEN SULFIDE**	12.6		4.2		12.8	
CARBON DIOXIDE	1.5		1.5		1.4	
HELIUM	0.07		0.03		0.03	
HEATING VALUE*	1038		1114		1090	
SPECIFIC GRAVITY	0.740		0.682		0.739	

	INDEX 4783 SAMPLE 10534		INDEX 4784 SAMPLE 10948		INDEX 4785 SAMPLE 17800	
STATE	NORTH DAKOTA		NORTH DAKOTA		NORTH DAKOTA	
COUNTY	MCKENZIE		MCKENZIE		MCKENZIE	
FIELD	CLEAR CREEK		CLEAR CREEK		EDGE	
WELL NAME	UNIT NO. 3		UNIT NO. 3		OSCAR JONSRUD NO. 1	
LOCATION	SEC. 23, T152N, R96W		SEC. 23, T152N, R96W		SEC. 5, T151N, R96W	
OWNER	SKELLY OIL CO.		SKELLY OIL CO.		TEXACO INC.	
COMPLETED	10/15/65		10/15/65		01/30/85	
SAMPLED	04/19/66		04/24/67		08/06/85	
FORMATION	PENN-MINNELUSA		PENN-MINNELUSA		SILU-INTERLAKE	
GEOLOGIC PROVINCE CODE	395		395		395	
DEPTH, FEET	7184		7184		12291	
WELLHEAD PRESSURE,PSIG	2650		2100		NOT GIVEN	
OPEN FLOW, MCFD	45000		2000		200	
COMPONENT, MOLE PCT						
METHANE	0.5		0.4		71.3	
ETHANE	0.1		0.0		9.4	
PROPANE	0.2		TRACE		4.6	
N-BUTANE	0.0		0.0		2.0	
ISOBUTANE	0.0		0.0		1.6	
N-PENTANE	0.0		0.0		1.1	
ISOPENTANE	0.0		0.0		1.0	
CYCLOPENTANE	0.0		0.0		0.2	
HEXANES PLUS	0.0		0.0		1.3	
NITROGEN	96.0		95.8		5.6	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.6	
CARBON DIOXIDE	3.0		3.7		1.3	
HELIUM	0.06		0.06		0.03	
HEATING VALUE*	4		4		1299	
SPECIFIC GRAVITY	0.982		0.986		0.817	

	INDEX 4786 SAMPLE 17924		INDEX 4787 SAMPLE 17467		INDEX 4788 SAMPLE 17023	
STATE	NORTH DAKOTA		NORTH DAKOTA		NORTH DAKOTA	
COUNTY	MCKENZIE		MCKENZIE		MCKENZIE	
FIELD	EDGE		ELK		ELLSWORTH	
WELL NAME	OSCAR JONSRUD NO. 1		IVERSON NO. A-1		STATE-ROGNESS NO. 1	
LOCATION	SEC. 5, T151N, R96W		SEC. 6, T151N,R102W		SEC. 29, T149N, R100W	
OWNER	TEXACO INC.		SUN EXPLORATION & PRODUCTION		CHAMPLIN PETROLEUM CO.	
COMPLETED	01/30/85		08/--/83		08/--/83	
SAMPLED	12/04/85		09/19/84		08/29/83	
FORMATION	DEVO-DUPEROW		MISS-MISSION CANYON		ORDO-RED RIVER	
GEOLOGIC PROVINCE CODE	395		395		395	
DEPTH, FEET	11160		9364		13884	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		820		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		300		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	62.0		63.6		73.9	
ETHANE	13.8		16.4		10.2	
PROPANE	9.5		9.5		5.6	
N-BUTANE	3.2		3.5		1.5	
ISOBUTANE	1.2		1.6		1.1	
N-PENTANE	3.2		0.7		0.6	
ISOPENTANE	1.7		1.0		0.7	
CYCLOPENTANE	0.6		0.3		0.3	
HEXANES PLUS	2.3		0.4		1.1	
NITROGEN	0.0		1.6		0.5	
OXYGEN	TRACE		TRACE		0.3	
ARGON	0.0		TRACE		0.0	
HYDROGEN	TRACE		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		5.7	
CARBON DIOXIDE	0.8		1.1		1.3	
HELIUM	0.01		0.02		0.03	
HEATING VALUE*	1682		1468		1264	
SPECIFIC GRAVITY	0.983		0.876		0.790	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4789 SAMPLE 17274	INDEX 4790 SAMPLE 17142	INDEX 4791 SAMPLE 6831
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	MCKENZIE	MCKENZIE	MCKENZIE
FIELD	JUNIPER	MARLEY	NOT GIVEN
WELL NAME	EIDE 35-11 NO. 1	CROWFLY NO. 17-10	SIGNALNESS NO. 1
LOCATION	SEC. 35, T149N, R99W	SEC. 17, T152N, R102W	SEC. 2, T150N, R96W
OWNER	PLACID OIL CO.	GETTY OIL CO.	CALVERT DRILLING CO.
COMPLETED	05/01/84	--/--/00	05/26/58
SAMPLED	05/01/84	11/30/83	10/09/58
FORMATION	ORDO-RED RIVER	SILU-INTERLAKE	MISS-MADISON
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	14280	13111	9386
WELLHEAD PRESSURE,PSIG	4500	NOT GIVEN	1100
OPEN FLOW, MCFD	4500	80	36
COMPONENT, MOLE PCT			
METHANE	74.1	62.1	65.3
ETHANE	5.4	18.0	14.9
PROPANE	1.6	10.6	5.8
N-BUTANE	0.4	3.8	1.6
ISOBUTANE	0.6	1.3	0.9
N-PENTANE	0.2	1.6	0.6
ISOPENTANE	0.1	1.3	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.4
NITROGEN	2.6	0.3	0.9
OXYGEN	0.5	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	12.8	0.0	5.9
CARBON DIOXIDE	1.2	0.5	2.9
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1037	1547	1272
SPECIFIC GRAVITY	0.733	0.902	0.827

	INDEX 4792 SAMPLE 17514	INDEX 4793 SAMPLE 17747	INDEX 4794 SAMPLE 15619
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	MCKENZIE	MCKENZIE	RENVILLE
FIELD	TIMBER CREEK	TOBACCO GARDEN	NEWPORTE
WELL NAME	ROY MOEN NO. 1	FELLAND NO. 4-1	MOTT NO. 32-3
LOCATION	SEC. 35, T150N, R100W	SEC. 15, T150N, R99W	NOT GIVEN
OWNER	MOBIL OIL CORP.	TEXACO INC.	SHELL OIL CO.
COMPLETED	--/--/83	01/03/81	09/01/78
SAMPLED	11/01/84	07/12/85	05/09/79
FORMATION	ORDO-RED RIVER	ORDO-RED RIVER	CAMB-DEADWOOD
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	14184	14042	9146
WELLHEAD PRESSURE,PSIG	1800	4900	NOT GIVEN
OPEN FLOW, MCFD	862	1800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.6	80.8	28.4
ETHANE	5.2	3.4	11.5
PROPANE	0.5	1.0	7.8
N-BUTANE	0.2	0.5	2.9
ISOBUTANE	TRACE	0.4	1.0
N-PENTANE	0.1	0.4	0.9
ISOPENTANE	TRACE	0.0	0.4
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	TRACE	0.7	0.5
NITROGEN	0.5	0.5	45.3
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	0.1	TRACE
HYDROGEN SULFIDE**	0.3	10.9	0.0
CARBON DIOXIDE	0.2	1.0	0.1
HELIUM	0.02	0.02	0.07
HEATING VALUE*	1058	1066	913
SPECIFIC GRAVITY	0.594	0.704	0.983

	INDEX 4795 SAMPLE 15623	INDEX 4796 SAMPLE 15624	INDEX 4797 SAMPLE 16554
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	RENVILLE	RENVILLE	STARK
FIELD	NEWPORTE	NEWPORTE	RICHARDTON
WELL NAME	LARSON NO. 23X-9	DUERRE NO. 43-5	OGRE NO. 1-24-1C
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	SHELL OIL CO.	SHELL OIL CO.	GULF OIL EXPL. & PROD. CO.
COMPLETED	06/01/78	09/01/78	01/--/82
SAMPLED	05/09/79	05/09/79	06/19/82
FORMATION	CAMB-DEADWOOD	CAMB-DEADWOOD	ORDO-WINNIPEG
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	9574	9516	11700
WELLHEAD PRESSURE,PSIG	6000	NOT GIVEN	4100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	20.3	15.7	90.7
ETHANE	6.2	3.9	3.7
PROPANE	2.9	2.1	1.0
N-BUTANE	1.3	1.2	0.4
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.4	0.6	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	67.0	74.4	2.1
OXYGEN	0.1	0.0	TRACE
ARGON	0.4	0.3	TRACE
HYDROGEN	0.4	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	1.1
HELIUM	0.17	0.17	0.09
HEATING VALUE*	487	391	1055
SPECIFIC GRAVITY	0.936	0.958	0.620

	INDEX 4798 SAMPLE 5068	INDEX 4799 SAMPLE 5089	INDEX 4800 SAMPLE 10495
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	WILLIAMS	WILLIAMS	WILLIAMS
FIELD	BEAVER LODGE	BEAVER LODGE	BEAVER LODGE
WELL NAME	IVERSON NO. 1	CLARENCE IVERSON NO. 1	BLOU NO. 1
LOCATION	SEC. 6, T155N, R95W	SEC. 6, T155N, R95W	SEC. 2, T155N, R96W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	07/15/51	02/01/63
SAMPLED	04/25/51	08/05/51	03/01/66
FORMATION	DEVO-& SILU	DEVO-	ORDO-WINNIPEG
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	11630	10490	13390
WELLHEAD PRESSURE,PSIG	NOT GIVEN	6690	9200
OPEN FLOW, MCFD	3800	NOT GIVEN	11000
COMPONENT, MOLE PCT			
METHANE	79.4	70.0	78.6
ETHANE	8.5	14.6	3.0
PROPANE	3.4	8.7	1.4
N-BUTANE	1.0	2.2	0.5
ISOBUTANE	0.8	1.3	TRACE
N-PENTANE	0.5	0.6	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.6	0.2
NITROGEN	5.6	1.3	12.8
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.6	2.9
HELIUM	0.07	0.01	0.20
HEATING VALUE*	1156	1370	926
SPECIFIC GRAVITY	0.705	0.805	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4801 SAMPLE 10496	INDEX 4802 SAMPLE 10497	INDEX 4803 SAMPLE 10498
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	WILLIAMS	WILLIAMS	WILLIAMS
FIELD	BEAVER LODGE	BEAVER LODGE	BEAVER LODGE
WELL NAME	BLOU 1-31S	BLSU D-408	BLOU NO. 1
LOCATION	SEC. 17, T156N, R95W	SEC. 2, T155N, R96W	SEC. 21, T155N, R96W
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	02/05/64	09/12/63	02/01/63
SAMPLED	03/01/66	03/01/66	03/01/66
FORMATION	DEVO-	SILU-	ORDO-RED RIVER
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	10650	11767	12696
WELLHEAD PRESSURE,PSIG	408	3455	4200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	18000
COMPONENT, MOLE PCT			
METHANE	58.7	80.6	78.7
ETHANE	19.4	7.3	4.8
PROPANE	13.0	2.8	1.9
N-BUTANE	4.1	0.9	0.7
ISOBUTANE	1.8	0.6	0.3
N-PENTANE	0.7	0.3	0.3
ISOPENTANE	1.2	0.3	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	0.1	5.3	6.4
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.6
HYDROGEN SULFIDE**	0.0	1.0	3.7
CARBON DIOXIDE	0.5	0.5	1.9
HELIUM	0.01	0.09	0.13
HEATING VALUE*	1588	1113	1035
SPECIFIC GRAVITY	0.924	0.691	0.696

	INDEX 4804 SAMPLE 10499	INDEX 4805 SAMPLE 16713	INDEX 4806 SAMPLE 478
STATE	NORTH DAKOTA	NORTH DAKOTA	OHIO
COUNTY	WILLIAMS	WILLIAMS	ASHLAND
FIELD	BEAVER LODGE	WILLOW CREEK	ASHLAND
WELL NAME	BLAU D-25	SLETTE-STANGELAND NCT 1 NO.1	SLOAN NO. 1
LOCATION	SEC. 17, T156N, R95W	SEC. 13, T153N,R100W	SEC. 16, MONTGOMERY TWP.
OWNER	AMERADA PETROLEUM CORP.	TEXACO INC.	LOGAN NATURAL GAS & FUEL CO.
COMPLETED	09/12/63	01/26/82	--/--/11
SAMPLED	03/01/66	11/23/82	09/01/20
FORMATION	MISS-MADISON	ORDO-RED RIVER	SILU-CLINTON
GEOLOGIC PROVINCE CODE	395	395	160
DEPTH, FEET	8525	14037	2504
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3680	950
OPEN FLOW, MCFD	NOT GIVEN	2800	790
COMPONENT, MOLE PCT			
METHANE	61.7	72.3	78.4
ETHANE	17.7	12.9	18.1
PROPANE	9.5	6.4	----
N-BUTANE	3.4	2.7	----
ISOBUTANE	1.1	1.1	----
N-PENTANE	0.5	1.0	----
ISOPENTANE	0.9	1.4	----
CYCLOPENTANE	0.1	0.1	----
HEXANES PLUS	0.3	0.5	----
NITROGEN	1.2	0.7	2.8
OXYGEN	TRACE	TRACE	0.4
ARGON	TRACE	TRACE	----
HYDROGEN	0.0	0.1	----
HYDROGEN SULFIDE**	1.8	0.1	----
CARBON DIOXIDE	1.8	0.6	0.1
HELIUM	0.02	0.03	0.16
HEATING VALUE*	1431	1391	1119
SPECIFIC GRAVITY	0.876	0.809	0.658

	INDEX 4807 SAMPLE 541	INDEX 4808 SAMPLE 4131	INDEX 4809 SAMPLE 9394
STATE	OHIO	OHIO	OHIO
COUNTY	ASHLAND	ASHLAND	ASHLAND
FIELD	ASHLAND	MOUNT VERNON	NOT GIVEN
WELL NAME	J. L. CRONE NO. 1, S-1575	O. S. VANCE NO. 1-8116	TROXEL NO. 1
LOCATION	SEC. 1, T GREEN	SEC. 29, T19N, R16W	SEC. 3, CLEAR CREEK TWP.
OWNER	LOGAN NATURAL GAS & FUEL CO.	OHIO FUEL GAS CO.	B. A. PLATA ASSOC.
COMPLETED	--/--/16	02/04/46	02/09/64
SAMPLED	11/22/60	09/30/46	04/03/64
FORMATION	NOT GIVEN	SILU-CLINTON	CAMB-COPPER RIDGE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2855	2746	NOT GIVEN
WELLHEAD PRESSURE,PSIG	430	1120	NOT GIVEN
OPEN FLOW, MCFD	195	700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.1	79.9	89.7
ETHANE	11.3	9.4	4.9
PROPANE	----	----	1.6
N-BUTANE	----	----	0.6
ISOBUTANE	----	----	0.2
N-PENTANE	----	----	0.3
ISOPENTANE	----	----	0.2
CYCLOPENTANE	----	----	0.1
HEXANES PLUS	----	----	0.3
NITROGEN	6.6	10.1	2.1
OXYGEN	0.3	0.1	0.0
ARGON	----	----	TRACE
HYDROGEN	----	----	0.0
HYDROGEN SULFIDE**	----	----	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.29	0.25	0.06
HEATING VALUE*	1024	978	1096
SPECIFIC GRAVITY	0.639	0.649	0.636

	INDEX 4810 SAMPLE 17724	INDEX 4811 SAMPLE 9048	INDEX 4812 SAMPLE 12272
STATE	OHIO	OHIO	OHIO
COUNTY	ASHTABULA	ASHTABULA	ASHTABULA
FIELD	ASHTABULA	BUSHNELL	JEFFERSON
WELL NAME	RHOA NO. 3	EDWARD & JESSIE SIMAK NO. 1	J & E REMELIUS
LOCATION	NEW LYME TOWNSHIP, LOT 8	SEC. 12, MONROE TWP.	LENOX TWP.
OWNER	PARK-OHIO ENERGY, INC.	UNION CARBIDE OLEFINS CO.	MANSFIELD DRILLING CO.
COMPLETED	04/01/82	05/04/63	09/25/69
SAMPLED	06/17/85	07/16/63	05/29/70
FORMATION	ORDO-ROSE RUN	SILU-CLINTON REO (MEDINA)	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6148	3148	3500
WELLHEAD PRESSURE,PSIG	2003	1000	1275
OPEN FLOW, MCFD	2800	620	12288
COMPONENT, MOLE PCT			
METHANE	86.5	85.3	89.4
ETHANE	5.3	3.7	6.6
PROPANE	2.8	1.1	0.9
N-BUTANE	1.5	0.5	0.3
ISOBUTANE	0.7	TRACE	0.5
N-PENTANE	0.6	TRACE	0.0
ISOPENTANE	0.6	0.3	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.4
NITROGEN	1.2	8.3	1.5
OXYGEN	TRACE	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.05	0.20	0.12
HEATING VALUE*	1194	994	1102
SPECIFIC GRAVITY	0.682	0.639	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4813 SAMPLE 12505	INDEX 4814 SAMPLE 12524	INDEX 4815 SAMPLE 7742
STATE	OHIO	OHIO	OHIO
COUNTY	ASHTABULA	ASHTABULA	ASHTABULA
FIELD	LENOX	LENOX	WILDCAT
WELL NAME	HUBERT RHODES NO. 1	KANANEN-SUPPLEE NO. 1	CLARK D NO. 1
LOCATION	LENOX TWP.	LENOX TWP.	LOT 1, WINDSOR TERR. R9
OWNER	KINGWOOD OIL CO.	UNION OIL CO. OF CALIF.	NORTHERN NATURAL GAS PROD. C
COMPLETED	08/12/70	09/09/70	07/20/60
SAMPLED	11/04/70	11/05/70	10/23/60
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3535	3304	3816
WELLHEAD PRESSURE,PSIG	1225	1220	1230
OPEN FLOW, MCFD	4400	2806	194
COMPONENT, MOLE PCT			
METHANE	89.3	89.5	82.9
ETHANE	4.4	4.4	9.4
PROPANE	1.4	1.4	3.1
N-BUTANE	0.3	0.4	0.8
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	3.8	3.7	2.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.12	0.12	0.10
HEATING VALUE*	1050	1055	1169
SPECIFIC GRAVITY	0.618	0.620	0.680

	INDEX 4816 SAMPLE 15050	INDEX 4817 SAMPLE 12850	INDEX 4818 SAMPLE 14378
STATE	OHIO	OHIO	OHIO
COUNTY	COLUMBIANA	COLUMBIANA	COLUMBIANA
FIELD	ADAIR	GUILFORD LAKE	HOMEWORTH
WELL NAME	ELLYSON NO. 1	F. MURRAY NO. 1A	HOFFMAN NO. 1-2601
LOCATION	SEC. 19, HANOVER TWP.	SEC. 18, CENTER TWP.	SEC. 33, KNOX TWP.
OWNER	POMEX, INC.	MANAGEMENT CONTROL CORP.	EAST OHIO GAS CO.
COMPLETED	08/17/76	05/--/70	08/25/71
SAMPLED	07/01/77	06/--/71	05/29/75
FORMATION	SILU-CLINTON	SILU-CLINTON	ORDO-BEEKMANTOWN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5708	5750	8083
WELLHEAD PRESSURE,PSIG	1400	1600	2214
OPEN FLOW, MCFD	2400	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.9	91.6	91.3
ETHANE	2.9	3.4	4.9
PROPANE	0.4	0.7	1.6
N-BUTANE	0.2	TRACE	0.4
ISOBUTANE	0.0	0.2	0.4
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	3.3	3.7	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.00	0.07	0.03
HEATING VALUE*	1020	1023	1108
SPECIFIC GRAVITY	0.595	0.600	0.624

	INDEX 4819 SAMPLE 3999	INDEX 4820 SAMPLE 10207	INDEX 4821 SAMPLE 11646
STATE	OHIO	OHIO	OHIO
COUNTY	COLUMBIANA	COLUMBIANA	COLUMBIANA
FIELD	NOT GIVEN	WELLSVILLE	WILDCAT
WELL NAME	J. F. BARNETT NO. 1	TURK NO. 444	ELOON P. DENNY NO. 1
LOCATION	SEC. 14, KNOX TWP.	MADISON TWP.	SEC. 12, KNOX TWP.
OWNER	OHIO OIL CO.	MANUFACTURERS LT. & HEAT CO.	EAST OHIO GAS CO.
COMPLETED	12/20/44	09/29/24	07/11/68
SAMPLED	03/29/45	10/12/65	09/18/68
FORMATION	DEVO-	MISS-BEREA	ORDO-BEEKMANTOWN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3544	786	8089
WELLHEAD PRESSURE,PSIG	110	300	2694
OPEN FLOW, MCFD	6	72	14500
COMPONENT, MOLE PCT			
METHANE	83.1	74.9	94.4
ETHANE	16.0	12.6	3.2
PROPANE	---	6.4	0.6
N-BUTANE	---	1.7	0.0
ISOBUTANE	---	0.8	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.6	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	0.3	2.1	0.8
OXYGEN	0.3	0.0	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.2	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.9
HELIUM	0.08	0.25	0.01
HEATING VALUE*	1129	1260	1029
SPECIFIC GRAVITY	0.640	0.747	0.588

	INDEX 4822 SAMPLE 4225	INDEX 4823 SAMPLE 3885	INDEX 4824 SAMPLE 3926
STATE	OHIO	OHIO	OHIO
COUNTY	COSHOCTON	COSHOCTON	COSHOCTON
FIELD	COSHOCTON	MOUNT VERNON	NOT GIVEN
WELL NAME	LEE NO. 1	STELLA LANDIS NO. 1	LOWERS NO. 1
LOCATION	SEC. 16, T5N, R8W	SEC. 9, JACKSON TWP.	CLARK TWP.
OWNER	BENEDUM-TREES OIL CO.	OHIO FUEL GAS CO.	W. K. PORTER
COMPLETED	11/10/46	07/29/43	08/28/44
SAMPLED	02/08/47	09/11/44	09/14/44
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3392	3562	3608
WELLHEAD PRESSURE,PSIG	840	NOT GIVEN	875
OPEN FLOW, MCFD	350	184	90
COMPONENT, MOLE PCT			
METHANE	81.7	81.7	88.3
ETHANE	3.1	0.4	7.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	13.8	16.9	3.2
OXYGEN	0.2	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.3	0.1
HELIUM	0.31	0.38	0.23
HEATING VALUE*	883	835	1036
SPECIFIC GRAVITY	0.635	0.629	0.609

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4825 SAMPLE 16511	INDEX 4826 SAMPLE 454	INDEX 4827 SAMPLE 10261
STATE	OHIO	OHIO	OHIO
COUNTY	CRAWFORD	CUYAHOGA	CUYAHOGA
FIELD	NOT GIVEN	BROOKLYN	NEWBURG HEIGHTS
WELL NAME	WATER WELL	LAMBWIER NO. 1	MARSHAW CHEMICAL CO. NO. 1
LOCATION	NEAR TIRO OHIO	5 MI. S CLEVELAND	CLEVELAND TWP.
OWNER	CRAIG M. KEHRES	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	--/--/00	--/--/15	--/--/00
SAMPLED	05/01/32	09/25/20	11/01/65
FORMATION	NOT GIVEN	SILU-CLINTON	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	110	2740	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	80	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.0	78.1	90.3
ETHANE	0.0	20.0	4.5
PROPANE	0.0	---	1.6
N-BUTANE	0.0	---	0.4
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.1
NITROGEN	13.4	1.3	2.4
OXYGEN	0.1	0.5	0.0
ARGON	0.3	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.0	0.1
HELIUM	0.01	0.00	0.09
HEATING VALUE*	871	1150	1074
SPECIFIC GRAVITY	0.616	0.661	0.620

	INDEX 4828 SAMPLE 1165	INDEX 4829 SAMPLE 10399	INDEX 4830 SAMPLE 10222
STATE	OHIO	OHIO	OHIO
COUNTY	CUYAHOGA	CUYAHOGA	CUYAHOGA
FIELD	NOT GIVEN	PARK S	PARK N
WELL NAME	NOT GIVEN	MEINTZ NO. 1, E.O.G. NO. 488	GRANDALL NO.2-EOG NO. 377
LOCATION	NOT GIVEN	SEC. 33, INDEPENDENCE TWP.	LAKEWOOD TWP.
OWNER	STADLER PRODUCTS CO.	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	--/--/15	--/--/00	--/--/00
SAMPLED	10/13/25	02/08/66	10/05/65
FORMATION	SILU-NEWBURG	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2450	3036	NOT GIVEN
WELLHEAD PRESSURE,PSIG	30	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	40	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.3	85.6	87.7
ETHANE	13.1	6.5	5.7
PROPANE	---	2.3	1.8
N-BUTANE	---	0.7	0.5
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.3	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	2.2	3.6	3.4
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.09	0.17	0.13
HEATING VALUE*	1089	1106	1082
SPECIFIC GRAVITY	0.631	0.653	0.636

	INDEX 4831 SAMPLE 10220	INDEX 4832 SAMPLE 475	INDEX 4833 SAMPLE 2323
STATE	OHIO	OHIO	OHIO
COUNTY	CUYAHOGA	FAIRFIELD	FAIRFIELD
FIELD	STRONGSVILLE	BALTIMORE	BEME TOWNSHIP
WELL NAME	L. BEYER NO.4 - EOG NO.371	MILLER NO. 1	HARTMAN NO. 2
LOCATION	SEC. 15, MIDDLEBURG TWP.	1 MI. S BALTIMORE	SEC. 23, PLEASANTS TWP.
OWNER	EAST OHIO GAS CO.	OHIO FUEL SUPPLY CO.	CITY NATURAL GAS WORKS
COMPLETED	--/--/00	--/--/08	07/15/30
SAMPLED	10/05/65	10/06/20	05/06/31
FORMATION	SILU-CLINTON	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2825	1985	2351
WELLHEAD PRESSURE,PSIG	NOT GIVEN	80	700
OPEN FLOW, MCFD	NOT GIVEN	200	5000
COMPONENT, MOLE PCT			
METHANE	85.6	75.4	68.7
ETHANE	6.5	18.5	24.7
PROPANE	2.9	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.7	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	2.7	5.3	6.1
OXYGEN	0.0	0.4	0.4
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.10	0.28	0.17
HEATING VALUE*	1146	1095	1139
SPECIFIC GRAVITY	0.669	0.668	0.705

	INDEX 4834 SAMPLE 3	INDEX 4835 SAMPLE 463	INDEX 4836 SAMPLE 9557
STATE	OHIO	OHIO	OHIO
COUNTY	FAIRFIELD	FAIRFIELD	FAIRFIELD
FIELD	BUCKEYE LAKE	MILLERSPORT	PICKERINGTON
WELL NAME	NOT GIVEN	BRISON NO. 1	LOUISE CAMDEN NO. 1
LOCATION	NOT GIVEN	1/2 MI. S MILLERSPORT	SEC. 8, T15N, R20W
OWNER	OHIO FUEL GAS CO.	OHIO FUEL SUPPLY CO.	STEWART OIL CO.
COMPLETED	--/--/00	--/--/12	04/18/64
SAMPLED	05/03/19	10/07/20	09/10/64
FORMATION	SILU-CLINTON	SILU-CLINTON	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	2116	3184
WELLHEAD PRESSURE,PSIG	125	108	1125
OPEN FLOW, MCFD	NOT GIVEN	300	4800
COMPONENT, MOLE PCT			
METHANE	73.4	78.5	82.6
ETHANE	16.9	22.2	4.5
PROPANE	---	---	1.3
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	7.9	6.8	10.3
OXYGEN	1.3	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.0	0.1
HELIUM	0.10	0.26	0.31
HEATING VALUE*	1046	1112	981
SPECIFIC GRAVITY	0.681	0.692	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES -

	INDEX 4837 SAMPLE 466	INDEX 4838 SAMPLE 11271	INDEX 4839 SAMPLE 17516
STATE	OHIO	OHIO	OHIO
COUNTY	FAIRFIELD	FAIRFIELD	GALLIA
FIELD	SUGAR GROVE	WILDCAT	GALLIA PROJECT
WELL NAME	LEWIS KULL NO. 1	Mc. THOMAS NO. 2A	GRADY WAUGH NO. 1
LOCATION	BERNE TWP.	SEC. 8, RUSH CREEK TWP.	SEC. 11, PERRY TWP.
OWNER	LOGAN NATURAL GAS & FUEL CO.	HUNTING OIL CO.	GALLIA PROJECT ACCOUNT
COMPLETED	--/--/00	06/13/67	01/31/71
SAMPLED	10/07/20	01/24/68	11/01/84
FORMATION	SILU-CLINTON	ORDO-BEEKMANTOWN	MISS-COW RUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2179	4470	663
WELLHEAD PRESSURE,PSIG	350	1420	285
OPEN FLOW, MCFD	5000	200	60
COMPONENT, MOLE PCT			
METHANE	78.9	89.0	89.3
ETHANE	15.0	4.1	2.0
PROPANE	---	1.4	TRACE
N-BUTANE	---	0.5	0.0
ISOBUTANE	---	0.2	0.0
N-PENTANE	---	0.4	0.0
ISOPENTANE	---	0.2	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.3	0.0
NITROGEN	5.9	3.1	7.8
OXYGEN	0.0	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.5
HELIUM	0.18	0.11	0.33
HEATING VALUE*	1068	1080	940
SPECIFIC GRAVITY	0.652	0.635	0.601

	INDEX 4840 SAMPLE 13635	INDEX 4841 SAMPLE 13636	INDEX 4842 SAMPLE 17270
STATE	OHIO	OHIO	OHIO
COUNTY	GEAUGA	GEAUGA	GEAUGA
FIELD	AUBURN	AUBURN	MONTSVILLE
WELL NAME	TIMMONS NO. 1	ORAVEC NO. 1	CLEMSON NO. 1
LOCATION	LOT 2, SEC. 3, AUBURN TWP.	LOT 38, NEWBURY TWP.	MARDEN QUAD.
OWNER	QUAKER STATE OIL REF. CORP.	QUAKER STATE OIL REF. CORP.	COLLINS-MCGREGOR OPER. CO.
COMPLETED	12/30/71	01/26/72	11/18/82
SAMPLED	07/--/73	07/--/73	04/27/84
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3723	3775	3792
WELLHEAD PRESSURE,PSIG	1500	1575	870
OPEN FLOW, MCFD	600	3072	2800
COMPONENT, MOLE PCT			
METHANE	86.5	88.9	81.9
ETHANE	5.6	4.9	7.3
PROPANE	2.5	1.8	3.5
N-BUTANE	0.7	0.4	1.2
ISOBUTANE	0.5	0.4	0.8
N-PENTANE	0.2	0.1	0.5
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	3.5	3.0	3.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.13	0.12	0.12
HEATING VALUE*	1108	1076	1187
SPECIFIC GRAVITY	0.652	0.626	0.704

	INDEX 4843 SAMPLE 469	INDEX 4844 SAMPLE 464	INDEX 4845 SAMPLE 471
STATE	OHIO	OHIO	OHIO
COUNTY	GUERNSEY	GUERNSEY	GUERNSEY
FIELD	BYERSVILLE-CAMBRIDGE	CAMBRIDGE	CAMBRIDGE
WELL NAME	S. R. NICHELSON NO. 1	WILSON NO. 1	TURNBAUGH NO. 1
LOCATION	LOT 27, JACKSON TWP.	CAMBRIDGE SCHOOL DIST. & TWP	CAMBRIDGE SCHOOL DIST. & TWP
OWNER	NOT GIVEN	OHIO FUEL SUPPLY CO.	OHIO FUEL SUPPLY CO.
COMPLETED	--/--/00	--/--/90	--/--/18
SAMPLED	--/--/00	10/06/20	10/--/20
FORMATION	MISS-BEREA	MISS-BEREA	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1100	1100	1100
WELLHEAD PRESSURE,PSIG	580	750	NOT GIVEN
OPEN FLOW, MCFD	25	100	150
COMPONENT, MOLE PCT			
METHANE	76.5	80.5	77.5
ETHANE	18.5	17.0	19.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.5	0.8	2.5
OXYGEN	0.2	1.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.26	0.44	0.27
HEATING VALUE*	1106	1120	1131
SPECIFIC GRAVITY	0.664	0.646	0.660

	INDEX 4846 SAMPLE 12406	INDEX 4847 SAMPLE 12529	INDEX 4848 SAMPLE 12530
STATE	OHIO	OHIO	OHIO
COUNTY	GUERNSEY	GUERNSEY	GUERNSEY
FIELD	CLAYSVILLE	CLAYSVILLE	CLAYSVILLE
WELL NAME	DINGEY COMMUNITY NO. 1	KING NO. 1	ED KOVAL NO. 1
LOCATION	SEC. 21, WESTLAND TWP.	SEC. 9, ADAMS TWP.	SEC. 16, JACKSON TWP.
OWNER	WISER OIL CO.	NATIONAL TREASURE MINES CO.	NATIONAL TREASURE MINES CO.
COMPLETED	08/13/69	09/02/70	04/--/69
SAMPLED	09/03/70	11/07/70	11/04/70
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5134	4962	5020
WELLHEAD PRESSURE,PSIG	1275	1490	1450
OPEN FLOW, MCFD	1000	8630	3600
COMPONENT, MOLE PCT			
METHANE	86.0	87.6	86.2
ETHANE	6.5	5.5	6.1
PROPANE	2.0	1.7	1.9
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.9	3.7	4.3
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.13	0.12	0.12
HEATING VALUE*	1080	1079	1074
SPECIFIC GRAVITY	0.639	0.635	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4849 SAMPLE 899	INDEX 4850 SAMPLE 12058	INDEX 4851 SAMPLE 10353
STATE	OHIO	OHIO	OHIO
COUNTY	GUERNSEY	GUERNSEY	HARDIN
FIELD	NOT GIVEN	WILDCAT	BLANCHARD
WELL NAME	NO. 1956	HARRY KAHN NO. 1	BLANCHARD QUARRY NO. 1
LOCATION	KNOX	SEC. 14, MONROE TWP.	SEC. 5, PLEASANT TWP.
OWNER	OHIO FUEL GAS CO.	CHICF DRILLING CO., INC.	SHELDON GAS CO.
COMPLETED	--/--/00	06/23/69	01/01/30
SAMPLED	07/01/24	09/15/69	01/05/66
FORMATION	NOT GIVEN	SILU-CLINTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	160	160	300
DEPTH, FEET	3151	4978	1325
WELLHEAD PRESSURE, PSIG	1275	1480	NOT GIVEN
OPEN FLOW, MCFD	18000	3800	250
COMPONENT, MOLE PCT			
METHANE	75.8	87.9	75.5
ETHANE	22.1	5.8	8.7
PROPANE	---	1.6	4.7
N-BUTANE	---	0.4	1.2
ISOBUTANE	---	0.1	0.7
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	1.7	3.5	8.0
OXYGEN	0.0	0.0	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.07	0.11	0.23
HEATING VALUE*	1164	1076	1143
SPECIFIC GRAVITY	0.672	0.652	0.723

	INDEX 4852 SAMPLE 10354	INDEX 4853 SAMPLE 10352	INDEX 4854 SAMPLE 10459
STATE	OHIO	OHIO	OHIO
COUNTY	HARDIN	HARDIN	HENRY
FIELD	KENTON	PATTERSON	MAMLER NO. 1
WELL NAME	STEINMAN NO. 1	LAPENSE NO. 1	E. LANGE NO. 1
LOCATION	CESSNA TWP. SEC. 24	SEC. 23, JACKSON TWP.	SEC. 2, T3N, R7E
OWNER	SHELDON GAS CO.	FOREST GAS & OIL CO.	DR. MAURICE M. WEIKEL
COMPLETED	01/01/34	01/01/40	10/15/65
SAMPLED	01/05/66	01/05/66	03/11/66
FORMATION	ORDO-TRENTON	ORDO-TRENTON	ORDO-TRENTON
GEOLOGIC PROVINCE CODE	300	300	305
DEPTH, FEET	1365	1320	1546
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	535
OPEN FLOW, MCFD	500	750	700
COMPONENT, MOLE PCT			
METHANE	77.0	76.6	73.3
ETHANE	7.9	6.5	8.9
PROPANE	4.1	2.9	2.9
N-BUTANE	1.0	0.9	0.6
ISOBUTANE	0.5	0.7	0.2
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	8.3	10.4	13.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.3
HELIUM	0.17	0.24	0.22
HEATING VALUE*	1110	1053	1022
SPECIFIC GRAVITY	0.706	0.700	0.704

	INDEX 4855 SAMPLE 10	INDEX 4856 SAMPLE 4009	INDEX 4857 SAMPLE 9046
STATE	OHIO	OHIO	OHIO
COUNTY	HOCKING	HOCKING	HOCKING
FIELD	HOCKING COUNTY	NOT GIVEN	NOT GIVEN
WELL NAME	NOT GIVEN	SUNDAY CREEK COAL CO.	JOHN C. SHARP NO. 10
LOCATION	NOT GIVEN	SEC. 2, STARR TWP.	SEC. 2, SALT CREEK TWP.
OWNER	OHIO FUEL SUPPLY CO.	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.
COMPLETED	--/--/11	02/24/45	05/08/63
SAMPLED	05/12/19	04/17/45	07/11/63
FORMATION	SILU-CLINTON	MISS-BEREA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	1157	2238
WELLHEAD PRESSURE, PSIG	90	640	640
OPEN FLOW, MCFD	NOT GIVEN	1240	3020
COMPONENT, MOLE PCT			
METHANE	69.5	82.5	78.2
ETHANE	11.6	15.5	3.5
PROPANE	---	---	1.0
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	16.5	1.5	15.8
OXYGEN	1.9	0.3	0.0
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	TRACE	0.14	0.40
HEATING VALUE*	912	1113	905
SPECIFIC GRAVITY	0.691	0.640	0.662

	INDEX 4858 SAMPLE 543	INDEX 4859 SAMPLE 3827	INDEX 4860 SAMPLE 9068
STATE	OHIO	OHIO	OHIO
COUNTY	HOCKING	HOCKING	HOLMES
FIELD	SUGAR GROVE	WARD TWP.	FRYBURG
WELL NAME	NELSON DELONG NO. 1	SUNDAY CREEK COAL CO. 231	BOWMAN NO. 1
LOCATION	SEC. 8, SALT CREEK TWP.	SEC. 8	LOT 4, SALT CREEK SUR.
OWNER	LOGAN NATURAL GAS & FUEL CO.	OHIO FUEL GAS CO.	KIN-ARK OIL CO.
COMPLETED	--/--/16	09/12/43	05/10/63
SAMPLED	11/13/20	05/04/44	08/01/63
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1900	3570	3871
WELLHEAD PRESSURE, PSIG	830	1065	1180
OPEN FLOW, MCFD	400	789	7500
COMPONENT, MOLE PCT			
METHANE	79.7	71.2	84.9
ETHANE	8.3	12.7	6.3
PROPANE	---	---	1.6
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	11.1	15.2	6.0
OXYGEN	0.2	0.4	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.44	0.27	0.20
HEATING VALUE*	956	949	1048
SPECIFIC GRAVITY	0.642	0.683	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4861 SAMPLE 900	INDEX 4862 SAMPLE 3938	INDEX 4863 SAMPLE 10308
STATE	OHIO	OHIO	OHIO
COUNTY	HOLMES	HOLMES	HOLMES
FIELD	NOT GIVEN	NOT GIVEN	WILDCAT
WELL NAME	NO. 4161	S. C. CRITCHFIELD NO. 1	RUBEN S. ERB NO. 1
LOCATION	SEC. 12-13, T MONROE	SEC. 28, RIPLEY TWP.	SEC. 23, CLARK TWP.
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	KIN-ARK OIL CO.
COMPLETED	04/03/24	09/28/44	11/10/65
SAMPLED	07/03/24	12/07/44	11/30/65
FORMATION	SILU-CLINTON	NOT GIVEN	ORDO-ROSE RUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	3082	6464
WELLHEAD PRESSURE,PSIG	1020	1085	2400
OPEN FLOW, MCFD	3154	1180	2100
COMPONENT, MOLE PCT			
METHANE	70.3	1.2	92.2
ETHANE	19.4	64.7	4.5
PROPANE	---	---	1.4
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	9.2	33.6	0.7
OXYGEN	0.5	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.18	0.21	0.03
HEATING VALUE*	1060	1172	1092
SPECIFIC GRAVITY	0.696	1.015	0.613

	INDEX 4864 SAMPLE 4384	INDEX 4865 SAMPLE 5238	INDEX 4866 SAMPLE 10350
STATE	OHIO	OHIO	OHIO
COUNTY	HOLMES	HOLMES	HURON
FIELD	WOOSTER	WOOSTER	WILDCAT
WELL NAME	MYRTLE LAKE	CRITCHFIELD NO. 1	JOPLAND-CHAPMAN UNIT NO. 1
LOCATION	SEC. 32, RIPLEY TWP.	SEC. 28, RIPLEY TWP.	SEC. 1, NEW HAVEN TWP.
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	STOCKER & SITLER, INC.
COMPLETED	05/29/47	09/28/44	01/11/65
SAMPLED	11/13/47	05/13/52	12/30/65
FORMATION	SILU-	SILU-CLINTON	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3165	3082	3488
WELLHEAD PRESSURE,PSIG	1100	550	1175
OPEN FLOW, MCFD	1290	1180	1970
COMPONENT, MOLE PCT			
METHANE	83.0	85.2	88.3
ETHANE	11.7	5.3	3.6
PROPANE	---	1.7	1.4
N-BUTANE	---	0.5	0.5
ISOBUTANE	---	0.1	0.3
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	4.8	5.9	5.0
OXYGEN	0.2	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.19	0.18	0.20
HEATING VALUE*	1050	1036	1049
SPECIFIC GRAVITY	0.633	0.639	0.632

	INDEX 4867 SAMPLE 10129	INDEX 4868 SAMPLE 10584	INDEX 4869 SAMPLE 10568
STATE	OHIO	OHIO	OHIO
COUNTY	KNOX	KNOX	KNOX
FIELD	ESTA	FREDERICKTOWN	FREDERICKTOWN S
WELL NAME	ZORA MCLORNAN	GWENDOLYNE RANDALL NO. 1	ISABELL E. DARLING NO. 1
LOCATION	SEC. 22, BUTLER TOWNSHIP	SEC. 19, MIDDLEBURRT TWP.	LOT 15, WAYNE TWP.
OWNER	MASK OIL CO.	OHIO PETROLEUM CO.	BRINKERHOFF DRILLING CO.
COMPLETED	04/01/51	01/28/65	09/01/65
SAMPLED	09/08/55	05/25/66	05/10/66
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2999	2093	2054
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	920
OPEN FLOW, MCFD	NOT GIVEN	734	2800
COMPONENT, MOLE PCT			
METHANE	81.3	72.1	72.8
ETHANE	9.2	10.1	8.0
PROPANE	3.7	5.1	2.6
N-BUTANE	0.8	1.0	0.9
ISOBUTANE	0.7	0.7	0.5
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	3.7	11.9	13.7
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.10	0.22	0.26
HEATING VALUE*	1153	1090	1041
SPECIFIC GRAVITY	0.684	0.726	0.719

	INDEX 4870 SAMPLE 4134	INDEX 4871 SAMPLE 10108	INDEX 4872 SAMPLE 10109
STATE	OHIO	OHIO	OHIO
COUNTY	KNOX	KNOX	KNOX
FIELD	MOUNT VERNON	MOUNT VERNON	MOUNT VERNON
WELL NAME	D. R. CULLER NO. 1-8031	O-C-16, JAMES M. BERRY	O-C-49, W. M. MCMARA
LOCATION	SEC. 3, T22N, R17W	NEAR HOWARD OHIO	NEAR DANVILLE OHIO
OWNER	OHIO FUEL GAS CO.	OHIO CUMBERLAND GAS CO.	OHIO CUMBERLAND GAS CO.
COMPLETED	09/24/45	10/22/22	12/22/15
SAMPLED	09/30/46	09/08/65	09/08/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2628	2626	2772
WELLHEAD PRESSURE,PSIG	1030	1070	NOT GIVEN
OPEN FLOW, MCFD	962	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.8	79.5	80.7
ETHANE	14.0	8.0	7.9
PROPANE	---	4.0	3.1
N-BUTANE	---	1.2	1.1
ISOBUTANE	---	0.7	0.8
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.3
NITROGEN	8.3	5.8	5.2
OXYGEN	0.5	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.22	0.12	0.15
HEATING VALUE*	1029	1148	1145
SPECIFIC GRAVITY	0.662	0.701	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4873 SAMPLE 17493	INDEX 4874 SAMPLE 17494	INDEX 4875 SAMPLE 3781
STATE	OHIO	OHIO	OHIO
COUNTY	KNOX	KNOX	LAKE
FIELD	MOUNT VERNON N	MOUNT VERNON N	NOT GIVEN
WELL NAME	BESST-CAMERON UNIT	RUBY & ARTHUR BURKE NO. 1	WILLIE HAWGOOD NO. 1
LOCATION	LOT. 24, QTR. 4, T-7, R-14	LOT 24, QTR 4, T-7, R-2	MENTOR TWP. LOT 10
OWNER	JADOIL, INC.	JADOIL, INC.	BENEDUM-TREES OIL CO.
COMPLETED	09/30/80	10/20/83	01/21/44
SAMPLED	10/09/84	10/09/84	04/05/44
FORMATION	CAMB-TREMPEALEAU	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4096	2100	2936
WELLHEAD PRESSURE,PSIG	1400	700	690
OPEN FLOW, MCFD	150	6000	110
COMPONENT, MOLE PCT			
METHANE	80.3	79.3	80.0
ETHANE	6.6	6.8	15.2
PROPANE	3.6	2.5	---
N-BUTANE	1.1	0.8	---
ISOBUTANE	0.5	0.6	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	6.5	8.8	6.2
OXYGEN	TRACE	TRACE	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.19	0.27	0.08
HEATING VALUE*	1124	1069	1047
SPECIFIC GRAVITY	0.693	0.685	0.648

	INDEX 4876 SAMPLE 12814	INDEX 4877 SAMPLE 10134	INDEX 4878 SAMPLE 8
STATE	OHIO	OHIO	OHIO
COUNTY	LAWRENCE	LICKING	LICKING
FIELD	UNNAMED	FALLSBURY	HOMER
WELL NAME	ROSE EVERMART NO. 1	C. E. VAN WINKLE	NOT GIVEN
LOCATION	SEC. 17, LAWRENCE TWP.	SEC. 1, FALLSBURY TWP.	NOT GIVEN
OWNER	COTTON PETROLEUM CORP.	WAVERLY OIL WORKS CO.	OHIO FUEL GAS CO.
COMPLETED	09/--/70	03/01/62	--/--/02
SAMPLED	05/01/73	09/08/65	05/05/19
FORMATION	MISS-MAXTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	800	2849	NOT GIVEN
WELLHEAD PRESSURE,PSIG	220	NOT GIVEN	200
OPEN FLOW, MCFD	3000	250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.1	75.7	53.8
ETHANE	2.5	7.8	15.4
PROPANE	TRACE	4.6	---
N-BUTANE	0.0	1.4	---
ISOBUTANE	0.0	0.9	---
N-PENTANE	0.0	0.5	---
ISOPENTANE	0.0	0.4	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.3	---
NITROGEN	8.7	8.3	27.8
OXYGEN	0.0	TRACE	3.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.47	0.12	0.00
HEATING VALUE*	937	1153	821
SPECIFIC GRAVITY	0.601	0.732	0.762

	INDEX 4879 SAMPLE 474	INDEX 4880 SAMPLE 3841	INDEX 4881 SAMPLE 3861
STATE	OHIO	OHIO	OHIO
COUNTY	LICKING	LORAIN	LORAIN
FIELD	JOHNSTOWN	EATON	GRAFTON
WELL NAME	H. JOHNSON NO. 1	PAULINE SCHNEIDER NO. 1-7582	JOHN MOHLER NO. 1
LOCATION	6 MI. NE JOHNSTOWN	SEC. 1-9R	SEC. 24, GRAFTON TWP.
OWNER	OHIO FUEL SUPPLY CO.	OHIO FUEL GAS CO.	BELMONT QUADRANGLE DRILLING
COMPLETED	--/--/02	11/09/43	06/23/44
SAMPLED	10/04/20	--/--/00	09/27/44
FORMATION	NOT GIVEN	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1865	2421	2386
WELLHEAD PRESSURE,PSIG	60	935	NOT GIVEN
OPEN FLOW, MCFD	85	235	1335
COMPONENT, MOLE PCT			
METHANE	75.4	76.2	77.4
ETHANE	18.5	11.6	13.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.4	11.4	7.8
OXYGEN	0.2	0.3	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.21	0.28	0.25
HEATING VALUE*	1093	980	1033
SPECIFIC GRAVITY	0.670	0.661	0.660

	INDEX 4882 SAMPLE 3806	INDEX 4883 SAMPLE 4287	INDEX 4884 SAMPLE 4377
STATE	OHIO	OHIO	OHIO
COUNTY	LORAIN	LORAIN	LORAIN
FIELD	LAGRANGE	NORTHERN	NORTHERN
WELL NAME	TESSIE MILLER NO. 1	WM. GILGENBACH NO. 8310	E. I. MILLER NO. 1
LOCATION	SEC. 84	LOT 22, Y&M, R16W	LOT 98, PITTSFIELD TWP.
OWNER	MANLEY & BIRD	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.
COMPLETED	01/11/44	12/30/96	06/25/47
SAMPLED	04/12/44	03/17/47	11/07/47
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU---
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2365	2477	2190
WELLHEAD PRESSURE,PSIG	1160	1150	1080
OPEN FLOW, MCFD	2500	1010	1950
COMPONENT, MOLE PCT			
METHANE	89.0	81.8	77.4
ETHANE	4.4	13.2	11.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.8	4.3	10.0
OXYGEN	0.4	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.28	0.22	0.26
HEATING VALUE*	980	1065	992
SPECIFIC GRAVITY	0.602	0.641	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4885 SAMPLE 4378	INDEX 4886 SAMPLE 5125	INDEX 4887 SAMPLE 4133
STATE	OHIO	OHIO	OHIO
COUNTY	LORAIN	LORAIN	LORAIN
FIELD	NORTHERN	NORTHERN	NOT GIVEN
WELL NAME	NO. 8400	G. C. KRUECK NO. 1	PHILLIP BOBEL NO. 2-8212
LOCATION	LOT 105, PITTSFIELD TWP.	LOT 18, T1T	LOT 48
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.
COMPLETED	06/19/47	02/07/51	07/22/46
SAMPLED	11/07/47	11/12/51	10/16/46
FORMATION	SILU---	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2206	2583	2547
WELLHEAD PRESSURE,PSIG	1150	975	1120
OPEN FLOW, MCFD	1780	302	4370
COMPONENT, MOLE PCT			
METHANE	76.9	77.7	73.6
ETHANE	12.8	4.3	12.1
PROPANE	---	1.1	---
N-BUTANE	---	0.2	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	9.6	16.0	13.4
OXYGEN	0.2	0.1	0.7
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.26	0.36	0.27
HEATING VALUE*	1008	912	962
SPECIFIC GRAVITY	0.659	0.663	0.673

	INDEX 4888 SAMPLE 4671	INDEX 4889 SAMPLE 4537	INDEX 4890 SAMPLE 3943
STATE	OHIO	OHIO	OHIO
COUNTY	LORAIN	LORAIN	LORAIN
FIELD	NOT GIVEN	PENFIELD TOWNSHIP	WELLINGTON
WELL NAME	E. L. PIERCE NO. 8670	NO. 8521	L. W. MCCONNELL NO. 1
LOCATION	LOT 10, PENFIELD TWP.	SEC. 4, LOT 25	LOTS 18 & 19, LAGRANGE TWP.
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	MANLEY & BIRD
COMPLETED	12/10/48	01/13/48	10/02/44
SAMPLED	02/15/49	06/03/48	12/08/44
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2438	2458	2269
WELLHEAD PRESSURE,PSIG	1125	1170	1090
OPEN FLOW, MCFD	407	1330	830
COMPONENT, MOLE PCT			
METHANE	76.1	72.4	78.1
ETHANE	6.3	14.2	10.5
PROPANE	2.0	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	13.4	12.6	10.5
OXYGEN	0.1	0.2	0.1
ARGON	TRACE	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.3	0.2
HELIUM	0.23	0.25	0.38
HEATING VALUE*	1001	988	979
SPECIFIC GRAVITY	0.690	0.679	0.649

	INDEX 4891 SAMPLE 11677	INDEX 4892 SAMPLE 13086	INDEX 4893 SAMPLE 9725
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MAHONING	MAHONING
FIELD	BESS	CAMFIELD	ELLSWORTH
WELL NAME	WILCOX NO. 1	J & C GENTOFANTI NO. 1	E & M SAYRE NO. 1 - 409
LOCATION	SEC. 18, GOSHEN TWP.	SEC. 15, ELLSWORTH TWP.	SEC. 19, ELLSWORTH TWP.
OWNER	DORFMAN PRODUCTION CO.	LIBERTY PETROLEUM CORP.	BELDON & BLAKE OIL PROD. CO.
COMPLETED	06/26/68	06/07/71	11/10/64
SAMPLED	10/22/68	10/16/71	02/05/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5149	5362	5009
WELLHEAD PRESSURE,PSIG	1450	1450	1450
OPEN FLOW, MCFD	1058	1040	426
COMPONENT, MOLE PCT			
METHANE	89.8	87.8	90.0
ETHANE	4.8	5.6	4.7
PROPANE	1.4	1.9	1.1
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.7	3.5	3.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.07	0.10	0.09
HEATING VALUE*	1067	1080	1058
SPECIFIC GRAVITY	0.617	0.634	0.617

	INDEX 4894 SAMPLE 9839	INDEX 4895 SAMPLE 10195	INDEX 4896 SAMPLE 14854
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MAHONING	MAHONING
FIELD	ELLSWORTH	ELLSWORTH N	LIMA N
WELL NAME	NO. 1-417	STEISKAL NO. 1-EOG NO. 2333	RICHARD CALVIN NO. 1
LOCATION	SEC. 22, ELLSWORTH TWP.	SEC. 22, ELLSWORTH TWP.	SEC. 9, BEAVER TOWNSHIP
OWNER	BELDEN & BLAKE OIL PROD. CO.	EAST OHIO GAS CO.	POMINEX, INC.
COMPLETED	12/16/64	07/25/64	06/20/75
SAMPLED	04/06/65	10/08/65	11/03/76
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4988	4981	5510
WELLHEAD PRESSURE,PSIG	1450	1400	1375
OPEN FLOW, MCFD	476	711	1400
COMPONENT, MOLE PCT			
METHANE	91.4	91.0	94.2
ETHANE	4.0	4.2	2.4
PROPANE	1.0	0.9	0.3
N-BUTANE	0.3	0.3	TRACE
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	2.8	3.0	2.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.08	0.08	0.08
HEATING VALUE*	1046	1047	1008
SPECIFIC GRAVITY	0.605	0.609	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4897 SAMPLE 4055	INDEX 4898 SAMPLE 11962	INDEX 4899 SAMPLE 7027
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MEDINA	MEDINA
FIELD	WILDCAT	BONETA	HINCKLEY
WELL NAME	D. B. MCCUNE NO. 1	RODENBUCKER A NO. 1	FRANK SMITH NO. 1-A
LOCATION	SEC. 11, GOSHEN TWP.	LOT 102, MONTVILLE TWP.	LOT 69
OWNER	OHIO OIL CO.	KING DRILLING CO.	OHIO FUEL GAS CO.
COMPLETED	07/23/45	04/24/69	01/16/59
SAMPLED	09/04/45	07/10/69	04/10/59
FORMATION	DEVO-	SILU-CLINTON	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3608	3320	5775
WELLHEAD PRESSURE, PSIG	1388	1250	2060
OPEN FLOW, MCFD	3	4070	1210
COMPONENT, MOLE PCT			
METHANE	79.3	85.4	86.3
ETHANE	20.7	9.5	5.3
PROPANE	---	2.4	1.9
N-BUTANE	---	0.5	0.8
ISOBUTANE	---	0.4	0.9
N-PENTANE	---	0.2	0.8
ISOPENTANE	---	0.1	0.4
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	0.2	1.5
NITROGEN	0.0	5.0	1.7
OXYGEN	0.0	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.03	0.17	0.10
HEATING VALUE*	1174	1060	1211
SPECIFIC GRAVITY	0.657	0.649	0.698

	INDEX 4900 SAMPLE 9311	INDEX 4901 SAMPLE 3840	INDEX 4902 SAMPLE 3859
STATE	OHIO	OHIO	OHIO
COUNTY	MEDINA	MEDINA	MEDINA
FIELD	HINCKLEY-GRANGER	LITCHFIELD TWP.	LODI
WELL NAME	F. L. SMITH ESTATE NO. 1	EDGAR J. YOST NO. 1-7747	W. A. SHAW NO. 1
LOCATION	LOT 69, HINCKLEY TWP.	LOT 22, T3N, R16W	SEC. 13, CHATHAM TWP.
OWNER	WISER OIL CO., ET AL.	OHIO FUEL GAS CO.	E. R. EDSON & SON CO.
COMPLETED	01/03/59	04/06/44	05/23/44
SAMPLED	04/03/59	--/--/00	07/24/44
FORMATION	CAMB-TREMPEALEAU	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5764	2717	2696
WELLHEAD PRESSURE, PSIG	2100	1270	NOT GIVEN
OPEN FLOW, MCFD	1200	6580	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.3	71.0	85.1
ETHANE	5.4	12.9	4.5
PROPANE	2.0	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	1.2	15.4	9.6
OXYGEN	0.1	0.4	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.06	0.25	0.34
HEATING VALUE*	1123	950	943
SPECIFIC GRAVITY	0.639	0.683	0.619

	INDEX 4903 SAMPLE 4601	INDEX 4904 SAMPLE 3884	INDEX 4905 SAMPLE 487
STATE	OHIO	OHIO	OHIO
COUNTY	MEDINA	MEDINA	MEDINA
FIELD	MEDINA	NOT GIVEN	SALEM W
WELL NAME	AGNES MCMICHAEL	EDGAR J. YOST NO. 2-7778	TOWLES NO. 1
LOCATION	LOT 6	LOT 22, LITCHFIELD TWP.	LOT 181, HARRISVILLE TWP.
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	OHIO FUEL SUPPLY CO.
COMPLETED	05/18/48	05/18/44	--/--/18
SAMPLED	10/26/48	08/02/44	09/01/20
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2662	2697	2850
WELLHEAD PRESSURE, PSIG	1200	NOT GIVEN	320
OPEN FLOW, MCFD	504	1870	5000
COMPONENT, MOLE PCT			
METHANE	73.5	72.9	78.8
ETHANE	13.3	13.5	15.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.3	12.3	5.5
OXYGEN	0.3	0.8	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	TRACE
HELIUM	0.24	0.24	0.24
HEATING VALUE*	983	980	1069
SPECIFIC GRAVITY	0.676	0.679	0.651

	INDEX 4906 SAMPLE 4328	INDEX 4907 SAMPLE 11889	INDEX 4908 SAMPLE 1276
STATE	OHIO	OHIO	OHIO
COUNTY	MEIGS	MEIGS	MEIGS
FIELD	ATHENS DISTRICT	GROUND HOG CREEK	MEIGS COUNTY
WELL NAME	M. W. RITCHIE NO. 8342	WM. MCKELVEY NO. 1-A	DFG NO. 4
LOCATION	SEC. 1, CHESTER TWP.	SEC. 16, LEBANON TWP.	SEC. 30, SUTTON TWP.
OWNER	OHIO FUEL GAS CO.	QUAKER STATE OIL REF. CORP.	OHIO FUEL GAS CO.
COMPLETED	04/22/47	03/20/69	11/--/25
SAMPLED	06/19/47	04/01/69	06/11/26
FORMATION	DEVO-	SILU-NEWBURG	PENN-COW RUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2831	4880	512
WELLHEAD PRESSURE, PSIG	730	1855	160
OPEN FLOW, MCFD	79	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.1	88.6	91.5
ETHANE	22.4	5.4	0.3
PROPANE	---	2.6	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	1.2	1.5	6.4
OXYGEN	0.2	0.0	0.5
ARGON	---	0.0	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	0.09	0.08	0.98
HEATING VALUE*	1172	1129	932
SPECIFIC GRAVITY	0.672	0.644	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4909 SAMPLE 11245	INDEX 4910 SAMPLE 11536	INDEX 4911 SAMPLE 11535
STATE	OHIO	OHIO	OHIO
COUNTY	MONROE	MONROE	MONROE
FIELD	BETHEL	GRAYSVILLE	LENISVILLE
WELL NAME	C. D. MERCHER NO. 1	EMMA MCHUGH NO. 1	FRANCIS REISCHMAN NO. 1
LOCATION	SYCAMORE VALLEY DIST.	SEC. 7, WASHINGTON TWP.	SEC. 27, MALAGA TWP.
OWNER	PETROLEUM SPECIALTIES, INC.	LIBERTY PETROLEUM CORP.	LIBERTY PETROLEUM CORP.
COMPLETED	10/01/67	03/04/68	02/08/68
SAMPLED	12/14/67	06/05/68	06/05/68
FORMATION	DEVO-OHIO	MISS-DEVO	DEVO-OHIO
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1734	1288	2249
WELLHEAD PRESSURE,PSIG	800	440	775
OPEN FLOW, MCFD	1250	460	230
COMPONENT, MOLE PCT			
METHANE	82.4	69.3	63.1
ETHANE	9.2	12.1	11.5
PROPANE	3.4	5.3	5.7
N-BUTANE	1.0	1.5	1.7
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.2	0.6	0.6
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	2.5	9.5	13.0
OXYGEN	0.0	1.7	2.9
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.17	0.07	0.07
HEATING VALUE*	1168	1174	1116
SPECIFIC GRAVITY	0.682	0.764	0.794

	INDEX 4912 SAMPLE 3925	INDEX 4913 SAMPLE 1100	INDEX 4914 SAMPLE 12667
STATE	OHIO	OHIO	OHIO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	BLOOM	MORGAN COUNTY	NOT GIVEN
WELL NAME	RICHARDSON NO. 1	J. LONGSTRETH NO. 1	E. D. PARKS NO. 1
LOCATION	BLOOM TWP.	SEC. 29, YORK TWP.	SEC. 9, MANCHESTER TWP.
OWNER	H. K. PORTER	SUN OIL CO.	LIBERTY PETROLEUM CORP.
COMPLETED	01/27/44	05/--/25	05/09/70
SAMPLED	09/14/44	08/03/25	02/12/71
FORMATION	SILU-CLINTON	MISS-BEREA	SILU-CLINTON & MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4325	1255	5230
WELLHEAD PRESSURE,PSIG	1190	450	1400
OPEN FLOW, MCFD	1	1500	3781
COMPONENT, MOLE PCT			
METHANE	84.6	85.0	86.5
ETHANE	9.8	13.0	4.9
PROPANE	---	---	1.3
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.3
NITROGEN	4.7	0.5	6.0
OXYGEN	0.1	0.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.9	TRACE
HELIUM	0.18	0.21	0.14
HEATING VALUE*	1033	1094	1041
SPECIFIC GRAVITY	0.628	0.632	0.635

	INDEX 4915 SAMPLE 10550	INDEX 4916 SAMPLE 3927	INDEX 4917 SAMPLE 4302
STATE	OHIO	OHIO	OHIO
COUNTY	MORGAN	MORGAN	MORGAN
FIELD	PORTERSVILLE	YORK	YORK TWP.
WELL NAME	GLEN TAYLOR NO. 1	HARRY PLETCHER NO. 1	D. L. JADWIN NO. 2-8307
LOCATION	SEC. 19, DEERFIELD TWP.	YORK TWP.	SEC. 26
OWNER	CARCO OIL, INC.	H. K. PORTER	OHIO FUEL GAS CO.
COMPLETED	03/01/66	08/01/44	04/09/47
SAMPLED	05/05/66	09/14/44	05/01/47
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU---
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4070	4031	3928
WELLHEAD PRESSURE,PSIG	980	1125	1130
OPEN FLOW, MCFD	9520	1	713
COMPONENT, MOLE PCT			
METHANE	86.0	89.3	85.8
ETHANE	4.8	6.2	10.1
PROPANE	1.1	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	6.6	3.7	3.5
OXYGEN	0.0	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.20	0.19	0.20
HEATING VALUE*	1052	1016	1050
SPECIFIC GRAVITY	0.638	0.605	0.621

	INDEX 4918 SAMPLE 9395	INDEX 4919 SAMPLE 9884	INDEX 4920 SAMPLE 9396
STATE	OHIO	OHIO	OHIO
COUNTY	MORROW	MORROW	MORROW
FIELD	CHESTERFIELD W	EDISON N	EDISON W
WELL NAME	MORROW ELEC. CO-OP NO. 2	ATHA-RANO NO. 1	OLDS NO. 1
LOCATION	LOT 15, FRANKLIN TWP.	LOT 27, GILEAD TWP.	CANNON TWP.
OWNER	TRI-STATE PRODUCING CO., INC	HOWARD D. ATHA OIL PRODUCER	PERRY FULK OIL PRODUCER
COMPLETED	03/21/64	04/29/65	02/13/64
SAMPLED	04/03/64	05/01/65	06/--/64
FORMATION	CAMB-TREMPEALEAU	CAMB-TREMPEALEAU	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3652	3126	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1260	1060	NOT GIVEN
OPEN FLOW, MCFD	675	1105	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.0	71.6	70.7
ETHANE	5.7	6.7	11.7
PROPANE	2.0	3.9	7.2
N-BUTANE	0.4	1.1	3.3
ISOBUTANE	0.2	0.9	1.5
N-PENTANE	TRACE	0.5	1.0
ISOPENTANE	0.1	TRACE	1.9
CYCLOPENTANE	TRACE	0.7	0.2
HEXANES PLUS	TRACE	TRACE	0.8
NITROGEN	6.2	10.0	0.4
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.35	0.04
HEATING VALUE*	1040	1062	1409
SPECIFIC GRAVITY	0.639	0.737	0.830

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4921 SAMPLE 8869	INDEX 4922 SAMPLE 9754	INDEX 4923 SAMPLE 9398
STATE	OHIO	OHIO	OHIO
COUNTY	MORROW	MORROW	MORROW
FIELD	NOT GIVEN	NOT GIVEN	WOODBURY S
WELL NAME	A. C. WINDBIGLER NO. 1	CASH NO. 1	BARBER UNIT NO. 1
LOCATION	SEC. 18, T20N, R19W	SEC. 18, PERRY TWP.	LOT 14, PERU TWP.
OWNER	PAN AMERICAN PETROLEUM CORP.	SOMIO PETROLEUM CO.	KIN-ARK OIL CO.
COMPLETED	12/03/62	01/06/65	12/15/63
SAMPLED	12/03/62	02/13/65	06/10/64
FORMATION	SILU-NIAGARAN	SILU-NIAGARAN	CAMB-TREMPEALEAU
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1443	1550	3112
WELLHEAD PRESSURE,PSIG	390	450	NOT GIVEN
OPEN FLOW, MCFD	1120	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	76.4	51.4
ETHANE	4.3	4.8	18.1
PROPANE	1.1	1.2	16.0
N-BUTANE	0.4	0.4	5.2
ISOBUTANE	0.0	0.4	2.2
N-PENTANE	TRACE	0.1	0.8
ISOPENTANE	0.2	0.1	1.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	6.0	15.6	4.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.30	0.60	0.04
HEATING VALUE*	1020	932	1624
SPECIFIC GRAVITY	0.624	0.672	0.987

	INDEX 4924 SAMPLE 12230	INDEX 4925 SAMPLE 10128	INDEX 4926 SAMPLE 4132
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	ADAMSVILLE	BROOKOVER	BRUSH CREEK
WELL NAME	DALE LANE NO. 1	C. F. & A. CARTER	ESTELLA BUCHANAN NO. 8231
LOCATION	SEC. 20, ADAMS TWP.	SEC. 19, WAYNE TWP.	SEC. 15, BRUSHCREEK TWP.
OWNER	CURTIS MINERALS	OXFORD OIL CO.	OHIO FUEL GAS CO.
COMPLETED	03/19/69	03/01/48	08/16/46
SAMPLED	03/27/70	09/09/65	10/08/46
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4375	3900	3687
WELLHEAD PRESSURE,PSIG	1300	300	1125
OPEN FLOW, MCFD	3600	20	396
COMPONENT, MOLE PCT			
METHANE	82.7	84.2	83.0
ETHANE	6.5	6.0	9.7
PROPANE	2.7	1.6	---
N-BUTANE	0.7	0.4	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	6.1	6.8	6.3
OXYGEN	0.0	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.17	0.22	0.21
HEATING VALUE*	1089	1057	1015
SPECIFIC GRAVITY	0.667	0.653	0.633

	INDEX 4927 SAMPLE 10139	INDEX 4928 SAMPLE 10137	INDEX 4929 SAMPLE 9629
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	COALDALE	FULTONHAM	GRATIOT
WELL NAME	V & E IDEN	ROBERTS	HARKNESS UNIT NO. 2
LOCATION	SEC. 5, HOPEWELL TWP.	SEC. 18, NEWTON TWP.	SEC. 6, T18N, R15W
OWNER	ROYAL OIL & GAS CORP.	OXFORD OIL CO.	OXFORD OIL CO.
COMPLETED	04/01/63	01/01/37	08/31/64
SAMPLED	09/09/65	09/09/65	11/07/64
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3214	3308	3080
WELLHEAD PRESSURE,PSIG	970	250	900
OPEN FLOW, MCFD	500	25	1200
COMPONENT, MOLE PCT			
METHANE	81.9	87.9	84.6
ETHANE	8.6	5.0	4.7
PROPANE	2.8	1.7	1.1
N-BUTANE	0.9	0.8	0.4
ISOBUTANE	0.8	0.5	0.2
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	3.7	3.4	7.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.08	0.13	0.26
HEATING VALUE*	1168	1094	1013
SPECIFIC GRAVITY	0.688	0.643	0.643

	INDEX 4930 SAMPLE 4144	INDEX 4931 SAMPLE 4135	INDEX 4932 SAMPLE 9834
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	MUSKINGUM COUNTY	NEWTON	NOT GIVEN
WELL NAME	M. M. WERNON NO. 1	MARY BUTLER NO. 1-7961	R & L BEATTY NO. 2
LOCATION	SEC. 19, T3N, R6W	SEC. 5	SEC. 36, SALT CREEK TWP.
OWNER	WITTMER OIL & GAS CORP.	OHIO FUEL GAS CO.	PETROL CO.
COMPLETED	06/27/45	06/05/46	01/15/65
SAMPLED	12/06/46	10/15/46	04/01/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4180	3457	4500
WELLHEAD PRESSURE,PSIG	960	740	610
OPEN FLOW, MCFD	230	332	325
COMPONENT, MOLE PCT			
METHANE	70.5	82.1	86.7
ETHANE	14.0	9.8	5.3
PROPANE	---	---	1.6
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	14.7	7.1	5.0
OXYGEN	0.1	0.6	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.26	0.20	0.18
HEATING VALUE*	965	1007	1049
SPECIFIC GRAVITY	0.687	0.637	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4933 SAMPLE 10140	INDEX 4934 SAMPLE 10138	INDEX 4935 SAMPLE 3924
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	MUSKINGUM
FIELD	POVERTY RUN	ROSEVILLE	ZANESWILLE
WELL NAME	ZELLA F. DEWITT	SPRING COMMUNITY NO. 1	ARMCO NO. 1
LOCATION	SEC. 3, HOPEWELL TWP.	SEC. 26, NEWTON TWP.	ZANESVILLE TWP.
OWNER	PRESTON OIL CO.	NATIONAL GAS & OIL CORP.	M. K. PORTER
COMPLETED	08/01/60	09/02/59	06/26/44
SAMPLED	09/09/65	09/09/65	09/14/44
FORMATION	SILU-CLINTON	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3248	3618	3495
WELLHEAD PRESSURE,PSIG	NOT GIVEN	920	1150
OPEN FLOW, MCFD	NOT GIVEN	180	2
COMPONENT, MOLE PCT			
METHANE	70.2	86.1	87.4
ETHANE	15.3	5.8	9.6
PROPANE	7.2	1.7	---
N-BUTANE	2.2	0.6	---
ISOBUTANE	1.1	0.3	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.7	0.1	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.6	0.2	---
NITROGEN	2.0	4.6	2.4
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.03	0.15	0.21
HEATING VALUE*	1369	1074	1057
SPECIFIC GRAVITY	0.801	0.644	0.614

	INDEX 4936 SAMPLE 11753	INDEX 4937 SAMPLE 12281	INDEX 4938 SAMPLE 11940
STATE	OHIO	OHIO	OHIO
COUNTY	MUSKINGUM	MUSKINGUM	NOBLE
FIELD	ZANESVILLE	ZANESVILLE	AVA
WELL NAME	JENKINS COMMUNITY NO. 1	ROGOVIN NO. 1	C. J. & J. A. BRYAN NO. 1
LOCATION	SEC. 10, NEWTON TWP.	MADISON TWP.	SEC. 1, NOBLE TWP.
OWNER	OXFORD OIL CO.	POINTER OIL CO.	LIBERTY PETROLEUM CORP.
COMPLETED	09/21/68	01/20/70	02/19/69
SAMPLED	02/03/69	05/27/70	06/14/69
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3472	4650	5155
WELLHEAD PRESSURE,PSIG	1200	1000	1325
OPEN FLOW, MCFD	3800	215000	1700
COMPONENT, MOLE PCT			
METHANE	85.6	84.6	87.1
ETHANE	5.8	5.8	4.7
PROPANE	1.2	1.8	1.6
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.3	0.0	0.2
ISOPENTANE	0.0	0.4	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.6	6.1	5.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.4	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.00	0.21	0.16
HEATING VALUE*	1039	1051	1059
SPECIFIC GRAVITY	0.643	0.644	0.637

	INDEX 4939 SAMPLE 13292	INDEX 4940 SAMPLE 13293	INDEX 4941 SAMPLE 10500
STATE	OHIO	OHIO	OHIO
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	GUERNSEY	GUERNSEY	MEDDLESON
WELL NAME	HOMER GUILER NO. 1	CHARLES SNODE NO. 1	CLAIR MEDDLESON NO. 1
LOCATION	SEC. 25, CENTER TWP.	SEC. 35, BUFFALO TWP.	OLIVE TWP.
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	PERMIAN OIL AND GAS CO.
COMPLETED	--/--/00	10/02/70	--/--/00
SAMPLED	07/05/72	07/06/72	03/28/66
FORMATION	ORDO-QUEENSTON	ORDO-QUEENSTON	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5899	5732	1370
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1460	200
OPEN FLOW, MCFD	3009	3900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.7	86.3	74.6
ETHANE	2.2	6.5	13.8
PROPANE	0.0	2.0	7.2
N-BUTANE	0.3	0.5	1.5
ISOBUTANE	0.8	0.5	0.6
N-PENTANE	0.8	0.2	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	7.7	3.6	1.5
OXYGEN	1.7	0.0	0.0
ARGON	1.9	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.0
HELIUM	0.12	0.11	0.10
HEATING VALUE*	969	1094	1292
SPECIFIC GRAVITY	0.665	0.644	0.747

	INDEX 4942 SAMPLE 12668	INDEX 4943 SAMPLE 12669	INDEX 4944 SAMPLE 10133
STATE	OHIO	OHIO	OHIO
COUNTY	NOBLE	NOBLE	PERRY
FIELD	NOT GIVEN	NOT GIVEN	BRISTOL
WELL NAME	SAMANTHA GROVES NO. 1	CHARLES STIERS NO. 1	KING/DENNIS
LOCATION	SEC. 19, BUFFALO TWP.	SEC. 12, NOBLE TWP.	SEC. 20, PIKE TWP.
OWNER	LIBERTY PETROLEUM CORP.	LIBERTY PETROLEUM CORP.	LANDA OIL CO.
COMPLETED	12/03/69	12/06/69	09/01/60
SAMPLED	02/12/71	02/12/71	09/09/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5192	5230	3329
WELLHEAD PRESSURE,PSIG	1400	1425	NOT GIVEN
OPEN FLOW, MCFD	2019	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	85.8	80.2
ETHANE	5.3	4.9	8.4
PROPANE	1.2	1.5	3.6
N-BUTANE	0.4	0.4	1.4
ISOBUTANE	0.3	0.4	0.9
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	4.8	7.7	3.6
OXYGEN	0.2	0.8	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.11	0.13	0.07
HEATING VALUE*	1047	1021	1207
SPECIFIC GRAVITY	0.629	0.650	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4945 SAMPLE 10178	INDEX 4946 SAMPLE 10551	INDEX 4947 SAMPLE 10552
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	CLAYTON	CORNING	CORNING
WELL NAME	CLYDE MYER	KEIFER-MARSHALL UNIT NO. 5	C. & V. WEAVER
LOCATION	SEC. 2, CLAYTON TWP.	SEC. 10, MONROE TWP.	SEC. 3, MONROE TWP.
OWNER	HOGAN & LEONARD OIL CO.	JOHN ALTIER, SR.	GALION PROSPECTORS
COMPLETED	08/01/62	02/01/66	08/01/65
SAMPLED	09/28/65	05/05/66	05/05/66
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3321	3893	3922
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	1050
OPEN FLOW, MCFD	870	3160	3500
COMPONENT, MOLE PCT			
METHANE	86.1	80.4	80.2
ETHANE	4.6	4.5	4.6
PROPANE	1.2	2.1	1.9
N-BUTANE	0.3	0.7	0.7
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.8	11.2	11.1
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.20	0.32	0.28
HEATING VALUE*	1025	1003	1009
SPECIFIC GRAVITY	0.635	0.667	0.672

	INDEX 4948 SAMPLE 10132	INDEX 4949 SAMPLE 4099	INDEX 4950 SAMPLE 10131
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	MOUNT PERRY	NOT GIVEN	PHERSON
WELL NAME	J. THOMPSON	SUNDAY CREEK COAL CO. NO.259	J. SCHOFIELD
LOCATION	SEC. 4, MADISON TWP.	SEC. 1, MONROE TWP.	SEC. 24, HOPEWELL TWP.
OWNER	C. E. SMITH & A. W. YENNE	OHIO FUEL GAS CO.	OXFORD OIL CO.
COMPLETED	11/01/59	04/25/45	01/01/48
SAMPLED	09/09/65	05/28/45	09/08/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3198	3983	3250
WELLHEAD PRESSURE,PSIG	900	1120	225
OPEN FLOW, MCFD	2190	757	30
COMPONENT, MOLE PCT			
METHANE	86.3	79.1	87.4
ETHANE	5.6	13.1	5.6
PROPANE	1.4	---	1.8
N-BUTANE	0.4	---	0.6
ISOBUTANE	0.4	---	0.3
N-PENTANE	0.1	---	0.2
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	5.2	7.4	3.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.19	0.28	0.10
HEATING VALUE*	1057	1036	1089
SPECIFIC GRAVITY	0.639	0.649	0.641

	INDEX 4951 SAMPLE 10130	INDEX 4952 SAMPLE 10135	INDEX 4953 SAMPLE 4370
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	SOMERSET	SOMERSET S	SOUTHERN
WELL NAME	IVA FISHER	NANCE	J. A. WELLS NO. 8390
LOCATION	SEC. 32, HOPEWELL TWP.	SEC. 13, READING TWP.	SEC. 11, BEARFIELD TWP.
OWNER	GEORGE MAUB, ET AL.	NATIONAL GAS & OIL CORP.	OHIO FUEL GAS CO.
COMPLETED	05/01/51	06/27/55	06/20/47
SAMPLED	09/09/65	09/08/65	10/21/47
FORMATION	NOT GIVEN	SILU-CLINTON	SILU-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3080	2741	3815
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1190
OPEN FLOW, MCFD	800	1594	798
COMPONENT, MOLE PCT			
METHANE	86.7	85.9	75.5
ETHANE	5.5	5.9	15.0
PROPANE	1.5	1.7	---
N-BUTANE	0.4	0.6	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	4.7	4.9	8.8
OXYGEN	0.0	TRACE	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.16	0.12	0.23
HEATING VALUE*	1066	1090	1034
SPECIFIC GRAVITY	0.639	0.652	0.668

	INDEX 4954 SAMPLE 5111	INDEX 4955 SAMPLE 6079	INDEX 4956 SAMPLE 467
STATE	OHIO	OHIO	OHIO
COUNTY	PERRY	PERRY	PERRY
FIELD	SUGAR GROVE	SUGAR GROVE	THORNSVILLE
WELL NAME	A. W. PASKELL NO. 1-8929	LOLA M. NOTES NO. 1	FINK NO. 1
LOCATION	SEC. 17, T13N, R14W	SEC. 9, HOPEWELL TWP.	1 MI. N THORNSVILLE
OWNER	OHIO FUEL GAS CO.	OHIO FUEL GAS CO.	LOGAN NATURAL GAS & FUEL CO.
COMPLETED	06/04/51	01/26/56	--/--/08
SAMPLED	10/08/51	06/04/56	10/07/20
FORMATION	SILU-NIAGARAN	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3548	2830	2580
WELLHEAD PRESSURE,PSIG	860	855	50
OPEN FLOW, MCFD	203	272	400
COMPONENT, MOLE PCT			
METHANE	84.4	85.5	72.2
ETHANE	4.1	5.2	23.1
PROPANE	1.3	2.0	---
N-BUTANE	0.4	0.8	---
ISOBUTANE	0.1	0.5	---
N-PENTANE	0.2	0.5	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.2	0.4	---
NITROGEN	5.2	4.2	3.7
OXYGEN	0.1	TRACE	0.7
ARGON	TRACE	TRACE	---
HYDROGEN	0.3	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.29	0.08	0.18
HEATING VALUE*	993	1106	1145
SPECIFIC GRAVITY	0.645	0.658	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4957 SAMPLE 10193	INDEX 4958 SAMPLE 10194	INDEX 4959 SAMPLE 9779
STATE	OHIO	OHIO	OHIO
COUNTY	PORTAGE	PORTAGE	PORTAGE
FIELD	BEST DEERFIELD-SMITH	BRIMFIELD	RANDOLPH
WELL NAME	CLINE NO. 1 - EOG NO.2225	C. STEWART NO.1-EOG NO.2057	J. R. FREEMAN NO. 1-413
LOCATION	LOT 37, DEERFIELD TWP.	SEC. 14, BRIMFIELD TWP.	LOT 71, RANDOLPH TWP.
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	BELDEN & BLAKE OIL PROD. CO.
COMPLETED	09/10/64	08/21/57	12/15/64
SAMPLED	10/04/64	10/04/65	03/02/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4792	4204	4674
WELLHEAD PRESSURE,PSIG	1440	1265	1400
OPEN FLOW, MCFD	2949	760	2370
COMPONENT, MOLE PCT			
METHANE	88.3	90.7	90.2
ETHANE	5.4	4.3	5.1
PROPANE	1.6	1.2	1.3
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.3	2.6	2.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.09	0.10	0.10
HEATING VALUE*	1079	1066	1074
SPECIFIC GRAVITY	0.633	0.617	0.618

	INDEX 4960 SAMPLE 9780	INDEX 4961 SAMPLE 8970	INDEX 4962 SAMPLE 9061
STATE	OHIO	OHIO	OHIO
COUNTY	PORTAGE	PORTAGE	PORTAGE
FIELD	RANDOLPH	RAVENNA	RAVENNA
WELL NAME	JAMES SPELLMAN NO. 1-407	J. M. PARSONS NO. 1-2287	M. M. MILLER NO. 1
LOCATION	LOT 62, RANDOLPH TWP.	LOT 25, ROOTSTOWN TWP.	LOT 95, RANDOLPH PORTAGE SUR
OWNER	BELDEN & BLAKE OIL PROD. Co.	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	11/27/64	02/02/63	03/29/63
SAMPLED	01/02/65	01/23/63	07/29/63
FORMATION	SILU-CLINTON	SILU-MEDINA	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4642	4370	4407
WELLHEAD PRESSURE,PSIG	1415	1370	1380
OPEN FLOW, MCFD	5130	1614	4080
COMPONENT, MOLE PCT			
METHANE	89.7	89.8	90.5
ETHANE	5.2	4.8	4.8
PROPANE	1.6	1.5	1.3
N-BUTANE	0.4	0.6	0.5
ISOBUTANE	0.2	0.1	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.6	2.6	2.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.09	0.10	0.10
HEATING VALUE*	1073	1080	1074
SPECIFIC GRAVITY	0.619	0.626	0.620

	INDEX 4963 SAMPLE 9613	INDEX 4964 SAMPLE 7859	INDEX 4965 SAMPLE 10513
STATE	OHIO	OHIO	OHIO
COUNTY	PORTAGE	PORTAGE	RICHLAND
FIELD	ROOTSTOWN	WILDCAT	WILDCAT
WELL NAME	ZIEKEFOOSE METZNER NO. 2	MOORE E NO. 1	S. MILLER NO. 1
LOCATION	LOT 1, ROOTSTOWN TWP.	LOT 79, FREEDOM TWP.	SEC. 24, PLYMOUTH TWP.
OWNER	MIDLAND EXPLORATION CO.	NORTHERN NATURAL GAS PROD. C	MCCLURE OIL CO.
COMPLETED	06/--/64	12/03/60	05/26/65
SAMPLED	10/16/64	02/11/61	03/29/66
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4555	4354	1324
WELLHEAD PRESSURE,PSIG	1400	1337	495
OPEN FLOW, MCFD	952	300	4300
COMPONENT, MOLE PCT			
METHANE	89.2	86.8	86.1
ETHANE	5.1	5.9	5.3
PROPANE	1.6	1.8	1.4
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	2.6	3.6	5.6
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.10	0.10	0.15
HEATING VALUE*	1090	1091	1034
SPECIFIC GRAVITY	0.631	0.645	0.635

	INDEX 4966 SAMPLE 11645	INDEX 4967 SAMPLE 10174	INDEX 4968 SAMPLE 10161
STATE	OHIO	OHIO	OHIO
COUNTY	STARK	STARK	STARK
FIELD	BETHLEHEM-STARK	CANTON	CANTON SUBURBAN
WELL NAME	A. & M. FEUCHT NO. 1	BREINING COMM. NO. 1-EOG NO.	W. MILLER NO. 2-EOG NO. 2099
LOCATION	BETHLEHEM TWP.	SEC. 21, CANTON TWP.	SEC. 28, PERRY TWP.
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	02/09/68	01/04/47	09/01/58
SAMPLED	09/18/68	09/30/65	09/22/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4394	4640	4334
WELLHEAD PRESSURE,PSIG	1250	1210	1250
OPEN FLOW, MCFD	7310	1101	1637
COMPONENT, MOLE PCT			
METHANE	87.7	88.7	87.3
ETHANE	5.6	5.5	5.8
PROPANE	1.7	1.4	1.7
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.5	3.0	3.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.13	0.10	0.11
HEATING VALUE*	1086	1080	1086
SPECIFIC GRAVITY	0.638	0.630	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4969 SAMPLE 10175	INDEX 4970 SAMPLE 10295	INDEX 4971 SAMPLE 10176
STATE	OHIO	OHIO	OHIO
COUNTY	STARK	STARK	STARK
FIELD	LAKE	MARLBORO S	PIKE-STARK
WELL NAME	TROYER NO. 1-EOG NO. 2	CHENEVEY NO. 1 - 2380	WEAVER NO. 1-EOG 1780
LOCATION	SEC. 21, LAKE TWP.	SEC. 25, MARLBORO TWP.	SEC. 15, PIKE TWP.
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	07/29/58	05/24/63	12/30/43
SAMPLED	09/30/65	10/20/65	09/30/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4445	4814	4865
WELLHEAD PRESSURE,PSIG	1000	400	1340
OPEN FLOW, MCFD	459	25	1069
COMPONENT, MOLE PCT			
METHANE	88.0	83.4	88.8
ETHANE	5.8	7.6	5.6
PROPANE	1.8	2.9	1.7
N-BUTANE	0.5	1.0	0.5
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	3.0	3.2	2.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	TRACE	0.1	0.10
HELIUM	0.11	0.11	0.10
HEATING VALUE*	1087	1157	1089
SPECIFIC GRAVITY	0.633	0.681	0.630

	INDEX 4972 SAMPLE 9080	INDEX 4973 SAMPLE 9090	INDEX 4974 SAMPLE 3873
STATE	OHIO	OHIO	OHIO
COUNTY	STARK	STARK	STARK
FIELD	RAVENNA	RAVENNA	SANDYVILLE
WELL NAME	A&M CHENEVEY COMM. NO. 1	A&M CHENEVEY COMM. NO. 1	REAM NO. 1
LOCATION	SEC. 25, MARLBORO STARK SUR.	SEC. 25, MARLBORO SUR.	SEC. 27, CANTON TWP.
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	MANLEY & BIRD
COMPLETED	05/24/63	05/24/63	08/--/44
SAMPLED	09/13/63	09/13/63	11/13/44
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4844	4814	4685
WELLHEAD PRESSURE,PSIG	400	400	NOT GIVEN
OPEN FLOW, MCFD	25	25	1630
COMPONENT, MOLE PCT			
METHANE	78.5	85.4	90.6
ETHANE	6.9	7.1	8.2
PROPANE	2.8	2.0	---
N-BUTANE	1.7	1.0	---
ISOBUTANE	0.3	0.6	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	0.4	0.3	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	0.2	---
NITROGEN	8.6	2.2	0.6
OXYGEN	1.2	0.0	0.4
ARGON	0.1	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.20	0.10	0.12
HEATING VALUE*	1042	1148	1065
SPECIFIC GRAVITY	0.683	0.665	0.600

	INDEX 4975 SAMPLE 10155	INDEX 4976 SAMPLE 10156	INDEX 4977 SAMPLE 10244
STATE	OHIO	OHIO	OHIO
COUNTY	STARK	STARK	SUMMIT
FIELD	STARK-SUMMIT	STARK-SUMMIT	GREENSBURG
WELL NAME	JENKINS NO.1-EOG 2114	ROHRER NO 1-EOG. NO. 1719	GOODYEAR TIRE & RUBBER NO. 1
LOCATION	SEC. 36 LAWRENCE TWP.	SEC. 1, JACKSON TWP.	SEC. 26, GREEN TWP.
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	09/06/59	05/18/39	--/--/00
SAMPLED	09/22/65	09/22/65	10/20/65
FORMATION	SILU-CLINTON	DEVO-ORISKANY	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4186	2881	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1250	975	NOT GIVEN
OPEN FLOW, MCFD	572	157	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	85.6	86.3
ETHANE	6.7	8.7	5.5
PROPANE	2.4	2.6	1.6
N-BUTANE	0.9	0.6	0.5
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	5.7	1.4	4.5
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.06	0.12
HEATING VALUE*	1094	1146	1073
SPECIFIC GRAVITY	0.668	0.655	0.645

	INDEX 4978 SAMPLE 10223	INDEX 4979 SAMPLE 10157	INDEX 4980 SAMPLE 4471
STATE	OHIO	OHIO	OHIO
COUNTY	SUMMIT	SUMMIT	SUMMIT
FIELD	RICHFIELD W	STARK-SUMMIT	WILDCAT
WELL NAME	E. MERTON NO.2 - EOG NO.969	KIMINECZ NO.1-EOG NO. 2022	J. G. MCCREADY NO. 1
LOCATION	SEC. 19, RICHFIELD TWP.	SEC. 17, FRANKLIN TWP.	LOT 73, NORTHHAMPTON TWP.
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	WISER OIL CO.
COMPLETED	--/--/00	08/14/56	12/19/47
SAMPLED	11/05/65	09/22/65	06/07/48
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3509	3900	3645
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1340	825
OPEN FLOW, MCFD	NOT GIVEN	2307	213
COMPONENT, MOLE PCT			
METHANE	85.5	87.3	84.6
ETHANE	6.8	5.8	13.4
PROPANE	2.7	1.5	---
N-BUTANE	0.9	0.7	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.4	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	2.8	3.5	1.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.17	0.11	0.12
HEATING VALUE*	1133	1099	1097
SPECIFIC GRAVITY	0.662	0.642	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4981 SAMPLE 17257	INDEX 4982 SAMPLE 9741	INDEX 4983 SAMPLE 12707
STATE	OHIO	OHIO	OHIO
COUNTY	TUSCARAWAS	TUSCARAWAS	TUSCARAWAS
FIELD	BALTIC	NEW CUMBERLAND	STONE CREEK
WELL NAME	DAN ANDREAS NO. 1	HARDWIDGE NO. 1	DEIBEL-GINTZ NO. 1
LOCATION	SEC. 18, AUBURN TWP.	SEC. 36, WARREN TWP.	JEFFERSON TWP.
OWNER	CLARENCE SHERMAN	MIDLAND EXPLORATION CO.	WESTERN EXPLORATION, INC.
COMPLETED	09/07/81	07/06/64	09/--/70
SAMPLED	04/16/84	02/16/65	03/01/71
FORMATION	ORDO-ROSE RUN	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6790	4923	4717
WELLHEAD PRESSURE,PSIG	2200	1400	1900
OPEN FLOW, MCFD	25	3072	3692
COMPONENT, MOLE PCT			
METHANE	89.6	88.4	84.6
ETHANE	5.0	5.6	6.7
PROPANE	1.7	1.6	2.0
N-BUTANE	0.6	0.4	0.6
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.9	3.2	4.9
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.06	0.12	0.14
HEATING VALUE*	1106	1076	1089
SPECIFIC GRAVITY	0.633	0.628	0.655

	INDEX 4984 SAMPLE 11845	INDEX 4985 SAMPLE 11729	INDEX 4986 SAMPLE 10177
STATE	OHIO	OHIO	OHIO
COUNTY	TUSCARAWAS	TUSCARAWAS	TUSCARAWAS
FIELD	WAINWRIGHT	WILDCAT	ZOARVILLE
WELL NAME	P. REICHMAN NO. 1	CROSS CREEK A-2	SPRING NO. 1-EOG NO. 1436
LOCATION	SEC. 13, WARWICK TWP.	GOSHEN TWP.	SEC. 49, SANDY TWP.
OWNER	MUTUAL OIL & GAS CO.	EAST OHIO GAS CO.	EAST OHIO GAS CO.
COMPLETED	10/30/68	06/17/68	10/15/37
SAMPLED	05/02/69	01/09/69	09/30/65
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4980	4865	4728
WELLHEAD PRESSURE,PSIG	1410	NOT GIVEN	1350
OPEN FLOW, MCFD	1750	2271	2067
COMPONENT, MOLE PCT			
METHANE	88.0	86.4	89.7
ETHANE	6.1	6.4	5.0
PROPANE	1.5	1.8	1.3
N-BUTANE	0.4	0.7	0.4
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	3.1	3.4	2.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.12	0.13	0.10
HEATING VALUE*	1074	1104	1079
SPECIFIC GRAVITY	0.627	0.649	0.625

	INDEX 4987 SAMPLE 542	INDEX 4988 SAMPLE 498	INDEX 4989 SAMPLE 500
STATE	OHIO	OHIO	OHIO
COUNTY	VINTON	VINTON	VINTON
FIELD	SUGAR GROVE	VINTON	VINTON
WELL NAME	P. M. CLARK 4	WILLIAMS NO. 1, OFS NO. 2863	M. JOHNSON, OFS NO. 1592
LOCATION	SEC. 7, ELK TWP.	SEC. 29, SWAN TWP.	SEC. 34, JACKSON TWP.
OWNER	LOGAN NATURAL GAS & FUEL CO.	OHIO FUEL SUPPLY CO.	OHIO FUEL SUPPLY CO.
COMPLETED	--/--/18	03/01/20	--/--/20
SAMPLED	11/--/20	10/08/20	10/11/20
FORMATION	SILU-CLINTON	SILU-CLINTON	SILU-CLINTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2745	2639	2400
WELLHEAD PRESSURE,PSIG	820	800	210
OPEN FLOW, MCFD	1410	1500	3500
COMPONENT, MOLE PCT			
METHANE	78.9	80.8	78.2
ETHANE	5.6	9.8	10.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.3	9.0	10.8
OXYGEN	0.9	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	0.0
HELIUM	0.51	0.39	0.41
HEATING VALUE*	900	994	989
SPECIFIC GRAVITY	0.643	0.638	0.649

	INDEX 4990 SAMPLE 4	INDEX 4991 SAMPLE 17784	INDEX 4992 SAMPLE 9052
STATE	OHIO	OHIO	OHIO
COUNTY	VINTON	WASHINGTON	WASHINGTON
FIELD	VINTON COUNTY	BARTLETT	LOWELL
WELL NAME	NOT GIVEN	B. PICKERING NO. 1	HAAS NO. 1
LOCATION	NOT GIVEN	SEC. 16, FAIRFIELD TWP.	LOT 72, BEAR CREEK ALLOTMENT
OWNER	OHIO FUEL GAS CO.	SUN EXPLORATION & PRODUCTION	QUAKER STATE OIL REF. CORP.
COMPLETED	--/--/15	05/25/82	05/21/63
SAMPLED	05/03/19	07/22/85	07/23/63
FORMATION	SILU-CLINTON	SILU-MEDINA	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	5370	1819
WELLHEAD PRESSURE,PSIG	155	1650	735
OPEN FLOW, MCFD	NOT GIVEN	595	960
COMPONENT, MOLE PCT			
METHANE	74.5	80.1	82.6
ETHANE	7.5	6.8	10.0
PROPANE	---	2.5	4.0
N-BUTANE	---	0.8	1.1
ISOBUTANE	---	0.4	0.1
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.6	0.1
NITROGEN	16.3	7.7	1.6
OXYGEN	1.1	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	TRACE	0.14	0.10
HEATING VALUE*	889	1098	1182
SPECIFIC GRAVITY	0.665	0.692	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 4993 SAMPLE 16207		INDEX 4994 SAMPLE 480		INDEX 4995 SAMPLE 10158	
STATE	OHIO		OHIO		OHIO	
COUNTY	WASHINGTON		WAYNE		WAYNE	
FIELD	NOT GIVEN		ASHLAND		CHIPPEWA	
WELL NAME	JUSTICE NO. 1		MALEY NO. 1		BRILLHART NO. 1-EOG NO. 2112	
LOCATION	DECATER TOWNSHIP		SEC. 9, CONGRESS TWP.		SEC. 4, BAUGHMAN TWP.	
OWNER	TREND EXPLORATION, INC.		LOGAN NATURAL GAS & FUEL CO.		EAST OHIO GAS CO.	
COMPLETED	11/99/78		--/--/15		07/09/59	
SAMPLED	03/10/81		09/01/20		09/22/65	
FORMATION	DEVO-OHIO		SILU-CLINTON		SILU-CLINTON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3880		3021		3760	
WELLHEAD PRESSURE,PSIG	800		110		1280	
OPEN FLOW, MCFD	4000		313		519	
COMPONENT, MOLE PCT						
METHANE	81.5		89.1		89.5	
ETHANE	9.6		7.2		5.1	
PROPANE	4.2		---		1.3	
N-BUTANE	0.9		---		0.3	
ISOBUTANE	0.3		---		0.3	
N-PENTANE	0.2		---		0.1	
ISOPENTANE	0.2		---		0.1	
CYCLOPENTANE	0.1		---		TRACE	
HEXANES PLUS	0.2		---		0.1	
NITROGEN	2.7		1.9		3.0	
OXYGEN	TRACE		1.5		0.0	
ARGON	0.0		---		TRACE	
HYDROGEN	0.1		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.0		0.0		0.1	
HELIUM	0.11		0.21		0.24	
HEATING VALUE*	1178		1031		1065	
SPECIFIC GRAVITY	0.687		0.605		0.621	

	INDEX 4996 SAMPLE 6787		INDEX 4997 SAMPLE 10307		INDEX 4998 SAMPLE 553	
STATE	OHIO		OHIO		OHIO	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	DALTON		HERMANSVILLE		LODI	
WELL NAME	LOUIS WITHRICH NO. 1		HARVEY GASSER NO. 1		WM. NAFTZGER NO. 2, S-1667	
LOCATION	SEC. 13, SUGAR CREEK		SEC. 30, MILTON TWP.		SEC. 7	
OWNER	WISER OIL CO.		KIN-ARK OIL CO.		LOGAN NATURAL GAS & FUEL CO.	
COMPLETED	--/--/00		07/18/65		--/--/17	
SAMPLED	--/--/58		11/30/65		12/--/20	
FORMATION	SILU-CLINTON, RED		SILU-CLINTON		NOT GIVEN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	4118		3360		3098	
WELLHEAD PRESSURE,PSIG	1320		965		200	
OPEN FLOW, MCFD	2494		1300		78	
COMPONENT, MOLE PCT						
METHANE	87.1		88.4		86.6	
ETHANE	6.9		5.3		10.9	
PROPANE	1.7		1.5		---	
N-BUTANE	0.5		0.7		---	
ISOBUTANE	0.4		0.2		---	
N-PENTANE	0.0		0.1		---	
ISOPENTANE	0.1		0.2		---	
CYCLOPENTANE	0.0		TRACE		---	
HEXANES PLUS	0.2		0.1		---	
NITROGEN	3.5		3.2		2.1	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.1		0.1		0.0	
HELIUM	0.10		0.12		0.21	
HEATING VALUE*	1087		1078		1073	
SPECIFIC GRAVITY	0.640		0.631		0.615	

	INDEX 4999 SAMPLE 7993		INDEX 5000 SAMPLE 3894		INDEX 5001 SAMPLE 9043	
STATE	OHIO		OHIO		OHIO	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	NORTHERN		NOT GIVEN		NOT GIVEN	
WELL NAME	NO. 10242		MARY MARTIN NO. 1		D. & E. WETGANDT NO. 1	
LOCATION	SEC. 3, PLAIN TWP.		SEC. 3, GREEN TWP.		SEC. 9, BAUGHMAN WAYNE CTY.	
OWNER	OHIO FUEL GAS CO.		NORTHERN ORDNANCE, INC.		EAST OHIO GAS CO.	
COMPLETED	--/--/00		09/04/44		02/15/63	
SAMPLED	05/22/61		09/04/44		07/15/63	
FORMATION	SILU-CLINTON		SILU-CLINTON		SILU-CLINTON	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3179		3440		3696	
WELLHEAD PRESSURE,PSIG	980		1125		1350	
OPEN FLOW, MCFD	2480		800		1417	
COMPONENT, MOLE PCT						
METHANE	83.3		91.9		81.9	
ETHANE	6.9		7.4		5.4	
PROPANE	1.9		---		2.0	
N-BUTANE	0.5		---		0.7	
ISOBUTANE	0.5		---		0.1	
N-PENTANE	0.1		---		0.2	
ISOPENTANE	0.1		---		0.1	
CYCLOPENTANE	TRACE		---		TRACE	
HEXANES PLUS	0.1		---		0.2	
NITROGEN	6.7		0.2		9.1	
OXYGEN	0.1		0.4		TRACE	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.0		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.2		0.0		TRACE	
HELIUM	0.20		0.10		0.20	
HEATING VALUE*	1052		1064		1028	
SPECIFIC GRAVITY	0.654		0.594		0.660	

	INDEX 5002 SAMPLE 7148		INDEX 5003 SAMPLE 10340		INDEX 5004 SAMPLE 10341	
STATE	OHIO		OHIO		OHIO	
COUNTY	WAYNE		WOOD		WOOD	
FIELD	WILDCAT		FREEPORT		FREEPORT	
WELL NAME	NO. 10042		ROSENDALE		DEWITT	
LOCATION	SEC. 7, GREEN TWP.		PERRY TWP.		PERRY TWP.	
OWNER	WARD W. RAMSEYER		W. M. DENNIS & SON NAT. GAS		W. M. DENNIS & SON NAT. GAS	
COMPLETED	05/28/59		01/01/09		01/01/42	
SAMPLED	07/14/59		12/22/65		12/22/65	
FORMATION	SILU-CLINTON		ORDO-TRENTON		ORDO-TRENTON	
GEOLOGIC PROVINCE CODE	160		300		300	
DEPTH, FEET	3424		1180		1180	
WELLHEAD PRESSURE,PSIG	1340		20		20	
OPEN FLOW, MCFD	644		10		2	
COMPONENT, MOLE PCT						
METHANE	87.8		71.6		73.7	
ETHANE	5.0		10.0		8.6	
PROPANE	1.3		5.6		4.8	
N-BUTANE	0.0		2.5		2.0	
ISOBUTANE	0.6		0.9		0.9	
N-PENTANE	0.1		0.6		0.6	
ISOPENTANE	0.0		0.9		0.9	
CYCLOPENTANE	TRACE		0.2		0.2	
HEXANES PLUS	0.0		0.6		0.6	
NITROGEN	4.7		6.7		7.2	
OXYGEN	0.2		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.2	
HELIUM	0.10		0.13		0.14	
HEATING VALUE*	1037		1267		1226	
SPECIFIC GRAVITY	0.624		0.789		0.768	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5005 SAMPLE 6552	INDEX 5006 SAMPLE 17901	INDEX 5007 SAMPLE 6559
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	AMORITA S	BURLINGTON S	CARMEN N
WELL NAME	STATE-HEATH NO. 1	KASPAREK-LEWIS NO. 1-27	MORGENSON-JENNINGS NO. 1
LOCATION	SEC. 16, T26N, R10W	SEC. 27, T28N, R12W	SEC. 13, T25N, R12W
OWNER	GULF OIL CORP. & B.M. HEALTH	CHAMPLIN PETROLEUM CO.	AMERADA HESS CORP.
COMPLETED	01/01/58	06/29/85	04/13/58
SAMPLED	04/09/58	--/--/00	04/19/58
FORMATION	PENN-CHEROKEE	DEVO-MISENER	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4914	5581	5983
WELLHEAD PRESSURE,PSIG	1867	1851	560
OPEN FLOW, MCFD	3500	5000	115
COMPONENT, MOLE PCT			
METHANE	88.0	78.9	87.7
ETHANE	6.1	8.3	7.3
PROPANE	2.1	5.0	1.8
N-BUTANE	0.8	1.9	0.7
ISOBUTANE	0.4	TRACE	0.2
N-PENTANE	0.2	0.8	0.3
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.8	4.0	1.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.10	0.07	0.10
HEATING VALUE*	1136	1204	1127
SPECIFIC GRAVITY	0.648	0.721	0.643

	INDEX 5008 SAMPLE 10765	INDEX 5009 SAMPLE 11272	INDEX 5010 SAMPLE 6547
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	CHEROKEE SW	CHEROKEE W	CHEROKITA TREND
WELL NAME	COLLINS NO. 1	TAYLOR-HEATH NO. 1	O. Z. SMITH A NO. 1
LOCATION	SEC. 21, T26N, R11W	SEC. 2, T26N, R12W	SEC. 21, T27N, R10W
OWNER	J. W. MUSER CORP.	GULF OIL CORP.	CONTINENTAL OIL CO.
COMPLETED	12/18/65	12/06/57	--/--/00
SAMPLED	10/26/66	02/05/68	03/24/58
FORMATION	DEVO-HUNTON	PENN-CHEROKEE	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6082	5455	280
WELLHEAD PRESSURE,PSIG	2069	1242	NOT GIVEN
OPEN FLOW, MCFD	3650	2472	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	88.6	1.4
ETHANE	9.4	5.6	0.2
PROPANE	5.8	2.4	0.1
N-BUTANE	2.2	0.8	TRACE
ISOBUTANE	0.8	0.3	0.0
N-PENTANE	1.3	0.2	TRACE
ISOPENTANE	0.9	0.4	0.0
CYCLOPENTANE	0.7	0.1	TRACE
HEXANES PLUS	1.4	0.2	0.1
NITROGEN	4.5	1.2	97.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.11	0.05	0.80
HEATING VALUE*	1320	1137	25
SPECIFIC GRAVITY	0.796	0.648	0.957

	INDEX 5011 SAMPLE 9820	INDEX 5012 SAMPLE 10104	INDEX 5013 SAMPLE 13224
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	CHEROKITA TREND	CHEROKITA TREND	CHEROKITA TREND
WELL NAME	GOEKAN A-1	U.S.A. NO. 1-18	W. E. LODGE A NO. 1
LOCATION	SEC. 21, T27N, R11W	SEC. 18, T27N, R9W	SEC. 19, T27N, R10W
OWNER	PHILLIPS PETROLEUM CO.	SHELL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	12/29/64	08/05/65	03/13/72
SAMPLED	03/24/65	09/07/65	05/30/72
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5203	5110	4150
WELLHEAD PRESSURE,PSIG	1915	1555	1600
OPEN FLOW, MCFD	1290	1289	2281
COMPONENT, MOLE PCT			
METHANE	87.3	89.8	85.3
ETHANE	5.5	5.2	5.0
PROPANE	2.0	1.8	2.4
N-BUTANE	0.5	0.5	0.8
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.8	1.6	5.1
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.08	0.07	0.16
HEATING VALUE*	1088	1098	1092
SPECIFIC GRAVITY	0.643	0.629	0.660

	INDEX 5014 SAMPLE 9632	INDEX 5015 SAMPLE 11676	INDEX 5016 SAMPLE 11362
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	DACOMA E	DACOMA NE	DACOMA S
WELL NAME	O. LEAMON NO. 1	SHARE NO. 1-29	NEWLIN NO. 1
LOCATION	SEC. 5, T25N, R12W	SEC. 29, T26N, R12W	SEC. 19, T25N, R12W
OWNER	SUN OIL CO.	CLEARY PETROLEUM CORP.	CONTINENTAL OIL CO.
COMPLETED	05/22/63	08/12/68	--/--/00
SAMPLED	11/10/64	10/09/68	03/04/68
FORMATION	PENN-COTTAGE GROVE	DEVO-HUNTON	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6476	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1955	2200	NOT GIVEN
OPEN FLOW, MCFD	5950	8600D	10600
COMPONENT, MOLE PCT			
METHANE	87.6	88.0	90.1
ETHANE	4.6	6.7	4.6
PROPANE	2.9	2.1	2.0
N-BUTANE	1.9	0.5	0.9
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.4	0.1	0.1
HEXANES PLUS	0.8	0.1	0.3
NITROGEN	2.3	1.8	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.09	0.09	0.06
HEATING VALUE*	1147	1107	1127
SPECIFIC GRAVITY	0.665	0.635	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5017 SAMPLE 14242	INDEX 5018 SAMPLE 14243	INDEX 5019 SAMPLE 9845
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	LAMBERT NW	LAMBERT NW	LAMBERT SE
WELL NAME	WEBB NO. 9-B	WEBB NO. 9-B	MCDANIEL NO. 1
LOCATION	SEC. 9, T26N, R12W	SEC. 9, T26N, R12W	SEC. 21, T25N, R11W
OWNER	RAN RICKS, JR.	RAN RICKS, JR.	NATURAL GAS & OIL PROD. CO.
COMPLETED	09/--/75	--/--/00	10/04/64
SAMPLED	12/--/74	12/--/74	04/15/65
FORMATION	PENN-RED FORK	PENN-RED FORK	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5810
WELLHEAD PRESSURE,PSIG	1820	NOT GIVEN	1942
OPEN FLOW, MCFD	3100	NOT GIVEN	1849
COMPONENT, MOLE PCT			
METHANE	88.8	88.9	90.1
ETHANE	5.5	5.5	5.8
PROPANE	2.6	2.6	1.7
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.9	0.9	1.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.04	0.12
HEATING VALUE*	1141	1144	1107
SPECIFIC GRAVITY	0.646	0.649	0.631

	INDEX 5020 SAMPLE 14704	INDEX 5021 SAMPLE 14705	INDEX 5022 SAMPLE 9965
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	LAMBERT SE	LAMBERT SE	RINGWOOD
WELL NAME	RUTH NO. 1	SCHNITZER	MILACEK UNIT NO. 1-C
LOCATION	SEC. 15, T25N, R10W	SEC. 22, T25N, R10W	SEC. 10, T23N, R9W
OWNER	L. R. FRENCH, JR.	L. R. FRENCH, JR.	CHAMPLIN PETROLEUM CO.
COMPLETED	11/02/75	--/--/00	06/08/65
SAMPLED	06/15/76	06/15/76	07/08/65
FORMATION	PENN-OSWEGO	PENN-OSWEGO	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5388	5483	6640
WELLHEAD PRESSURE,PSIG	750	950	2183
OPEN FLOW, MCFD	600	600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	86.2	90.0
ETHANE	5.3	5.7	4.4
PROPANE	2.8	3.2	1.7
N-BUTANE	0.8	1.0	0.7
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	2.3	2.4	1.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.08	0.09	0.10
HEATING VALUE*	1134	1146	1115
SPECIFIC GRAVITY	0.656	0.670	0.638

	INDEX 5023 SAMPLE 9966	INDEX 5024 SAMPLE 11005	INDEX 5025 SAMPLE 11006
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	MILACEK UNIT NO. 1-T	PECHA NO. 1	PECHA NO. 1
LOCATION	SEC. 10, T23N, R9W	SEC. 9, T23N, R9W	SEC. 9, T23N, R9W
OWNER	CHAMPLIN PETROLEUM CO.	ALADDIN PETROLEUM CORP.	ALADDIN PETROLEUM CORP.
COMPLETED	06/01/65	01/02/67	01/02/67
SAMPLED	07/08/65	06/21/67	06/21/67
FORMATION	DEVO-HUNTON	MISS---	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7078	6515	7123
WELLHEAD PRESSURE,PSIG	2524	1350	1350
OPEN FLOW, MCFD	NOT GIVEN	14174	7400
COMPONENT, MOLE PCT			
METHANE	86.7	87.0	87.8
ETHANE	6.8	6.4	6.5
PROPANE	2.7	2.1	2.0
N-BUTANE	0.9	0.7	0.8
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	TRACE	0.2	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.8	0.4	0.2
NITROGEN	0.9	1.8	1.5
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.10	0.57	0.05
HEATING VALUE*	1183	1125	1127
SPECIFIC GRAVITY	0.671	0.648	0.647

	INDEX 5026 SAMPLE 11274	INDEX 5027 SAMPLE 11275	INDEX 5028 SAMPLE 12124
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	JOHNSON LARIMORE UNIT NO. 1	JOHNSON-LARIMORE UNIT NO. 1	MINNICK NO. 1
LOCATION	SEC. 1, T23N, R10W	SEC. 1, T23N, R10W	SEC. 24, T24N, R10W
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	INTERNATIONAL NUCLEAR CORP.
COMPLETED	05/15/65	05/15/65	--/--/69
SAMPLED	02/10/68	02/10/68	11/20/69
FORMATION	DEVO-HUNTON	MISS---	DEVO-MISENER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7184	6504	7120
WELLHEAD PRESSURE,PSIG	1142	1337	950
OPEN FLOW, MCFD	1133	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.5	86.9	68.9
ETHANE	8.6	7.0	14.2
PROPANE	3.8	2.5	7.7
N-BUTANE	0.8	0.7	2.2
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.3	0.3	0.8
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	2.7	1.8	4.8
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.08	0.05	0.06
HEATING VALUE*	1155	1127	1310
SPECIFIC GRAVITY	0.675	0.650	0.793

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5029 SAMPLE 12261	INDEX 5030 SAMPLE 12262	INDEX 5031 SAMPLE 12263
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	SIMON B. UNRUH UNIT NO. 1	JULIUS J. SEVERIN UNIT NO. 1	L. V. MAHAFFEY UNIT NO. 1
LOCATION	SEC. 2, T23N, R9W	SEC. 12, T23N, R9W	SEC. 3, T23N, R9W
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	06/27/65	08/09/65	06/10/65
SAMPLED	05/19/70	05/19/70	05/19/70
FORMATION	MISS---	MISS---	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6408	6430	6398
WELLHEAD PRESSURE,PSIG	2060	1875	2100
OPEN FLOW, MCFD	5207	7255	7119
COMPONENT, MOLE PCT			
METHANE	87.6	88.1	77.9
ETHANE	6.0	5.1	5.2
PROPANE	2.5	2.1	2.3
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	1.9	2.5	12.5
OXYGEN	0.0	0.3	2.3
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.3	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1134	1104	1007
SPECIFIC GRAVITY	0.652	0.644	0.691

	INDEX 5032 SAMPLE 5974	INDEX 5033 SAMPLE 16507	INDEX 5034 SAMPLE 17653
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ALFALFA	ALFALFA	ALFALFA
FIELD	WAKITA TREND	WAKITA TREND	WAKITA TREND
WELL NAME	J. E. MALTBIE NO. 1	FEELY NO. 1-23	PASCHALL NO. 22-1
LOCATION	SEC. 8, T28N, R9W	SEC. 23, T28N, R9W	SEC. 22, T28N, R9W
OWNER	CONTINENTAL OIL CO.	KWB OIL PROPERTY MGMT., INC.	MID-AMERICA PETROLEUM CORP.
COMPLETED	07/29/55	--/--/81	02/28/84
SAMPLED	11/29/55	04/28/82	03/01/85
FORMATION	PENN-BASAL	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4892	5175	5140
WELLHEAD PRESSURE,PSIG	1779	1950	1400
OPEN FLOW, MCFD	32800	1400	1379
COMPONENT, MOLE PCT			
METHANE	81.1	84.6	84.0
ETHANE	6.7	5.6	6.1
PROPANE	3.0	2.3	3.2
N-BUTANE	1.2	0.8	1.8
ISOBUTANE	0.7	0.5	0.7
N-PENTANE	1.2	0.4	0.8
ISOPENTANE	0.4	0.1	0.5
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	1.1	0.4	0.3
NITROGEN	4.8	5.0	2.3
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.08	0.09	0.08
HEATING VALUE*	1219	1104	1202
SPECIFIC GRAVITY	0.728	0.665	0.701

	INDEX 5035 SAMPLE 16736	INDEX 5036 SAMPLE 6595	INDEX 5037 SAMPLE 11421
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ATOKA	BEAVER	BEAVER
FIELD	RIDGE S	BALKO S	BALKO S
WELL NAME	TAYLOR NO. 1	MELEN BARBY NO. 1	MITCHELL NO. 1
LOCATION	SEC. 15, T3S, R11E	SEC. 10, T1N, R22ECM	SEC. 3, T1N, R23ECM
OWNER	SOHIO PETROLEUM CO.	TEXACO INC.	WESTERN OIL FIELDS, INC.
COMPLETED	11/13/81	04/07/58	--/--/00
SAMPLED	12/14/82	05/14/58	--/--/00
FORMATION	PENN-WAPANUCKA	PENN-KANSAS CITY	PENN-MORROW
GEOLOGIC PROVINCE CODE	400	360	360
DEPTH, FEET	9824	5998	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2888	380	869
OPEN FLOW, MCFD	1400	52	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.1	47.5	71.8
ETHANE	2.9	14.1	8.1
PROPANE	0.9	18.7	6.7
N-BUTANE	0.2	6.5	1.6
ISOBUTANE	0.1	3.4	1.1
N-PENTANE	TRACE	1.0	0.6
ISOPENTANE	0.1	2.0	0.1
CYCLOPENTANE	0.3	0.4	0.1
HEXANES PLUS	0.3	0.8	0.3
NITROGEN	0.6	5.2	7.4
OXYGEN	0.1	TRACE	1.5
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.03	0.04	0.09
HEATING VALUE*	1064	1737	1186
SPECIFIC GRAVITY	0.594	1.070	0.766

	INDEX 5038 SAMPLE 12968	INDEX 5039 SAMPLE 12970	INDEX 5040 SAMPLE 12971
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	BALKO S	BALKO S	BALKO S
WELL NAME	HUMMER NO. 1	FRT NO. 2-34	THRASHER NO. 1-8
LOCATION	SEC. 31, T1N, R23ECM	SEC. 34, T1N, R24ECM	SEC. 35, T1N, R22ECM
OWNER	HERNDON DRILLING CO.	EXPLORATION VENTURES	PHILCON DEVELOPMENT CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/23/71	08/23/71	08/23/71
FORMATION	PENN-MARMATON	NOT GIVEN	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6950	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.7	80.4	44.0
ETHANE	7.5	7.9	15.9
PROPANE	6.7	4.7	22.9
N-BUTANE	3.0	1.4	8.3
ISOBUTANE	1.1	0.8	3.2
N-PENTANE	1.0	0.8	2.4
ISOPENTANE	0.6	0.2	0.3
CYCLOPENTANE	0.4	0.3	0.3
HEXANES PLUS	0.7	0.7	0.8
NITROGEN	4.0	2.9	1.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.0
HELIUM	0.19	0.11	0.02
HEATING VALUE*	1323	1242	1681
SPECIFIC GRAVITY	0.793	0.727	1.122

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5041 SAMPLE 12972	INDEX 5042 SAMPLE 16475	INDEX 5043 SAMPLE 17544
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	BALKO S	BALKO S	BALKO S
WELL NAME	SWAIM NO. 1	NAYLOR "A" NO. 1-32	MORRIS 22-1 NO. 1
LOCATION	SEC. 36, T1N, R22ECM	SEC. 32, T1N, R22ECM	SEC. 22, T1N, R22 ECM
OWNER	PHILCON DEVELOPMENT CO.	NATURAL GAS ANADARKO, INC.	INTERNORTH, INC.
COMPLETED	--/--/00	09/15/81	02/03/84
SAMPLED	04/23/71	04/01/82	12/20/84
FORMATION	PENN-MARMATON	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	8056	8583
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1774	2197
OPEN FLOW, MCFD	NOT GIVEN	2704	1450
COMPONENT, MOLE PCT			
METHANE	68.9	86.7	91.6
ETHANE	10.5	5.7	2.3
PROPANE	9.9	2.9	0.8
N-BUTANE	3.2	0.9	0.3
ISOBUTANE	1.4	0.4	0.2
N-PENTANE	1.2	0.2	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.6	0.3	0.2
NITROGEN	3.6	1.8	3.6
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.3
HELIUM	0.10	0.15	0.32
HEATING VALUE*	1404	1140	1029
SPECIFIC GRAVITY	0.839	0.661	0.609

	INDEX 5044 SAMPLE 14865	INDEX 5045 SAMPLE 16929	INDEX 5046 SAMPLE 5703
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	BOYD E	BOYD E	CAMRICK GAS AREA
WELL NAME	DAVIS NO. 2-11	BUXTON NO. 1	F. L. HARRISON NO. 2
LOCATION	SEC. 11, T3N, R21ECM	SEC. 18, T3N, R20ECM	SEC. 30, T2N, R20ECM
OWNER	WECO DEVELOPMENT CO.	FUNK EXPLORATION CO.	UNITED PRODUCING CO., INC.
COMPLETED	08/06/76	05/04/82	09/15/54
SAMPLED	12/03/76	05/10/83	10/12/54
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6766	6750	6714
WELLHEAD PRESSURE,PSIG	1410	1625	1413
OPEN FLOW, MCFD	3318	4500	42800
COMPONENT, MOLE PCT			
METHANE	90.2	80.9	85.2
ETHANE	4.4	6.3	5.5
PROPANE	2.2	4.5	3.9
N-BUTANE	0.7	1.4	1.0
ISOBUTANE	0.2	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.8	0.3
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	1.1	4.0	2.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.12	0.14	0.16
HEATING VALUE*	1115	1165	1145
SPECIFIC GRAVITY	0.635	0.711	0.673

	INDEX 5047 SAMPLE 6097	INDEX 5048 SAMPLE 6352	INDEX 5049 SAMPLE 7484
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	O. C. FLOWER GAS UNIT B 1	LEHMANN UNIT NO. 1	ANNIE L. MOUNTS NO. 1
LOCATION	SEC. 8, T1N, R20ECM	SEC. 30, T1N, R20ECM	SEC. 21, T1N, R21ECM
OWNER	RICHFIELD CO.	CARTER OIL CO.	SUN OIL CO.
COMPLETED	01/23/56	--/--/00	12/17/59
SAMPLED	06/26/56	07/08/57	03/31/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7202	7441	7963
WELLHEAD PRESSURE,PSIG	1461	2100	1641
OPEN FLOW, MCFD	2200	28750	3000
COMPONENT, MOLE PCT			
METHANE	83.9	88.2	83.6
ETHANE	6.3	5.2	6.9
PROPANE	4.3	2.8	4.3
N-BUTANE	1.6	1.0	1.3
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.6	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.6	0.8	1.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1194	1150	1189
SPECIFIC GRAVITY	0.690	0.654	0.691

	INDEX 5050 SAMPLE 8007	INDEX 5051 SAMPLE 8377	INDEX 5052 SAMPLE 8483
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	FLOYD A. KERNS NO. 1-36	T. O. WILSON	L. L. LEATHERMAN NO. 1
LOCATION	SEC. 36, T2N, R20ECM	SEC. 26, T2N, R20ECM	SEC. 34, T2N, R20ECM
OWNER	MAY EXPLORATION VENTURES	MAY EXPLORATION VENTURES	CABOT CORP.
COMPLETED	11/18/60	12/19/61	02/06/62
SAMPLED	06/--/61	01/24/62	03/26/62
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7690	7542	7350
WELLHEAD PRESSURE,PSIG	1547	1708	1679
OPEN FLOW, MCFD	6894	5800	26000
COMPONENT, MOLE PCT			
METHANE	92.5	83.0	83.5
ETHANE	3.6	3.1	6.6
PROPANE	1.6	1.4	5.2
N-BUTANE	0.5	0.5	1.2
ISOBUTANE	0.3	0.2	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.2	8.9	2.3
OXYGEN	TRACE	1.8	TRACE
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.10	0.08	0.12
HEATING VALUE*	1093	988	1179
SPECIFIC GRAVITY	0.615	0.661	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 5053 SAMPLE 12854	INDEX 5054 SAMPLE 12855	INDEX 5055 SAMPLE 12856
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	SIMS NO. 1-36U	SIMS NO. 1-36L	SIMS NO. 2-36
LOCATION	SEC. 36, T1N, R20ECM	SEC. 36, T1N, R20ECM	SEC. 36, T1N, R20ECM
OWNER	SUNSET INTERNATL. PET. CORP.	SUNSET INTERNATL. PET. CORP.	SUNSET INTERNATL. PET. CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/21/71	06/21/71	06/21/71
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7550	8400	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	540	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	48.5	87.6	82.1
ETHANE	10.8	5.1	5.3
PROPANE	17.1	3.4	3.5
N-BUTANE	8.4	0.9	0.4
ISOBUTANE	3.7	0.4	0.9
N-PENTANE	2.6	0.2	0.3
ISOPENTANE	3.5	0.2	1.1
CYCLOPENTANE	1.1	TRACE	1.2
HEXANES PLUS	2.3	0.1	1.7
NITROGEN	1.9	1.7	2.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.4
HELIUM	0.09	0.11	0.13
HEATING VALUE*	1957	1133	1253
SPECIFIC GRAVITY	1.165	0.650	0.741

	INDEX 5056 SAMPLE 12864	INDEX 5057 SAMPLE 12872	INDEX 5058 SAMPLE 12876
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	W. A. GRAY NO. 1	ANDERSON NO. 1	BRAMSGROVE NO. 2
LOCATION	SEC. 34, T1N, R21ECM	SEC. 34, T1N, R20ECM	SEC. 33, T1N, R20ECM
OWNER	EXXON CO., U.S.A.	MUNT OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/00	08/27/58	--/--/00
SAMPLED	06/22/71	06/21/71	06/23/71
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7722	NOT GIVEN
WELLHEAD PRESSURE,PSIG	140	300	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	86.6	88.5
ETHANE	6.6	5.3	4.7
PROPANE	5.2	3.9	3.1
N-BUTANE	1.3	1.2	1.0
ISOBUTANE	0.8	0.5	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.5	0.2	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	1.7	1.4	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.14	0.03	0.10
HEATING VALUE*	1218	1174	1144
SPECIFIC GRAVITY	0.702	0.671	0.652

	INDEX 5059 SAMPLE 16619	INDEX 5060 SAMPLE 16620	INDEX 5061 SAMPLE 7471
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CORO SW
WELL NAME	RAGSDALE TRUST NO. 1	RAGSDALE TRUST NO. 1	PERRY JENKINS NO. 1-9
LOCATION	SEC. 9, T2N, R20ECM	SEC. 9, T2N, R20ECM	SEC. 9, T1N, R24ECM
OWNER	KELLOIL, INC.	KELLOIL, INC.	RAY EXPLORATION VENTURES
COMPLETED	11/07/81	11/07/81	11/--/59
SAMPLED	08/17/82	08/17/82	03/30/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7060	6638	8037
WELLHEAD PRESSURE,PSIG	1400	450	2331
OPEN FLOW, MCFD	2800	800	21640
COMPONENT, MOLE PCT			
METHANE	75.7	81.0	95.9
ETHANE	7.5	5.9	0.2
PROPANE	7.8	5.0	0.1
N-BUTANE	2.7	1.7	0.1
ISOBUTANE	1.1	0.8	TRACE
N-PENTANE	0.9	0.4	TRACE
ISOPENTANE	1.0	0.7	TRACE
CYCLOPENTANE	0.2	0.3	TRACE
HEXANES PLUS	0.4	0.5	TRACE
NITROGEN	2.5	2.9	3.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	TRACE
HELIUM	0.16	0.15	0.20
HEATING VALUE*	1320	1225	981
SPECIFIC GRAVITY	0.781	0.725	0.572

	INDEX 5062 SAMPLE 7472	INDEX 5063 SAMPLE 9903	INDEX 5064 SAMPLE 11084
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	CORO SW	DORBEY	DORBEY
WELL NAME	PERRY JENKINS NO. 1-9	ELLERSON A-1	PYLE J NO. 1
LOCATION	SEC. 9, T1N, R24ECM	SEC. 15, T4N, R20ECM	SEC. 26, T4N, R20ECM
OWNER	RAY EXPLORATION VENTURES	ANADARKO PRODUCTION CO.	JAMES F. SMITH
COMPLETED	11/--/59	12/22/64	06/07/67
SAMPLED	03/30/60	05/26/65	--/--/00
FORMATION	PENN-MORROW	MISS-CHESTER	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8562	6454	7885
WELLHEAD PRESSURE,PSIG	2165	1625	2021
OPEN FLOW, MCFD	7490	2459	9180
COMPONENT, MOLE PCT			
METHANE	86.0	82.0	73.8
ETHANE	6.5	4.7	9.1
PROPANE	3.2	2.4	3.9
N-BUTANE	1.6	0.9	1.5
ISOBUTANE	0.5	0.6	1.0
N-PENTANE	0.3	0.3	1.1
ISOPENTANE	0.3	0.2	1.0
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.3	1.1
NITROGEN	1.1	8.0	6.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.10	0.29	0.12
HEATING VALUE*	1168	1068	1253
SPECIFIC GRAVITY	0.670	0.677	0.777

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5065 SAMPLE 11422	INDEX 5066 SAMPLE 15807	INDEX 5067 SAMPLE 7825
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	ELMWOOD	FORGAN S	GRAND VALLEY E
WELL NAME	SLEEPER NO. 1	SIMMONS NO. 1	FRED JUST NO. 1
LOCATION	SEC. 25, T2N, R23ECM	SEC. 25, T6N, R23ECM	SEC. 1, T2N, R21ECM
OWNER	WESTERN OIL FIELDS, INC.	ELDER & VAUGHN	KINGWOOD OIL CO.
COMPLETED	--/--/00	02/13/79	12/01/60
SAMPLED	--/--/00	10/22/79	01/03/61
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6048	7077
WELLHEAD PRESSURE,PSIG	763	1648	1100
OPEN FLOW, MCFD	NOT GIVEN	3701	1250
COMPONENT, MOLE PCT			
METHANE	83.7	80.7	84.9
ETHANE	8.1	5.1	6.9
PROPANE	4.4	2.7	3.7
N-BUTANE	1.2	0.9	1.0
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.9	1.1	1.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.12	0.09	0.20
HEATING VALUE*	1195	1140	1161
SPECIFIC GRAVITY	0.686	0.649	0.671

	INDEX 5068 SAMPLE 11410	INDEX 5069 SAMPLE 11856	INDEX 5070 SAMPLE 6924
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	GRAND VALLEY E	GRAND VALLEY E	GRAND VALLEY N
WELL NAME	SARGENT NO. 1	MEIERS NO. 1	O. JOLLIFFE ESTATE NO. 1
LOCATION	SEC. 13, T2N, R20ECM	SEC. 7, T2N, R22ECM	SEC. 30, T3N, R20ECM
OWNER	SUN OIL CO.	OKLAHOMA NATURAL GAS CO.	REPUBLIC NATURAL GAS CO.
COMPLETED	05/11/59	03/21/69	01/14/59
SAMPLED	03/26/68	05/08/69	01/17/59
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7223	7440	6728
WELLHEAD PRESSURE,PSIG	958	1430	1250
OPEN FLOW, MCFD	NOT GIVEN	1540	2547
COMPONENT, MOLE PCT			
METHANE	86.7	86.5	84.6
ETHANE	3.5	4.8	5.6
PROPANE	3.2	3.0	3.0
N-BUTANE	1.3	0.9	0.8
ISOBUTANE	0.2	0.6	0.6
N-PENTANE	0.5	0.3	0.1
ISOPENTANE	0.5	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.2	2.9	4.7
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	1.7
HELIUM	0.09	0.19	0.20
HEATING VALUE*	1172	1159	1069
SPECIFIC GRAVITY	0.673	0.658	0.658

	INDEX 5071 SAMPLE 11411	INDEX 5072 SAMPLE 11412	INDEX 5073 SAMPLE 15633
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	IVANHOE	IVANHOE	IVANHOE
WELL NAME	DYCHE NO. 1	JACKSON NO. 1	BELL NO. 1-A
LOCATION	SEC. 7, T1N, R28ECM	SEC. 7, T1N, R28ECM	SEC. 4, T1N, R27 ECM
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
COMPLETED	10/--/61	06/--/59	--/--/00
SAMPLED	03/27/68	03/27/68	05/16/79
FORMATION	PENN-MORROW	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8394	7462	8119
WELLHEAD PRESSURE,PSIG	1239	1450	1855
OPEN FLOW, MCFD	17986	354	2750
COMPONENT, MOLE PCT			
METHANE	86.9	76.8	83.3
ETHANE	6.1	10.2	6.3
PROPANE	2.9	6.6	2.7
N-BUTANE	0.8	1.8	0.8
ISOBUTANE	0.3	0.9	0.4
N-PENTANE	0.3	0.8	0.2
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.8	2.1	4.2
OXYGEN	0.0	0.0	0.9
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.9	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.5
HELIUM	0.07	0.10	0.06
HEATING VALUE*	1140	1278	1107
SPECIFIC GRAVITY	0.651	0.745	0.677

	INDEX 5074 SAMPLE 17407	INDEX 5075 SAMPLE 5491	INDEX 5076 SAMPLE 15639
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LEIRLE	LIBERAL SE	LIBERAL SE
WELL NAME	DELBERT NO. 1	COBB NO. 1	DICKEY NO. 1
LOCATION	SEC. 17, T3N, R22ECM	SEC. 16, T6N, R20ECM	SEC. 19, T6N, R21ECM
OWNER	FUNK EXPLORATION CO.	ALADDIN PETROLEUM CORP.	MAGUIRE OIL CO.
COMPLETED	09/24/83	04/03/53	--/--/00
SAMPLED	09/06/84	05/20/53	06/05/79
FORMATION	MISS-CHESTER & PENN-MORROW	PENN-MORROW	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7273	6162	4300
WELLHEAD PRESSURE,PSIG	170	1602	468
OPEN FLOW, MCFD	1942	4440	720
COMPONENT, MOLE PCT			
METHANE	86.3	84.3	79.6
ETHANE	4.7	5.5	7.0
PROPANE	2.3	3.2	3.3
N-BUTANE	0.8	1.0	1.0
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	2.0	4.1	7.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.1
HELIUM	0.12	0.17	0.28
HEATING VALUE*	1118	1126	1114
SPECIFIC GRAVITY	0.648	0.676	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5077 SAMPLE 16982	INDEX 5078 SAMPLE 11294	INDEX 5079 SAMPLE 11311
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LIBERAL SE	LOGAN S	LOGAN S
WELL NAME	KING NO. E-1	BALDWIN UNIT NO. 1	HOUSE NO. 1
LOCATION	SEC. 31, T6N, R20ECM	SEC. 10, T1N, R26ECM	SEC. 32, T1N, R26ECM
OWNER	ANADARKO PRODUCTION CO.	EXXON CO., U.S.A.	FALCON SEABOARD DRILLING CO.
COMPLETED	10/04/81	06/14/61	01/15/62
SAMPLED	07/06/83	02/19/63	02/26/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6064	8279	6073
WELLHEAD PRESSURE,PSIG	880	NOT GIVEN	600
OPEN FLOW, MCFD	157	285	1044
COMPONENT, MOLE PCT			
METHANE	75.6	85.0	84.0
ETHANE	3.9	7.3	7.9
PROPANE	3.0	3.7	3.8
N-BUTANE	0.9	1.2	1.2
ISOBUTANE	0.7	0.3	0.4
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.6	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	13.6	1.0	1.6
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.3	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.2
HELIUM	0.31	0.07	0.10
HEATING VALUE*	1021	1174	1186
SPECIFIC GRAVITY	0.709	0.679	0.683

	INDEX 5080 SAMPLE 12875	INDEX 5081 SAMPLE 12964	INDEX 5082 SAMPLE 12965
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LOGAN S	LOGAN S	LOGAN S
WELL NAME	HOUSE NO. 1	SCHWAB NO. 2	TERRELL NO. 1 & 2
LOCATION	SEC. 32, T1N, R26ECM	SEC. 33, T1N, R26ECM	SEC. 35, T1N, R26ECM
OWNER	FALCON SEABOARD DRILLING CO.	APACHE CORP.	APACHE CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/24/71	08/23/71	08/23/71
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6300	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	500	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.4	78.4	79.0
ETHANE	9.0	9.5	9.8
PROPANE	4.8	5.8	6.0
N-BUTANE	1.4	1.6	1.7
ISOBUTANE	0.5	1.0	0.8
N-PENTANE	0.4	0.9	0.8
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.2	0.4	0.2
HEXANES PLUS	0.4	0.9	0.5
NITROGEN	1.4	0.7	0.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	TRACE
HELIUM	0.07	0.08	0.07
HEATING VALUE*	1237	1311	1292
SPECIFIC GRAVITY	0.710	0.754	0.740

	INDEX 5083 SAMPLE 12966	INDEX 5084 SAMPLE 12974	INDEX 5085 SAMPLE 10033
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LOGAN S	LOGAN S	LORENA
WELL NAME	NICHOLSON UNIT	SCHWAB NO. 1	STEPHENSON B-1
LOCATION	SEC. 33, T1N, R26ECM	SEC. 34, T1N, R26ECM	SEC. 21, T5N, R20ECM
OWNER	APACHE CORP.	SHELL OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	--/--/00	07/31/58	11/06/64
SAMPLED	08/23/71	08/23/71	08/03/65
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	8431	6675
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1637
OPEN FLOW, MCFD	NOT GIVEN	1675	519
COMPONENT, MOLE PCT			
METHANE	73.7	85.4	84.2
ETHANE	11.6	6.9	4.5
PROPANE	7.3	4.3	2.1
N-BUTANE	2.2	1.0	0.9
ISOBUTANE	1.1	0.3	0.8
N-PENTANE	0.9	0.3	0.6
ISOPENTANE	0.3	0.0	TRACE
CYCLOPENTANE	0.3	TRACE	0.3
HEXANES PLUS	0.6	0.1	0.8
NITROGEN	1.5	1.2	5.1
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.06	0.06	0.15
HEATING VALUE*	1348	1162	1124
SPECIFIC GRAVITY	0.786	0.668	0.684

	INDEX 5086 SAMPLE 17374	INDEX 5087 SAMPLE 16183	INDEX 5088 SAMPLE 16184
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LORENA	LORENA E	LORENA E
WELL NAME	DANIEL STRICKLAND NO. 1	HUEBNER NO.1-14	KOOS TRUST NO. 1-19
LOCATION	SEC. 32, T5N, R20ECM	SEC. 14, T5N, R20 ECM	SEC. 19, T5N, R21ECM
OWNER	KELLOIL, INC.	INTERNORTH, INC.	INTERNORTH, INC.
COMPLETED	12/--/82	04/10/79	04/25/80
SAMPLED	08/10/84	01/22/81	01/22/81
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7000	6434	6583
WELLHEAD PRESSURE,PSIG	925	1629	1221
OPEN FLOW, MCFD	605	5200	3800
COMPONENT, MOLE PCT			
METHANE	87.0	87.0	91.3
ETHANE	5.0	4.3	3.8
PROPANE	2.3	2.5	1.8
N-BUTANE	1.0	0.7	0.5
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	0.4	0.2	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.8	4.1	1.4
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.06	0.16	0.12
HEATING VALUE*	1117	1096	1081
SPECIFIC GRAVITY	0.656	0.651	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5089 SAMPLE 11286	INDEX 5090 SAMPLE 6843	INDEX 5091 SAMPLE 4306
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	LORENA SE	MOCANE NW	MOCANE-LAVERNE GAS AREA
WELL NAME	DICK NO. 1-31	A. E. ADAMS NO. 12	LIGHT EST. NO. 1
LOCATION	SEC. 31, T5N, R21ECM	SEC. 36, T6N, R24ECM	SEC. 9, T6N, R21ECM
OWNER	PANHANDLE EASTERN PIPELINE C	UNITED PRODUCING CO., INC.	HUNT OIL CO.
COMPLETED	08/18/58	06/16/58	01/15/46
SAMPLED	02/15/60	10/22/58	09/12/47
FORMATION	MISS-CHESTER	PENN-MODGES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6507	5286	6220
WELLHEAD PRESSURE,PSIG	561	NOT GIVEN	1650
OPEN FLOW, MCFD	430	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	88.7	77.4	64.6
ETHANE	4.5	1.2	32.7
PROPANE	2.1	0.6	---
N-BUTANE	0.8	0.2	---
ISOBUTANE	TRACE	0.3	0.0
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.4	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	2.5	19.4	2.0
OXYGEN	0.1	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.16	0.30	0.11
HEATING VALUE*	1101	861	1240
SPECIFIC GRAVITY	0.642	0.664	0.729

	INDEX 5092 SAMPLE 5081	INDEX 5093 SAMPLE 5119	INDEX 5094 SAMPLE 5153
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	WALLACE NO. 1	HUNT-LIGHT NO. 1	HEINTZ NO. 1
LOCATION	SEC. 15, T6N, R21ECM	SEC. 9, T6N, R21ECM	SEC. 15, T6N, R21ECM
OWNER	J. M. HUBER CORP.	J. M. HUBER CORP.	J. M. HUBER CORP.
COMPLETED	04/18/51	03/12/47	11/15/51
SAMPLED	07/03/51	10/14/51	11/30/51
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5974	6226	6009
WELLHEAD PRESSURE,PSIG	1579	1627	1561
OPEN FLOW, MCFD	91287	3948	64795
COMPONENT, MOLE PCT			
METHANE	86.7	88.8	85.2
ETHANE	5.9	4.2	6.3
PROPANE	3.2	2.2	3.9
N-BUTANE	0.7	0.9	1.1
ISOBUTANE	0.2	0.1	0.3
N-PENTANE	TRACE	0.3	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.0	2.7	2.3
OXYGEN	0.2	0.3	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.12	0.11	0.13
HEATING VALUE*	1109	1094	1149
SPECIFIC GRAVITY	0.648	0.638	0.673

	INDEX 5095 SAMPLE 5176	INDEX 5096 SAMPLE 5308	INDEX 5097 SAMPLE 5497
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	LIGHT 18	ALBERT NO. 1	TRETBAR NO. 1
LOCATION	SEC. 18, T6N, R21ECM	SEC. 16, T5N, R26ECM	SEC. 7, T5N, R22ECM
OWNER	J. M. HUBER CORP.	UNION OIL CO. OF CALIF.	CARTER OIL CO.
COMPLETED	12/10/51	05/13/52	02/02/53
SAMPLED	01/31/52	08/11/52	06/18/53
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6360	6750	6315
WELLHEAD PRESSURE,PSIG	1502	1350	NOT GIVEN
OPEN FLOW, MCFD	1830	2070	10633
COMPONENT, MOLE PCT			
METHANE	91.6	83.0	91.4
ETHANE	3.6	6.5	3.6
PROPANE	1.6	0.0	1.8
N-BUTANE	0.6	1.0	0.6
ISOBUTANE	0.0	1.6	0.2
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.0	1.0	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	1.9	5.8	1.3
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.09	0.22	0.09
HEATING VALUE*	1073	1116	1101
SPECIFIC GRAVITY	0.613	0.685	0.625

	INDEX 5098 SAMPLE 5498	INDEX 5099 SAMPLE 5646	INDEX 5100 SAMPLE 5704
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	DORMAN NO. 1	L. J. BARBT A NO. 1	FRED BARBT NO. 1
LOCATION	SEC. 30, T5N, R22ECM	SEC. 2, T4N, R25ECM	SEC. 36, T5N, R25ECM
OWNER	CARTER OIL CO.	TEXACO INC.	UNITED PRODUCING CO., INC.
COMPLETED	11/--/52	05/10/54	08/24/54
SAMPLED	06/18/53	06/24/54	10/12/54
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6596	6752	6894
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1486	1760
OPEN FLOW, MCFD	12000	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.4	89.7	88.4
ETHANE	3.1	4.5	6.9
PROPANE	1.3	2.6	2.8
N-BUTANE	0.4	0.7	1.0
ISOBUTANE	TRACE	0.3	0.4
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.6	1.0	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.06	0.11	0.10
HEATING VALUE*	1076	1113	1152
SPECIFIC GRAVITY	0.607	0.633	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5101 SAMPLE 5839	INDEX 5102 SAMPLE 5857	INDEX 5103 SAMPLE 5866
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	JUDY NO. A-1	SARGENT A NO. 1	MAY DIXON NO. 2
LOCATION	SEC. 1, T5N, R24ECM	SEC. 7, T5N, R27ECM	SEC. 29, T5N, R26ECM
OWNER	CABOT CORP.	TEXACO INC.	UNION OIL CO. OF CALIF.
COMPLETED	04/25/55	02/26/55	03/05/55
SAMPLED	05/10/55	06/09/55	06/21/55
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6282	6545	6805
WELLHEAD PRESSURE, PSIG	1800	1763	1650
OPEN FLOW, MCFD	4750	734	6500
COMPONENT, MOLE PCT			
METHANE	88.2	87.9	84.8
ETHANE	5.0	5.7	5.5
PROPANE	2.4	2.7	3.8
N-BUTANE	0.8	0.8	1.3
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.4
NITROGEN	1.8	1.4	2.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.10	0.01	0.15
HEATING VALUE*	1122	1138	1166
SPECIFIC GRAVITY	0.646	0.651	0.683

	INDEX 5104 SAMPLE 5883	INDEX 5105 SAMPLE 5925	INDEX 5106 SAMPLE 5962
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	JUETT BENNETT NO. 1	ARMSTRONG NO. 1-3	LLOYD BARBY NO. A-1
LOCATION	SEC. 21, T3N, R25ECM	SEC. 3, T2N, R27ECM	SEC. 1, T4N, R25ECM
OWNER	WHITE EAGLE & OHIO OIL CO.	COLORADO OIL & GAS CORP.	CABOT CORP.
COMPLETED	07/21/55	08/12/55	10/31/54
SAMPLED	07/22/55	08/29/55	11/06/55
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5412	7686	6764
WELLHEAD PRESSURE, PSIG	1485	1253	1693
OPEN FLOW, MCFD	1540	1628	11900
COMPONENT, MOLE PCT			
METHANE	82.4	84.3	92.2
ETHANE	6.3	6.8	4.3
PROPANE	2.5	3.9	1.5
N-BUTANE	0.9	1.2	0.2
ISOBUTANE	0.2	0.4	0.1
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.1	0.5	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	7.4	1.5	1.0
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.1
HELIUM	0.23	0.08	0.10
HEATING VALUE*	1037	1179	1070
SPECIFIC GRAVITY	0.652	0.684	0.603

	INDEX 5107 SAMPLE 6011	INDEX 5108 SAMPLE 6098	INDEX 5109 SAMPLE 6105
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	HODGES NO. 1	BASS NO. 1	GULF COAST WESTERN NO. 1
LOCATION	SEC. 21, T6N, R24ECM	SEC. 14, T3N, R24ECM	SEC. 9, T5N, R24ECM
OWNER	LION OIL CO.	HARPER OIL CO.	TEXACO INC.
COMPLETED	04/10/56	04/26/56	12/21/55
SAMPLED	12/31/56	07/12/56	07/06/56
FORMATION	PERM-COUNCIL GROVE	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3102	5372	6910
WELLHEAD PRESSURE, PSIG	840	1500	1736
OPEN FLOW, MCFD	4500	12500	7450
COMPONENT, MOLE PCT			
METHANE	76.2	84.0	90.0
ETHANE	6.0	7.3	5.1
PROPANE	2.9	2.7	2.3
N-BUTANE	1.0	1.0	0.7
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	12.0	2.6	0.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.39	0.15	0.09
HEATING VALUE*	1034	1162	1112
SPECIFIC GRAVITY	0.697	0.679	0.630

	INDEX 5110 SAMPLE 6108	INDEX 5111 SAMPLE 6109	INDEX 5112 SAMPLE 6114
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	STATE RICARDS NO. 1	CAMPBELL GAS UNIT NO. 1	L. J. BARBY B-2
LOCATION	SEC. 16, T5N, R25ECM	SEC. 5, T2N, R24ECM	SEC. 27, T4N, R25ECM
OWNER	CARTER OIL CO.	STANOLIND OIL & GAS CO.	CABOT CORP.
COMPLETED	05/02/56	05/21/56	01/31/56
SAMPLED	07/17/56	07/10/56	08/03/56
FORMATION	MISS-CHESTER	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6993	7242	6936
WELLHEAD PRESSURE, PSIG	1385	1600	1540
OPEN FLOW, MCFD	4455	11396	4000
COMPONENT, MOLE PCT			
METHANE	87.8	83.1	90.4
ETHANE	5.4	7.3	4.5
PROPANE	2.6	4.5	2.1
N-BUTANE	0.8	1.2	0.7
ISOBUTANE	0.3	0.6	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	1.5	1.7	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.5
HELIUM	0.10	0.13	0.08
HEATING VALUE*	1143	1196	1117
SPECIFIC GRAVITY	0.655	0.696	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5113 SAMPLE 6115	INDEX 5114 SAMPLE 6179	INDEX 5115 SAMPLE 6180
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	L. J. BARBY B-A	OTTO BARBY D-1	RYSER
LOCATION	SEC. 27, T4N, R25ECM	SEC. 25, T4N, R26ECM	SEC. 9, T3N, R28ECM
OWNER	CABOT CORP.	CABOT CORP.	CABOT CORP.
COMPLETED	01/31/56	07/13/56	09/23/56
SAMPLED	08/03/56	11/14/56	11/14/56
FORMATION	MISS-CHESTER	PENN-LOVELL	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7050	4870	4450
WELLHEAD PRESSURE,PSIG	1720	1400	NOT GIVEN
OPEN FLOW, MCFD	8000	4000	14000
COMPONENT, MOLE PCT			
METHANE	90.3	81.9	85.9
ETHANE	4.9	6.9	6.7
PROPANE	2.2	1.7	1.3
N-BUTANE	0.6	0.5	0.8
ISOBUTANE	0.5	0.6	1.3
N-PENTANE	0.2	0.0	0.8
ISOPENTANE	0.0	0.3	0.9
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.5	7.0	3.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	0.08	0.25	0.16
HEATING VALUE*	1110	1048	1134
SPECIFIC GRAVITY	0.630	0.659	0.669

	INDEX 5116 SAMPLE 6181	INDEX 5117 SAMPLE 6195	INDEX 5118 SAMPLE 6215
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	RYSER NO. 1	W. A. LONKER UNIT NO. 1	BEARD A NO. 1
LOCATION	SEC. 7, T3N, R28ECM	SEC. 36, T6N, R21ECM	SEC. 8, T5N, R22ECM
OWNER	CABOT CORP.	UNITED PRODUCING CO., INC.	CITIES SERVICE OIL CO.
COMPLETED	09/23/56	10/27/56	11/18/56
SAMPLED	11/14/56	11/25/56	12/11/56
FORMATION	MISS-CHESTER	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7319	6030	6665
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1850	1662
OPEN FLOW, MCFD	2000	6470	8700
COMPONENT, MOLE PCT			
METHANE	66.6	87.4	91.2
ETHANE	7.0	5.4	3.8
PROPANE	2.3	1.3	1.3
N-BUTANE	0.7	0.4	0.6
ISOBUTANE	0.9	0.3	0.9
N-PENTANE	0.0	0.0	0.7
ISOPENTANE	1.0	0.3	0.5
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	20.2	4.1	0.7
OXYGEN	0.0	0.2	0.0
ARGON	0.2	0.1	TRACE
HYDROGEN	0.3	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.4
HELIUM	TRACE	0.12	0.08
HEATING VALUE*	948	1033	1121
SPECIFIC GRAVITY	0.746	0.633	0.635

	INDEX 5119 SAMPLE 6216	INDEX 5120 SAMPLE 6225	INDEX 5121 SAMPLE 6365
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BEARD A NO. 1	E. ATKINS NO. 1	HARRY CARLISLE NO. 4
LOCATION	SEC. 8, T5N, R22ECM	SEC. 25, T3N, R25ECM	SEC. 15, T3N, R28ECM
OWNER	CITIES SERVICE OIL CO.	SHELL OIL CO.	UNITED PRODUCING CO., INC.
COMPLETED	11/18/56	12/06/56	07/16/57
SAMPLED	12/11/56	01/15/57	08/19/57
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6305	5562	4350
WELLHEAD PRESSURE,PSIG	1413	1558	1375
OPEN FLOW, MCFD	110000	3573	10600
COMPONENT, MOLE PCT			
METHANE	79.8	85.7	87.1
ETHANE	7.1	6.4	5.9
PROPANE	3.1	2.5	2.3
N-BUTANE	2.3	0.7	0.6
ISOBUTANE	1.0	0.7	0.4
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	1.5	0.2	0.1
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	2.6	2.6	2.9
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.2	0.1
HELIUM	0.14	0.11	0.16
HEATING VALUE*	1246	1134	1104
SPECIFIC GRAVITY	0.744	0.664	0.645

	INDEX 5122 SAMPLE 6401	INDEX 5123 SAMPLE 6417	INDEX 5124 SAMPLE 6418
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	E. FICKEL NO. 1	SIZELOVE NO. 1	OTTO BARBY NO. E-1
LOCATION	SEC. 16, T3N, R25ECM	SEC. 12, T3N, R27ECM	SEC. 31, T4N, R28ECM
OWNER	CARTER OIL CO.	CABOT CARBON CO.	CABOT CORP.
COMPLETED	07/27/57	05/02/57	08/18/56
SAMPLED	09/18/57	10/04/57	10/12/56
FORMATION	PENN-TONKAWA	PENN-HOOVER	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5519	4390	4318
WELLHEAD PRESSURE,PSIG	1580	2600	1500
OPEN FLOW, MCFD	21980	20000	32000
COMPONENT, MOLE PCT			
METHANE	87.4	88.4	85.7
ETHANE	6.4	5.8	5.9
PROPANE	2.9	1.9	2.4
N-BUTANE	0.7	0.5	0.9
ISOBUTANE	0.9	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.6	2.2	4.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.1
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1131	1082	1095
SPECIFIC GRAVITY	0.649	0.631	0.651

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5125 SAMPLE 6740	INDEX 5126 SAMPLE 6772	INDEX 5127 SAMPLE 6828
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	DILLION NO. 1	WHITMARSH NO. 1	OYLER G.U. 8 NO. 1
LOCATION	SEC. 13, T6N, R26ECM	SEC. 14, T5N, R25ECM	SEC. 22, T5N, R23ECM
OWNER	MONSANTO CO.	T. N. BERRY & CO.	AMOCO PRODUCTION CO.
COMPLETED	01/--/58	--/--/00	05/16/58
SAMPLED	07/17/58	08/02/58	10/04/58
FORMATION	MISS-CHESTER	PENN-MORROW	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6175	6705	3171
WELLHEAD PRESSURE,PSIG	1760	NOT GIVEN	821
OPEN FLOW, MCFD	7153	NOT GIVEN	2
COMPONENT, MOLE PCT			
METHANE	91.1	86.0	85.7
ETHANE	4.6	6.1	6.7
PROPANE	1.8	3.3	2.6
N-BUTANE	0.6	1.0	0.8
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.6	1.5	2.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	TRACE
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1109	1165	1131
SPECIFIC GRAVITY	0.625	0.671	0.659

	INDEX 5128 SAMPLE 6972	INDEX 5129 SAMPLE 7015	INDEX 5130 SAMPLE 7022
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	FICKLE BANK UNIT NO. 1	MIKE ALBERT NO. 1	MILLER NO. 1
LOCATION	SEC. 29, T3N, R25ECM	SEC. 10, T5N, R26ECM	SEC. 1, T3N, R23ECM
OWNER	CARTER OIL CO.	CHAMPLIN OIL & REFINING CO.	HARPER OIL CO.
COMPLETED	12/24/58	09/30/58	12/--/58
SAMPLED	02/15/59	03/30/59	04/11/59
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5479	6567	7116
WELLHEAD PRESSURE,PSIG	1520	1622	2000
OPEN FLOW, MCFD	5633	4975	7864
COMPONENT, MOLE PCT			
METHANE	88.2	81.0	93.0
ETHANE	6.8	6.2	2.7
PROPANE	2.3	4.8	0.8
N-BUTANE	0.6	1.5	0.3
ISOBUTANE	0.3	0.9	0.0
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	1.0	4.0	0.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.10	0.20	0.10
HEATING VALUE*	1114	1177	1111
SPECIFIC GRAVITY	0.637	0.707	0.629

	INDEX 5131 SAMPLE 7154	INDEX 5132 SAMPLE 7164	INDEX 5133 SAMPLE 7165
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	LEON ALLEN NO. 1	MAHAFFEY NO. 1	HOWARD NO. 1
LOCATION	SEC. 25, T4N, R27ECM	SEC. 18, T1N, R25ECM	SEC. 13, T1N, R24ECM
OWNER	CABOT CORP.	VICKERS PETROLEUM CO.	VICKERS PETROLEUM CO., INC.
COMPLETED	03/11/57	04/26/59	05/11/59
SAMPLED	07/24/59	07/30/59	07/30/59
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW & MISS-CHESTER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3210	NOT GIVEN	5543
WELLHEAD PRESSURE,PSIG	988	1600	1550
OPEN FLOW, MCFD	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.3	92.7	88.3
ETHANE	5.1	3.4	6.3
PROPANE	6.5	0.9	1.2
N-BUTANE	0.8	0.3	0.6
ISOBUTANE	TRACE	0.3	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	5.7	1.1	1.8
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.9
HELIUM	0.31	0.10	0.10
HEATING VALUE*	1124	1072	1114
SPECIFIC GRAVITY	0.687	0.614	0.643

	INDEX 5134 SAMPLE 7179	INDEX 5135 SAMPLE 7181	INDEX 5136 SAMPLE 7322
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	NINE NO. 1	NELSON NO. 3	R. EADES NO. 1
LOCATION	SEC. 21, T3N, R27ECM	SEC. 28, T3N, R27ECM	SEC. 29, T3N, R27ECM
OWNER	REPUBLIC NATURAL GAS CO.	REPUBLIC NATURAL GAS CO.	ATLANTIC RICHFIELD CO.
COMPLETED	04/08/58	09/05/58	10/15/59
SAMPLED	08/25/59	08/25/59	12/31/59
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5619	7410	5638
WELLHEAD PRESSURE,PSIG	1568	1679	NOT GIVEN
OPEN FLOW, MCFD	3850	1900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	86.5	74.6
ETHANE	6.6	6.0	6.9
PROPANE	2.4	3.1	3.3
N-BUTANE	0.6	0.8	1.9
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.1	TRACE	0.5
ISOPENTANE	0.3	0.7	0.4
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.3	0.5
NITROGEN	2.4	1.6	10.2
OXYGEN	TRACE	TRACE	1.8
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.10	0.04	0.10
HEATING VALUE*	1129	1157	1078
SPECIFIC GRAVITY	0.656	0.667	0.727

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5137 SAMPLE 7323	INDEX 5138 SAMPLE 7328	INDEX 5139 SAMPLE 7364
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	GEORGE S. LOWERY NO. 1	GOETZINGER TRUST NO. 1	ADAH E. SCHAFFTER
LOCATION	SEC. 9, T5N, R27ECM	SEC. 11, T3N, R24ECM	SEC. 10, T5N, R27ECM
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	SUN OIL CO.
COMPLETED	11/03/59	11/12/59	11/29/59
SAMPLED	12/31/59	12/31/59	01/30/60
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6354	5154	6318
WELLHEAD PRESSURE,PSIG	1657	1646	1700
OPEN FLOW, MCFD	7500	1650	17000
COMPONENT, MOLE PCT			
METHANE	86.6	93.4	88.4
ETHANE	5.8	3.0	5.0
PROPANE	3.1	0.7	2.4
N-BUTANE	0.9	0.2	0.7
ISOBUTANE	0.6	0.2	0.4
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.6	0.0	0.4
CYCLOPENTANE	0.2	TRACE	0.3
HEXANES PLUS	0.4	TRACE	0.5
NITROGEN	1.4	1.7	1.2
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.10	0.10	0.11
HEATING VALUE*	1170	1032	1143
SPECIFIC GRAVITY	0.671	0.593	0.652

	INDEX 5140 SAMPLE 7390	INDEX 5141 SAMPLE 7391	INDEX 5142 SAMPLE 7446
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BARTH NO. 1-11	AMY PATTEN NO. 1-34	MARTIN-DIXON NO. 1
LOCATION	SEC. 11, T5N, R28ECM	SEC. 34, T5N, R28ECM	SEC. 28, T5N, R27ECM
OWNER	STEKOLL PANHANDLE, LTD.	STEKOLL PANHANDLE, LTD.	KERR-MCGEE OIL IND., INC.
COMPLETED	12/29/59	12/14/59	03/01/60
SAMPLED	02/13/60	02/13/60	03/12/60
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6267	6641	6702
WELLHEAD PRESSURE,PSIG	1759	1547	1700
OPEN FLOW, MCFD	11600	2400	30000
COMPONENT, MOLE PCT			
METHANE	86.5	89.3	84.8
ETHANE	5.9	4.9	6.6
PROPANE	3.5	2.4	3.7
N-BUTANE	1.0	0.7	1.2
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.5	0.3	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	1.2	1.2	1.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.39	0.13	0.10
HEATING VALUE*	1171	1117	1186
SPECIFIC GRAVITY	0.670	0.638	0.683

	INDEX 5143 SAMPLE 7486	INDEX 5144 SAMPLE 7558	INDEX 5145 SAMPLE 7579
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	HAMILTON NO. 1	OSCAR B. KENNECK	WOLF NO. 1
LOCATION	SEC. 18, T5N, R27ECM	SEC. 17, T3N, R24ECM	SEC. 20, T4N, R28ECM
OWNER	CABOT CORP.	OKLAHOMA NATURAL GAS CO.	CABOT CARBON CO.
COMPLETED	--/--/00	02/--/60	12/02/59
SAMPLED	03/22/60	05/17/60	06/28/60
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6636	7033	6853
WELLHEAD PRESSURE,PSIG	1738	1650	1786
OPEN FLOW, MCFD	12750	11150	20000
COMPONENT, MOLE PCT			
METHANE	86.3	81.3	87.0
ETHANE	6.0	8.0	6.7
PROPANE	3.4	5.2	3.1
N-BUTANE	1.0	1.5	0.9
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.5	1.6	0.4
CYCLOPENTANE	TRACE	0.4	0.2
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.6	1.8	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1151	1240	1161
SPECIFIC GRAVITY	0.662	0.719	0.660

	INDEX 5146 SAMPLE 7580	INDEX 5147 SAMPLE 7625	INDEX 5148 SAMPLE 7633
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	H. CARLISLE NO. 10	NELSON NO. 1-27	REIER NO. 1
LOCATION	SEC. 22, T3N, R21ECM	SEC. 27, T1N, R24ECM	SEC. 13, T1N, R25ECM
OWNER	UNITED PRODUCING CO., INC.	STATEX PETROLEUM	PHILLIPS PETROLEUM CO.
COMPLETED	05/07/59	05/18/59	05/27/60
SAMPLED	06/10/60	07/27/60	08/02/60
FORMATION	PENN-MORROW & MISS-CHESTER	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7174	6106	6039
WELLHEAD PRESSURE,PSIG	1364	1625	1637
OPEN FLOW, MCFD	580	2530	3804
COMPONENT, MOLE PCT			
METHANE	85.8	83.6	88.3
ETHANE	7.6	6.6	6.4
PROPANE	3.8	3.0	2.4
N-BUTANE	0.8	1.0	0.8
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	0.7	4.0	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.2	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.10	0.20	0.03
HEATING VALUE*	1165	1124	1146
SPECIFIC GRAVITY	0.662	0.668	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5149 SAMPLE 7656	INDEX 5150 SAMPLE 7686	INDEX 5151 SAMPLE 7687
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	E. C. MILLER NO. 1	THOMPSON UNIT NO. 1	THOMPSON UNIT NO. 1
LOCATION	SEC. 15, T5N, R23ECM	SEC. 36, T4N, R24ECM	SEC. 36, T4N, R24ECM
OWNER	GULF OIL CO.- U.S.	KERR-MCGEE OIL IND., INC.	KERR-MCGEE CORP.
COMPLETED	11/12/59	--/--/00	--/--/00
SAMPLED	08/25/60	10/04/60	10/04/60
FORMATION	PENN-MORROW & MISS-CHESTER	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6526	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1765	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	12700	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.3	89.9	81.8
ETHANE	4.6	4.7	8.1
PROPANE	1.8	2.2	5.0
N-BUTANE	0.6	0.7	1.4
ISOBUTANE	0.3	TRACE	0.7
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.6	0.8	1.7
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1102	1115	1210
SPECIFIC GRAVITY	0.621	0.637	0.703

	INDEX 5152 SAMPLE 7722	INDEX 5153 SAMPLE 7823	INDEX 5154 SAMPLE 7824
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	WILLIAM GRAY NO. 1	MCCUNE NO. 1	MCCUNE NO. 1
LOCATION	SEC. 15, T2N, R24ECM	SEC. 23, T4N, R24ECM	SEC. 23, T4N, R24ECM
OWNER	MAY EXPLORATION VENTURES	KINGWOOD OIL CO.	KINGWOOD OIL CO.
COMPLETED	10/01/60	12/16/60	12/16/60
SAMPLED	10/12/60	01/03/61	01/03/61
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7420	6910	6804
WELLHEAD PRESSURE,PSIG	1587	1797	1739
OPEN FLOW, MCFD	1500	20000	5800
COMPONENT, MOLE PCT			
METHANE	80.8	91.8	90.9
ETHANE	9.5	3.9	4.4
PROPANE	5.1	1.4	1.9
N-BUTANE	1.3	0.3	0.6
ISOBUTANE	0.6	0.3	0.3
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.6	1.4	0.8
OXYGEN	0.0	0.2	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.6
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1207	1061	1097
SPECIFIC GRAVITY	0.704	0.610	0.626

	INDEX 5155 SAMPLE 7973	INDEX 5156 SAMPLE 8006	INDEX 5157 SAMPLE 8008
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	R. FRY 1-34	FLOYD M. DYER NO. 1	B. R. SMYLIE NO. 1-17
LOCATION	SEC. 34, T1N, R24ECM	SEC. 29, T5N, R27ECM	SEC. 17, T4N, R24ECM
OWNER	MAY PETROLEUM, INC.	MAY EXPLORATION VENTURES	MAY PETROLEUM, INC.
COMPLETED	12/28/60	01/15/61	11/12/60
SAMPLED	05/19/61	06/--/61	06/--/61
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6076	6689	6404
WELLHEAD PRESSURE,PSIG	1700	1608	1534
OPEN FLOW, MCFD	2897	26353	4737
COMPONENT, MOLE PCT			
METHANE	84.6	85.0	85.5
ETHANE	6.8	6.7	6.1
PROPANE	3.0	3.7	3.7
N-BUTANE	0.8	1.1	1.1
ISOBUTANE	0.6	0.7	0.8
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	3.2	1.5	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.20	0.10	0.20
HEATING VALUE*	1135	1177	1158
SPECIFIC GRAVITY	0.669	0.677	0.670

	INDEX 5158 SAMPLE 8009	INDEX 5159 SAMPLE 8365	INDEX 5160 SAMPLE 9006
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	A. R. TURNER NO. 1-1	WM. FLANNIGAN	JAMES E. COOK NO. 2
LOCATION	SEC. 1, T2N, R23ECM	SEC. 27, T6N, R22ECM	SEC. 8, T1N, R25ECM
OWNER	MAY EXPLORATION VENTURES	MAY EXPLORATION VENTURES	MAY EXPLORATION VENTURES
COMPLETED	06/01/60	09/24/61	07/06/62
SAMPLED	06/--/61	02/--/62	06/--/63
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7182	6290	7834
WELLHEAD PRESSURE,PSIG	1554	1692	575
OPEN FLOW, MCFD	2100	6800	70
COMPONENT, MOLE PCT			
METHANE	82.9	90.7	83.1
ETHANE	7.5	4.0	9.2
PROPANE	4.8	1.8	3.2
N-BUTANE	1.3	0.5	0.7
ISOBUTANE	0.6	0.3	0.2
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.5
HEXANES PLUS	0.1	0.1	1.0
NITROGEN	1.6	1.6	1.0
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.7
HELIUM	0.20	0.09	0.10
HEATING VALUE*	1189	1090	1203
SPECIFIC GRAVITY	0.690	0.625	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5161 SAMPLE 9026	INDEX 5162 SAMPLE 10172	INDEX 5163 SAMPLE 11389
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	JAMES E. COOK NO. 1	ANSHUTZ NO. 1-20	MORRIS NO. 1
LOCATION	SEC. 6, T1N, R25ECM	SEC. 20, T6N, R26ECM	SEC. 20, T3N, R23E
OWNER	MAY EXPLORATION VENTURES	CLEARY PETROLEUM, INC.	READING & BATES OFFSHORE DRI
COMPLETED	05/26/62	07/01/65	--/--/00
SAMPLED	06/10/63	09/26/65	03/19/68
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7852	3215	NOT GIVEN
WELLHEAD PRESSURE,PSIG	600	1000	1260
OPEN FLOW, MCFD	70	4900	NOT GIVEN.
COMPONENT, MOLE PCT			
METHANE	84.3	81.2	89.5
ETHANE	8.0	5.3	4.4
PROPANE	3.5	2.3	2.5
N-BUTANE	0.8	0.7	0.8
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.4	0.1	0.1
HEXANES PLUS	0.7	0.2	0.2
NITROGEN	1.1	8.9	1.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.5
HELIUM	0.10	0.32	0.12
HEATING VALUE*	1186	1042	1119
SPECIFIC GRAVITY	0.675	0.672	0.640

	INDEX 5164 SAMPLE 11485	INDEX 5165 SAMPLE 11683	INDEX 5166 SAMPLE 12278
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	ROBERTSON NO. 1	BEN ALLEN UNIT NO. 1	GIRK NO. A-1
LOCATION	SEC. 16, T3N, R28ECM	SEC. 33, T4N, R24ECM	SEC. 33, T6N, R24ECM
OWNER	OKLAHOMA NATURAL GAS CO.	ATLANTIC RICHFIELD CO.	CITIES SERVICE OIL CO.
COMPLETED	09/14/60	--/--/00	02/18/58
SAMPLED	05/10/68	11/15/68	06/05/70
FORMATION	PENN-MORROW	PERM-COUNCIL GROVE	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7646	3445	3212
WELLHEAD PRESSURE,PSIG	1320	601	439
OPEN FLOW, MCFD	7704	1954	2044
COMPONENT, MOLE PCT			
METHANE	81.5	87.0	77.1
ETHANE	8.3	5.4	5.9
PROPANE	5.1	2.4	3.2
N-BUTANE	1.3	0.8	0.5
ISOBUTANE	0.9	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	1.1	2.1	11.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.0
HELIUM	0.06	0.14	0.38
HEATING VALUE*	1231	1127	1051
SPECIFIC GRAVITY	0.711	0.650	0.695

	INDEX 5167 SAMPLE 12291	INDEX 5168 SAMPLE 12398	INDEX 5169 SAMPLE 12399
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	EAGAN NO. 1	JESSIE ADAMS NO. 1-C	H. G. ADAMS III NO. 1-A
LOCATION	SEC. 32, T6N, R24ECM	SEC. 9, T6N, R24ECM	SEC. 12, T6N, R23ECM
OWNER	CALVERT EXPLORATION CO.	UNDERWOOD OIL CO.	UNDERWOOD OIL CO.
COMPLETED	12/01/62	08/24/70	06/30/70
SAMPLED	06/11/70	08/24/70	08/24/70
FORMATION	PERM-COUNCIL GROVE	MISS-CHESTER	MISS-ST. GENEVIEVE&ST. LOUIS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3038	6780	16112
WELLHEAD PRESSURE,PSIG	550	1250	1850
OPEN FLOW, MCFD	2055	12200	2663
COMPONENT, MOLE PCT			
METHANE	79.1	84.5	85.2
ETHANE	5.9	4.8	4.4
PROPANE	2.9	2.8	1.9
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	9.8	5.5	6.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.36	0.11	0.21
HEATING VALUE*	1055	1087	1052
SPECIFIC GRAVITY	0.685	0.664	0.651

	INDEX 5170 SAMPLE 12569	INDEX 5171 SAMPLE 12851	INDEX 5172 SAMPLE 12861
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	ALBERT NO. 1	MENAGER NO. 1	MESSNER-LITTAU
LOCATION	SEC. 34, T6N, R26ECM	SEC. 27, T6N, R27ECM	SEC. 33, T1N, R25ECM
OWNER	AMAREX, INC.	TEXAS OIL & GAS CORP.	EXXON CO., U.S.A.
COMPLETED	09/--/65	01/19/70	--/--/00
SAMPLED	--/--/70	06/15/71	06/22/71
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3108	6180	NOT GIVEN
WELLHEAD PRESSURE,PSIG	240	NOT GIVEN	200
OPEN FLOW, MCFD	1698	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.3	87.6	77.5
ETHANE	5.4	5.4	6.2
PROPANE	2.3	3.0	9.0
N-BUTANE	0.7	0.8	7.1
ISOBUTANE	0.2	0.6	0.0
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.2	0.2	5.5
CYCLOPENTANE	0.2	TRACE	0.5
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	4.9	1.8	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	1.3
HELIUM	0.26	0.10	0.05
HEATING VALUE*	1086	1132	1426
SPECIFIC GRAVITY	0.653	0.651	0.845

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5173 SAMPLE 12863	INDEX 5174 SAMPLE 12865	INDEX 5175 SAMPLE 12866
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	MERCER NO. 1	BARBY NO. 1-A	BARBY NO. 1
LOCATION	SEC. 32, T1N, R25ECM	SEC. 28, T4N, R26ECM	SEC. 21, T4N, R26ECM
OWNER	HUMBLE OIL & REFINING CO.	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/22/71	06/23/71	06/23/71
FORMATION	PENN-TONKAWA	MISS-CHESTER	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.3	90.6	86.5
ETHANE	6.7	4.5	5.3
PROPANE	3.6	2.0	3.8
N-BUTANE	1.1	0.5	1.0
ISOBUTANE	0.8	0.4	0.6
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.6	0.1	0.1
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	1.3	1.1	1.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.04	0.08	0.13
HEATING VALUE*	1220	1104	1146
SPECIFIC GRAVITY	0.704	0.630	0.662

	INDEX 5176 SAMPLE 12874	INDEX 5177 SAMPLE 12877	INDEX 5178 SAMPLE 12878
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	MILLER NO. 1	ALLEN-STATE NO. 1-27	SIZELOVE NO. 3
LOCATION	SEC. 1, T3N, R23ECM	SEC. 27, T4N, R27ECM	SEC. 35, T4N, R27ECM
OWNER	HARPER OIL CO.	SHELL OIL CO.	CABOT CORP.
COMPLETED	12/--/58	06/05/61	--/--/00
SAMPLED	06/24/71	06/24/71	06/24/71
FORMATION	PENN-MORROW	PENN-MORROW	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7800	6921	NOT GIVEN
WELLHEAD PRESSURE,PSIG	900	NOT GIVEN	600
OPEN FLOW, MCFD	NOT GIVEN	4800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.4	83.9	85.2
ETHANE	2.6	6.1	5.3
PROPANE	1.0	5.1	2.6
N-BUTANE	0.2	1.3	0.7
ISOBUTANE	0.2	0.8	0.4
N-PENTANE	TRACE	0.3	0.3
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	2.0	5.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	TRACE
HELIUM	0.06	0.15	0.23
HEATING VALUE*	1052	1193	1081
SPECIFIC GRAVITY	0.594	0.690	0.651

	INDEX 5179 SAMPLE 12879	INDEX 5180 SAMPLE 12899	INDEX 5181 SAMPLE 12901
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	ALLEN NO. 5	ALBERT NO. 1	BLAKEMORE NO. J-1
LOCATION	SEC. 23, T4N, R27ECM	SEC. 18, T6N, R27ECM	SEC. 3, T4N, R22ECM
OWNER	CABOT CORP.	GULF OIL CO.- U.S.	BURK ROYALTY CO.
COMPLETED	--/--/00	07/05/59	--/--/00
SAMPLED	06/24/71	07/20/71	07/20/71
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6402	NOT GIVEN
WELLHEAD PRESSURE,PSIG	980	1100	400
OPEN FLOW, MCFD	NOT GIVEN	3210	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.8	91.0	83.7
ETHANE	5.9	4.3	6.8
PROPANE	3.2	2.0	5.0
N-BUTANE	0.8	0.5	1.0
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.7	1.1	2.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	TRACE	0.09	0.13
HEATING VALUE*	1151	1104	1169
SPECIFIC GRAVITY	0.663	0.625	0.678

	INDEX 5182 SAMPLE 12902	INDEX 5183 SAMPLE 12973	INDEX 5184 SAMPLE 14564
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BLAKEMORE NO. J-1	LAWSON NO. 1	GIRK B NO. 3
LOCATION	SEC. 3, T4N, R22ECM	SEC. 35, T1N, R24ECM	SEC. 35, T6N, R24ECM
OWNER	BURK ROYALTY CO.	SAMEDAN OIL CORP.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	--/--/00	07/08/75
SAMPLED	07/20/71	08/23/71	01/21/76
FORMATION	MISS-CHESTER	PENN-TONKAWA	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3247
WELLHEAD PRESSURE,PSIG	400	NOT GIVEN	824
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2547
COMPONENT, MOLE PCT			
METHANE	84.4	80.6	78.5
ETHANE	6.5	9.0	6.0
PROPANE	4.7	5.0	2.7
N-BUTANE	1.0	1.4	0.7
ISOBUTANE	0.2	0.6	0.4
N-PENTANE	0.3	0.5	0.2
ISOPENTANE	0.3	0.5	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	2.3	2.0	10.2
OXYGEN	0.0	0.0	0.4
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.13	0.09	0.41
HEATING VALUE*	1165	1237	1028
SPECIFIC GRAVITY	0.676	0.716	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5185 SAMPLE 14716	INDEX 5186 SAMPLE 14722	INDEX 5187 SAMPLE 14940
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	SIRK NO. B-3	GREGG NO. 1	ROCK NO. 1
LOCATION	SEC. 35, T6N, R24ECM	SEC. 26, T4N, R22ECM	SEC. 36, T 4N, R22ECM
OWNER	CITIES SERVICE OIL CO.	ARGONAUT ENERGY CORP.	ARGONAUT ENERGY CORP.
COMPLETED	07/07/75	01/29/76	09/01/76
SAMPLED	06/30/76	07/13/76	03/17/77
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6240	6884	6900
WELLHEAD PRESSURE,PSIG	733	1710	818
OPEN FLOW, MCFD	450	4546	2132
COMPONENT, MOLE PCT			
METHANE	88.9	93.3	92.7
ETHANE	5.2	3.1	3.3
PROPANE	2.6	1.2	1.4
N-BUTANE	0.8	0.4	0.5
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.3	0.8	0.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.09	0.08	0.08
HEATING VALUE*	1134	1070	1093
SPECIFIC GRAVITY	0.646	0.605	0.619

	INDEX 5188 SAMPLE 14941	INDEX 5189 SAMPLE 15101	INDEX 5190 SAMPLE 15640
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	DRUM NO. 1-21	HENNIGH-LOTSPEICH NO. 1	HUNT LIGHT NO. 2
LOCATION	SEC. 21, T 3N, R23ECM	SEC. 15, T6N, R26ECM	SEC. 9, T6N, R21ECM
OWNER	NATURAL GAS ANADARKO, INC.	AMERICAN PETROFINA CO.	J. M. HUBER CORP.
COMPLETED	08/05/76	06/11/77	02/21/79
SAMPLED	03/17/77	08/13/77	06/11/79
FORMATION	MISS-CHESTER	MISS-CHESTER	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7265	5818	6103
WELLHEAD PRESSURE,PSIG	1046	1779	1420
OPEN FLOW, MCFD	2294	4592	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.8	90.4	91.2
ETHANE	4.4	4.8	3.9
PROPANE	2.3	2.0	1.8
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.2	0.9	1.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.12	0.08	0.09
HEATING VALUE*	1117	1115	1090
SPECIFIC GRAVITY	0.639	0.633	0.620

	INDEX 5191 SAMPLE 16128	INDEX 5192 SAMPLE 16330	INDEX 5193 SAMPLE 16476
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	L. W. BALDWIN UNIT NO. 1	TRELBAR "A" NO. 1	VINABLE NO. 1-28
LOCATION	SEC. 34, T2N, R28ECM	SEC. 11, T5N, R21ECM	SEC. 28, T3N, R23ECM
OWNER	UNITED PETROLEUM EXPL. INC.	ANADARKO PRODUCTION CO.	NATURAL GAS ANADARKO, INC.
COMPLETED	--/--/00	11/19/80	10/08/80
SAMPLED	10/31/80	09/02/81	04/01/82
FORMATION	PENN-MORROW	MISS-CHESTER	MISS-ST. GENEVIEVE&ST. LOUIS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6489	7920
WELLHEAD PRESSURE,PSIG	900	900	2436
OPEN FLOW, MCFD	NOT GIVEN	2800	6971
COMPONENT, MOLE PCT			
METHANE	62.6	90.6	93.2
ETHANE	5.3	4.2	2.1
PROPANE	2.8	2.0	0.7
N-BUTANE	0.8	0.6	0.3
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	21.2	1.3	2.6
OXYGEN	5.6	0.0	0.1
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	TRACE
HELIUM	0.05	0.09	0.17
HEATING VALUE*	872	1101	1039
SPECIFIC GRAVITY	0.766	0.629	0.600

	INDEX 5194 SAMPLE 16699	INDEX 5195 SAMPLE 16700	INDEX 5196 SAMPLE 12873
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	SIX MILE S
WELL NAME	WALLACE "B" NO. 1	PLETT "B" NO. 1	OVERTON NO. 4 LT
LOCATION	SEC. 22, T6N, R21ECM	SEC. 23, T5N, R21ECM	SEC. 23, T3N, R23ECM
OWNER	J. M. HUBER CORP.	ANADARKO PRODUCTION CO.	HUNT PETROLEUM CORP.
COMPLETED	10/28/81	04/09/81	02/21/61
SAMPLED	11/01/82	11/01/82	06/21/71
FORMATION	PENN-KANSAS CITY	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4600	6502	7501
WELLHEAD PRESSURE,PSIG	1275	508	290
OPEN FLOW, MCFD	19100	221	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	88.9	82.6
ETHANE	6.7	3.8	5.8
PROPANE	3.2	2.0	4.6
N-BUTANE	1.0	0.6	1.5
ISOBUTANE	0.9	0.4	0.8
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.9	0.5	1.0
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.3	0.2	0.7
NITROGEN	9.5	2.5	2.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.0
HELIUM	0.30	0.11	0.16
HEATING VALUE*	1087	1098	1252
SPECIFIC GRAVITY	0.701	0.642	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5197 SAMPLE 13053	INDEX 5198 SAMPLE 17255	INDEX 5199 SAMPLE 17406
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	SIX MILE S	SIX MILE S	TURPIN SE
WELL NAME	U.S.A. NO. 1	OVERTON NO. 2	ERNESTINE NO. 1
LOCATION	SEC. 23, T3N, R23ECM	SEC. 14, T3N, R23ECM	SEC. 22, T4N, R21ECM
OWNER	HUNT PETROLEUM CORP.	ESSEX EXPLORATION, INC.	FUNK EXPLORATION CO.
COMPLETED	04/15/69	11/14/83	09/20/83
SAMPLED	10/05/71	04/18/84	09/06/84
FORMATION	PENN-MARMATON	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6114	6874	6563
WELLHEAD PRESSURE,PSIG	NOT GIVEN	950	1341
OPEN FLOW, MCFD	NOT GIVEN	2831	9500
COMPONENT, MOLE PCT			
METHANE	74.7	81.0	87.6
ETHANE	8.7	8.1	4.9
PROPANE	7.6	5.4	2.6
N-BUTANE	2.2	1.4	0.8
ISOBUTANE	1.0	0.5	0.4
N-PENTANE	0.5	0.3	0.1
ISOPENTANE	0.4	0.3	0.5
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	4.2	2.2	2.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.3
HELIUM	0.09	0.16	0.13
HEATING VALUE*	1264	1209	1128
SPECIFIC GRAVITY	0.770	0.708	0.655

	INDEX 5200 SAMPLE 17515	INDEX 5201 SAMPLE 16979	INDEX 5202 SAMPLE 1922
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BECKHAM
FIELD	TURPIN SE	UNION STAR W	BERLIN
WELL NAME	OKIE NO. 1	KIMBALL NO. 1-22	COREHOLE F189
LOCATION	SEC. 12, T4N, R21ECM	SEC. 22, T3N, R22ECM	SEC. 3, T10N, R23W
OWNER	FUNK EXPLORATION CO.	NATURAL GAS AMADARKO, INC.	SHELL OIL CO.
COMPLETED	08/02/84	10/21/82	--/--/00
SAMPLED	11/01/84	06/24/83	01/18/30
FORMATION	MISS-CHESTER	MISS-CHESTER	PERM-937 FT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7300	7292	937
WELLHEAD PRESSURE,PSIG	777	716	NOT GIVEN
OPEN FLOW, MCFD	8008	5573	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.6	88.8	0.0
ETHANE	3.2	4.5	0.0
PROPANE	1.3	2.5	---
N-BUTANE	0.4	0.9	---
ISOBUTANE	0.1	0.3	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.2	0.6	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	1.1	1.5	99.5
OXYGEN	TRACE	0.2	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.3	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.7	0.4
HELIUM	0.08	0.11	0.14
HEATING VALUE*	1073	1127	0
SPECIFIC GRAVITY	0.613	0.655	0.970

	INDEX 5203 SAMPLE 16235	INDEX 5204 SAMPLE 16261	INDEX 5205 SAMPLE 16761
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	BERLIN NE	BERLIN NE	BERLIN SE
WELL NAME	K. C. CATTLE CO. NO. 1	MERRICK NO. 1	IKE HALL NO. 1-1
LOCATION	SEC. 34, T12N, R22W	SEC. 28, T12N, R22W	SEC. 1, T10N, R23W
OWNER	GHK GAS CORP.	GHK GAS CORP.	PIONEER PRODUCTION CORP.
COMPLETED	01/06/81	01/15/81	08/25/82
SAMPLED	04/16/81	05/21/81	01/31/83
FORMATION	PENN-ATOKA	PENN-ATOKA	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15196	15152	11875
WELLHEAD PRESSURE,PSIG	10600	9800	3560
OPEN FLOW, MCFD	12000	14200	5500
COMPONENT, MOLE PCT			
METHANE	95.1	95.5	81.9
ETHANE	2.1	1.8	8.3
PROPANE	0.4	0.3	3.7
N-BUTANE	0.1	0.1	1.2
ISOBUTANE	0.1	0.1	0.9
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.1	0.1	0.8
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	0.2	0.9
NITROGEN	0.4	0.4	0.8
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	0.6
HELIUM	0.02	0.02	0.04
HEATING VALUE*	1037	1032	1250
SPECIFIC GRAVITY	0.596	0.592	0.722

	INDEX 5206 SAMPLE 15584	INDEX 5207 SAMPLE 15592	INDEX 5208 SAMPLE 5167
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	CARPENTER	CARPENTER	CARPENTER SW
WELL NAME	WATKINS NO. 1	WATKINS NO. 2-21	F. L. CLARK UNIT
LOCATION	SEC. 21, T12N, R21W	SEC. 21, T12N, R21W	SEC. 32, T12N, R21W
OWNER	GHK GAS CORP.	GHK GAS CORP.	UNITED CARBON CO., INC.
COMPLETED	05/17/78	09/22/78	10/--/51
SAMPLED	03/29/79	03/29/79	02/26/52
FORMATION	PENN-MORROW	PENN-RED FORK	PERM-DEESE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16997	13989	14660
WELLHEAD PRESSURE,PSIG	11200	7790	4500
OPEN FLOW, MCFD	32600	15000	200
COMPONENT, MOLE PCT			
METHANE	97.2	92.5	90.2
ETHANE	0.6	4.4	5.6
PROPANE	0.1	0.8	1.6
N-BUTANE	0.0	0.2	0.4
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	TRACE	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.5	0.4	0.6
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.9	1.3	1.0
HELIUM	0.02	0.02	0.03
HEATING VALUE*	998	1056	1096
SPECIFIC GRAVITY	0.577	0.607	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5209 SAMPLE 15971	INDEX 5210 SAMPLE 15301	INDEX 5211 SAMPLE 15789
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	CARPENTER SW	CARPENTER W	CARPENTER W
WELL NAME	FARRAR NO. 1-22	THURMOND NO. 1	POTTER STATE NO. 1-20
LOCATION	SEC. 22, T12N, R21W	SEC. 21, T12N, R22W	SEC. 20, T12N, R22W
OWNER	GMK GAS CORP.	NATOMAS NORTH AMERICA, INC.	APACHE CORP.
COMPLETED	09/20/70	12/08/77	--/--/00
SAMPLED	05/31/80	06/07/78	09/25/79
FORMATION	PENN-MORROW	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17002	16060	14590
WELLHEAD PRESSURE,PSIG	12500	11337	4900
OPEN FLOW, MCFD	4439	13382	4100
COMPONENT, MOLE PCT			
METHANE	97.3	97.0	95.4
ETHANE	0.6	0.4	1.8
PROPANE	0.1	0.1	0.5
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.5	0.5	0.7
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.8	1.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	999	993	1025
SPECIFIC GRAVITY	0.575	0.577	0.590

	INDEX 5212 SAMPLE 16143	INDEX 5213 SAMPLE 16142	INDEX 5214 SAMPLE 6396
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	CARPENTER N	CARTER E	CARTER N
WELL NAME	THURMOND NO. 1	KENNEMER NO. 1-6	C. BOYD NO. 1
LOCATION	SEC. 27, T12N, R22W	SEC. 6, T8N, R21W	SEC. 15, T9N, R22W
OWNER	GMK GAS CORP.	UNION TEXAS PETROLEUM CORP.	SHELL OIL CO.
COMPLETED	08/21/80	08/12/80	08/19/57
SAMPLED	12/07/80	01/06/81	08/26/57
FORMATION	PENN-ATOKA	MISS-	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14806	12594	10212
WELLHEAD PRESSURE,PSIG	8660	3490	4148
OPEN FLOW, MCFD	12277	5700	21000
COMPONENT, MOLE PCT			
METHANE	95.2	88.6	93.6
ETHANE	2.1	5.5	2.2
PROPANE	0.4	1.7	1.0
N-BUTANE	0.1	0.6	0.3
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	0.3	1.4	0.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.2	0.4
HELIUM	0.02	0.04	0.03
HEATING VALUE*	1034	1094	1102
SPECIFIC GRAVITY	0.591	0.641	0.622

	INDEX 5215 SAMPLE 11308	INDEX 5216 SAMPLE 11309	INDEX 5217 SAMPLE 11310
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	CARTER N	CARTER N	CARTER N
WELL NAME	C. BOYD NO. 1-15	M. PATTON NO. 1-9	COOPER NO. 1-9
LOCATION	SEC. 15, T9N, R22W	SEC. 9, T9N, R22W	SEC. 9, T9N, R22W
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	08/19/57	09/08/58	08/18/59
SAMPLED	02/26/68	02/26/68	02/26/68
FORMATION	PENN-SPRINGER	PENN-DES MOINES	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	10841	9093
WELLHEAD PRESSURE,PSIG	1264	1504	1563
OPEN FLOW, MCFD	1552	276	12142
COMPONENT, MOLE PCT			
METHANE	94.7	87.5	84.3
ETHANE	2.1	6.2	8.1
PROPANE	0.9	2.6	3.4
N-BUTANE	0.4	0.9	1.1
ISOBUTANE	0.1	0.4	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	TRACE	0.3	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	0.6	1.1	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.04	0.05	0.05
HEATING VALUE*	1065	1154	1185
SPECIFIC GRAVITY	0.601	0.659	0.681

	INDEX 5218 SAMPLE 4650	INDEX 5219 SAMPLE 4677	INDEX 5220 SAMPLE 4678
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	ELK CITY	ELK CITY	ELK CITY
WELL NAME	MUSIC NO. 1	O. L. KELLY NO. 1	LONG NO. 1
LOCATION	SEC. 29, T10N, R21W	SEC. 23, T10N, R21W	SEC. 15, T10N, R21W
OWNER	UNION PRODUCING CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	11/14/48	03/--/49	02/--/49
SAMPLED	12/02/48	03/29/49	03/29/49
FORMATION	PENN-CONGLOMERATE	PENN-CONGLOMERATE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9600	10130	9040
WELLHEAD PRESSURE,PSIG	3123	4328	3853
OPEN FLOW, MCFD	8000	4000	6500
COMPONENT, MOLE PCT			
METHANE	77.8	81.0	61.2
ETHANE	21.4	8.6	16.2
PROPANE	---	4.7	13.9
N-BUTANE	---	1.0	3.9
ISOBUTANE	---	0.4	2.0
N-PENTANE	---	0.1	0.6
ISOPENTANE	---	0.3	0.9
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.0	0.4
NITROGEN	0.2	3.2	0.3
OXYGEN	0.3	0.2	0.1
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.04	0.04	TRACE
HEATING VALUE*	1172	1164	1553
SPECIFIC GRAVITY	0.666	0.691	0.907

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 5221 SAMPLE 4679	INDEX 5222 SAMPLE 4769	INDEX 5223 SAMPLE 14929
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	ELK CITY	ELK CITY	ELK CITY
WELL NAME	J. G. WALTERS NO. 1	E. B. YELTON	HARRISON ESTATE NO. 1
LOCATION	SEC. 14, T10N, R21W	SEC. 15, T10N, R21W	SEC. 14, T10N, R21W
OWNER	SHELL OIL CO.	SHELL OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	04/--/49	06/--/49	04/18/76
SAMPLED	03/29/49	10/14/49	03/03/77
FORMATION	PENN-CONGLOMERATE	PENN-CONGLOMERATE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9260	9055	15816
WELLHEAD PRESSURE,PSIG	3900	1850	11328
OPEN FLOW, MCFD	NOT GIVEN	2204	4575
COMPONENT, MOLE PCT			
METHANE	84.6	83.9	95.3
ETHANE	6.3	6.7	2.9
PROPANE	4.1	4.3	0.5
N-BUTANE	1.4	1.4	0.1
ISOBUTANE	0.8	0.6	TRACE
N-PENTANE	0.2	0.4	TRACE
ISOPENTANE	0.7	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.3	TRACE
NITROGEN	1.5	2.0	0.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.9
HELIUM	0.04	0.05	0.02
HEATING VALUE*	1186	1185	1038
SPECIFIC GRAVITY	0.687	0.690	0.587

	INDEX 5224 SAMPLE 16265	INDEX 5225 SAMPLE 17899	INDEX 5226 SAMPLE 11799
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	ELK CITY	ELK CITY	ELK CITY E
WELL NAME	MIKLES NO. 1	DAVIS NO. 2-29	GREEN NO. 1-1
LOCATION	SEC. 10, T10N, R22W	SEC. 29, T11N, R22W	SEC. 1, T10N, R21W
OWNER	APACHE CORP.	APACHE CORP.	GLOVER HEFNER KENNEDY OIL CO
COMPLETED	--/--/00	03/11/85	03/28/69
SAMPLED	05/23/81	11/08/85	03/25/69
FORMATION	PENN-CHEROKEE & PERM-GRAN WS	PENN-GRANITE WASH	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11790	12537	21604
WELLHEAD PRESSURE,PSIG	3800	2221	15130
OPEN FLOW, MCFD	4825	17465	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.1	75.4	94.8
ETHANE	6.7	11.9	0.2
PROPANE	3.1	6.3	TRACE
N-BUTANE	0.8	2.0	0.0
ISOBUTANE	0.4	0.5	0.0
N-PENTANE	0.2	0.7	0.0
ISOPENTANE	0.2	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.4	0.0
NITROGEN	0.9	1.3	0.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.9	4.6
HELIUM	0.04	0.05	0.02
HEATING VALUE*	1154	1296	964
SPECIFIC GRAVITY	0.658	0.761	0.601

	INDEX 5227 SAMPLE 3263	INDEX 5228 SAMPLE 3264	INDEX 5229 SAMPLE 10326
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	ERICK	ERICK	ERICK
WELL NAME	DAVIDSON NO. 1	BALDWIN	DURAN NO. 1
LOCATION	SEC. 2, T9N, R25W	SEC. 10, T9N, R25W	SEC. 15, T9N, R25W
OWNER	WESTOAK GASOLINE CO.	WESTOAK GASOLINE CO.	T. K. HENDRICK
COMPLETED	08/21/36	05/03/36	05/02/65
SAMPLED	04/15/42	04/15/42	12/15/65
FORMATION	PERM-DOLOMITE	PERM-DOLOMITE	PERM-BRITTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3362	3270	6452
WELLHEAD PRESSURE,PSIG	695	745	2192
OPEN FLOW, MCFD	11300	9730	17879
COMPONENT, MOLE PCT			
METHANE	92.4	91.6	93.9
ETHANE	6.6	7.0	2.9
PROPANE	---	---	1.0
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.5	0.7	1.1
OXYGEN	0.4	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.08	0.07	TRACE
HEATING VALUE*	1054	1053	1080
SPECIFIC GRAVITY	0.592	0.596	0.619

	INDEX 5230 SAMPLE 13576	INDEX 5231 SAMPLE 4127	INDEX 5232 SAMPLE 6576
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	ERICK	ERICK GAS AREA S	ERICK GAS AREA S
WELL NAME	POWELL NO 1-11	PENNINGTON NO. 1	SMITH NO. 1-8
LOCATION	SEC. 11, T9N, R25W	SEC. 27, T8N, R25W	SEC. 1, T7N, R26W
OWNER	MCCULLOCH OIL CORP.	STEPHENS PETROLEUM CO.	EL PASO NATURAL GAS CO.
COMPLETED	11/15/72	05/04/46	09/16/57
SAMPLED	04/10/73	10/11/46	05/06/58
FORMATION	PERM-GRANITE WASH	PERM-DOLOMITE	PERM-DOLOMITE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7000	1950	1936
WELLHEAD PRESSURE,PSIG	1925	400	426
OPEN FLOW, MCFD	30	1000	11900
COMPONENT, MOLE PCT			
METHANE	94.0	91.0	93.7
ETHANE	2.7	6.1	2.7
PROPANE	1.1	---	1.2
N-BUTANE	0.3	---	0.3
ISOBUTANE	0.2	---	0.2
N-PENTANE	0.1	---	TRACE
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	1.1	1.9	1.8
OXYGEN	0.0	0.7	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.2	0.0
HELIUM	0.04	0.05	0.10
HEATING VALUE*	1060	1031	1055
SPECIFIC GRAVITY	0.600	0.598	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5233 SAMPLE 11762	INDEX 5234 SAMPLE 14411	INDEX 5235 SAMPLE 14412
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	MAYFIELD NE	MAYFIELD NE	MAYFIELD NE
WELL NAME	BROWN UNIT NO. 1	PRICE NO. 1	ANNIE BRUNER NO. 1
LOCATION	SEC. 5, T10N, R25W	SEC. 3, T10N, R25W	SEC. 33, T11N, R25W
OWNER	PETROLEUM INTERNATIONAL, INC	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	11/08/68	06/26/74	04/08/72
SAMPLED	02/13/69	07/07/75	07/07/75
FORMATION	PERM-GRANITE WASH	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12240	19374	24065
WELLHEAD PRESSURE,PSIG	2300	11236	5490
OPEN FLOW, MCFD	4000	3650	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.8	96.9	97.2
ETHANE	8.4	0.4	0.4
PROPANE	3.9	TRACE	0.1
N-BUTANE	1.1	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	2.2	0.3	0.7
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	2.3	1.5
HELIUM	0.05	0.01	0.02
HEATING VALUE*	1177	989	995
SPECIFIC GRAVITY	0.695	0.579	0.574

	INDEX 5236 SAMPLE 15899	INDEX 5237 SAMPLE 16746	INDEX 5238 SAMPLE 14512
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	MAYFIELD NE	MAYFIELD NE	MAYFIELD W
WELL NAME	JOHN S BROWN NO. 1	MAYFIELD NO. 1-34	CUPP NO. 1
LOCATION	SEC. 9, T10N, R25W	SEC. 34, T11N, R25W	SEC. 27, T10N, R26W
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	HELMERICH & PAYNE, INC.
COMPLETED	12/17/77	06/06/81	10/08/75
SAMPLED	02/08/80	01/06/83	10/27/75
FORMATION	PENN-ATOKA	PENN-ATOKA	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14075	14256	16850
WELLHEAD PRESSURE,PSIG	4624	3400	6635
OPEN FLOW, MCFD	NOT GIVEN	425	42995
COMPONENT, MOLE PCT			
METHANE	90.7	88.5	97.5
ETHANE	4.4	4.6	0.5
PROPANE	1.5	1.8	0.1
N-BUTANE	0.3	0.4	TRACE
ISOBUTANE	0.2	0.5	0.0
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.1	0.8	TRACE
NITROGEN	1.4	1.2	0.6
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.1	1.2
HELIUM	0.03	0.01	0.02
HEATING VALUE*	1067	1126	999
SPECIFIC GRAVITY	0.618	0.655	0.571

	INDEX 5239 SAMPLE 14513	INDEX 5240 SAMPLE 14992	INDEX 5241 SAMPLE 15227
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	MAYFIELD W	MAYFIELD W	MAYFIELD W
WELL NAME	CUPP "C" NO. 1	GREEN ESTATE NO. 1	WALLACE LEASE NO. 1
LOCATION	SEC. 22, T10N, R26W	SEC. 29, T10N, R26W	SEC. 18, T10N, R26W
OWNER	HELMERICH & PAYNE, INC.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	10/09/75	12/--/76	10/18/77
SAMPLED	10/27/75	04/28/77	03/16/78
FORMATION	CAMO-ARBUCKLE	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17907	18192	18567
WELLHEAD PRESSURE,PSIG	6620	6900	6950
OPEN FLOW, MCFD	60348	34000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.6	96.7	95.6
ETHANE	0.5	1.1	1.2
PROPANE	0.1	0.2	0.2
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.6	0.8	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.9	1.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1000	1017	1008
SPECIFIC GRAVITY	0.572	0.580	0.587

	INDEX 5242 SAMPLE 15979	INDEX 5243 SAMPLE 17826	INDEX 5244 SAMPLE 1212
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	MAYFIELD W	MAYFIELD W	MORAVIA DISTRICT ME
WELL NAME	MILLS NO. 2-19	SUTTON NO. 1	MCGEE
LOCATION	SEC. 19, T10N, R26W	SEC. 9, T10N, R26W	SEC. 25, T8N, R22W
OWNER	NATOMAS NORTH AMERICA, INC.	E.T.S. ENTERPRISES, INC.	OKLAHOMA SERVICE CO.
COMPLETED	02/25/80	10/25/80	02/--/24
SAMPLED	06/12/80	--/--/00	02/19/26
FORMATION	DEVO-HUNTON	PENN-DES MOINES	PERM-CONGLOMERATE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17796	12382	1000
WELLHEAD PRESSURE,PSIG	4423	NOT GIVEN	300
OPEN FLOW, MCFD	5850	2024	3000
COMPONENT, MOLE PCT			
METHANE	96.4	71.6	88.1
ETHANE	1.0	9.7	10.5
PROPANE	0.1	6.4	---
N-BUTANE	0.1	2.6	---
ISOBUTANE	0.0	1.6	---
N-PENTANE	TRACE	1.0	---
ISOPENTANE	0.1	1.2	---
CYCLOPENTANE	TRACE	0.9	---
HEXANES PLUS	0.1	2.2	---
NITROGEN	0.9	2.3	0.4
OXYGEN	TRACE	0.1	0.7
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.2	0.4	0.3
HELIUM	0.02	0.04	0.07
HEATING VALUE*	1010	1448	1081
SPECIFIC GRAVITY	0.581	0.857	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5245 SAMPLE 15970	INDEX 5246 SAMPLE 16527	INDEX 5247 SAMPLE 1768
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BECKHAM	BECKHAM
FIELD	NEW LIBERTY SW	NEW LIBERTY SW	SAYRE DISTRICT
WELL NAME	D. L. SANDERS UNIT NO. 1	SWEET NO. 1-21	E. L. GRAY NO. 2
LOCATION	SEC. 24, T10N, R25W	SEC. 21, T10N, R24W	SEC. 14, T9N, R23W
OWNER	MISS. RIVER TRANS. EXPL. CO.	TENNECO OIL EXPL. & PROD. CO	MOBIL OIL CORP.
COMPLETED	02/20/79	12/12/81	03/10/29
SAMPLED	05/30/80	05/26/82	05/03/29
FORMATION	DEVO-HUNTON	PENN-MORROW	PENN-2600 FT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	23920	18364	2609
WELLHEAD PRESSURE,PSIG	5122	5400	815
OPEN FLOW, MCFD	7779	3500	12000
COMPONENT, MOLE PCT			
METHANE	97.5	97.9	84.0
ETHANE	0.1	0.6	13.6
PROPANE	TRACE	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	2.3	0.3	2.2
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	1.0	0.2
HELIUM	0.05	0.01	0.08
HEATING VALUE*	989	1005	1095
SPECIFIC GRAVITY	0.564	0.569	0.634

	INDEX 5248 SAMPLE 16802	INDEX 5249 SAMPLE 9855	INDEX 5250 SAMPLE 9917
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BECKHAM	BLAINE	BLAINE
FIELD	SWEETWATER W	CANTON S	CANTON S
WELL NAME	B. H. PURYEAR NO. 20-1	PAULSON NO. 1-A	BENNIE V. TICE NO. 1
LOCATION	SEC. 20, T11N, R26W	SEC. 28, T18N, R13W	SEC. 29, T18N, R13W
OWNER	GETTY OIL CO.	GOFF OIL CO.	EXXON CO., U.S.A.
COMPLETED	09/--/82	01/08/65	04/26/65
SAMPLED	03/13/83	04/26/65	06/05/65
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17092	8899	8884
WELLHEAD PRESSURE,PSIG	10308	2650	3200
OPEN FLOW, MCFD	340	14800	3570
COMPONENT, MOLE PCT			
METHANE	97.3	84.1	82.9
ETHANE	0.7	6.9	7.0
PROPANE	0.1	4.1	4.3
N-BUTANE	0.1	1.0	1.5
ISOBUTANE	0.1	0.7	0.8
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.0	0.2	0.6
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	0.2	1.8	1.0
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.4	0.5
HELIUM	0.01	TRACE	0.04
HEATING VALUE*	1026	1170	1244
SPECIFIC GRAVITY	0.581	0.683	0.718

	INDEX 5251 SAMPLE 11009	INDEX 5252 SAMPLE 11010	INDEX 5253 SAMPLE 13167
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	CARLETON NE	CARLETON NE	CARLETON NE
WELL NAME	MAEGLER UNIT D NO. 1	WILEY UNIT NO. 1	SHORT UNIT NO. 1
LOCATION	SEC. 32, T18N, R12W	SEC. 33, T18N, R12W	SEC. 36, T18N, R12W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	PETROLEUM, INC.
COMPLETED	12/19/66	09/06/66	04/--/71
SAMPLED	06/21/67	06/21/67	03/14/72
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8264	8590	8147
WELLHEAD PRESSURE,PSIG	5239	5423	5339
OPEN FLOW, MCFD	33812	43087	7834
COMPONENT, MOLE PCT			
METHANE	83.8	79.5	89.7
ETHANE	7.2	6.8	3.8
PROPANE	4.2	3.5	1.3
N-BUTANE	1.2	1.1	0.2
ISOBUTANE	0.8	0.6	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.6	0.8	0.1
CYCLOPENTANE	0.3	0.2	0.2
HEXANES PLUS	0.5	0.5	0.3
NITROGEN	0.7	5.5	3.4
OXYGEN	TRACE	1.2	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.7
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1230	1147	1059
SPECIFIC GRAVITY	0.703	0.715	0.635

	INDEX 5254 SAMPLE 14586	INDEX 5255 SAMPLE 11650	INDEX 5256 SAMPLE 13156
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	EAGLE CITY	EAGLE CITY S	ELM GROVE
WELL NAME	HEAT GOVT. NO. 15-1	MARTIN NO. 1	ANDY PAYNE NO. 1-21
LOCATION	SEC. 15, T17N, R13W	SEC. 8, T16N, R13W	SEC. 21, T13N, R12W
OWNER	WOODS PETROLEUM CORP.	AMOCO PRODUCTION CO.	UNION OIL CO. OF CALIF.
COMPLETED	05/28/75	01/04/68	08/21/71
SAMPLED	02/23/76	09/16/68	03/02/72
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9063	9738	11895
WELLHEAD PRESSURE,PSIG	4700	1989	7865
OPEN FLOW, MCFD	2564	2875	8800
COMPONENT, MOLE PCT			
METHANE	84.1	85.7	96.4
ETHANE	7.6	7.3	1.4
PROPANE	4.3	3.9	0.2
N-BUTANE	1.2	1.0	0.0
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.4	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	1.2	0.6	0.8
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	1.0
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1183	1178	1007
SPECIFIC GRAVITY	0.681	0.672	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5257 SAMPLE 9790	INDEX 5258 SAMPLE 10022	INDEX 5259 SAMPLE 11533
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	FAY E	FAY E	FAY E
WELL NAME	L. M. GODWIN NO. 1	W. W. FORNEY ESTATE NO. 1	WOODRUFF NO. 1
LOCATION	SEC. 27, T15N, R13W	SEC. 21, T15N, R13W	SEC. 4, T15N, R13W
OWNER	SUN OIL CO.	SUN OIL CO.	TEXACO INC.
COMPLETED	10/05/64	04/10/65	12/29/60
SAMPLED	03/05/65	07/30/65	06/10/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10705	10634	10220
WELLHEAD PRESSURE,PSIG	6200	6800	150
OPEN FLOW, MCFD	8000	13300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.1	91.8	86.7
ETHANE	6.3	4.3	6.8
PROPANE	2.7	1.2	3.3
N-BUTANE	0.7	0.3	0.7
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.2	0.3
NITROGEN	0.9	0.9	0.6
OXYGEN	0.1	0.3	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.5
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1153	1069	1168
SPECIFIC GRAVITY	0.663	0.613	0.666

	INDEX 5260 SAMPLE 13407	INDEX 5261 SAMPLE 15628	INDEX 5262 SAMPLE 15629
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	FAY E	FAY E	FAY E
WELL NAME	STATE NO. 1-36	LLOYD SCOT NO. 1	PERKINS NO. 1
LOCATION	SEC. 36, T16N, R13W	SEC. 6, T14N, R13W	SEC. 7, T14N, R13W
OWNER	CLEARY PETROLEUM CORP.	READING & BATES PETROLEUM CO	READING & BATES PETROLEUM CO
COMPLETED	03/15/72	--/--/00	--/--/00
SAMPLED	09/30/72	05/18/79	05/22/79
FORMATION	PENN-MORROW	PENN-MORROW	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10200	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	5557	3500	3500
OPEN FLOW, MCFD	4600	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.8	88.1	83.8
ETHANE	7.8	5.9	8.1
PROPANE	4.3	2.3	4.2
N-BUTANE	1.0	0.5	1.0
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	1.3	1.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.9	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.3
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1189	1115	1193
SPECIFIC GRAVITY	0.678	0.633	0.683

	INDEX 5263 SAMPLE 9817	INDEX 5264 SAMPLE 12822	INDEX 5265 SAMPLE 13596
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	GEARY N	GEARY N	GEARY SW
WELL NAME	LOTE FOSTER NO. 1	LOOSEN NO. 1	GILBERT PECK UNIT NO. 1
LOCATION	SEC. 33, T15N, R10W	SEC. 31, T16N, R10W	SEC. 30, T13N, R11W
OWNER	SKELLY OIL CO.	WOODS PETROLEUM CORP.	SUN OIL CO.
COMPLETED	12/16/64	11/21/70	11/16/72
SAMPLED	03/16/65	05/19/71	05/04/73
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	11760
WELLHEAD PRESSURE,PSIG	6400	NOT GIVEN	6475
OPEN FLOW, MCFD	4353	NOT GIVEN	790
COMPONENT, MOLE PCT			
METHANE	95.0	88.1	89.4
ETHANE	2.7	5.4	6.3
PROPANE	0.8	2.2	2.3
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.5	2.6	0.5
OXYGEN	TRACE	0.4	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.7
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1047	1084	1108
SPECIFIC GRAVITY	0.589	0.637	0.631

	INDEX 5266 SAMPLE 16257	INDEX 5267 SAMPLE 14953	INDEX 5268 SAMPLE 15713
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	GEARY SW	GEARY W	GEARY W
WELL NAME	STATE-REX NO. 1-16	GROENDYKE HALL NO. 1	TULSA ROYALTIES NO. 1
LOCATION	SEC. 16, T13N, R11W	SEC. 10, T13N, R12W	SEC. 4, T14N, R12W
OWNER	SEARCH DRILLING CO.	WOODS PETROLEUM CORP.	COTTON PETROLEUM CORP.
COMPLETED	09/10/80	08/23/76	11/11/78
SAMPLED	05/19/81	03/24/77	07/26/79
FORMATION	PENN-RED FORK	PENN-MORROW	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10880	11677	10883
WELLHEAD PRESSURE,PSIG	1405	4790	5670
OPEN FLOW, MCFD	2031	4295	9500
COMPONENT, MOLE PCT			
METHANE	83.5	88.7	91.0
ETHANE	9.4	6.3	5.0
PROPANE	3.8	2.4	1.9
N-BUTANE	0.8	0.4	0.4
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.7	0.4	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.6
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1184	1127	1108
SPECIFIC GRAVITY	0.679	0.644	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5269 SAMPLE 15326	INDEX 5270 SAMPLE 17384	INDEX 5271 SAMPLE 16416
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	GREEN NW	GREENFIELD NW	HYDRO NE
WELL NAME	BRADFORD NO. 1	-C- FARMS INC. NO. 1	FRIEDA NO. 1-25
LOCATION	SEC. 18, T15N, R11W	SEC. 8, T14N, R11W	SEC. 25, T13N, R13W
OWNER	MUSTANG PRODUCTION CO.	TXO PRODUCTION CORP.	AN-SON CORP.
COMPLETED	05/19/78	10/27/82	11/16/81
SAMPLED	07/27/78	09/--/84	01/24/82
FORMATION	PENN-ATOKA & MORROW	PENN-MORROW	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10234	9882	12578
WELLHEAD PRESSURE,PSIG	5000	1300	8700
OPEN FLOW, MCFD	3500	1800	4700
COMPONENT, MOLE PCT			
METHANE	82.8	88.6	94.8
ETHANE	7.7	6.0	2.7
PROPANE	4.8	2.4	0.6
N-BUTANE	1.1	0.6	0.1
ISOBUTANE	0.7	0.4	0.1
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.4	0.5	TRACE
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	0.5	0.4	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	0.9
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1121	1145	1049
SPECIFIC GRAVITY	0.702	0.651	0.595

	INDEX 5272 SAMPLE 16686	INDEX 5273 SAMPLE 14384	INDEX 5274 SAMPLE 16596
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	HYDRO NE	LONGDALE	LONGDALE
WELL NAME	LUBINUS NO. 1-15	SMITH NO. 1	BAKER NO. 1-11
LOCATION	SEC. 15, T13N, R13W	SEC. 7, T19N, R12W	SEC. 11, T19N, R13W
OWNER	AN-SON CORP.	TENNECO OIL CO.	SENECA OIL CO.
COMPLETED	05/26/82	11/12/74	09/23/80
SAMPLED	09/24/82	06/13/75	07/26/82
FORMATION	PENN-SPRINGER	MISS-	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12516	8819	9555
WELLHEAD PRESSURE,PSIG	7300	2202	3150
OPEN FLOW, MCFD	3550	864	1200
COMPONENT, MOLE PCT			
METHANE	93.1	88.5	93.3
ETHANE	3.6	6.0	2.6
PROPANE	1.0	2.5	0.9
N-BUTANE	0.2	0.8	0.3
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	0.3	0.8	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.6	0.7
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1061	1127	1068
SPECIFIC GRAVITY	0.604	0.645	0.609

	INDEX 5275 SAMPLE 14008	INDEX 5276 SAMPLE 14399	INDEX 5277 SAMPLE 8423
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	LONGDALE SE	LOYAL W	OKEENE NE
WELL NAME	BOSTON NO. 1-20	LORENZ NO. 3	FLESHMAN UNIT
LOCATION	SEC. 20, T19N, R12W	SEC. 12, T17N, R10W	SEC. 32, T20N, R10W
OWNER	UNIVERSAL RESOURCES CORP.	UNIVERSAL RESOURCES CORP.	AMOCO PRODUCTION CO.
COMPLETED	03/14/74	--/--/00	10/30/61
SAMPLED	05/13/74	06/25/75	03/03/62
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8032	9800	7301
WELLHEAD PRESSURE,PSIG	2950	2700	2570
OPEN FLOW, MCFD	4768	NOT GIVEN	2400
COMPONENT, MOLE PCT			
METHANE	86.3	83.9	88.7
ETHANE	5.9	7.9	5.7
PROPANE	3.1	4.3	2.5
N-BUTANE	1.3	1.3	0.7
ISOBUTANE	0.7	0.6	0.4
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.5	0.3	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	0.6	0.8	0.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.1
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1199	1207	1135
SPECIFIC GRAVITY	0.686	0.690	0.641

	INDEX 5278 SAMPLE 6182	INDEX 5279 SAMPLE 7249	INDEX 5280 SAMPLE 11462
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	DOUGHTERTY NO. 1	OUTHIER NO. 1	WALTON-EWING NO. 1
LOCATION	SEC. 10, T19N, R11W	SEC. 1, T19N, R11W	SEC. 34, T20N, R11W
OWNER	PERKINS PRODUCTION CO.	AMOCO PRODUCTION CO.	EASON OIL CO.
COMPLETED	--/--/00	12/13/57	10/--/62
SAMPLED	12/11/56	10/15/59	04/24/68
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7476	2342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3330	950
OPEN FLOW, MCFD	NOT GIVEN	2740	250
COMPONENT, MOLE PCT			
METHANE	87.9	91.9	91.7
ETHANE	4.4	4.8	4.0
PROPANE	1.1	1.6	1.8
N-BUTANE	0.6	0.3	0.4
ISOBUTANE	0.8	0.1	0.4
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	1.8	0.3	TRACE
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.6	0.2	0.4
NITROGEN	1.5	0.4	0.7
OXYGEN	0.2	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1164	1099	1107
SPECIFIC GRAVITY	0.674	0.617	0.626

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5281 SAMPLE 17413	INDEX 5282 SAMPLE 17852	INDEX 5283 SAMPLE 7709
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	OKEENE NW	OKEENE NW	SOONER TREND
WELL NAME	BLANKENSHIP NO. 1	LEO NO. 1	S. D. HAWORTH NO. 1
LOCATION	SEC. 4, T19N, R11W	SEC. 12, T18N, R11W	SEC. 9, T18N, R10W
OWNER	RED EAGLE OIL CO.	TXO PRODUCTION CORP.	EXXON CO., U.S.A.
COMPLETED	11/17/85	01/27/85	07/20/60
SAMPLED	09/13/84	10/02/85	10/04/60
FORMATION	MISS---	PENN-OSWEGO	-POPE DOUGHERTY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8012	7280	7720
WELLHEAD PRESSURE,PSIG	100	1760	3850
OPEN FLOW, MCFD	1200	1350	1450
COMPONENT, MOLE PCT			
METHANE	84.0	86.9	92.3
ETHANE	7.4	5.1	4.3
PROPANE	3.5	3.0	1.6
N-BUTANE	1.6	0.9	0.4
ISOBUTANE	0.7	0.2	0.3
N-PENTANE	0.5	0.2	0.1
ISOPENTANE	0.4	0.5	0.1
CYCLOPENTANE	0.2	0.4	0.1
HEXANES PLUS	0.4	0.4	0.3
NITROGEN	0.9	0.9	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	0.04	0.06	0.03
HEATING VALUE*	1218	1170	1105
SPECIFIC GRAVITY	0.700	0.669	0.621

	INDEX 5284 SAMPLE 13654	INDEX 5285 SAMPLE 13889	INDEX 5286 SAMPLE 14138
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SOUTHARD SE	SOUTHARD SE	SOUTHARD SE
WELL NAME	WEBER NO. 1-17	OBLANDER NO. 1-18	BEECKMAN NO. 1
LOCATION	SEC. 17, T18N, R11W	SEC. 18, T18N, R11W	SEC. 20, T18N, R11W
OWNER	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.	TEXAS OIL & GAS CORP.
COMPLETED	04/25/73	09/16/73	05/04/74
SAMPLED	07/20/73	12/18/73	08/29/74
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7872	7921	7877
WELLHEAD PRESSURE,PSIG	5525	5200	4450
OPEN FLOW, MCFD	7809	4250	3036
COMPONENT, MOLE PCT			
METHANE	93.2	93.1	92.3
ETHANE	3.8	3.6	4.4
PROPANE	1.3	1.2	1.7
N-BUTANE	0.2	0.2	0.3
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.5	0.5	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1085	1082	1096
SPECIFIC GRAVITY	0.608	0.608	0.614

	INDEX 5287 SAMPLE 6351	INDEX 5288 SAMPLE 15004	INDEX 5289 SAMPLE 15327
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SQUAW CREEK	SQUAW CREEK	SQUAW CREEK
WELL NAME	A. O. BAKER NO. 1	TURTLE SITTING DOWN NO. 1	BARRINGER NO. 1
LOCATION	SEC. 36, T14N, R13W	SEC. 27, T14N, R13W	SEC. 12, T14N, R13W
OWNER	SUN OIL CO.	HARPER OIL CO.	MUSTANG PRODUCTION CO.
COMPLETED	09/16/59	11/06/76	--/--/00
SAMPLED	12/27/61	05/17/77	07/27/78
FORMATION	PENN-CHEROKEE	PENN-SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10777	11796	11137
WELLHEAD PRESSURE,PSIG	5400	7000	7000
OPEN FLOW, MCFD	19784	1550	6000
COMPONENT, MOLE PCT			
METHANE	80.7	87.6	93.8
ETHANE	7.9	6.1	3.3
PROPANE	5.0	2.8	0.9
N-BUTANE	0.4	0.8	0.2
ISOBUTANE	0.4	0.6	0.1
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	5.5	0.3	0.4
OXYGEN	1.2	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.8
HELIUM	0.05	0.02	0.02
HEATING VALUE*	1077	1150	1066
SPECIFIC GRAVITY	0.677	0.655	0.604

	INDEX 5290 SAMPLE 15792	INDEX 5291 SAMPLE 17603	INDEX 5292 SAMPLE 10731
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	SQUAW CREEK	SQUAW CREEK	STAR
WELL NAME	COWAN NO. 1-2	HOWLING WOMAN NO. 1-12	PHILLIPS NO. 1-13
LOCATION	SEC. 2, T14N, R13W	SEC. 12, T13N, R12W	SEC. 13, T19N, R10W
OWNER	MUSTANG PRODUCTION CO.	SOUTHPORT EXPLORATION, INC.	CLEARY PETROLEUM, INC.
COMPLETED	--/--/00	11/01/83	09/13/65
SAMPLED	09/27/79	--/--/00	09/27/66
FORMATION	PENN-MORROW	PENN-SPRINGER	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10323	11600	8437
WELLHEAD PRESSURE,PSIG	2008	1200	1884
OPEN FLOW, MCFD	2995		14658
COMPONENT, MOLE PCT			
METHANE	93.9	83.7	81.8
ETHANE	3.5	3.9	10.3
PROPANE	0.8	1.5	3.3
N-BUTANE	0.2	0.5	0.8
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.6	7.5	2.4
OXYGEN	0.1	1.8	0.4
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1055	985	1155
SPECIFIC GRAVITY	0.599	0.649	0.680

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5293 SAMPLE 15100	INDEX 5294 SAMPLE 7663	INDEX 5295 SAMPLE 8262
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	THOMAS E	WATONGA S	WATONGA-CHICKASHA TREND
WELL NAME	TWIN WOMAN NO. 1	E. A. SALLSTROM	C. W. SWANEGAN NO. 1
LOCATION	SEC. 29, T18N, R13W	SEC. 2, T15N, R12W	SEC. 11, T16N, R11W
OWNER	ST. JOE PETROLEUM CORP.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	06/21/60	08/30/61
SAMPLED	09/12/77	08/31/60	11/01/61
FORMATION	PENN-RED FORK	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	9752	9822
WELLHEAD PRESSURE,PSIG	5614	5788	6500
OPEN FLOW, MCFD	NOT GIVEN	5500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.6	85.4	93.3
ETHANE	5.8	6.7	3.6
PROPANE	2.0	3.7	1.2
N-BUTANE	0.4	1.1	0.2
ISOBUTANE	0.3	0.8	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.5	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	0.5	0.5	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1114	1203	1064
SPECIFIC GRAVITY	0.632	0.686	0.602

	INDEX 5296 SAMPLE 10411	INDEX 5297 SAMPLE 10432	INDEX 5298 SAMPLE 10631
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	RED CLOUD UNIT NO. 1	PATTERSON UNIT D NO. 1	KLOEPPEL 1-14
LOCATION	SEC. 15, T17N, R11W	SEC. 16, T17N, R11W	SEC. 14, T17N, R11W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	UNION OIL CO. OF CALIF.
COMPLETED	10/10/65	--/--/00	05/14/65
SAMPLED	02/22/66	03/05/66	06/28/66
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8345	8325	8273
WELLHEAD PRESSURE,PSIG	5300	5498	8600
OPEN FLOW, MCFD	15825	12000	31510
COMPONENT, MOLE PCT			
METHANE	93.4	92.6	92.7
ETHANE	4.3	4.2	3.9
PROPANE	1.3	1.3	1.4
N-BUTANE	0.3	0.3	0.5
ISOBUTANE	TRACE	0.2	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.0	0.5	0.8
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.03	0.04	0.04
HEATING VALUE*	1080	1091	1062
SPECIFIC GRAVITY	0.602	0.613	0.605

	INDEX 5299 SAMPLE 10632	INDEX 5300 SAMPLE 10959	INDEX 5301 SAMPLE 11011
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	SPAETH 1-23	WOOLWORTH UNIT NO. 1	R. A. MADDUX NO. 1
LOCATION	SEC. 23, T17N, R11W	SEC. 14, T15N, R11W	SEC. 2, T16N, R12W
OWNER	UNION OIL CO. OF CALIF.	WOODS PETROLEUM CORP.	AMOCO PRODUCTION CO.
COMPLETED	08/10/65	01/--/67	08/22/66
SAMPLED	06/28/66	05/18/67	06/21/67
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8360	9793	9046
WELLHEAD PRESSURE,PSIG	5750	6250	5569
OPEN FLOW, MCFD	67568	19131	25171
COMPONENT, MOLE PCT			
METHANE	93.8	84.6	82.6
ETHANE	4.0	3.0	7.2
PROPANE	1.4	0.7	4.5
N-BUTANE	0.5	0.2	1.5
ISOBUTANE	0.0	TRACE	0.8
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.0	0.8
CYCLOPENTANE	0.0	TRACE	0.3
HEXANES PLUS	0.0	0.1	0.5
NITROGEN	0.0	8.2	0.9
OXYGEN	0.0	2.2	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.4
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1075	945	1240
SPECIFIC GRAVITY	0.599	0.638	0.713

	INDEX 5302 SAMPLE 11369	INDEX 5303 SAMPLE 12315	INDEX 5304 SAMPLE 14327
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BLAINE	BLAINE
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	MEADOWS NO. 1	CHAMBERS NO. 3	WHEELER UNIT NO. 1
LOCATION	SEC. 1, T15N, R11W	SEC. 18, T16N, R11W	SEC. 31, T17N, R10W
OWNER	SUN OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	03/16/62	11/20/69	03/19/75
SAMPLED	03/11/68	05/08/70	05/08/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9548	9116	8714
WELLHEAD PRESSURE,PSIG	1651	5942	5620
OPEN FLOW, MCFD	1875	29300	12150
COMPONENT, MOLE PCT			
METHANE	93.3	88.0	92.5
ETHANE	3.2	5.3	4.0
PROPANE	0.9	3.1	1.6
N-BUTANE	0.5	0.8	0.4
ISOBUTANE	0.0	0.6	0.3
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.2	0.5	0.2
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	0.9	0.5	0.5
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.02	0.00	0.03
HEATING VALUE*	1070	1176	1087
SPECIFIC GRAVITY	0.607	0.667	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5305 SAMPLE 16837	INDEX 5306 SAMPLE 6574	INDEX 5307 SAMPLE 14157
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BLAINE	BRYAN	BRYAN
FIELD	WATONGA-CHICKASHA TREND	AYLESWORTH SE	AYLESWORTH SE
WELL NAME	KARNS GAS UNIT NO. 1	MARY MAYNIE NO. 1	NEFF GODFREY NO. 2
LOCATION	SEC. 10, T15N, R11W	SEC. 22, T6S, R7E	SEC. 22, T6S, R7E
OWNER	TOKLAN OIL & GAS CORP.	ANDERSON-PRICHARD OIL CORP.	JAKE L. HAMON
COMPLETED	03/24/83	05/01/58	05/03/74
SAMPLED	03/24/83	05/02/58	09/26/74
FORMATION	PENN-MORROW	DEVO-HUNTON	MISS-WOODFORD
GEOLOGIC PROVINCE CODE	360	400	400
DEPTH, FEET	9642	4192	3575
WELLHEAD PRESSURE,PSIG	6500	1515	798
OPEN FLOW, MCFD	3850	10	6759
COMPONENT, MOLE PCT			
METHANE	92.7	61.2	84.0
ETHANE	3.3	6.6	7.7
PROPANE	0.9	6.3	3.6
N-BUTANE	0.2	7.3	0.7
ISOBUTANE	0.1	2.4	0.3
N-PENTANE	0.0	5.3	0.1
ISOPENTANE	0.8	3.9	0.2
CYCLOPENTANE	0.4	0.8	TRACE
HEXANES PLUS	0.4	3.1	0.1
NITROGEN	0.4	2.7	2.9
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.02	0.10	0.05
HEATING VALUE*	1102	1811	1130
SPECIFIC GRAVITY	0.623	1.079	0.664

	INDEX 5308 SAMPLE 14529	INDEX 5309 SAMPLE 6765	INDEX 5310 SAMPLE 7765
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BRYAN	BRYAN	BRYAN
FIELD	AYLESWORTH SE	DURANT E	DURANT E
WELL NAME	GODFREY NO. 1	No. C. ANDERSON NO. 1	ANDERSON-MAYHUE UNIT NO. 1
LOCATION	SEC. 21, T6S, R7E	SEC. 2, T7S, R9E	SEC. 34, T6S, R9E
OWNER	CLEARY PETROLEUM CORP.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	07/22/75	07/22/58	08/31/60
SAMPLED	11/10/75	07/22/58	11/11/60
FORMATION	ORDO-OIL CREEK	ORDO-MCLISH	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	400	400	400
DEPTH, FEET	4171	7824	7072
WELLHEAD PRESSURE,PSIG	1720	2038	1971
OPEN FLOW, MCFD	6955	3237	6600
COMPONENT, MOLE PCT			
METHANE	86.5	95.3	94.3
ETHANE	4.8	1.7	2.6
PROPANE	3.1	0.8	1.0
N-BUTANE	1.0	0.3	0.4
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.3	0.3	TRACE
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	3.0	0.9	0.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	0.07	0.03	0.03
HEATING VALUE*	1126	1053	1062
SPECIFIC GRAVITY	0.665	0.594	0.599

	INDEX 5311 SAMPLE 12306	INDEX 5312 SAMPLE 12328	INDEX 5313 SAMPLE 10102
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BRYAN	BRYAN	BRYAN
FIELD	DURANT E	DURANT E	DURANT N
WELL NAME	SMITH-EVITTS NO. 1	SMITH-EVITT NO. 1	PARK-COLLEGE UNIT NO. 1
LOCATION	SEC. 1, T7S, R9E	SEC. 1, T7S, R9E	SEC. 18, T6S, R9E
OWNER	EARLSBORO OIL & GAS CO., INC	EARLSBORO OIL & GAS CO., INC	AMOCO PRODUCTION CO.
COMPLETED	12/05/69	12/05/69	07/26/65
SAMPLED	06/22/70	06/22/70	09/02/65
FORMATION	ORDO-MCLISH	ORDO-BROMIDE	ORDO-MCLISH
GEOLOGIC PROVINCE CODE	400	400	400
DEPTH, FEET	8080	7480	9126
WELLHEAD PRESSURE,PSIG	1815	2039	2780
OPEN FLOW, MCFD	1709	5727	2181
COMPONENT, MOLE PCT			
METHANE	96.1	92.1	83.3
ETHANE	1.1	3.9	4.5
PROPANE	0.4	1.5	2.2
N-BUTANE	0.1	0.4	0.9
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.2	1.2	7.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.2
HELIUM	0.03	0.04	0.08
HEATING VALUE*	1025	1076	1062
SPECIFIC GRAVITY	0.585	0.610	0.668

	INDEX 5314 SAMPLE 7134	INDEX 5315 SAMPLE 13566	INDEX 5316 SAMPLE 2801
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	ALDEN NW	ALDEN NW	APACHE
WELL NAME	NO. 1	BROMIDE UNIT NO. 1	SMITH NO. 1
LOCATION	SEC. 2, T6N, R13W	SEC. 35, T7N, R13W	SEC. 2, T5N, R12W
OWNER	ATLANTIC RICHFIELD CO.	JONES & PELLOW OIL CO.	TEXAS CO.
COMPLETED	03/--/59	12/31/72	--/--/00
SAMPLED	06/23/59	03/19/73	12/06/58
FORMATION	ORDO-BROMIDE	ORDO-BROMIDE	ORDO-SYLVAN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8880	9622	2403
WELLHEAD PRESSURE,PSIG	550	3242	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7108	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.2	84.6	86.5
ETHANE	10.4	7.2	10.8
PROPANE	1.8	3.9	---
N-BUTANE	1.5	0.9	---
ISOBUTANE	1.8	0.5	---
N-PENTANE	0.8	0.2	---
ISOPENTANE	1.7	0.2	---
CYCLOPENTANE	0.4	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.7	1.8	0.8
OXYGEN	TRACE	0.0	0.8
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.2	1.1
HELIUM	0.03	0.07	0.03
HEATING VALUE*	1416	1157	1070
SPECIFIC GRAVITY	0.833	0.668	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5317 SAMPLE 3265	INDEX 5318 SAMPLE 3266	INDEX 5319 SAMPLE 14255
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	APACHE	APACHE	APACHE E
WELL NAME	J. N. SMITH NO. 3	ACHILTA, B	A. O. BELCHER NO. 1
LOCATION	SEC. 2, T5N, R12W	SEC. 35, T6N, R12W	SEC. 23, T5N, R11W
OWNER	TEXACO INC.	TEXACO INC.	FOREST OIL CORP.
COMPLETED	09/22/41	01/15/42	10/01/73
SAMPLED	04/16/42	04/16/42	01/30/75
FORMATION	ORDO-WILCOX	ORDO-WILCOX	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3323	3709	18695
WELLHEAD PRESSURE,PSIG	1615	1656	13473
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7275
COMPONENT, MOLE PCT			
METHANE	84.1	61.0	96.7
ETHANE	15.1	37.9	1.7
PROPANE	---	---	0.2
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.4	0.4	0.3
OXYGEN	0.2	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.3	1.1
HELIUM	0.05	TRACE	0.01
HEATING VALUE*	1123	1297	1015
SPECIFIC GRAVITY	0.632	0.749	0.577

	INDEX 5320 SAMPLE 16867	INDEX 5321 SAMPLE 13844	INDEX 5322 SAMPLE 16312
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	APACHE SE	BINGER	BINGER
WELL NAME	WINDEMANN NO. 1-30	JOSHUA UNIT 29-1	PATTERSON NO. 1
LOCATION	SEC. 30, T5N, R10W	SEC. 29, T10N, R10W	SEC. 17, T10N, R10W
OWNER	KIRBY EXPLORATION CO.	JONES & PELLOW OIL CO.	COTTON PETROLEUM CORP.
COMPLETED	04/--/82	10/31/73	--/--/00
SAMPLED	04/11/83	12/26/73	08/06/81
FORMATION	PENN-BRITT	PENN-CUNNINGHAM	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17260	13900	13282
WELLHEAD PRESSURE,PSIG	8600	8000	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	6400	2085
COMPONENT, MOLE PCT			
METHANE	95.5	93.6	96.7
ETHANE	1.6	1.0	1.3
PROPANE	0.2	0.2	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.3	3.7	0.4
OXYGEN	0.3	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.4	1.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1002	971	1008
SPECIFIC GRAVITY	0.579	0.591	0.578

	INDEX 5323 SAMPLE 14947	INDEX 5324 SAMPLE 14949	INDEX 5325 SAMPLE 16088
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	BINGER NE	BINGER NE	BINGER W
WELL NAME	SHOOK NO. 1	SAH-MAH-NIN NO. 1	WILLIAMS NO. 1
LOCATION	SEC. 6, T9N, R9W	SEC. 31, T10N, R9W	SEC. 33, T10N, R11W
OWNER	MELMERICH & PAYNE, INC.	MELMERICH & PAYNE, INC.	SANGUINE, LTD.
COMPLETED	12/01/76	12/08/76	08/--/80
SAMPLED	03/24/77	03/24/77	10/09/80
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12941	13186	13100
WELLHEAD PRESSURE,PSIG	6587	8600	8100
OPEN FLOW, MCFD	200000	640000	3500
COMPONENT, MOLE PCT			
METHANE	92.3	96.8	81.4
ETHANE	4.6	1.7	10.7
PROPANE	1.2	0.3	4.1
N-BUTANE	0.2	0.0	0.9
ISOBUTANE	0.1	0.0	0.8
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.3	0.2	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	1.0
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1071	1019	1215
SPECIFIC GRAVITY	0.609	0.576	0.704

	INDEX 5326 SAMPLE 17616	INDEX 5327 SAMPLE 17731	INDEX 5328 SAMPLE 17900
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	BINGER W	BINGER W	BRIDGE
WELL NAME	MAAS NO. 2	DONALD GRAY NO. 1-28	MC COOL NO. 1-25
LOCATION	SEC. 36, T10N, R12W	SEC. 28, T10N, R12W	SEC. 25, T12N, R12W
OWNER	AMOCO PRODUCTION CO.	GRACE PETROLEUM CORP.	BRACKEN EXPLORATION CO.
COMPLETED	11/29/84	02/18/84	07/07/85
SAMPLED	--/--/00	06/25/85	11/07/85
FORMATION	PENN-SPRINGER	PENN-BRITT	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15682	15647	12522
WELLHEAD PRESSURE,PSIG	10171	8662	8380
OPEN FLOW, MCFD	30000	11859	1300
COMPONENT, MOLE PCT			
METHANE	96.9	96.8	92.8
ETHANE	1.1	1.1	4.5
PROPANE	0.1	0.1	0.9
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.2	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.5	0.9
HELIUM	0.02	0.01	0.03
HEATING VALUE*	1004	1003	1064
SPECIFIC GRAVITY	0.577	0.577	0.605

* CALCULATED GROSS BTU-PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5329 SAMPLE 8015	INDEX 5330 SAMPLE 14445	INDEX 5331 SAMPLE 15112
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	BRIDGEPORT	BRIDGEPORT W	BRIDGEPORT W
WELL NAME	W. V. WEATHERS NO. 1	MARTIN NO. 1	RANDAL FOSTER NO. 1
LOCATION	SEC. 8, T12N, R11W	SEC. 4, T12N, R12W	SEC. 11, T12N, R12W
OWNER	MOBIL OIL CORP.	MAY PETROLEUM, INC.	DAVIS OIL CO.
COMPLETED	02/09/61	12/02/74	07/--/77
SAMPLED	06/12/61	08/26/75	09/16/77
FORMATION	PENN-CHEROKEE	PENN-RED FORK	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11388	11484	12950
WELLHEAD PRESSURE,PSIG	5500	3760	5600
OPEN FLOW, MCFD	1284	2200	1275
COMPONENT, MOLE PCT			
METHANE	84.3	85.2	97.4
ETHANE	8.6	8.6	1.0
PROPANE	2.8	3.2	0.2
N-BUTANE	0.5	0.5	0.0
ISOBUTANE	0.8	0.5	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.5	0.1	0.0
CYCLOPENTANE	0.3	TRACE	0.0
HEXANES PLUS	1.0	0.1	0.0
NITROGEN	0.2	0.8	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	1.1
HELIUM	0.04	0.04	0.02
HEATING VALUE*	1213	1147	1010
SPECIFIC GRAVITY	0.693	0.661	0.572

	INDEX 5332 SAMPLE 17265	INDEX 5333 SAMPLE 14632	INDEX 5334 SAMPLE 16800
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	BROXTON N	CANYON CITY SW	CANYON CITY SW
WELL NAME	VERMA NO. 1	ARNOLD NO. 1	WAYNE NO. 1
LOCATION	SEC. 34, T7N, R12W	SEC. 23, T11N, R11W	SEC. 15, T11N, R11W
OWNER	RICKS EXPLORATION CO.	MONSANTO CO.	COTTON PETROLEUM CORP.
COMPLETED	03/12/83	05/27/75	07/15/82
SAMPLED	04/19/84	04/09/76	03/10/83
FORMATION	MISS-GODDARD	PENN-RED FORK	PENN-BRITT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	20631	12142	13374
WELLHEAD PRESSURE,PSIG	13600	6600	7600
OPEN FLOW, MCFD	60	NOT GIVEN	1439
COMPONENT, MOLE PCT			
METHANE	96.4	85.9	96.4
ETHANE	0.6	8.7	1.4
PROPANE	0.1	2.7	0.2
N-BUTANE	0.0	0.5	TRACE
ISOBUTANE	0.0	0.4	TRACE
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.0	0.6	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.9	1.4
HELIUM	0.02	0.03	0.02
HEATING VALUE*	990	1140	1012
SPECIFIC GRAVITY	0.581	0.656	0.578

	INDEX 5335 SAMPLE 2313	INDEX 5336 SAMPLE 2464	INDEX 5337 SAMPLE 2645
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	CEMENT	CEMENT	CEMENT
WELL NAME	BERT LACKEY NO. 6	PRESTON CULP NO. 6	GARNER NO. 1
LOCATION	SEC. 11, T5N, R9W	SEC. 6, T5N, R9W	SEC. 26, T6N, R10W
OWNER	MID-KANSAS OIL & GAS CO.	MID-KANSAS OIL & GAS CO.	WILLARD L. MILLER
COMPLETED	--/--/00	01/18/32	06/13/33
SAMPLED	04/01/31	01/29/32	09/--/33
FORMATION	PERM-BASAL	PENN-MEDRANO	PERM-BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6040	3382
WELLHEAD PRESSURE,PSIG	110	1500	1220
OPEN FLOW, MCFD	NOT GIVEN	10000	10000
COMPONENT, MOLE PCT			
METHANE	90.6	90.3	69.0
ETHANE	8.9	7.8	22.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	1.4	8.1
OXYGEN	0.1	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.04	0.07	0.05
HEATING VALUE*	1077	1055	1100
SPECIFIC GRAVITY	0.602	0.601	0.701

	INDEX 5338 SAMPLE 3314	INDEX 5339 SAMPLE 3543	INDEX 5340 SAMPLE 3563
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	CEMENT	CEMENT	CEMENT
WELL NAME	HEDLAND NO. 8	OAKS NO. 1	SAMES NO. 8
LOCATION	SEC. 11, T 5N, R 9W	SEC. 34, T6N, R10W	SEC 35, T6N, R10W
OWNER	MOBIL OIL CORP.	PHILLIPS PETROLEUM CO.	MOBIL OIL CORP.
COMPLETED	04/05/38	01/24/40	07/11/40
SAMPLED	04/16/42	05/18/42	05/18/42
FORMATION	PENN-DEESE	PENN-MEDRANO	PENN-MEDRANO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5754	5085	4278
WELLHEAD PRESSURE,PSIG	1385	1542	1463
OPEN FLOW, MCFD	22500	100	100000
COMPONENT, MOLE PCT			
METHANE	89.8	92.5	91.8
ETHANE	9.6	6.7	7.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	TRACE	0.1	0.5
OXYGEN	0.4	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.05	0.07	0.06
HEATING VALUE*	1082	1057	1055
SPECIFIC GRAVITY	0.605	0.592	0.595

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5341 SAMPLE 10401	INDEX 5342 SAMPLE 16792	INDEX 5343 SAMPLE 16528
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	CEMENT	CEMENT	CEMENT N
WELL NAME	ROYSE-ORDOVICIAN UNIT NO. 1	LEON FUERTH NO. 1-23	C.E. MOODY NO. 1-10
LOCATION	SEC. 12, T5N, R9W	SEC. 23, T6N, R9W	SEC. 10, T6N, R9W
OWNER	MOBIL OIL CORP.	GULF OIL EXPL. & PROD. CO.	GULF OIL EXPL. & PROD. CO.
COMPLETED	12/28/65	04/02/82	10/18/81
SAMPLED	02/15/66	02/10/83	05/25/82
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-CUNNINGHAM
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12315	16620	16580
WELLHEAD PRESSURE,PSIG	4893	7275	7980
OPEN FLOW, MCFD	1606	3123	1970
COMPONENT, MOLE PCT			
METHANE	89.3	75.7	95.5
ETHANE	4.8	11.4	2.5
PROPANE	2.0	4.9	0.3
N-BUTANE	0.6	1.7	0.1
ISOBUTANE	0.3	0.7	0.0
N-PENTANE	TRACE	0.5	TRACE
ISOPENTANE	1.9	0.7	TRACE
CYCLOPENTANE	0.4	0.2	TRACE
HEXANES PLUS	1.0	0.4	0.1
NITROGEN	0.6	2.6	0.2
OXYGEN	0.0	0.4	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.2	0.0
CARBON DIOXIDE	0.4	0.5	1.0
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1184	1259	1029
SPECIFIC GRAVITY	0.673	0.749	0.583

	INDEX 5344 SAMPLE 16616	INDEX 5345 SAMPLE 17281	INDEX 5346 SAMPLE 16756
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	COTTONWOOD SW	CRAIG	CYRIL NW
WELL NAME	MCCOMAS NO.1-21	CRAIG NO. 1	PATTERSON NO. 1-8
LOCATION	SEC. 21, T7N, R9W	SEC. 2, T10N, R12W	SEC. 8, T5N, R10W
OWNER	SHELL OIL CO.	RICKS EXPLORATION CORP.	CONTINENTAL RESOURCES CORP.
COMPLETED	04/--/82	06/25/82	09/02/82
SAMPLED	08/10/82	05/01/84	01/--/83
FORMATION	PENN-SPRINGER	PENN-RED FORK	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17534	13100	9557
WELLHEAD PRESSURE,PSIG	6451	NOT GIVEN	14000
OPEN FLOW, MCFD	6500	975	8000
COMPONENT, MOLE PCT			
METHANE	96.6	89.2	96.7
ETHANE	1.9	6.6	1.1
PROPANE	0.1	1.9	0.1
N-BUTANE	TRACE	0.5	0.0
ISOBUTANE	TRACE	0.2	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.2	0.4	0.2
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	1.5
HELIUM	0.01	0.03	0.01
HEATING VALUE*	1011	1105	1003
SPECIFIC GRAVITY	0.578	0.632	0.575

	INDEX 5347 SAMPLE 17140	INDEX 5348 SAMPLE 17183	INDEX 5349 SAMPLE 15933
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	CYRIL W	CYRIL W	EAKLY E
WELL NAME	SCHNEBERGER NO. 1-17	LG BOONE NO. 1	ALMA BARBEE NO. 1
LOCATION	SEC. 17, T5N, R10W	SEC. 31, T6N, R10W	SEC. 31, T10N, R12W
OWNER	KIRBY EXPLORATION CO.	PCX CORP.	HELMERICH & PAYNE, INC.
COMPLETED	--/--/83	03/--/83	04/25/79
SAMPLED	11/21/83	02/14/84	03/26/80
FORMATION	MISS-GODDARD	PENN-GODDARD	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	19553	19808	12456
WELLHEAD PRESSURE,PSIG	3800	5200	7625
OPEN FLOW, MCFD	NOT GIVEN	1200	17553
COMPONENT, MOLE PCT			
METHANE	95.5	96.8	85.9
ETHANE	1.3	1.0	7.5
PROPANE	0.1	0.1	3.4
N-BUTANE	TRACE	TRACE	0.8
ISOBUTANE	0.0	0.0	0.6
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.2
NITROGEN	1.4	0.2	0.4
OXYGEN	0.3	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.7	0.6
HELIUM	0.01	0.02	0.02
HEATING VALUE*	997	1001	1175
SPECIFIC GRAVITY	0.582	0.577	0.671

	INDEX 5350 SAMPLE 16655	INDEX 5351 SAMPLE 17693	INDEX 5352 SAMPLE 17063
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	EAKLY E	EAKLY E	EXEDINE NE
WELL NAME	BEAR NO. 19-1	J. E. SMITH NO. 1	FRED TUCKER UNIT A NO. 1
LOCATION	SEC. 19, T10N, R12W	SEC. 26, T10N, R12W	SEC. 30, T11N, R12W
OWNER	DRILLERS EXPLORATION, INC.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	09/17/82	12/98/2	10/23/82
SAMPLED	09/17/82	05/17/85	09/13/83
FORMATION	PENN-MORROW	PENN-RED FORK	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16000	15825	12468
WELLHEAD PRESSURE,PSIG	12500	3200	6815
OPEN FLOW, MCFD	25000	3481	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.0	86.3	94.4
ETHANE	0.7	8.1	3.2
PROPANE	0.1	2.7	0.6
N-BUTANE	0.0	0.6	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	0.2	0.6	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.8	1.1
HELIUM	0.02	0.03	0.02
HEATING VALUE*	998	1147	1039
SPECIFIC GRAVITY	0.576	0.658	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5353 SAMPLE 17076	INDEX 5354 SAMPLE 16954	INDEX 5355 SAMPLE 16932
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	GRACEMONT S	GRACEMONT W	LAVERTY W
WELL NAME	STEVENS NO. 26-1	JENNINGS NO. 1	DUNN NO. 1
LOCATION	SEC. 26, T8N, R10W	SEC. 6, T8N, R10W	SEC. 19, T6N, R9W
OWNER	SANTA FE MINERALS, INC.	RICKS EXPLORATION CO.	PCN CORP.
COMPLETED	04/11/83	05/25/83	06/16/82
SAMPLED	09/29/83	05/25/83	05/13/83
FORMATION	PENN-SPRINGER	PENN-RED FORK	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	17731	13864	18554
WELLHEAD PRESSURE,PSIG	11400	6000	4100
OPEN FLOW, MCFD	1804	4850	3000
COMPONENT, MOLE PCT			
METHANE	96.6	78.5	95.3
ETHANE	0.6	9.1	1.6
PROPANE	0.1	3.1	0.1
N-BUTANE	0.0	0.6	0.1
ISOBUTANE	0.0	0.7	0.0
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.8	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.6	0.1
NITROGEN	0.3	4.1	0.3
OXYGEN	0.1	0.9	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.8	1.7
HELIUM	0.01	0.03	0.02
HEATING VALUE*	993	1163	1022
SPECIFIC GRAVITY	0.578	0.715	0.591

	INDEX 5356 SAMPLE 16287	INDEX 5357 SAMPLE 16295	INDEX 5358 SAMPLE 16344
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	LIBBIE	LIBBIE	LIBBIE
WELL NAME	FLANIGIN NO. 1	JEAN R. EPPERLY NO. 1-24	FLANIGIN NO. 1
LOCATION	SEC. 29, T12N, R12W	SEC. 24, T12N, R13W	SEC. 29, T12N, R12W
OWNER	COTTON PETROLEUM CORP.	GULF OIL EXPL. & PROD. CO.	COTTON PETROLEUM CORP.
COMPLETED	08/24/80	06/08/81	08/--/80
SAMPLED	06/29/81	07/17/81	09/28/81
FORMATION	PENN-BRITT	PENN-SPRINGER	PENN-BRITT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13897	13804	13907
WELLHEAD PRESSURE,PSIG	8450	6944	6800
OPEN FLOW, MCFD	NOT GIVEN	3040	3389
COMPONENT, MOLE PCT			
METHANE	96.7	96.9	96.4
ETHANE	1.3	1.3	1.4
PROPANE	0.2	0.2	0.2
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.4	0.4	0.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.2	1.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1008	1010	1011
SPECIFIC GRAVITY	0.578	0.576	0.580

	INDEX 5359 SAMPLE 17189	INDEX 5360 SAMPLE 17236	INDEX 5361 SAMPLE 17380
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	LIBBIE SW	LIBBIE SW	LOOKEBA E
WELL NAME	FROST NO. 1-17	MELVIN CHISUM NO. 1	BAKER NO. 1
LOCATION	SEC. 17, T11N, R13W	SEC. 29, T11N, R13W	SEC. 6, T10N, R10W
OWNER	LEAR PETROLEUM EXPL., INC.	SUN EXPLORATION & PRODUCTION	ANR PRODUCTION CO.
COMPLETED	08/--/81	03/10/84	07/16/77
SAMPLED	02/23/84	03/11/84	08/15/84
FORMATION	PENN-SPRINGER	PENN-ATOKA	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15000	14302	13426
WELLHEAD PRESSURE,PSIG	3200	NOT GIVEN	5106
OPEN FLOW, MCFD	10064	20523	1800
COMPONENT, MOLE PCT			
METHANE	96.7	93.2	95.5
ETHANE	1.0	2.5	2.2
PROPANE	0.1	0.4	0.4
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.5	2.2	0.5
OXYGEN	0.1	0.5	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.9	1.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1000	1007	1026
SPECIFIC GRAVITY	0.579	0.594	0.588

	INDEX 5362 SAMPLE 14372	INDEX 5363 SAMPLE 15360	INDEX 5364 SAMPLE 17139
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	ONEY NE	ONEY SW	RICHARDS SW
WELL NAME	CAREY NO. 1	OPITZ NO. 1	THOMAS NO. 1-31
LOCATION	SEC. 9, T9N, R11W	SEC. 13, T8N, R12W	SEC. 31, T5N, R10W
OWNER	ARKLA EXPLORATION CO.	J. M. HUBER CORP.	KIRBY EXPLORATION CO.
COMPLETED	04/15/75	12/22/77	--/--/83
SAMPLED	05/15/75	08/--/78	11/22/83
FORMATION	MISS-CHESTER	PENN-MELTON	PENN-BRITT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15309	10213	17000
WELLHEAD PRESSURE,PSIG	9000	4600	6000
OPEN FLOW, MCFD	4400	3682	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.9	85.3	94.5
ETHANE	0.9	7.8	1.5
PROPANE	0.1	3.7	0.2
N-BUTANE	0.0	0.8	TRACE
ISOBUTANE	0.0	0.5	0.0
N-PENTANE	0.0	0.2	TRACE
ISOPENTANE	0.0	0.3	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	TRACE
NITROGEN	3.7	0.6	2.4
OXYGEN	0.8	TRACE	0.5
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.4	0.9
HELIUM	0.02	0.04	0.02
HEATING VALUE*	960	1176	989
SPECIFIC GRAVITY	0.594	0.670	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5365 SAMPLE 13792	INDEX 5366 SAMPLE 17195	INDEX 5367 SAMPLE 17514
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	SICKLES N	SICKLES NE	SICKLES NE
WELL NAME	BUELL NO. 1	PECK NO. 1-10	GENNIE LINDLEY "A" NO. 30-2
LOCATION	SEC. 11, T11N, R12W	SEC. 10, T10N, R12W	SEC. 30, T11N, R11W
OWNER	APEXCO, INC.	LEAR PETROLEUM EXPL., INC.	GETTY OIL CO.
COMPLETED	--/--/00	09/--/82	11/17/83
SAMPLED	--/--/00	02/23/84	06/06/84
FORMATION	PENN-SPRINGER	PENN-ATOKA	PENN-CUNNINGHAM
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13094	14276	13895
WELLHEAD PRESSURE,PSIG	9755	6400	7500
OPEN FLOW, MCFD	6200	3583	4226
COMPONENT, MOLE PCT			
METHANE	96.6	93.5	92.4
ETHANE	1.3	3.3	4.1
PROPANE	0.2	0.6	0.9
N-BUTANE	TRACE	0.1	0.3
ISOBUTANE	TRACE	0.1	0.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.3	1.3	0.6
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.0	1.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1007	1034	1072
SPECIFIC GRAVITY	0.575	0.602	0.615

	INDEX 5368 SAMPLE 16865	INDEX 5369 SAMPLE 13528	INDEX 5370 SAMPLE 13989
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	WASHITA CITY-CADDO	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	DIDIER NO. 1-28	W. G. GUSTAFSON NO. 1	STAHLMAN NO. 1
LOCATION	SEC. 28, T8N, R11W	SEC. 10, T10N, R9W	SEC. 9, T10N, R9W
OWNER	GHK GAS CORP.	AMOCO PRODUCTION CO.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	09/19/82	12/21/72	12/30/73
SAMPLED	04/--/83	02/09/73	05/03/74
FORMATION	PENN-RED FORK	PENN-SKINNER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14336	11918	12004
WELLHEAD PRESSURE,PSIG	9700	7935	7435
OPEN FLOW, MCFD	1200	20469	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.9	96.2	96.5
ETHANE	9.2	1.9	1.8
PROPANE	3.2	0.4	0.3
N-BUTANE	0.4	0.1	TRACE
ISOBUTANE	0.3	0.1	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	0.2	0.4
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.7
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1150	1035	1023
SPECIFIC GRAVITY	0.659	0.583	0.577

	INDEX 5371 SAMPLE 14468	INDEX 5372 SAMPLE 14579	INDEX 5373 SAMPLE 14706
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	KUHLMAN UNIT NO. 1	SHADID NO. 1	BELT UNIT NO. 1
LOCATION	SEC. 26, T10N, R9W	SEC 16, T9N, R9W	SEC. 21, T10N, R9W
OWNER	AMOCO PRODUCTION CO.	TENNECO OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	04/16/75	--/--/00	04/19/76
SAMPLED	09/17/75	02/10/76	06/21/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12228	13712	12682
WELLHEAD PRESSURE,PSIG	6967	6600	NOT GIVEN
OPEN FLOW, MCFD	27640	11289	4600
COMPONENT, MOLE PCT			
METHANE	96.7	96.3	92.5
ETHANE	1.6	1.8	4.4
PROPANE	0.2	0.2	1.2
N-BUTANE	TRACE	0.0	0.2
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	0.3	0.2	0.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.3	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1019	1013	1061
SPECIFIC GRAVITY	0.576	0.578	0.603

	INDEX 5374 SAMPLE 14723	INDEX 5375 SAMPLE 14728	INDEX 5376 SAMPLE 14819
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CADDO	CADDO
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	C. MENSLEY NO. 2-25	HUMPHREY NO. 1	STANDIFER UNIT NO. 1
LOCATION	SEC. 25, T9N, R9W	SEC. 12, T10N, R9W	SEC. 1, T10N, R9W
OWNER	TENNECO OIL CO.	FERGUSON OIL CO., INC.	DONALD C. SLAWSON
COMPLETED	--/--/00	01/28/76	09/02/76
SAMPLED	07/28/76	08/02/76	10/27/76
FORMATION	PENN-MORROW	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13356	11812	11643
WELLHEAD PRESSURE,PSIG	7400	7501	7436
OPEN FLOW, MCFD	NOT GIVEN	70325	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.8	97.6	95.3
ETHANE	4.3	1.2	2.6
PROPANE	1.1	0.2	0.7
N-BUTANE	0.2	0.0	0.1
ISOBUTANE	0.2	0.0	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	1.3	0.3	0.4
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1058	1015	1041
SPECIFIC GRAVITY	0.613	0.570	0.588

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5377 SAMPLE 15116	INDEX 5378 SAMPLE 15096	INDEX 5379 SAMPLE 15982
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CADDO	CANADIAN	CANADIAN
FIELD	NATONGA-CHICKASHA TREND	CANYON CITY SW	CONCHO N
WELL NAME	TAPPER NO. 1	CANYON CAMP UNIT NO. 1	BOMHOFF "C" NO. 1
LOCATION	SEC. 1, T10N, R10W	SEC. 19, T11N, R10W	SEC. 23, T14N, R8W
OWNER	WOODS PETROLEUM CORP.	DONALD C. SLAWSON	PHILLIPS PETROLEUM CO.
COMPLETED	05/15/76	07/15/77	--/--/00
SAMPLED	09/--/77	09/10/77	06/07/80
FORMATION	PENN-MORROW	PENN-RED FORK	PENN-OSWEGO & DEVO HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12374	11992	NOT GIVEN
WELLHEAD PRESSURE,PSIG	7650	6800	2000
OPEN FLOW, MCFD	2480	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	76.5	77.2
ETHANE	3.4	9.4	12.7
PROPANE	1.7	3.2	5.6
N-BUTANE	0.7	0.7	1.7
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.6	0.3	0.3
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.5	0.5	0.2
NITROGEN	3.9	6.2	1.0
OXYGEN	1.5	1.5	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.9	0.0
CARBON DIOXIDE	0.7	0.7	0.3
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1090	1125	1276
SPECIFIC GRAVITY	0.665	0.720	0.736

	INDEX 5380 SAMPLE 16331	INDEX 5381 SAMPLE 5421	INDEX 5382 SAMPLE 16335
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	EDMOND W	EL RENO	ENID NE
WELL NAME	CAROL DIANE NO. 1	E. HUTCHEMANN NO. 1	MCKINNEY NO. 1
LOCATION	SEC. 1, T14N, R5W	SEC. 14, T12N, R7W	SEC. 28, T12N, R5W
OWNER	DLB ENERGY CORP.	ATLANTIC RICHFIELD CO.	MORAN EXPLORATION, INC.
COMPLETED	--/--/00	10/--/52	--/--/00
SAMPLED	09/--/81	03/18/53	08/01/81
FORMATION	ORDO-WILCOX	ORDO-WILCOX	DEVO-HUNTON & MISS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	10304	7300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3650	1600
OPEN FLOW, MCFD	NOT GIVEN	14431	800
COMPONENT, MOLE PCT			
METHANE	94.6	94.7	79.5
ETHANE	2.3	2.4	10.7
PROPANE	0.6	0.7	4.9
N-BUTANE	0.2	0.2	1.5
ISOBUTANE	0.1	0.1	0.5
N-PENTANE	0.1	TRACE	0.4
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.5	0.7	1.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.3	0.8	0.5
HELIUM	0.05	0.03	0.09
HEATING VALUE*	1048	1040	1236
SPECIFIC GRAVITY	0.595	0.592	0.723

	INDEX 5383 SAMPLE 16336	INDEX 5384 SAMPLE 12288	INDEX 5385 SAMPLE 17824
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	ENID NE	MUSTANG N	MUSTANG SW
WELL NAME	MCKINNEY NO. 1	THIEMER NO. 1	GUTIERREZ NO. 1-27
LOCATION	SEC. 28, T12N, R5W	SEC. 21, T11N, R5W	SEC. 27, T11N, R6W
OWNER	MORAN EXPLORATION, INC.	HALL-JONES OIL CORP.	TRINEMA, INC.
COMPLETED	--/--/00	05/12/69	06/19/85
SAMPLED	08/01/81	06/05/70	08/28/85
FORMATION	PENN-OSWEGO	PENN-BARTLESVILLE	PENN-& MISS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7200	8258	9032
WELLHEAD PRESSURE,PSIG	1800	2527	2150
OPEN FLOW, MCFD	1800	5634	795
COMPONENT, MOLE PCT			
METHANE	77.8	88.2	75.1
ETHANE	9.9	6.8	8.2
PROPANE	5.6	2.5	5.2
N-BUTANE	1.5	0.6	3.1
ISOBUTANE	0.7	0.3	1.1
N-PENTANE	0.3	0.3	1.7
ISOPENTANE	0.3	TRACE	1.2
CYCLOPENTANE	0.1	TRACE	0.7
HEXANES PLUS	0.2	0.1	2.1
NITROGEN	2.9	1.3	1.0
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.5
HELIUM	0.07	0.04	0.03
HEATING VALUE*	1225	1114	1442
SPECIFIC GRAVITY	0.732	0.639	0.841

	INDEX 5386 SAMPLE 9840	INDEX 5387 SAMPLE 12157	INDEX 5388 SAMPLE 12185
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	OKARCHE N	REEDING S	REEDING S
WELL NAME	GRELLNER	SHORNEY NO. 4	HAMMOND NO. 1
LOCATION	SEC. 5, T14N, R7W	SEC. 4, T14N, R5W	SEC. 5, T14N, R5W
OWNER	ASHLAND OIL & REFINING CO.	RODMAN PETROLEUM CORP.	W. C. PAYNE
COMPLETED	01/07/65	--/--/00	08/08/69
SAMPLED	04/06/65	12/--/69	02/05/70
FORMATION	PENN-RED FORK	PENN-PRUE & BARTLESVILLE	PENN-PRUE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7988	6803	6900
WELLHEAD PRESSURE,PSIG	3550	NOT GIVEN	1000
OPEN FLOW, MCFD	1538	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	87.4	78.9	76.7
ETHANE	5.8	6.7	7.0
PROPANE	2.5	5.5	6.0
N-BUTANE	0.7	1.5	1.6
ISOBUTANE	0.5	0.8	0.8
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.2	0.7	0.9
CYCLOPENTANE	0.2	0.1	0.4
HEXANES PLUS	0.8	0.3	0.7
NITROGEN	1.3	5.0	5.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	TRACE
HELIUM	0.04	0.10	0.07
HEATING VALUE*	1164	1202	1245
SPECIFIC GRAVITY	0.668	0.727	0.755

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5389 SAMPLE 14753	INDEX 5390 SAMPLE 15042	INDEX 5391 SAMPLE 15082
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	RICHLAND N	RICHLAND N	RICHLAND N
WELL NAME	No. J. KRUGER NO. 15-1	SMITH NO. 1	MCLAIN NO. 1
LOCATION	SEC. 15, T13N, R6W	SEC. 18, T13N, R6W	SEC. 14, T13N, R 6W
OWNER	JONES & PELLOW OIL CO.	MACK OIL CO.	R. P. LAMMERTS OIL CO.
COMPLETED	06/23/76	06/10/77	08/13/76
SAMPLED	09/13/76	06/29/77	08/26/77
FORMATION	DEVO-BOIS D-ARC	DEVO-HUNTON & MISS	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8451	8807	8336
WELLHEAD PRESSURE,PSIG	1848	2700	2700
OPEN FLOW, MCFD	3905	5283	500000
COMPONENT, MOLE PCT			
METHANE	81.4	81.1	41.1
ETHANE	11.0	11.2	23.2
PROPANE	4.2	4.1	18.4
N-BUTANE	1.1	1.2	8.5
ISOBUTANE	0.4	0.4	2.9
N-PENTANE	0.2	0.4	2.1
ISOPENTANE	0.3	0.2	2.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.9
NITROGEN	1.0	0.6	0.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.03	0.03	TRACE
HEATING VALUE*	1208	1222	1932
SPECIFIC GRAVITY	0.691	0.699	1.139

	INDEX 5392 SAMPLE 15459	INDEX 5393 SAMPLE 11550	INDEX 5394 SAMPLE 11551
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	RICHLAND N	UNION CITY	UNION CITY
WELL NAME	WILKERSON NO. 3	PORTER B NO. 1	PORTER B NO. 1
LOCATION	SEC. 34, T13N, R6W	SEC. 5, T12N, R8W	SEC. 5, T12N, R8W
OWNER	UNIVERSAL RESOURCES CORP.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/27/78	10/30/59	10/30/59
SAMPLED	10/26/78	06/20/68	06/20/68
FORMATION	DEVO-HUNTON & MISS-	ORDO-BROMIDE	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8424	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1200	4200	4200
OPEN FLOW, MCFD	342	4900	4900
COMPONENT, MOLE PCT			
METHANE	76.5	94.4	93.7
ETHANE	12.0	2.3	2.3
PROPANE	6.1	0.6	0.5
N-BUTANE	1.9	0.2	0.2
ISOBUTANE	0.7	TRACE	0.1
N-PENTANE	0.5	0.3	0.2
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	1.3	0.3	0.2
NITROGEN	1.0	0.7	1.0
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.2	1.4
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1302	1048	1032
SPECIFIC GRAVITY	0.750	0.602	0.601

	INDEX 5395 SAMPLE 12405	INDEX 5396 SAMPLE 13913	INDEX 5397 SAMPLE 15027
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	UNION CITY	UNION CITY	UNION CITY
WELL NAME	EATZ NO. 1	HILL NO. 1	CRYSTAL BARNHART NO. 27-1
LOCATION	SEC. 30, T11N, R7W	SEC. 27, T11N, R7W	SEC. 27, T12N, R8W
OWNER	APEX OIL CO.	MACKELLAR, INC.	JONES & PELLOW OIL CO.
COMPLETED	10/10/69	01/12/74	10/18/76
SAMPLED	09/03/70	02/07/74	06/--/77
FORMATION	PENN-OSBORNE	PENN-OSBORNE	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10400	9610	9680
WELLHEAD PRESSURE,PSIG	4000	3455	2264
OPEN FLOW, MCFD	6000	2239	277
COMPONENT, MOLE PCT			
METHANE	85.4	86.6	84.3
ETHANE	7.8	7.7	7.4
PROPANE	4.0	3.0	3.4
N-BUTANE	0.7	0.5	0.6
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.8	2.4
OXYGEN	0.0	TRACE	0.5
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1164	1141	1128
SPECIFIC GRAVITY	0.664	0.652	0.668

	INDEX 5398 SAMPLE 15273	INDEX 5399 SAMPLE 15296	INDEX 5400 SAMPLE 15297
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	UNION CITY	UNION CITY	UNION CITY
WELL NAME	WHITE FARMS "A" NO. 1	VON TONGLEN NO. 1	RUNO NO. 1
LOCATION	SEC. 5, T10N, R7W	SEC. 12, T11N, R8W	SEC. 15, T11N, R8W
OWNER	PHILLIPS PETROLEUM CO.	L. G. WILLIAMS OIL CO.	L. G. WILLIAMS OIL CO.
COMPLETED	01/29/78	08/30/77	08/23/77
SAMPLED	05/04/78	06/01/78	06/01/78
FORMATION	PENN-OSBORNE	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9880	11010	11799
WELLHEAD PRESSURE,PSIG	3515	2000	3850
OPEN FLOW, MCFD	NOT GIVEN	5600	2500
COMPONENT, MOLE PCT			
METHANE	86.6	80.6	78.4
ETHANE	7.4	10.5	12.9
PROPANE	2.8	4.5	4.6
N-BUTANE	0.7	1.4	1.3
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.2	0.4	0.4
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	0.8	0.5	0.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1147	1242	1254
SPECIFIC GRAVITY	0.657	0.712	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5401 SAMPLE 15333	INDEX 5402 SAMPLE 8375	INDEX 5403 SAMPLE 9039
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	UNION CITY	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	BOLLINGER NO. 1	PAINT YELLOW NO. 1	BLACK OWL UNIT NO. 1
LOCATION	SEC. 16, T11N, R8W	SEC. 28, T14N, R9W	SEC. 33, T14N, R9W
OWNER	SARKEYS, INC.	GETTY OIL CO.	SUN OIL CO.
COMPLETED	12/30/77	11/27/61	04/04/63
SAMPLED	08/02/78	01/19/62	07/12/63
FORMATION	DEVO-BOIS D-ARC	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11798	9668	9800
WELLHEAD PRESSURE,PSIG	3050	6150	6519
OPEN FLOW, MCFD	NOT GIVEN	4350	13000
COMPONENT, MOLE PCT			
METHANE	78.7	91.0	96.5
ETHANE	11.5	2.9	2.1
PROPANE	5.1	1.0	0.5
N-BUTANE	1.2	0.2	0.1
ISOBUTANE	0.9	0.1	TRACE
N-PENTANE	0.4	TRACE	TRACE
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	TRACE
NITROGEN	0.9	3.5	0.1
OXYGEN	TRACE	0.3	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1261	1015	1036
SPECIFIC GRAVITY	0.727	0.604	0.577

	INDEX 5404 SAMPLE 10519	INDEX 5405 SAMPLE 10615	INDEX 5406 SAMPLE 10616
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	E. STOWER UNIT NO. 1	JACKSON UNIT NO. 1	E. L. LOWDER NO. 1
LOCATION	SEC. 4, T14N, R10W	SEC. 11, T13N, R10W	SEC. 22, T13N, R9W
OWNER	TIDEWATER OIL CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	08/02/65	04/18/66	03/28/66
SAMPLED	04/10/66	06/17/66	06/17/66
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9839	10610	10210
WELLHEAD PRESSURE,PSIG	6395	6700	NOT GIVEN
OPEN FLOW, MCFD	23378	7100	69500
COMPONENT, MOLE PCT			
METHANE	92.4	95.6	91.3
ETHANE	3.2	2.6	4.9
PROPANE	1.1	0.9	1.9
N-BUTANE	0.2	0.1	0.5
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.7	TRACE	0.3
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1050	1051	1101
SPECIFIC GRAVITY	0.609	0.587	0.621

	INDEX 5407 SAMPLE 10860	INDEX 5408 SAMPLE 11159	INDEX 5409 SAMPLE 11160
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	A. W. STOWER NO. 1-10	LYON UNIT NO. 1	ROYCE UNIT NO. 1
LOCATION	SEC. 10, T14N, R10W	SEC. 19, T14N, R10W	SEC. 23, T12N, R9W
OWNER	UNION OIL CO. OF CALIF.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	01/27/67	09/30/66	12/16/66
SAMPLED	02/07/67	10/11/67	10/13/67
FORMATION	PENN-MORROW	PENN-MORROW	PENN-SKINNER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10075	10500	10120
WELLHEAD PRESSURE,PSIG	6670	6985	5169
OPEN FLOW, MCFD	15000	9526	1497
COMPONENT, MOLE PCT			
METHANE	95.0	88.6	82.0
ETHANE	2.8	5.8	8.2
PROPANE	0.7	2.4	4.7
N-BUTANE	0.1	0.5	1.2
ISOBUTANE	0.1	0.4	0.8
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.4	0.8	1.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.6
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1051	1121	1207
SPECIFIC GRAVITY	0.590	0.644	0.701

	INDEX 5410 SAMPLE 11680	INDEX 5411 SAMPLE 11880	INDEX 5412 SAMPLE 11881
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	FOWLKES UNIT NO. 1	VIRGIAL REICHERT NO. 1	C. L. EATON NO. 1
LOCATION	SEC. 12, T12N, R10W	SEC. 13, T14N, R10W	SEC. 22, T12N, R9W
OWNER	SAMEDAN OIL CORP.	SUN OIL CO.	SUN OIL CO.
COMPLETED	08/06/68	10/15/68	02/26/69
SAMPLED	11/11/68	05/13/69	05/13/69
FORMATION	PENN-MORROW	PENN-MORROW & MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11098	9910	10661
WELLHEAD PRESSURE,PSIG	6529	6400	4320
OPEN FLOW, MCFD	3700	7200	7500
COMPONENT, MOLE PCT			
METHANE	95.8	95.5	91.0
ETHANE	2.1	2.6	4.2
PROPANE	0.4	0.5	2.0
N-BUTANE	0.3	0.2	0.9
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.3	0.4	0.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1047	1051	1110
SPECIFIC GRAVITY	0.589	0.592	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5413 SAMPLE 11986	INDEX 5414 SAMPLE 12563	INDEX 5415 SAMPLE 13079
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	C. A. RHODES NO. 1	THOMAS UNIT NO. 1	THOMAS NO. 2
LOCATION	SEC. 6, T13N, R10W	SEC. 16, T13N, R9W	SEC. 16, T11N, R9W
OWNER	SUN OIL CO.	WOODS PETROLEUM CORP.	WOODS PETROLEUM CORP.
COMPLETED	11/08/68	04/17/70	09/15/71
SAMPLED	07/25/69	12/03/70	10/11/71
FORMATION	PENN-RED FORK	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10366	11850	11339
WELLHEAD PRESSURE, PSIG	4200	7056	5913
OPEN FLOW, MCFD	2700	15400	44297
COMPONENT, MOLE PCT			
METHANE	78.6	97.5	97.6
ETHANE	11.9	1.0	1.1
PROPANE	5.6	0.2	0.2
N-BUTANE	0.8	0.0	0.1
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.3	0.4	0.3
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.7
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1228	1011	1017
SPECIFIC GRAVITY	0.713	0.572	0.571

	INDEX 5416 SAMPLE 13103	INDEX 5417 SAMPLE 13873	INDEX 5418 SAMPLE 14259
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	BESSIE HAMBY UNIT NO. 1-4	DENWALT NO. 1	DELANA NO. 1
LOCATION	SEC. 4, T11N, R9W	SEC. 1, T12N, R10W	SEC. 2, T12N, R10W
OWNER	TENNECO OIL CO.	TEXAS OIL & GAS CORP.	TENNECO OIL CO.
COMPLETED	07/29/71	06/01/73	01/06/74
SAMPLED	11/11/71	01/24/74	02/15/75
FORMATION	PENN-MORROW	PENN-SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11088	11019	11018
WELLHEAD PRESSURE, PSIG	7342	6125	6272
OPEN FLOW, MCFD	3057	7400	33800
COMPONENT, MOLE PCT			
METHANE	97.3	91.5	92.7
ETHANE	1.3	4.5	3.7
PROPANE	0.3	2.0	1.5
N-BUTANE	0.0	0.4	0.3
ISOBUTANE	0.0	0.4	0.3
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.3	0.3	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.6	0.6
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1017	1100	1087
SPECIFIC GRAVITY	0.573	0.622	0.616

	INDEX 5419 SAMPLE 14405	INDEX 5420 SAMPLE 14609	INDEX 5421 SAMPLE 14614
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	ALICE JOHNSON NO. 1	M. M. VICKERY NO. 1	GODARD UNIT NO. 1
LOCATION	SEC. 26, T11N, R10W	SEC. 30, T11N, R9W	SEC. 28, T11N, R10W
OWNER	SAMEDAN OIL CORP.	TENNECO OIL CO.	MOBIL OIL CORP.
COMPLETED	12/17/74	11/26/75	01/13/76
SAMPLED	06/30/75	03/04/76	03/17/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12314	11955	13000
WELLHEAD PRESSURE, PSIG	6222	4400	7800
OPEN FLOW, MCFD	6000	5600	2924
COMPONENT, MOLE PCT			
METHANE	88.7	93.8	96.9
ETHANE	5.0	3.4	1.2
PROPANE	2.9	0.8	0.2
N-BUTANE	1.0	0.1	TRACE
ISOBUTANE	0.4	0.2	TRACE
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.1	TRACE
NITROGEN	0.0	0.9	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	1.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1177	1052	1008
SPECIFIC GRAVITY	0.662	0.601	0.573

	INDEX 5422 SAMPLE 15975	INDEX 5423 SAMPLE 17607	INDEX 5424 SAMPLE 12314
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CANADIAN
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	MILLARD NO. 1	NICKERSON NO. 2-36	HADLOCK NO. 1
LOCATION	SEC. 30, T11N, R10W	SEC. 36, T14N, R9W	SEC. 30, T13N, R9W
OWNER	COTTON PETROLEUM CORP.	KAISER-FRANCIS OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/80	11/18/84	12/29/69
SAMPLED	06/--/80	03/07/85	06/08/70
FORMATION	PENN-MORROW	PENN-ATOKA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	9670	12902
WELLHEAD PRESSURE, PSIG	NOT GIVEN	3200	4541
OPEN FLOW, MCFD	NOT GIVEN	2600	15100
COMPONENT, MOLE PCT			
METHANE	94.3	93.4	96.2
ETHANE	2.7	2.6	1.6
PROPANE	0.7	0.9	0.1
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.6	0.9	0.9
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	0.6	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.5	1.1
HELIUM	TRACE	0.02	0.00
HEATING VALUE*	1051	1049	1027
SPECIFIC GRAVITY	0.602	0.607	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5425 SAMPLE 15960	INDEX 5426 SAMPLE 15962	INDEX 5427 SAMPLE 4607
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CANADIAN	CANADIAN	CARTER
FIELD	YUKON NW	YUKON NW	ARDMORE
WELL NAME	WHEATLEY NO. 1-15	WHEATLEY NO. 1-15	HEDGES NO. 1
LOCATION	SEC. 15, T12N, R5W	SEC. 15, T12N, R5W	SEC. 14, T5S, R1E
OWNER	RALPH E. PLOTNER OIL & GAS	RALPH E. PLOTNER OIL & GAS	SAMEDAN OIL CORP.
COMPLETED	--/--/00	11/27/79	06/15/48
SAMPLED	05/13/80	05/13/80	11/08/48
FORMATION	PENN-OSWEGO	DEVO-HUNTON & MISS	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	350
DEPTH, FEET	7426	7814	2610
WELLHEAD PRESSURE,PSIG	2188	1060	550
OPEN FLOW, MCFD	17155	850	3000
COMPONENT, MOLE PCT			
METHANE	80.8	66.2	90.5
ETHANE	10.2	16.2	8.5
PROPANE	4.6	10.8	---
N-BUTANE	1.2	3.2	---
ISOBUTANE	0.5	1.2	---
N-PENTANE	0.3	0.6	---
ISOPENTANE	0.2	0.6	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	1.6	0.6	0.6
OXYGEN	0.1	TRACE	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.05	0.02	0.08
HEATING VALUE*	1209	1455	1069
SPECIFIC GRAVITY	0.700	0.847	0.602

	INDEX 5428 SAMPLE 6927	INDEX 5429 SAMPLE 3435	INDEX 5430 SAMPLE 11376
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	ARDMORE	CADDO	CADDO
WELL NAME	D. NOLEN NO. 1	NOBLE NO. 1	PRUITT NO. 1
LOCATION	SEC. 12, T5S, R1E	SEC. 35, T3S, R1E	SEC. 35, T4S, R1E
OWNER	AMOCO PRODUCTION CO.	UNION OIL CO.	E. LYLE JOHNSON
COMPLETED	12/02/58	05/10/39	12/30/61
SAMPLED	02/11/59	05/21/42	03/08/68
FORMATION	PENN-SPRINGER	MISS-WOODFORD	PENN-GODDARD
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	8066	4289	3800
WELLHEAD PRESSURE,PSIG	2490	NOT GIVEN	750
OPEN FLOW, MCFD	12000	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	76.5	81.7
ETHANE	4.2	21.5	7.5
PROPANE	2.1	---	3.4
N-BUTANE	0.6	---	0.8
ISOBUTANE	0.4	---	0.3
N-PENTANE	0.2	---	0.2
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	1.0	1.4	4.7
OXYGEN	TRACE	0.3	0.9
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.08	0.04
HEATING VALUE*	1099	1160	1110
SPECIFIC GRAVITY	0.623	0.670	0.679

	INDEX 5431 SAMPLE 11377	INDEX 5432 SAMPLE 11378	INDEX 5433 SAMPLE 9365
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	CADDO	CADDO	HEALDTON
WELL NAME	PRUITT NO. 1	CONOVER NO. 1	STEWART-HAWK UNIT NO. 1
LOCATION	SEC. 35, T4S, R1E	SEC. 26, T3S, R1E	SEC. 4, T4S, R3W
OWNER	E. LYLE JOHNSON	E. LYLE JOHNSON	MOBIL OIL CORP.
COMPLETED	04/13/53	--/--/00	02/10/64
SAMPLED	03/08/68	03/08/68	05/15/64
FORMATION	DEVO-HUNTON	DEVO-HUNTON	ORDO-BIRDSEYE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4279	4160	2620
WELLHEAD PRESSURE,PSIG	950	1000	480
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	81.5	83.3	75.8
ETHANE	8.8	8.5	14.2
PROPANE	4.0	3.7	6.5
N-BUTANE	1.1	0.7	1.4
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	2.9	2.4	1.2
OXYGEN	0.2	0.3	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1174	1151	1270
SPECIFIC GRAVITY	0.692	0.674	0.729

	INDEX 5434 SAMPLE 14186	INDEX 5435 SAMPLE 9794	INDEX 5436 SAMPLE 18996
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	HEALDTON	HEWITT E	MURRAY STATE PARK
WELL NAME	ORME NO. 3	MCCLURE NO. 2	STATE PARK A NO. 1
LOCATION	SEC. 34, T3S, R3W	SEC. 14, T4S, R2W	SEC. 19, T5S, R3E
OWNER	KINGERY DRILLING CO.	J. F. STEPHENSON	COTTON PETROLEUM CORP.
COMPLETED	09/--/73	01/07/65	12/02/82
SAMPLED	10/--/74	03/10/65	07/26/83
FORMATION	PENN-DORNICK HILLS	PENN-HOXBAR	PENN-GODDARD
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5700	1962	17405
WELLHEAD PRESSURE,PSIG	1700	631	13500
OPEN FLOW, MCFD	3710	2900	3000
COMPONENT, MOLE PCT			
METHANE	77.2	80.8	96.2
ETHANE	10.8	6.8	1.1
PROPANE	5.8	3.5	0.1
N-BUTANE	1.5	0.7	0.1
ISOBUTANE	0.5	0.5	0.0
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	3.1	7.4	0.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	1.4
HELIUM	0.08	0.13	0.02
HEATING VALUE*	1233	1081	1011
SPECIFIC GRAVITY	0.730	0.676	0.581

* CALCULATED GROSS BTU PER CU FT, DRY; AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5437 SAMPLE 11706	INDEX 5438 SAMPLE 2647	INDEX 5439 SAMPLE 4733
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	OVERBROOK	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	A. T. RIMER NO. 1	MORGAN NO. 1	M. A. BRADY NO. 1
LOCATION	SEC. 32, T5S, R2E	SEC. 4, T1S, R3W	SEC. 22, T1S, R3W
OWNER	GULF OIL CO.- U.S.	CARTER OIL CO.	TEXACO INC.
COMPLETED	01/16/68	04/25/33	01/15/49
SAMPLED	12/13/68	09/14/33	05/11/49
FORMATION	PENN-SPRINGER	NOT GIVEN	PENN-TUSSY U & DEESE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4890	2015	2782
WELLHEAD PRESSURE,PSIG	1551	550	325
OPEN FLOW, MCFD	1835	8000	750
COMPONENT, MOLE PCT			
METHANE	87.0	55.7	89.6
ETHANE	6.5	28.5	1.6
PROPANE	1.0	---	0.8
N-BUTANE	1.0	---	0.2
ISOBUTANE	0.1	---	0.2
N-PENTANE	0.4	---	0.1
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	1.2	15.5	7.1
OXYGEN	TRACE	0.3	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.05	0.10	0.11
HEATING VALUE*	1153	1079	981
SPECIFIC GRAVITY	0.657	0.761	0.614

	INDEX 5440 SAMPLE 5014	INDEX 5441 SAMPLE 5065	INDEX 5442 SAMPLE 9932
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CARTER	CARTER
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	IDA BURPASS NO. 7	WILLIAMS NO. 1	DOROTHY GALT UNIT NO. 1
LOCATION	SEC. 33, T1S, R3W	SEC. 11, T1S, R3W	SEC. 20, T1S, R3W
OWNER	MOBIL OIL CORP.	KERR-MCGEE CORP.	TEXACO INC.
COMPLETED	12/25/50	--/--/00	02/27/65
SAMPLED	03/08/51	08/01/51	06/21/65
FORMATION	PENN-SPRINGER	NOT GIVEN	MISS-GOODWIN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5652	NOT GIVEN	6705
WELLHEAD PRESSURE,PSIG	1425	NOT GIVEN	1583
OPEN FLOW, MCFD	12500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	84.7	84.5
ETHANE	4.4	5.3	6.3
PROPANE	1.7	3.3	3.5
N-BUTANE	0.6	0.9	1.1
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.0	0.4
NITROGEN	1.6	4.6	2.7
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.15	0.12
HEATING VALUE*	1095	1100	1167
SPECIFIC GRAVITY	0.627	0.665	0.682

	INDEX 5443 SAMPLE 9946	INDEX 5444 SAMPLE 8623	INDEX 5445 SAMPLE 8842
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CARTER	CIMARRON	CIMARRON
FIELD	SHO-VEL-TUM	BURTON SE	BURTON SE
WELL NAME	DOROTHY GALT UNIT NO. 1	CLUCK A-1	CLUCK NO. 1
LOCATION	SEC. 20, T1S, R3W	SEC. 20, T4N, R9ECM	SEC. 19, T4N, R9ECM
OWNER	TEXACO INC.	HUGHES SEEWALD	DARYL DAVIS & ASSOC.
COMPLETED	02/27/65	07/27/62	09/15/62
SAMPLED	06/30/65	07/29/62	02/05/63
FORMATION	MISS-GOODWIN	PENN-MORROW M	PENN-MORROW M
GEOLOGIC PROVINCE CODE	350	435	435
DEPTH, FEET	6478	4410	4398
WELLHEAD PRESSURE,PSIG	1208	985	990
OPEN FLOW, MCFD	NOT GIVEN	25000	18000
COMPONENT, MOLE PCT			
METHANE	86.9	66.6	58.0
ETHANE	6.0	4.7	3.8
PROPANE	3.0	2.6	2.1
N-BUTANE	0.9	0.7	0.5
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.0	23.5	31.4
OXYGEN	0.0	TRACE	2.4
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.10	0.86	0.70
HEATING VALUE*	1132	886	759
SPECIFIC GRAVITY	0.654	0.725	0.759

	INDEX 5446 SAMPLE 9276	INDEX 5447 SAMPLE 9277	INDEX 5448 SAMPLE 9278
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	BURTON SE	BURTON SE	BURTON SE
WELL NAME	KLINE A-1	HAGAN A NO. 1	CLUCK A NO. 1
LOCATION	SEC. 19, T4N, R9ECM	SEC. 19, T4N, R9ECM	SEC. 20, T4N, R9ECM
OWNER	HUGHES SEEWALD	HUGHES SEEWALD	HUGHES SEEWALD
COMPLETED	01/--/64	09/--/63	09/--/62
SAMPLED	04/08/64	04/08/64	04/08/64
FORMATION	PENN-MORROW M	PENN-MORROW M	PENN-MORROW M
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4450	4440	4435
WELLHEAD PRESSURE,PSIG	976	985	985
OPEN FLOW, MCFD	5750	400	35000
COMPONENT, MOLE PCT			
METHANE	63.7	62.3	67.2
ETHANE	4.4	4.5	4.8
PROPANE	2.3	2.7	2.6
N-BUTANE	0.8	1.0	0.8
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	26.8	27.0	22.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.88	0.89	0.84
HEATING VALUE*	844	879	899
SPECIFIC GRAVITY	0.735	0.757	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5449 SAMPLE 7276	INDEX 5450 SAMPLE 14968	INDEX 5451 SAMPLE 15694
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	CASTANEDA	GRIGGS NE	GRIGGS NE
WELL NAME	OKLAHOMA G NO. 1	SMALTS NO. 1-A	ZIMMERMAN NO. 1
LOCATION	SEC. 30, T5N, R6ECM	SEC. 12, T2N, R9ECM	SEC. 11, T2N, R9ECM
OWNER	SKELLY OIL CO.	ARGONAUT ENERGY CORP.	ARGONAUT ENERGY CORP.
COMPLETED	10/17/58	01/12/77	--/--/00
SAMPLED	11/05/59	04/19/77	07/10/79
FORMATION	PENN-DES MOINES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4099	4524	5000
WELLHEAD PRESSURE, PSIG	10	1090	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	52500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	21.7	73.6	86.2
ETHANE	10.2	5.1	5.9
PROPANE	19.6	2.7	2.8
N-BUTANE	9.2	1.0	0.8
ISOBUTANE	3.4	0.4	0.3
N-PENTANE	1.3	0.2	0.3
ISOPENTANE	4.4	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	1.3	0.2	0.2
NITROGEN	27.8	15.6	3.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.20	0.59	0.20
HEATING VALUE*	1658	994	1124
SPECIFIC GRAVITY	1.255	0.709	0.658

	INDEX 5452 SAMPLE 6146	INDEX 5453 SAMPLE 6344	INDEX 5454 SAMPLE 6460
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS S	GRIGGS SE	GRIGGS SE
WELL NAME	BROEKE	GODWIN A NO. 1	W. D. YOUTSLER NO. 1
LOCATION	SEC. 31, T1N, R9ECM	SEC. 29, T1N, R9ECM	SEC. 23, T1N, R9ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	TEXACO INC.
COMPLETED	08/28/56	04/17/57	10/29/57
SAMPLED	10/10/56	06/18/57	10/29/57
FORMATION	PENN-MASSIVE LIME	PENN-MASSIVE LIME	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3228	3390	4570
WELLHEAD PRESSURE, PSIG	475	450	900
OPEN FLOW, MCFD	1850	9800	1448
COMPONENT, MOLE PCT			
METHANE	78.4	76.3	85.3
ETHANE	5.4	5.2	5.3
PROPANE	2.9	3.0	2.3
N-BUTANE	1.0	1.6	0.7
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.2	0.6	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	10.3	12.5	4.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.45	0.55	0.20
HEATING VALUE*	1049	1030	1083
SPECIFIC GRAVITY	0.688	0.699	0.654

	INDEX 5455 SAMPLE 6461	INDEX 5456 SAMPLE 6593	INDEX 5457 SAMPLE 6594
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	GRIGGS SE	GRIGGS SE
WELL NAME	W. D. YOUTSLER NO. 1	M. S. HAWKINS NO. 1	M. S. HAWKINS NO. 1
LOCATION	SEC. 23, T1N, R9ECM	SEC. 26, T1N, R9ECM	SEC. 26, T1N, R9ECM
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	10/29/57	04/18/58	04/18/58
SAMPLED	12/03/57	05/15/58	05/15/58
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4246	4568	4266
WELLHEAD PRESSURE, PSIG	840	909	909
OPEN FLOW, MCFD	5592	8089	15390
COMPONENT, MOLE PCT			
METHANE	89.2	86.9	88.4
ETHANE	5.4	5.5	5.5
PROPANE	2.2	2.4	2.4
N-BUTANE	0.7	0.7	0.9
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.2	3.4	1.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1118	1097	1132
SPECIFIC GRAVITY	0.636	0.645	0.647

	INDEX 5458 SAMPLE 7180	INDEX 5459 SAMPLE 7394	INDEX 5460 SAMPLE 7395
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	GRIGGS SE	GRIGGS SE
WELL NAME	L. J. WELLS NO. 1	RUTH CHUMAN NO. 1	RUTH CHUMAN NO. 1
LOCATION	SEC. 10, T1N, R9ECM	SEC. 29, T1N, R9ECM	SEC. 29, T1N, R9ECM
OWNER	CARTER OIL CO.	TEXACO INC.	TEXACO INC.
COMPLETED	06/06/59	09/28/59	09/28/59
SAMPLED	08/18/59	02/12/60	02/12/60
FORMATION	PENN-CHEROKEE	PENN-OSWEGO	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4308	4277	4676
WELLHEAD PRESSURE, PSIG	838	839	218
OPEN FLOW, MCFD	25150	22269	2060
COMPONENT, MOLE PCT			
METHANE	88.4	90.9	87.8
ETHANE	5.4	4.7	5.5
PROPANE	2.2	1.6	2.6
N-BUTANE	0.6	0.4	0.8
ISOBUTANE	0.4	0.1	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.9	1.6	2.3
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1123	1077	1115
SPECIFIC GRAVITY	0.645	0.614	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5461 SAMPLE 7752	INDEX 5462 SAMPLE 8019	INDEX 5463 SAMPLE 8459
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	GRIGGS SE	GRIGGS SE
WELL NAME	GUSTAV DENCKER NO. 1	GRABEAL NO. 1	RUTH CHUMAN NO. 2
LOCATION	SEC. 27, T2N, R9ECM	SEC. 20, T1N, R9ECM	SEC. 24, T1N, R9ECM
OWNER	TEXACO INC.	GREENLAND DRILLING CO.	TEXACO INC.
COMPLETED	04/18/60	04/--/61	02/06/62
SAMPLED	11/03/60	06/--/61	03/12/62
FORMATION	PENN-TOPEKA	PENN-RED CAVE	PENN-MASSIVE LIME
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3434	1738	3402
WELLHEAD PRESSURE,PSIG	480	NOT GIVEN	470
OPEN FLOW, MCFD	1170	NOT GIVEN	1697
COMPONENT, MOLE PCT			
METHANE	82.8	28.3	83.9
ETHANE	5.9	4.0	5.5
PROPANE	2.9	3.3	3.0
N-BUTANE	0.9	0.7	0.9
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	5.6	60.5	5.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.2	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	TRACE	0.1
HELIUM	0.30	2.00	0.25
HEATING VALUE*	1086	502	1092
SPECIFIC GRAVITY	0.671	0.876	0.663

	INDEX 5464 SAMPLE 8460	INDEX 5465 SAMPLE 8545	INDEX 5466 SAMPLE 16296
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	GRIGGS SE	GRIGGS SE
WELL NAME	RUTH CHUMAN NO. 2	BOWDY NO. 1	GUSTAVE DENCKER NO. 2
LOCATION	SEC. 24, T1N, R9ECM	SEC. 11, T1N, R9ECM	SEC. 27, T2N, R9ECM
OWNER	TEXACO INC.	COLORADO OIL & GAS CORP.	TEXACO INC.
COMPLETED	02/06/62	04/09/61	03/24/81
SAMPLED	03/12/62	05/01/62	07/28/81
FORMATION	PENN-FARMATON	PENN-TOPEKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4041	3452	4602
WELLHEAD PRESSURE,PSIG	770	474	1012
OPEN FLOW, MCFD	2763	6500	7300
COMPONENT, MOLE PCT			
METHANE	87.0	85.4	84.9
ETHANE	5.5	5.4	5.9
PROPANE	2.9	2.6	2.7
N-BUTANE	0.9	0.6	0.8
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.3	4.9	4.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.35	0.25	0.25
HEATING VALUE*	1125	1077	1105
SPECIFIC GRAVITY	0.651	0.649	0.661

	INDEX 5467 SAMPLE 17151	INDEX 5468 SAMPLE 3639	INDEX 5469 SAMPLE 3640
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	GRIGGS SE	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HITCH NO. 2	R. E. COX NO. 1	R. E. COX NO. 1
LOCATION	SEC. 25, T2N, R9ECM	SEC. 16, T5N, R8ECM	SEC. 16, T5N, R8ECM
OWNER	SPECTRA ENERGY CORP.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	07/14/83	05/08/43	05/08/43
SAMPLED	01/08/84	05/09/43	05/09/43
FORMATION	PENN-ATOKA	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4247	4684	4684
WELLHEAD PRESSURE,PSIG	800	846	846
OPEN FLOW, MCFD	2250	19000	19000
COMPONENT, MOLE PCT			
METHANE	83.0	60.8	59.1
ETHANE	5.4	12.7	11.9
PROPANE	2.8	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	6.5	23.8	26.1
OXYGEN	0.2	0.0	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.5	0.6
HELIUM	0.27	2.24	2.15
HEATING VALUE*	1074	843	812
SPECIFIC GRAVITY	0.666	0.711	0.719

	INDEX 5470 SAMPLE 3957	INDEX 5471 SAMPLE 4155	INDEX 5472 SAMPLE 4156
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ROSE NO. 1	JESSIE JERMYN NO. 1	JESSIE JERMYN NO. 2
LOCATION	SEC. 26, T5N, R8ECM	SEC. 18, T5N, R8ECM	SEC. 19, T5N, R8ECM
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	01/06/45	05/20/46	06/29/46
SAMPLED	02/05/45	08/27/46	08/27/46
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4630	4871	4820
WELLHEAD PRESSURE,PSIG	825	750	848
OPEN FLOW, MCFD	14	NOT GIVEN	20000
COMPONENT, MOLE PCT			
METHANE	61.4	55.0	51.5
ETHANE	9.1	13.2	17.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	26.1	28.0	27.1
OXYGEN	0.3	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	1.4	1.4
HELIUM	2.19	2.26	2.26
HEATING VALUE*	785	794	835
SPECIFIC GRAVITY	0.708	0.740	0.758

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX SAMPLE 5473 6157	INDEX SAMPLE 5474 6159	INDEX SAMPLE 5475 6160
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	EDWARD JERRYN NO. 1	J. C. JOHNSON NO. 1	A. T. ROSE NO. 1
LOCATION	SEC. 18, T5N, R8ECM	SEC. 12, T5N, R7ECM	SEC. 26, T5N, R8ECM
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	04/29/46	10/26/45	12/20/44
SAMPLED	08/27/46	08/28/46	08/27/46
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4778	4855	4640
WELLHEAD PRESSURE,PSIG	775	NOT GIVEN	850
OPEN FLOW, MCFD	7455	NOT GIVEN	6885
COMPONENT, MOLE PCT			
METHANE	54.8	21.1	58.0
ETHANE	14.3	38.9	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	27.6	30.3	25.6
OXYGEN	0.1	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	8.7	0.9
HELIUM	2.23	0.92	2.23
HEATING VALUE*	811	911	824
SPECIFIC GRAVITY	0.741	0.955	0.726

	INDEX SAMPLE 5476 4161	INDEX SAMPLE 5477 4162	INDEX SAMPLE 5478 4163
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	RUSSELL SPARKMAN NO. 1	OKLAHOMA STATE NO. 1	M. P. MCKIRAHAN NO. 1
LOCATION	SEC. 3, T5N, R8ECM	SEC. 7, T5N, R8ECM	SEC. 13, T5N, R7ECM
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	02/11/46	06/27/45	05/02/46
SAMPLED	08/28/46	08/28/46	08/28/46
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4719	4787	4848
WELLHEAD PRESSURE,PSIG	800	275	NOT GIVEN
OPEN FLOW, MCFD	170	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.9	51.7	64.9
ETHANE	13.4	19.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	27.4	25.6	23.8
OXYGEN	0.3	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	1.1	10.8
HELIUM	2.34	2.15	0.28
HEATING VALUE*	806	864	657
SPECIFIC GRAVITY	0.733	0.758	0.758

	INDEX SAMPLE 5479 4164	INDEX SAMPLE 5480 4711	INDEX SAMPLE 5481 5094
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	M. P. MCKIRAHAN NO. 2	PARKES NO. 1	PARKES NO. 1
LOCATION	SEC. 13, T5N, R9ECM	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM
OWNER	UNION OIL CO. OF CALIF.	BAY PETROLEUM CORP.	BAY PETROLEUM CORP.
COMPLETED	06/03/46	04/10/49	--/--/00
SAMPLED	08/28/46	07/18/49	10/29/51
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4848	4780	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.2	62.5	62.2
ETHANE	0.0	3.5	3.2
PROPANE	---	2.3	1.8
N-BUTANE	---	0.8	0.6
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.4	TRACE
NITROGEN	9.5	27.5	29.0
OXYGEN	0.3	0.0	0.2
ARGON	---	0.1	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	9.6	0.3	0.4
HELIUM	0.38	1.81	1.92
HEATING VALUE*	812	833	778
SPECIFIC GRAVITY	0.687	0.741	0.726

	INDEX SAMPLE 5482 5095	INDEX SAMPLE 5483 5096	INDEX SAMPLE 5484 5432
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PARKES NO. 2	BAKER NO. 1	WHISENHAND NO. A-1
LOCATION	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM	SEC. 2, T5N, R9ECM
OWNER	BAY PETROLEUM CORP.	BAY PETROLEUM CORP.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	--/--/00	03/27/53
SAMPLED	10/29/51	10/29/51	03/19/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4640
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	839
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5700
COMPONENT, MOLE PCT			
METHANE	62.1	62.1	65.3
ETHANE	3.2	3.2	2.9
PROPANE	1.7	1.8	1.9
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	TRACE	0.1	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	29.4	29.1	25.4
OXYGEN	0.3	0.2	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.4	0.8
HELIUM	1.88	1.93	2.14
HEATING VALUE*	770	777	815
SPECIFIC GRAVITY	0.724	0.728	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5485 SAMPLE 5433	INDEX 5486 SAMPLE 5452	INDEX 5487 SAMPLE 5465
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WHISENHAND A-1	MELTON A-1	PURDY 1-A
LOCATION	SEC. 2, T5N, R9ECM	SEC. 15, T5N, R9ECM	SEC. 20, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	COLUMBIAN FUEL CORP.
COMPLETED	03/27/53	05/16/53	10/21/52
SAMPLED	03/23/53	04/29/53	05/11/53
FORMATION	PENN-KEYES	PENN-PURDY	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4604	4196	4240
WELLHEAD PRESSURE,PSIG	839	935	1066
OPEN FLOW, MCFD	5700	3060	31640
COMPONENT, MOLE PCT			
METHANE	65.5	64.1	76.5
ETHANE	2.9	3.2	6.6
PROPANE	1.9	2.0	4.2
N-BUTANE	0.6	0.6	1.1
ISOBUTANE	0.9	0.3	0.8
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	25.2	25.9	9.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.2
HELIUM	2.14	2.16	0.50
HEATING VALUE*	826	816	1079
SPECIFIC GRAVITY	0.720	0.723	0.703

	INDEX 5488 SAMPLE 5466	INDEX 5489 SAMPLE 5472	INDEX 5490 SAMPLE 5474
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PURDY 1-B	DELOZIER NO. 1	WILSON NO. 1
LOCATION	SEC. 19, T6N, R9ECM	SEC. 3, T5N, R8ECM	SEC. 35, T4N, R8ECM
OWNER	COLTEXO CORP.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/27/53	12/15/52	07/--/52
SAMPLED	05/11/53	05/26/53	05/26/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4647	4715	4713
WELLHEAD PRESSURE,PSIG	838	650	746
OPEN FLOW, MCFD	13875	NOT GIVEN	1852
COMPONENT, MOLE PCT			
METHANE	60.5	61.8	62.4
ETHANE	2.9	3.5	3.6
PROPANE	2.0	1.8	2.0
N-BUTANE	0.8	0.4	0.6
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	0.5	0.1
HEXANES PLUS	0.3	1.1	0.4
NITROGEN	29.2	28.0	28.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.2
HELIUM	2.30	1.75	1.85
HEATING VALUE*	794	854	824
SPECIFIC GRAVITY	0.744	0.756	0.738

	INDEX 5491 SAMPLE 5475	INDEX 5492 SAMPLE 5476	INDEX 5493 SAMPLE 5477
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WIGGINS NO. 1	BAKER NO. 1	PARKS NO. 1
LOCATION	SEC. 33, T4N, R8ECM	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/--/52	10/05/50	05/--/49
SAMPLED	05/26/53	05/26/53	05/26/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4744	4784	4725
WELLHEAD PRESSURE,PSIG	779	787	781
OPEN FLOW, MCFD	4218	7816	2265
COMPONENT, MOLE PCT			
METHANE	62.8	62.7	62.5
ETHANE	3.3	3.4	3.4
PROPANE	1.8	1.8	1.7
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	28.2	28.3	28.8
OXYGEN	TRACE	TRACE	0.1
ARGON	0.2	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	1.93	1.92	1.88
HEATING VALUE*	796	797	789
SPECIFIC GRAVITY	0.724	0.725	0.724

	INDEX 5494 SAMPLE 5478	INDEX 5495 SAMPLE 5480	INDEX 5496 SAMPLE 5481
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PARKES NO. 2	J. JERMYN NO. 2	COX NO. 1
LOCATION	SEC. 34, T4N, R8ECM	SEC. 19, T5N, R8ECM	SEC. 16, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/--/49	06/24/46	03/22/43
SAMPLED	05/26/53	05/26/53	05/26/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4730	4813	4682
WELLHEAD PRESSURE,PSIG	777	697	807
OPEN FLOW, MCFD	4506	26375	3893
COMPONENT, MOLE PCT			
METHANE	62.7	60.4	63.0
ETHANE	3.5	3.5	3.2
PROPANE	1.7	2.3	1.8
N-BUTANE	0.4	0.7	0.6
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	28.7	28.7	27.3
OXYGEN	TRACE	0.3	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.7
HELIUM	1.83	2.17	2.13
HEATING VALUE*	788	803	807
SPECIFIC GRAVITY	0.723	0.745	0.729

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5497 SAMPLE 5482	INDEX 5498 SAMPLE 5483	INDEX 5499 SAMPLE 5494
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ROSE NO. 1	E. JERMYN NO. A-1	PURDY NO. 1-C
LOCATION	SEC. 26, T5N, R8ECM	SEC. 18, T5N, R8ECM	SEC. 21, T6N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLTEXO CORP.
COMPLETED	12/20/44	04/29/46	05/31/53
SAMPLED	05/26/53	05/26/53	06/03/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4640	4787	4554
WELLHEAD PRESSURE,PSIG	824	767	839
OPEN FLOW, MCFD	1892	33995	4605
COMPONENT, MOLE PCT			
METHANE	62.1	61.0	59.0
ETHANE	3.1	3.5	2.9
PROPANE	2.6	2.5	1.8
N-BUTANE	1.2	0.8	0.7
ISOBUTANE	0.7	0.0	0.2
N-PENTANE	0.3	0.0	0.3
ISOPENTANE	0.2	0.7	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	26.5	28.0	31.6
OXYGEN	TRACE	0.1	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.3
HELIUM	2.13	2.19	2.40
HEATING VALUE*	852	811	754
SPECIFIC GRAVITY	0.752	0.743	0.737

	INDEX 5500 SAMPLE 5499	INDEX 5501 SAMPLE 5500	INDEX 5502 SAMPLE 5512
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SPARKMAN A-1	FERGUSON NO. 1-C	PURDY NO. 1-D
LOCATION	SEC. 10, T5N, R9ECM	SEC. 35, T5N, R9ECM	SEC. 29, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	COLTEXO CORP.
COMPLETED	06/18/53	06/03/53	--/--/00
SAMPLED	06/19/53	06/19/53	07/04/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4624	4556	4552
WELLHEAD PRESSURE,PSIG	834	837	840
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.7	63.3	60.6
ETHANE	4.5	3.0	3.1
PROPANE	3.9	1.9	1.9
N-BUTANE	1.8	0.6	0.7
ISOBUTANE	1.1	0.4	0.4
N-PENTANE	0.8	0.4	0.3
ISOPENTANE	0.5	0.1	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.8	0.2	0.2
NITROGEN	21.6	26.5	29.2
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.2	0.9
HELIUM	1.62	2.16	2.29
HEATING VALUE*	1009	813	787
SPECIFIC GRAVITY	0.803	0.733	0.740

	INDEX 5503 SAMPLE 5513	INDEX 5504 SAMPLE 5517	INDEX 5505 SAMPLE 5518
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PURDY NO. 1-F	WHISENHAND NO. B-1	HINGENBACK NO. A-1
LOCATION	SEC. 28, T6N, R9ECM	SEC. 12, T5N, R9ECM	SEC. 32, T6N, R9ECM
OWNER	COLTEXO CORP.	TERMINAL FACILITIES, INC.	CITIES SERVICE OIL CO.
COMPLETED	06/26/53	07/14/53	05/28/53
SAMPLED	07/04/53	07/15/53	07/21/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4562	4562	4534
WELLHEAD PRESSURE,PSIG	839	837	840
OPEN FLOW, MCFD	54168	15100	8150
COMPONENT, MOLE PCT			
METHANE	60.8	71.1	62.5
ETHANE	3.0	4.0	3.3
PROPANE	1.9	2.2	1.9
N-BUTANE	0.6	0.8	0.8
ISOBUTANE	0.5	0.2	0.3
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	29.7	18.3	27.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	1.0
HELIUM	2.25	1.90	2.21
HEATING VALUE*	978	918	915
SPECIFIC GRAVITY	0.735	0.705	0.739

	INDEX 5506 SAMPLE 5519	INDEX 5507 SAMPLE 5520	INDEX 5508 SAMPLE 5521
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	JORDAN NO. B-1	FERGUSON NO. B-1	FORD NO. B-1
LOCATION	SEC. 25, T6N, R8ECM	SEC. 13, T5N, R9ECM	SEC. 24, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	06/25/53	05/29/53	06/09/53
SAMPLED	07/21/53	07/21/53	07/21/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4596	4218	4610
WELLHEAD PRESSURE,PSIG	832	858	840
OPEN FLOW, MCFD	16000	12100	26000
COMPONENT, MOLE PCT			
METHANE	62.8	70.7	63.3
ETHANE	3.3	5.6	3.4
PROPANE	2.0	2.9	2.1
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.5	0.4	0.3
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	26.8	17.4	26.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.3	0.7
HELIUM	2.16	0.91	2.15
HEATING VALUE*	820	972	825
SPECIFIC GRAVITY	0.738	0.720	0.732

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5509 SAMPLE 5522	INDEX 5510 SAMPLE 5523	INDEX 5511 SAMPLE 5524
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	KINSINGER NO. A-1	RHOTON NO. 1	STALLARD NO. 1
LOCATION	SEC. 36, T6N, R9ECM	SEC. 27, T6N, R8ECM	SEC. 9, T5N, R8ECM
OWNER	CITIES SERVICE OIL CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/13/53	06/13/53	06/27/53
SAMPLED	07/21/53	07/21/53	07/21/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4612	4730	4698
WELLHEAD PRESSURE,PSIG	841	789	800
OPEN FLOW, MCFD	20600	46000	10000
COMPONENT, MOLE PCT			
METHANE	72.0	62.2	62.5
ETHANE	4.0	3.5	3.5
PROPANE	2.2	2.0	2.2
N-BUTANE	0.8	0.7	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.3	0.5	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.5	0.3
NITROGEN	17.5	27.6	27.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	1.87	1.99	2.14
HEATING VALUE*	926	837	820
SPECIFIC GRAVITY	0.697	0.743	0.736

	INDEX 5512 SAMPLE 5525	INDEX 5513 SAMPLE 5549	INDEX 5514 SAMPLE 5554
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WIGGINS NO. 1-B	FERGUSON UNIT NO. 1	WHISENHAND NO. 1
LOCATION	SEC. 26, T4N, R8ECM	SEC. 26, T5N, R9ECM	SEC. 8, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	SHELL OIL CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/05/53	07/08/53	--/--/00
SAMPLED	07/21/53	09/02/53	09/28/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4697	4552	4374
WELLHEAD PRESSURE,PSIG	800	NOT GIVEN	820
OPEN FLOW, MCFD	25000	31600	900
COMPONENT, MOLE PCT			
METHANE	62.6	63.4	67.7
ETHANE	3.7	3.3	4.0
PROPANE	1.7	2.1	1.1
N-BUTANE	0.6	0.7	0.4
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	28.4	26.1	23.8
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.0	0.3
HELIUM	1.95	2.16	1.63
HEATING VALUE*	798	817	832
SPECIFIC GRAVITY	0.726	0.729	0.702

	INDEX 5515 SAMPLE 5556	INDEX 5516 SAMPLE 5557	INDEX 5517 SAMPLE 5567
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SPARKMAN NO. 2	BRACKEN NO. A-1	SCHOOLFIELD NO. 1
LOCATION	SEC. 34, T5N, R8ECM	SEC. 34, T5N, R9ECM	SEC. 30, T6N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	TERMINAL FACILITIES, INC.	MACDONALD, BURNS, & NORRIS
COMPLETED	--/--/00	09/21/53	12/01/53
SAMPLED	10/02/53	10/02/53	12/01/53
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4443	4532	4524
WELLHEAD PRESSURE,PSIG	1150	836	835
OPEN FLOW, MCFD	3000	37790	40200
COMPONENT, MOLE PCT			
METHANE	75.0	63.2	62.4
ETHANE	6.3	3.1	2.8
PROPANE	3.9	0.7	2.0
N-BUTANE	0.8	0.6	0.7
ISOBUTANE	0.4	0.6	0.1
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	11.8	27.1	28.3
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.5	0.5
HELIUM	0.91	2.22	2.30
HEATING VALUE*	1032	786	787
SPECIFIC GRAVITY	0.702	0.727	0.722

	INDEX 5518 SAMPLE 5603	INDEX 5519 SAMPLE 5606	INDEX 5520 SAMPLE 5654
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	MITCH-GRAY-PRICE NO. 1	MATHIS NO. 1	HALLIDAY NO. 1-A
LOCATION	SEC. 25, T4N, R8ECM	SEC. 23, T6N, R8ECM	SEC. 25, T6N, R8ECM
OWNER	TENCO INC.	R. M. FULTON & CO.	SHELL OIL CO.
COMPLETED	12/07/53	--/--/00	12/09/53
SAMPLED	03/24/54	04/06/54	07/22/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4703	4670	4624
WELLHEAD PRESSURE,PSIG	787	811	833
OPEN FLOW, MCFD	7690	16400	20263
COMPONENT, MOLE PCT			
METHANE	63.9	60.0	75.9
ETHANE	5.2	3.1	6.9
PROPANE	1.9	2.3	4.8
N-BUTANE	0.6	0.8	1.1
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	27.3	29.2	5.6
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	2.08	2.35	0.61
HEATING VALUE*	798	816	1089
SPECIFIC GRAVITY	0.717	0.750	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5521 SAMPLE 5655	INDEX 5522 SAMPLE 5656	INDEX 5523 SAMPLE 5657
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PHILLIPS NO. 1	SPARKMAN UNIT NO. 1	COLE UNIT NO. 1
LOCATION	SEC. 21, T4N, R8ECM	SEC. 12, T5N, R9ECM	SEC. 15, T4N, R9ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	03/22/54	03/25/54	01/28/54
SAMPLED	07/23/54	07/21/54	07/22/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4791	4530	4595
WELLHEAD PRESSURE,PSIG	787	832	827
OPEN FLOW, MCFD	36278	118949	19990
COMPONENT, MOLE PCT			
METHANE	63.4	67.5	62.2
ETHANE	3.3	3.4	3.1
PROPANE	2.0	2.3	1.9
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	27.9	22.2	27.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	1.2
HELIUM	2.01	1.99	2.01
HEATING VALUE*	809	861	796
SPECIFIC GRAVITY	0.725	0.716	0.736

	INDEX 5524 SAMPLE 5658	INDEX 5525 SAMPLE 5659	INDEX 5526 SAMPLE 5725
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HALLIDAY NO. B-1	SLEEPER UNIT NO. 1	FRANK PARKES NO. 1
LOCATION	SEC. 24, T6N, R8ECM	SEC. 35, T6N, R9ECM	SEC. 20, T5N, R9ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	VERNON TAYLOR, INC.
COMPLETED	03/25/54	02/09/54	08/11/54
SAMPLED	07/22/54	07/22/54	11/02/54
FORMATION	PENN-MORROW	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4367	4648	4594
WELLHEAD PRESSURE,PSIG	1058	835	828
OPEN FLOW, MCFD	6388	98727	43566
COMPONENT, MOLE PCT			
METHANE	61.8	65.6	63.9
ETHANE	2.8	3.3	2.8
PROPANE	1.9	2.0	1.9
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.1	24.7	26.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.9
HELIUM	2.30	2.11	2.22
HEATING VALUE*	778	831	799
SPECIFIC GRAVITY	0.728	0.714	0.722

	INDEX 5527 SAMPLE 5724	INDEX 5528 SAMPLE 5731	INDEX 5529 SAMPLE 5732
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WIGGINS NO. 1	FERGUSON GAS UNIT NO. 1	WIGGINS G.U. NO. A-1
LOCATION	SEC. 23, T4N, R8ECM	SEC. 2, T4N, R9ECM	SEC. 22, T4N, R8ECM
OWNER	WESTOMA OIL CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	09/11/54	03/09/54	08/10/54
SAMPLED	11/02/54	11/13/54	11/13/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4692	4590	4718
WELLHEAD PRESSURE,PSIG	762	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5400	55415	7332
COMPONENT, MOLE PCT			
METHANE	63.5	69.1	64.2
ETHANE	3.2	3.1	3.2
PROPANE	1.8	1.8	1.9
N-BUTANE	0.5	0.6	0.7
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.8	26.2	26.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.6	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.7
HELIUM	1.95	2.15	2.11
HEATING VALUE*	793	809	812
SPECIFIC GRAVITY	0.720	0.713	0.721

	INDEX 5530 SAMPLE 5797	INDEX 5531 SAMPLE 5806	INDEX 5532 SAMPLE 5810
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	W. H. SPRADLIN	PHILLIPS CIMARRON NO. 1	GROSS NO. 1
LOCATION	SEC. 8, T4N, R9ECM	SEC. 16, T4N, R8ECM	SEC. 25, T5N, R8ECM
OWNER	COLUMBIAN FUEL CORP.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/28/53	04/12/55	08/20/54
SAMPLED	03/26/55	05/11/55	04/07/55
FORMATION	PENN-KEYES	PENN-ATOKA	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4599	4070	4681
WELLHEAD PRESSURE,PSIG	824	709	823
OPEN FLOW, MCFD	20250	12200	36000
COMPONENT, MOLE PCT			
METHANE	64.3	45.0	64.2
ETHANE	2.9	7.3	2.8
PROPANE	1.8	3.9	1.7
N-BUTANE	0.7	1.0	0.5
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	26.2	40.6	27.0
OXYGEN	TRACE	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.1	0.8
HELIUM	2.22	1.05	2.23
HEATING VALUE*	807	762	790
SPECIFIC GRAVITY	0.719	0.828	0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5533 SAMPLE 5811	INDEX 5534 SAMPLE 5812	INDEX 5535 SAMPLE 5813
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	DAVID NO. 1	RODNEY NO. 1	GAITHER NO. 1
LOCATION	SEC. 15, T4N, R8ECM	SEC. 2, T5N, R8ECM	SEC. 22, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/22/54	09/22/54	11/21/53
SAMPLED	04/07/55	04/06/55	04/06/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4713	4624	4686
WELLHEAD PRESSURE,PSIG	776	807	810
OPEN FLOW, MCFD	6000	1620	4400
COMPONENT, MOLE PCT			
METHANE	64.1	62.6	63.9
ETHANE	2.9	2.6	3.0
PROPANE	1.6	1.6	2.0
N-BUTANE	0.4	0.5	0.7
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.7	29.0	26.6
OXYGEN	0.2	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.6
HELIUM	2.15	2.30	2.14
HEATING VALUE*	772	767	812
SPECIFIC GRAVITY	0.711	0.716	0.723

	INDEX 5536 SAMPLE 5814	INDEX 5537 SAMPLE 5815	INDEX 5538 SAMPLE 5816
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	MORRISON NO. 1	HIGH NO. 1	JENKINS NO. 1
LOCATION	SEC. 27, T5N, R8ECM	SEC. 6, T5N, R9ECM	SEC. 17, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/11/54	11/01/54	07/06/54
SAMPLED	04/07/55	04/06/55	04/06/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4692	4566	4733
WELLHEAD PRESSURE,PSIG	807	832	785
OPEN FLOW, MCFD	68000	14000	77580
COMPONENT, MOLE PCT			
METHANE	64.3	63.6	62.9
ETHANE	2.9	2.7	3.2
PROPANE	1.7	1.7	2.0
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	26.7	27.4	27.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.6
HELIUM	2.16	2.28	2.15
HEATING VALUE*	792	785	795
SPECIFIC GRAVITY	0.719	0.718	0.725

	INDEX 5539 SAMPLE 5817	INDEX 5540 SAMPLE 5818	INDEX 5541 SAMPLE 5819
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	GEMS NO. 1	BACON NO. 1	SLACK NO. 1
LOCATION	SEC. 31, T5N, R9ECM	SEC. 10, T5N, R8ECM	SEC. 19, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/16/54	11/07/54	11/06/54
SAMPLED	04/07/55	04/06/55	04/07/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4621	4699	4614
WELLHEAD PRESSURE,PSIG	824	808	826
OPEN FLOW, MCFD	16400	1670	29500
COMPONENT, MOLE PCT			
METHANE	63.6	63.2	64.3
ETHANE	3.0	3.1	2.8
PROPANE	1.8	2.0	1.5
N-BUTANE	0.6	0.7	0.4
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.2	27.3	27.5
OXYGEN	0.2	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.8
HELIUM	2.13	2.19	2.25
HEATING VALUE*	797	804	775
SPECIFIC GRAVITY	0.722	0.724	0.710

	INDEX 5542 SAMPLE 5820	INDEX 5543 SAMPLE 5821	INDEX 5544 SAMPLE 5822
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ACKENBACK NO. 1	PHILLIPS NO. 1	BURFORD NO. 1
LOCATION	SEC. 1, T5N, R8ECM	SEC. 35, T5N, R8ECM	SEC. 29, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/01/54	08/26/54	11/03/53
SAMPLED	04/06/55	04/07/55	04/06/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4614	4703	4760
WELLHEAD PRESSURE,PSIG	833	819	828
OPEN FLOW, MCFD	9600	62000	45000
COMPONENT, MOLE PCT			
METHANE	62.9	64.3	64.2
ETHANE	2.5	2.8	2.9
PROPANE	1.6	1.7	1.8
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	28.3	26.7	27.0
OXYGEN	0.2	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.8	0.5
HELIUM	2.29	2.20	2.18
HEATING VALUE*	758	794	790
SPECIFIC GRAVITY	0.718	0.716	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5545 SAMPLE 5823	INDEX 5546 SAMPLE 5825	INDEX 5547 SAMPLE 5827
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	KING NO. 1	SPRADLIN UNIT NO. 1	HUNT UNIT NO. 1
LOCATION	SEC. 21, T5N, R8ECM	SEC. 9, T4N, R9ECM	SEC. 28, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	07/10/54	06/--/54	09/--/53
SAMPLED	04/06/55	04/26/55	04/26/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4692	4589	4700
WELLHEAD PRESSURE,PSIG	805	825	735
OPEN FLOW, MCFD	107000	10000	2350
COMPONENT, MOLE PCT			
METHANE	64.3	64.2	64.0
ETHANE	2.9	2.9	3.2
PROPANE	1.8	1.9	1.9
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	26.5	25.9	27.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.3
HELIUM	2.19	2.15	1.98
HEATING VALUE*	808	817	817
SPECIFIC GRAVITY	0.721	0.725	0.725

	INDEX 5548 SAMPLE 5828	INDEX 5549 SAMPLE 5829	INDEX 5550 SAMPLE 5830
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FERGUSON NO. 8-1	HALLIDAY NO. C-1	DAVOLI NO. 1
LOCATION	SEC. 27, T5N, R9ECM	SEC. 26, T6N, R8ECM	SEC. 25, T6N, R9ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	06/--/54	04/--/54	06/--/54
SAMPLED	04/26/55	04/26/55	04/26/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4490	4686	4583
WELLHEAD PRESSURE,PSIG	831	828	825
OPEN FLOW, MCFD	22800	11000	4800
COMPONENT, MOLE PCT			
METHANE	60.0	61.2	64.8
ETHANE	3.0	3.1	3.2
PROPANE	1.7	2.1	1.9
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	31.1	28.8	25.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	1.54	2.30	2.03
HEATING VALUE*	783	798	837
SPECIFIC GRAVITY	0.749	0.736	0.727

	INDEX 5551 SAMPLE 5832	INDEX 5552 SAMPLE 5837	INDEX 5553 SAMPLE 5840
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	STATE NO. 1-D	CIMARRON NO. 1	HEATLEY NO. 1-1
LOCATION	SEC. 25, T5N, R9ECM	SEC. 16, T4N, R8ECM	SEC. 30, T5N, R9ECM
OWNER	SHELL OIL CO.	PHILLIPS PETROLEUM CO.	CITIES SERVICE OIL CO.
COMPLETED	05/--/54	04/12/55	10/10/53
SAMPLED	04/26/55	05/11/55	05/03/55
FORMATION	PENN-KEYES	PENN-ATOKA	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4532	4070	4660
WELLHEAD PRESSURE,PSIG	832	709	827
OPEN FLOW, MCFD	32000	12200	7531
COMPONENT, MOLE PCT			
METHANE	64.0	44.9	64.0
ETHANE	2.9	7.6	2.9
PROPANE	1.9	4.0	1.8
N-BUTANE	0.6	0.9	0.6
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.3	0.5
NITROGEN	26.2	40.3	26.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.1	0.7
HELIUM	2.15	0.99	2.15
HEATING VALUE*	807	773	827
SPECIFIC GRAVITY	0.722	0.832	0.731

	INDEX 5554 SAMPLE 5841	INDEX 5555 SAMPLE 5842	INDEX 5556 SAMPLE 5843
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SPRADLIN A NO. 1	SPRADLIN B NO. 1	BAUGHMAN NO. A-1
LOCATION	SEC. 4, T4N, R9ECM	SEC. 5, T4N, R9ECM	SEC. 16, T5N, R9ECM
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	09/09/53	09/18/53	10/02/54
SAMPLED	05/03/55	05/03/55	05/02/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4510	4610	4596
WELLHEAD PRESSURE,PSIG	830	828	832
OPEN FLOW, MCFD	21120	13924	37886
COMPONENT, MOLE PCT			
METHANE	64.3	64.2	64.1
ETHANE	2.9	2.9	2.8
PROPANE	1.9	1.8	1.7
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	26.0	26.3	26.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.9
HELIUM	2.20	2.19	2.22
HEATING VALUE*	817	810	804
SPECIFIC GRAVITY	0.725	0.720	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5557 SAMPLE 5845	INDEX 5558 SAMPLE 5846	INDEX 5559 SAMPLE 5847
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	TURNER NO. A-1	STATE NO. H-1	SPARKMAN NO. C-1
LOCATION	SEC. 24, T5N, R9ECM	SEC. 21, T5N, R9ECM	SEC. 32, T5N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	05/27/54	10/26/54	05/18/54
SAMPLED	09/03/55	05/03/55	05/03/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4570	4562	4572
WELLHEAD PRESSURE,PSIG	833	828	830
OPEN FLOW, MCFD	33000	32000	23940
COMPONENT, MOLE PCT			
METHANE	64.6	63.9	64.1
ETHANE	3.0	2.9	2.9
PROPANE	1.9	1.8	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	25.4	26.5	26.1
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.8	0.7
HELIUM	2.15	2.21	2.13
HEATING VALUE*	826	815	816
SPECIFIC GRAVITY	0.726	0.727	0.725

	INDEX 5560 SAMPLE 5848	INDEX 5561 SAMPLE 5849	INDEX 5562 SAMPLE 5850
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	MINGENBACK NO. B-1	SPARKMAN NO. D-1	SPARKMAN NO. B-1
LOCATION	SEC. 33, T6N, R9ECM	SEC. 11, T5N, R9ECM	SEC. 3, T5N, R9ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	01/09/54	09/08/54	01/17/54
SAMPLED	02/05/55	05/03/55	05/02/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4574	4530	4628
WELLHEAD PRESSURE,PSIG	835	834	834
OPEN FLOW, MCFD	2900	27000	17704
COMPONENT, MOLE PCT			
METHANE	64.2	67.0	65.0
ETHANE	2.9	3.1	3.0
PROPANE	1.8	2.0	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	26.6	23.2	25.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.9
HELIUM	2.25	2.09	2.11
HEATING VALUE*	805	851	824
SPECIFIC GRAVITY	0.718	0.714	0.724

	INDEX 5563 SAMPLE 5851	INDEX 5564 SAMPLE 5952	INDEX 5565 SAMPLE 5953
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SCHNAUFER A NO. 1	PHILLIPS NO. 1-B	FRENCH NO. 1
LOCATION	SEC. 23, T5N, R9ECM	SEC. 8, T4N, R8ECM	SEC. 31, T6N, R9ECM
OWNER	CITIES SERVICE OIL CO.	SHELL OIL CO.	SUPERIOR OIL CO.
COMPLETED	04/10/54	07/06/55	07/18/54
SAMPLED	05/03/55	10/16/55	10/27/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4466	4757	4576
WELLHEAD PRESSURE,PSIG	833	818	837
OPEN FLOW, MCFD	28000	33000	38500
COMPONENT, MOLE PCT			
METHANE	65.2	62.9	62.2
ETHANE	3.0	3.0	2.7
PROPANE	1.8	2.0	1.8
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.5	0.2	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	25.3	28.1	28.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.8
HELIUM	2.12	2.11	2.39
HEATING VALUE*	818	780	783
SPECIFIC GRAVITY	0.716	0.722	0.728

	INDEX 5566 SAMPLE 5956	INDEX 5567 SAMPLE 5957	INDEX 5568 SAMPLE 5969
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HATWARD NO. 1	COLBY NO. 1	ED PHILLIPS NO. 1
LOCATION	SEC. 29, T5N, R9ECM	SEC. 22, T5N, R9ECM	SEC. 18, T5N, R9ECM
OWNER	KERR-MCGEE CORP.	KERR-MCGEE CORP.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/26/55	03/10/55	08/16/55
SAMPLED	--/--/00	12/13/55	11/17/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4560	4462	4575
WELLHEAD PRESSURE,PSIG	821	819	815
OPEN FLOW, MCFD	40000	31000	62500
COMPONENT, MOLE PCT			
METHANE	63.9	63.3	62.9
ETHANE	4.5	2.9	2.6
PROPANE	2.2	1.8	1.6
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	24.6	27.2	28.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	1.1
HELIUM	2.27	2.19	2.40
HEATING VALUE*	859	801	779
SPECIFIC GRAVITY	0.728	0.728	0.727

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5569 SAMPLE 5981	INDEX 5570 SAMPLE 6069	INDEX 5571 SAMPLE 6070
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	M. HAGER	WILEY NO. 1	BURNETT NO. 1
LOCATION	SEC. 36, T6N, R8ECM	SEC. 15, T5N, R8ECM	SEC. 23, T5N, R8ECM
OWNER	COLTEXO CORP.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/20/53	08/12/55	09/27/55
SAMPLED	12/01/55	06/08/56	06/08/56
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4576	4641	4646
WELLHEAD PRESSURE, PSIG	809	809	809
OPEN FLOW, MCFD	7804	2280	4200
COMPONENT, MOLE PCT			
METHANE	62.4	64.1	64.1
ETHANE	3.8	3.1	3.0
PROPANE	1.7	2.0	2.0
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.1	0.3
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	28.5	26.8	26.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	0.0
HELIUM	2.39	2.20	2.21
HEATING VALUE*	780	805	800
SPECIFIC GRAVITY	0.726	0.717	0.706

	INDEX 5572 SAMPLE 6071	INDEX 5573 SAMPLE 6072	INDEX 5574 SAMPLE 6081
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HOLLIDAY NO. 2	HOLLIDAY NO. 4	WIGGINS NO. 1
LOCATION	SEC. 35, T6N, R8ECM	SEC. 34, T6N, R8ECM	SEC. 23, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	WESTHOMA OIL CO.
COMPLETED	07/05/55	07/11/55	09/11/54
SAMPLED	06/08/56	06/08/56	06/09/56
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4696	4730	4692
WELLHEAD PRESSURE, PSIG	819	797	762
OPEN FLOW, MCFD	2250	4000	5400
COMPONENT, MOLE PCT			
METHANE	61.3	60.5	63.5
ETHANE	3.1	3.0	3.2
PROPANE	2.7	3.1	1.8
N-BUTANE	0.9	0.7	0.4
ISOBUTANE	0.1	0.1	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	28.0	28.6	27.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.3
HELIUM	2.29	2.43	1.86
HEATING VALUE*	816	796	806
SPECIFIC GRAVITY	0.742	0.740	0.724

	INDEX 5575 SAMPLE 6096	INDEX 5576 SAMPLE 6104	INDEX 5577 SAMPLE 6256
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BRADSHAW A-1	WITCH-GRAY-PRICE LAND CO.	C. B. SPRADLIN
LOCATION	SEC. 14, T5N, R9ECM	SEC. 25, T4N, R8ECM	SEC. 16, T4N, R9ECM
OWNER	CITIES SERVICE OIL CO.	TEXACO INC.	COLUMBIAN FUEL CORP.
COMPLETED	05/04/55	12/24/53	05/11/54
SAMPLED	07/19/56	07/03/56	03/04/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4474	4703	4593
WELLHEAD PRESSURE, PSIG	820	765	831
OPEN FLOW, MCFD	3200	2006	23500
COMPONENT, MOLE PCT			
METHANE	65.2	63.6	63.5
ETHANE	3.5	3.4	3.1
PROPANE	2.6	1.9	1.9
N-BUTANE	0.8	0.7	0.7
ISOBUTANE	0.1	0.2	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	24.1	27.2	26.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.8
HELIUM	2.11	2.03	2.19
HEATING VALUE*	820	820	811
SPECIFIC GRAVITY	0.725	0.728	0.726

	INDEX 5578 SAMPLE 6257	INDEX 5579 SAMPLE 6259	INDEX 5580 SAMPLE 6260
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	A. H. HAGER NO. 1	C. B. SPRADLIN NO. 1	M. B. ROSS NO. 1
LOCATION	SEC. 36, T6N, R8ECM	SEC. 33, T5N, R9ECM	SEC. 28, T5N, R9ECM
OWNER	COLUMBIAN FUEL CORP.	UNITED CARBON CO., INC.	UNITED CARBON CO., INC.
COMPLETED	08/15/53	08/18/53	06/15/54
SAMPLED	03/04/57	03/04/57	03/04/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4576	4530	4542
WELLHEAD PRESSURE, PSIG	835	823	823
OPEN FLOW, MCFD	5650	24000	3829
COMPONENT, MOLE PCT			
METHANE	63.1	64.2	64.7
ETHANE	2.3	3.1	2.9
PROPANE	1.8	1.8	1.9
N-BUTANE	0.5	0.6	0.8
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	27.9	26.1	25.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.1	0.6
HELIUM	2.35	2.38	2.25
HEATING VALUE*	777	804	815
SPECIFIC GRAVITY	0.717	0.721	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5581 SAMPLE 6261	INDEX 5582 SAMPLE 6262	INDEX 5583 SAMPLE 6278
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	W. H. SPRADLIN NO. 1	W. S. BURKETT NO. 1	PHILLIPS C NO. 1
LOCATION	SEC. 3, T4N, R9ECM	SEC. 10, T4N, R9ECM	SEC. 17, T4N, R8ECM
OWNER	UNITED CARBON CO., INC.	UNITED CARBON CO., INC.	SHELL OIL CO.
COMPLETED	08/11/55	09/10/55	12/30/55
SAMPLED	03/04/57	03/04/57	03/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4512	4588	4760
WELLHEAD PRESSURE,PSIG	822	822	811
OPEN FLOW, MCFD	18000	15800	8900
COMPONENT, MOLE PCT			
METHANE	63.9	64.0	63.0
ETHANE	3.1	3.2	3.2
PROPANE	1.7	1.6	1.6
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	26.2	26.3	28.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.1	0.3
HELIUM	2.28	2.27	2.17
HEATING VALUE*	795	799	798
SPECIFIC GRAVITY	0.720	0.720	0.726

	INDEX 5584 SAMPLE 6324	INDEX 5585 SAMPLE 6325	INDEX 5586 SAMPLE 6366
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	NARRYMAN	HATWORTH	BRYAN NO. 1
LOCATION	SEC. 17, T5N, R9ECM	SEC. 5, T5N, R9ECM	SEC. 31, T5N, R8ECM
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/17/54	05/14/57	07/10/51
SAMPLED	05/14/57	05/14/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4602	4591	4824
WELLHEAD PRESSURE,PSIG	830	806	790
OPEN FLOW, MCFD	18691	9778	35000
COMPONENT, MOLE PCT			
METHANE	63.5	63.8	61.7
ETHANE	2.8	3.0	3.1
PROPANE	1.8	1.9	2.8
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	27.2	26.7	28.3
OXYGEN	0.0	0.0	0.5
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.9
HELIUM	2.36	2.27	2.11
HEATING VALUE*	784	805	781
SPECIFIC GRAVITY	0.718	0.722	0.732

	INDEX 5587 SAMPLE 6367	INDEX 5588 SAMPLE 6368	INDEX 5589 SAMPLE 6369
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BURKHARDT NO. 1	DITTMAR NO. 1	ENTRIKIN NO. 2
LOCATION	SEC. 4, T4N, R8ECM	SEC. 33, T5N, R8ECM	SEC. 20, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/29/56	06/11/56	10/15/56
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4734	4735	4750
WELLHEAD PRESSURE,PSIG	797	789	788
OPEN FLOW, MCFD	60000	32	30000
COMPONENT, MOLE PCT			
METHANE	63.5	63.0	62.3
ETHANE	3.1	3.0	3.0
PROPANE	1.8	1.8	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	27.2	27.5	27.9
OXYGEN	TRACE	0.1	0.4
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.7
HELIUM	2.18	2.20	2.20
HEATING VALUE*	807	799	787
SPECIFIC GRAVITY	0.724	0.728	0.728

	INDEX 5590 SAMPLE 6370	INDEX 5591 SAMPLE 6371	INDEX 5592 SAMPLE 6372
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FOSTER NO. 1	HALLIDAY NO. 3	HARGIS NO. 1
LOCATION	SEC. 24, T5N, R8ECM	SEC. 9, T5N, R8ECM	SEC. 8, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/05/55	05/24/55	08/22/55
SAMPLED	08/19/57	08/19/57	08/20/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4603	4756	4670
WELLHEAD PRESSURE,PSIG	814	805	817
OPEN FLOW, MCFD	10200	2180	44000
COMPONENT, MOLE PCT			
METHANE	62.8	61.1	63.6
ETHANE	2.8	3.1	2.9
PROPANE	1.6	2.2	1.8
N-BUTANE	0.5	0.7	0.6
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	28.0	28.2	26.9
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.3	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.2	1.0
HELIUM	2.31	2.27	2.30
HEATING VALUE*	769	791	800
SPECIFIC GRAVITY	0.714	0.738	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5593 SAMPLE 6373	INDEX 5594 SAMPLE 6374	INDEX 5595 SAMPLE 6375
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HARRYMAN NO. 1	MOWE NO. 1	HURST NO. 1
LOCATION	SEC. 13, T5N, R8ECM	SEC. 12, T5N, R8ECM	SEC. 3, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/21/56	09/14/56	08/18/56
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4578	4516	4724
WELLHEAD PRESSURE,PSIG	799	801	796
OPEN FLOW, MCFD	7800	6800	4000
COMPONENT, MOLE PCT			
METHANE	62.2	62.7	64.0
ETHANE	2.7	2.6	3.0
PROPANE	1.7	2.9	1.8
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	28.4	27.6	26.8
OXYGEN	0.2	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.0	0.6
HELIUM	2.29	2.33	2.25
HEATING VALUE*	767	782	801
SPECIFIC GRAVITY	0.725	0.722	0.718

	INDEX 5596 SAMPLE 6376	INDEX 5597 SAMPLE 6377	INDEX 5598 SAMPLE 6378
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	JOHNSON NO. 1	LA MAR NO. 1	RECOT NO. 1
LOCATION	SEC. 36, T5N, R8ECM	SEC. 34, T5N, R8ECM	SEC. 10, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/30/56	07/25/56	05/14/56
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4679	4653	4670
WELLHEAD PRESSURE,PSIG	812	810	798
OPEN FLOW, MCFD	17000	33500	1290
COMPONENT, MOLE PCT			
METHANE	63.0	64.0	59.8
ETHANE	3.0	3.0	2.9
PROPANE	1.9	1.8	1.7
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	26.9	26.6	30.4
OXYGEN	0.1	TRACE	1.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.5
HELIUM	2.22	2.19	2.10
HEATING VALUE*	816	802	754
SPECIFIC GRAVITY	0.733	0.720	0.737

	INDEX 5599 SAMPLE 6379	INDEX 5600 SAMPLE 6380	INDEX 5601 SAMPLE 6381
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	NASH NO. 1	PETTY NO. 1	PHILMAC NO. 1
LOCATION	SEC. 2, T5N, R9ECM	SEC. 30, T5N, R8ECM	SEC. 32, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/04/56	09/17/55	06/01/56
SAMPLED	08/19/57	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4541	4846	4748
WELLHEAD PRESSURE,PSIG	802	805	802
OPEN FLOW, MCFD	28000	12150	59000
COMPONENT, MOLE PCT			
METHANE	63.1	62.3	63.4
ETHANE	2.8	3.2	3.1
PROPANE	1.7	2.1	1.9
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	27.8	27.8	26.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.8	0.6
HELIUM	2.35	2.25	2.19
HEATING VALUE*	782	795	808
SPECIFIC GRAVITY	0.722	0.728	0.724

	INDEX 5602 SAMPLE 6382	INDEX 5603 SAMPLE 6383	INDEX 5604 SAMPLE 6384
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ROBERTS NO. 1	ST. JOHN NO. 1	SLACK NO. 2
LOCATION	SEC. 14, T5N, R8ECM	SEC. 4, T5N, R8ECM	SEC. 11, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/06/56	10/11/56	06/10/55
SAMPLED	--/--/--	08/19/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4604	4754	4576
WELLHEAD PRESSURE,PSIG	800	785	811
OPEN FLOW, MCFD	730	2450	3350
COMPONENT, MOLE PCT			
METHANE	63.2	61.9	62.0
ETHANE	3.0	3.6	2.8
PROPANE	1.8	2.5	1.8
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	27.5	27.6	28.8
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.7
HELIUM	2.34	2.18	2.28
HEATING VALUE*	802	816	772
SPECIFIC GRAVITY	0.726	0.736	0.725

* CALCULATED GROSS BTU PER CU FT, DRY; AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5605 SAMPLE 6385	INDEX 5606 SAMPLE 6386	INDEX 5607 SAMPLE 6387
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	SMITH NO. 1	THRASH NO. 1	WILMARTH NO. 1
LOCATION	SEC. 28, T5N, R8ECM	SEC. 9, T5N, R9ECM	SEC. 5, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/29/56	09/08/55	05/24/56
SAMPLED	08/19/57	08/20/57	08/19/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4740	4644	4774
WELLHEAD PRESSURE,PSIG	787	818	805
OPEN FLOW, MCFD	16200	47500	13300
COMPONENT, MOLE PCT			
METHANE	62.3	63.6	61.8
ETHANE	3.1	2.9	3.0
PROPANE	1.8	1.9	1.7
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	28.1	26.6	28.6
OXYGEN	0.1	0.1	0.5
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.9	0.5
HELIUM	2.47	2.24	2.14
HEATING VALUE*	785	802	785
SPECIFIC GRAVITY	0.726	0.723	0.731

	INDEX 5608 SAMPLE 6437	INDEX 5609 SAMPLE 6438	INDEX 5610 SAMPLE 6476
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FRANCIS NO. 1	FIDLER NO. 1	FORD UNIT NO. 1
LOCATION	SEC. 6, T4N, R8ECM	SEC. 7, T4N, R8ECM	SEC. 27, T4N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	SOHIO PETROLEUM CO., ET AL.
COMPLETED	08/25/57	09/19/57	11/24/57
SAMPLED	11/22/57	11/24/57	01/09/58
FORMATION	PENN-KEYES	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4786	4766	4576
WELLHEAD PRESSURE,PSIG	764	776	860
OPEN FLOW, MCFD	43500	40000	750
COMPONENT, MOLE PCT			
METHANE	62.4	63.2	58.0
ETHANE	2.8	3.1	3.9
PROPANE	1.7	1.7	1.7
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	28.6	27.9	33.2
OXYGEN	0.2	0.1	0.5
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.4	0.2
HELIUM	2.20	2.10	1.50
HEATING VALUE*	775	788	729
SPECIFIC GRAVITY	0.723	0.720	0.739

	INDEX 5611 SAMPLE 6518	INDEX 5612 SAMPLE 6536	INDEX 5613 SAMPLE 6621
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	ELMER ADAMS NO. 1	STATE NO. 1-18	MINNS NO. 1
LOCATION	SEC. 12, T4N, R7ECM	SEC. 18, T4N, R8ECM	SEC. 6, T4N, R9ECM
OWNER	UNION OIL CO. OF CALIF.	COLORADO OIL & GAS CORP.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/17/58	01/17/58	--/--/00
SAMPLED	03/09/58	03/29/58	05/31/58
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4860	4810	4627
WELLHEAD PRESSURE,PSIG	NOT GIVEN	713	713
OPEN FLOW, MCFD	NOT GIVEN	4650	38500
COMPONENT, MOLE PCT			
METHANE	61.8	60.7	63.6
ETHANE	4.6	3.1	3.2
PROPANE	3.6	1.5	1.8
N-BUTANE	1.6	0.5	0.7
ISOBUTANE	1.0	0.3	0.4
N-PENTANE	0.6	0.1	0.2
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	23.2	33.2	26.5
OXYGEN	TRACE	0.7	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.7
HELIUM	1.80	2.30	2.20
HEATING VALUE*	962	701	817
SPECIFIC GRAVITY	0.782	0.724	0.727

	INDEX 5614 SAMPLE 6622	INDEX 5615 SAMPLE 6623	INDEX 5616 SAMPLE 6627
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	CONOVER NO. 1	BARRICK NO. 1	FORD NO. 1-22
LOCATION	SEC. 5, T5N, R8ECM	SEC. 1, T4N, R8ECM	SEC. 22, T4N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO OIL & GAS CORP.
COMPLETED	09/05/57	09/12/57	--/--/55
SAMPLED	05/31/58	06/--/58	06/16/58
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4781	4676	4700
WELLHEAD PRESSURE,PSIG	764	774	775
OPEN FLOW, MCFD	4100	6100	33000
COMPONENT, MOLE PCT			
METHANE	61.4	63.7	60.6
ETHANE	3.4	3.1	3.2
PROPANE	2.3	1.8	1.9
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	27.7	26.6	29.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.7	1.1
HELIUM	2.20	2.20	1.90
HEATING VALUE*	815	817	779
SPECIFIC GRAVITY	0.745	0.728	0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5617 SAMPLE 6628		INDEX 5618 SAMPLE 6629		INDEX 5619 SAMPLE 6649	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CIMARRON		CIMARRON		CIMARRON	
FIELD	KEYES GAS AREA		KEYES GAS AREA		KEYES GAS AREA	
WELL NAME	FLEMING NO. 1		BORDON NO. 1-4		NEFF NO. 1	
LOCATION	SEC. 23, T4N, R9ECM		SEC. 4, T3N, R9ECM		SEC. 1, T4N, R7ECM	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO OIL & GAS CORP.		UNION OIL CO. OF CALIF.	
COMPLETED	--/--/57		--/--/56		01/31/58	
SAMPLED	06/16/58		06/16/58		06/21/58	
FORMATION	PENN-KEYES		PENN-KEYES		PENN-KEYES	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	4700		4700		4818	
WELLHEAD PRESSURE,PSIG	775		780		700	
OPEN FLOW, MCFD	2000		14000		4280	
COMPONENT, MOLE PCT						
METHANE	61.7		42.6		63.2	
ETHANE	3.2		11.8		2.6	
PROPANE	1.6		14.0		1.3	
N-BUTANE	0.5		5.7		0.4	
ISOBUTANE	0.3		3.7		0.2	
N-PENTANE	0.1		1.4		0.1	
ISOPENTANE	0.1		1.9		0.2	
CYCLOPENTANE	TRACE		0.2		TRACE	
HEXANES PLUS	0.1		1.0		0.1	
NITROGEN	30.0		15.2		28.7	
OXYGEN	0.0		TRACE		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		1.2		0.8	
HELIUM	1.98		1.10		2.30	
HEATING VALUE*	765		1523		762	
SPECIFIC GRAVITY	0.727		1.058		0.717	

	INDEX 5620 SAMPLE 6700		INDEX 5621 SAMPLE 6991		INDEX 5622 SAMPLE 7182	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CIMARRON		CIMARRON		CIMARRON	
FIELD	KEYES GAS AREA		KEYES GAS AREA		KEYES GAS AREA	
WELL NAME	TROTTI NO. A-1		WHISENHAND NO. 1		WIGGINS NO. 1	
LOCATION	SEC. 13, T4N, R8ECM		SEC. 22, T6N, R9ECM		SEC. 33, T4N, R8ECM	
OWNER	HUGHES SEEWALD		PANHANDLE EASTERN PIPELINE C		COLORADO INTERSTATE GAS CO.	
COMPLETED	--/--/00		11/09/58		07/28/52	
SAMPLED	07/01/58		03/03/59		08/26/59	
FORMATION	PENN-KEYES		PENN-KEYES		PENN-KEYES	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	4647		4539		4806	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		771		753	
OPEN FLOW, MCFD	40000		1674		3920	
COMPONENT, MOLE PCT						
METHANE	64.0		59.9		63.1	
ETHANE	3.2		2.9		3.3	
PROPANE	1.8		1.9		1.8	
N-BUTANE	0.7		0.6		0.5	
ISOBUTANE	0.4		0.5		0.3	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.4		0.1		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	26.4		30.6		28.1	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.4		0.2	
HELIUM	2.20		2.40		2.00	
HEATING VALUE*	829		772		798	
SPECIFIC GRAVITY	0.728		0.739		0.723	

	INDEX 5623 SAMPLE 7183		INDEX 5624 SAMPLE 7184		INDEX 5625 SAMPLE 7186	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CIMARRON		CIMARRON		CIMARRON	
FIELD	KEYES GAS AREA		KEYES GAS AREA		KEYES GAS AREA	
WELL NAME	KINSINGER NO. 1		DELOZIER NO. 1		SPARKMAN A-1	
LOCATION	SEC. 36, T6N, R9ECM		SEC. 3, T3N, R8ECM		SEC. 10, T5N, R9ECM	
OWNER	CITIES SERVICE OIL CO.		COLORADO INTERSTATE GAS CO.		CITIES SERVICE OIL CO.	
COMPLETED	06/13/53		12/15/52		07/12/53	
SAMPLED	08/21/59		08/26/59		08/21/59	
FORMATION	PENN-KEYES		PENN-KEYES		PENN-KEYES	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	4612		4761		4624	
WELLHEAD PRESSURE,PSIG	762		7098		757	
OPEN FLOW, MCFD	10295		1620		17790	
COMPONENT, MOLE PCT						
METHANE	71.3		58.4		64.6	
ETHANE	3.7		3.3		3.1	
PROPANE	2.6		1.7		2.9	
N-BUTANE	0.7		0.5		0.6	
ISOBUTANE	0.4		0.3		0.2	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.3		0.3		0.3	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	18.1		32.2		25.0	
OXYGEN	0.0		1.2		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.6	
HELIUM	1.90		1.60		2.10	
HEATING VALUE*	924		748		843	
SPECIFIC GRAVITY	0.702		0.747		0.726	

	INDEX 5626 SAMPLE 7187		INDEX 5627 SAMPLE 7188		INDEX 5628 SAMPLE 7196	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	CIMARRON		CIMARRON		CIMARRON	
FIELD	KEYES GAS AREA		KEYES GAS AREA		KEYES GAS AREA	
WELL NAME	WHISENHAND NO. 1		FLEMING NO. 1		FRANK PARKES NO. A-1	
LOCATION	SEC. 8, T5N, R8ECM		SEC. 21, T4N, R9ECM		SEC. 12, T4N, R8ECM	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		HUGHES SEEWALD	
COMPLETED	10/30/53		08/07/57		01/04/58	
SAMPLED	08/21/59		08/26/59		08/25/59	
FORMATION	PENN-KEYES		PENN-KEYES		PENN-KEYES	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	4753		4660		4636	
WELLHEAD PRESSURE,PSIG	778		751		748	
OPEN FLOW, MCFD	4800		1940		81000	
COMPONENT, MOLE PCT						
METHANE	62.0		56.6		63.1	
ETHANE	3.4		3.1		3.0	
PROPANE	2.5		2.6		1.1	
N-BUTANE	0.7		0.6		0.5	
ISOBUTANE	0.3		0.2		0.5	
N-PENTANE	0.1		0.2		TRACE	
ISOPENTANE	0.4		0.3		0.5	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	27.7		32.8		27.7	
OXYGEN	0.0		0.9		TRACE	
ARGON	0.1		0.1		0.1	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.6		1.0	
HELIUM	2.15		1.85		2.20	
HEATING VALUE*	823		754		791	
SPECIFIC GRAVITY	0.738		0.762		0.728	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5629 SAMPLE 7244	INDEX 5630 SAMPLE 7245	INDEX 5631 SAMPLE 7271
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BORDEN NO. 1-4	HALLIDAY B	HALLIDAY NO. 1
LOCATION	SEC. 4, T6N, R9ECM	SEC. 24, T6N, R8ECM	SEC. 25, T6N, R8ECM
OWNER	COLORADO OIL & GAS CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	03/24/54	12/09/53
SAMPLED	10/16/59	10/16/59	11/03/59
FORMATION	PENN-KEYES	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4618	4367	4624
WELLHEAD PRESSURE, PSIG	760	950	758
OPEN FLOW, MCFD	NOT GIVEN	6400	16000
COMPONENT, MOLE PCT			
METHANE	63.0	76.5	60.8
ETHANE	2.8	6.3	2.8
PROPANE	1.7	4.1	2.6
N-BUTANE	0.6	0.9	0.7
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.6	0.5	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	27.6	10.1	29.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.4
HELIUM	2.20	0.60	2.40
HEATING VALUE*	797	1071	799
SPECIFIC GRAVITY	0.729	0.700	0.741

	INDEX 5632 SAMPLE 7272	INDEX 5633 SAMPLE 7283	INDEX 5634 SAMPLE 7284
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	STATE NO. 1-18	HALLIDAY B-1	WHISENHAND B-1
LOCATION	SEC. 18, T6N, R8ECM	SEC. 24, T6N, R8ECM	SEC. 1, T5N, R9ECM
OWNER	COLORADO INTERSTATE GAS CO.	SHELL OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	01/17/58	06/18/58	07/12/53
SAMPLED	11/03/59	11/17/59	11/17/59
FORMATION	PENN-KEYES	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4810	4367	4552
WELLHEAD PRESSURE, PSIG	733	758	759
OPEN FLOW, MCFD	NOT GIVEN	1449	6287
COMPONENT, MOLE PCT			
METHANE	62.6	60.4	69.4
ETHANE	3.0	2.7	3.5
PROPANE	2.0	3.1	3.0
N-BUTANE	0.5	0.7	0.6
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	28.6	29.3	20.1
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.5
HELIUM	2.20	2.30	1.90
HEATING VALUE*	790	795	893
SPECIFIC GRAVITY	0.725	0.741	0.704

	INDEX 5635 SAMPLE 7301	INDEX 5636 SAMPLE 7302	INDEX 5637 SAMPLE 7321
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	BURNS NO. 1	HAGAN	READ NO. 1
LOCATION	SEC. 18, T4N, R9ECM	SEC. 19, T4N, R9ECM	SEC. 27, T6N, R9ECM
OWNER	HUGHES SEEWALD	HUGHES SEEWALD	DIAMOND SHAMROCK CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/04/59	12/04/59	12/20/59
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	7419	743	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.9	62.9	61.3
ETHANE	2.9	3.0	3.0
PROPANE	3.1	2.4	2.1
N-BUTANE	0.7	0.6	0.7
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	26.9	27.9	29.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	2.20	2.00	2.30
HEATING VALUE*	823	803	785
SPECIFIC GRAVITY	0.732	0.726	0.735

	INDEX 5638 SAMPLE 7393	INDEX 5639 SAMPLE 7500	INDEX 5640 SAMPLE 7807
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HURST NO. 2	WHISENHAND A-2	JERRYN NO. 1
LOCATION	SEC. 9, T4N, R8ECM	SEC. 2, T5N, R9ECM	SEC. 19, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	CITIES SERVICE OIL CO.	COLORADO OIL & GAS CORP.
COMPLETED	--/--/00	01/16/60	05/05/60
SAMPLED	02/12/60	06/13/60	01/04/61
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4722	4590	4817
WELLHEAD PRESSURE, PSIG	739	752	NOT GIVEN
OPEN FLOW, MCFD	4579	40	7800
COMPONENT, MOLE PCT			
METHANE	62.6	64.7	61.7
ETHANE	3.0	3.3	3.5
PROPANE	2.0	2.1	0.9
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.4	0.4	0.8
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	28.3	24.9	28.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.6
HELIUM	2.10	2.70	2.20
HEATING VALUE*	802	829	781
SPECIFIC GRAVITY	0.729	0.717	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5641 SAMPLE 8105	INDEX 5642 SAMPLE 8391	INDEX 5643 SAMPLE 8546
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	R. B. MANES NO. 1-Z	PAUL HANKE NO. 1	NASH NO. 1
LOCATION	SEC. 2, T3N, R9ECM	SEC. 3, T3N, R9ECM	SEC. 7, T5N, R9ECM
OWNER	BAKER & TAYLOR DRILLING CO.	TEXACO INC.	HUGHES SEEWALD
COMPLETED	--/--/00	12/03/61	--/--/00
SAMPLED	08/02/61	02/01/62	05/09/62
FORMATION	PENN-MORROW	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4275	4477	4544
WELLHEAD PRESSURE,PSIG	NOT GIVEN	842	NOT GIVEN
OPEN FLOW, MCFD	4828	8577	
COMPONENT, MOLE PCT			
METHANE	68.8	57.6	62.7
ETHANE	4.9	3.3	2.8
PROPANE	2.9	1.9	1.6
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	1.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.6	0.2
NITROGEN	22.1	32.0	27.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	1.1
HELIUM	0.60	1.08	2.34
HEATING VALUE*	880	829	787
SPECIFIC GRAVITY	0.708	0.783	0.729

	INDEX 5644 SAMPLE 8742	INDEX 5645 SAMPLE 8744	INDEX 5646 SAMPLE 8866
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	HANKE-HANES NO. 1	ANKE-HANES NO. 1	OKLAHOMA STATE C NO. 1
LOCATION	SEC. 11, T3N, R9ECM	SEC. 11, T3N, R9ECM	SEC. 14, T6N, R9ECM
OWNER	TEXACO INC.	TEXACO INC.	PETROLEUM, INC.
COMPLETED	07/11/62	07/11/62	11/05/62
SAMPLED	11/01/62	11/01/62	02/12/63
FORMATION	PENN-MORROW	PENN-KEYES	PENN-WABAUNSEE
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4295	4545	2728
WELLHEAD PRESSURE,PSIG	971	841	460
OPEN FLOW, MCFD	9416	10214	1400
COMPONENT, MOLE PCT			
METHANE	69.5	54.5	46.5
ETHANE	4.8	3.4	3.9
PROPANE	2.0	1.7	3.6
N-BUTANE	0.5	0.6	1.3
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	21.6	36.2	42.7
OXYGEN	TRACE	1.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.1
HELIUM	0.56	1.06	0.95
HEATING VALUE*	885	722	715
SPECIFIC GRAVITY	0.706	0.772	0.821

	INDEX 5647 SAMPLE 9204	INDEX 5648 SAMPLE 9279	INDEX 5649 SAMPLE 9509
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	DOUGHTY NO. 1	MINNS A NO. 2	DOUGHERTY NO. 1
LOCATION	SEC. 22, T3N, R9ECM	SEC. 20, T4N, R9ECM	SEC. 22, T3N, R9ECM
OWNER	MONSANTO CHEMICAL CO.	HUGHES SEEWALD	MONSANTO CO.
COMPLETED	--/--/00	10/--/62	12/24/63
SAMPLED	12/19/63	04/08/64	07/28/64
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4580	4720	4580
WELLHEAD PRESSURE,PSIG	946	712	793
OPEN FLOW, MCFD	1500	18000	1654
COMPONENT, MOLE PCT			
METHANE	56.5	62.9	60.6
ETHANE	3.0	3.2	3.1
PROPANE	1.4	1.9	1.5
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	TRACE	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	34.6	27.5	32.6
OXYGEN	1.5	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	1.00	2.14	0.64
HEATING VALUE*	735	817	766
SPECIFIC GRAVITY	0.765	0.732	0.745

	INDEX 5650 SAMPLE 10651	INDEX 5651 SAMPLE 10652	INDEX 5652 SAMPLE 10653
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	WIGGINS NO. 1	E. VERMYN NO. A-1	ROSE NO. 1
LOCATION	SEC. 33, T4N, R8ECM	SEC. 18, T5N, R8ECM	SEC. 26, T5N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/08/52	04/29/46	12/20/44
SAMPLED	07/20/66	07/20/66	07/20/66
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4806	4787	4640
WELLHEAD PRESSURE,PSIG	621	622	631
OPEN FLOW, MCFD	924	11421	2480
COMPONENT, MOLE PCT			
METHANE	63.0	62.1	62.9
ETHANE	3.3	3.4	3.0
PROPANE	1.9	2.4	2.0
N-BUTANE	0.5	0.8	0.7
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	28.0	27.3	27.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.7
HELIUM	2.04	2.20	2.26
HEATING VALUE*	803	825	816
SPECIFIC GRAVITY	0.730	0.740	0.730

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5653 SAMPLE 10654	INDEX 5654 SAMPLE 10655	INDEX 5655 SAMPLE 10656
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	COX NO. 1	BAKER NO. 1	PARKES NO. 1
LOCATION	SEC. 16, T5N, R8ECM	SEC. 34, T4N, R8ECM	SEC. 34, T4N, R8ECM
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	03/22/43	10/05/50	04/10/49
SAMPLED	07/20/66	07/20/66	07/20/66
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4682	4784	4725
WELLHEAD PRESSURE,PSIG	625	620	617
OPEN FLOW, MCFD	3749	1676	104
COMPONENT, MOLE PCT			
METHANE	63.0	63.1	63.3
ETHANE	3.1	3.4	3.4
PROPANE	2.0	1.9	1.8
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	27.3	27.8	28.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	2.23	1.97	1.98
HEATING VALUE*	810	802	790
SPECIFIC GRAVITY	0.730	0.720	0.720

	INDEX 5656 SAMPLE 10657	INDEX 5657 SAMPLE 13733	INDEX 5658 SAMPLE 15133
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	FERGUSON UNIT NO. 1	ROSA B. NEFF G.U. NO. 1	M. B. ROSS NO. 3
LOCATION	SEC. 2, T4N, R9ECM	SEC. 1, T4N, R7ECM	SEC. 28, T5N, R9ECM
OWNER	AMOCO PRODUCTION CO.	CHARLES B. WILSON, JR., LTD.	ASHLAND EXPLORATION, INC.
COMPLETED	03/09/54	02/--/59	06/24/77
SAMPLED	07/20/66	10/01/73	11/02/77
FORMATION	PENN-KEYES	PENN-KEYES	PENN-LANSING
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4590	4810	3190
WELLHEAD PRESSURE,PSIG	834	435	356
OPEN FLOW, MCFD	55415	500	800
COMPONENT, MOLE PCT			
METHANE	62.3	61.8	56.9
ETHANE	3.1	2.9	6.3
PROPANE	2.0	1.6	3.4
N-BUTANE	0.7	0.5	0.9
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	27.2	29.2	30.6
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.8	0.1
HELIUM	2.22	2.21	0.92
HEATING VALUE*	807	775	840
SPECIFIC GRAVITY	0.740	0.729	0.772

	INDEX 5659 SAMPLE 6884	INDEX 5660 SAMPLE 6885	INDEX 5661 SAMPLE 12617
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES W	KEYES W	KEYES W
WELL NAME	L. K. TWINNING NO. 1	TWINNING NO. 1	JOHNSON NO. 1
LOCATION	SEC. 28, T5N, R7ECM	SEC. 28, T5N, R7ECM	SEC. 34, T5N, R7ECM
OWNER	J. S. ABERCOMBIE	J. S. ABERCOMBIE	TEXAS ENERGIES, INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	01/04/71
FORMATION	PENN-KEYES	PENN-DES MOINES	PENN-MARMATON
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4824	4128	4060
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.3	37.6	38.4
ETHANE	2.5	5.6	5.5
PROPANE	1.2	3.8	4.8
N-BUTANE	0.4	1.0	1.0
ISOBUTANE	0.3	0.6	0.6
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	34.7	48.7	48.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	TRACE
HELIUM	2.60	1.29	1.23
HEATING VALUE*	694	661	688
SPECIFIC GRAVITY	0.735	0.859	0.859

	INDEX 5662 SAMPLE 12661	INDEX 5663 SAMPLE 13658	INDEX 5664 SAMPLE 4102
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES W	MIDWELL	NOT GIVEN
WELL NAME	JOHNSON NO. 1	DENNING NO. 1	SEEPAGE FROM WATER HOLE
LOCATION	SEC. 34, T5N, R7ECM	SEC. 24, T4N, R9ECM	SEC. 17, T6N, R1ECM
OWNER	TEXAS ENERGIES, INC.	AN-SON CORP.	FRED V. TUCKER
COMPLETED	02/02/71	02/09/73	--/--/00
SAMPLED	02/08/71	07/25/73	05/20/46
FORMATION	PENN-CHEROKEE	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4161	4560	NOT GIVEN
WELLHEAD PRESSURE,PSIG	200	750	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.4	60.1	90.0
ETHANE	5.2	4.0	0.0
PROPANE	4.6	2.3	---
N-BUTANE	0.8	0.6	---
ISOBUTANE	0.5	0.4	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.0	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	48.7	30.7	3.8
OXYGEN	0.0	0.0	0.6
ARGON	0.1	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	5.6
HELIUM	1.29	1.21	TRACE
HEATING VALUE*	659	792	912
SPECIFIC GRAVITY	0.850	0.744	0.628

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5665 SAMPLE 4954	INDEX 5666 SAMPLE 4030	INDEX 5667 SAMPLE 5473
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	NOT GIVEN	SAMPSEL NE	SAMPSEL NE
WELL NAME	WATER WELL	R. R. OMOHUNDRO NO. 1	OMOHUNDRO NO. 1
LOCATION	NEAR KENTON	SEC. 21, T3N, R8ECM	SEC. 21, T3N, R8ECM
OWNER	FRED V. TUCKER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	10/15/45	06/--/45
SAMPLED	09/22/50	10/20/45	05/26/53
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	4801	4800
WELLHEAD PRESSURE,PSIG	NOT GIVEN	835	800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1534
COMPONENT, MOLE PCT			
METHANE	55.8	69.1	77.2
ETHANE	0.1	19.1	5.9
PROPANE	0.1	---	2.3
N-BUTANE	0.1	---	0.6
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.0	---	0.3
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.3
NITROGEN	42.1	10.5	11.9
OXYGEN	0.3	0.1	0.0
ARGON	0.6	---	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	0.4	0.1
HELIUM	0.02	0.80	0.80
HEATING VALUE*	576	1042	1014
SPECIFIC GRAVITY	0.748	0.693	0.683

	INDEX 5668 SAMPLE 6973	INDEX 5669 SAMPLE 7972	INDEX 5670 SAMPLE 8449
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	SAMPSEL NE	SAMPSEL NE	SAMPSEL NE
WELL NAME	JOHNSON UNIT NO. 1	PINKERTON A NO. 1	HARPER B NO. 1
LOCATION	SEC. 20, T3N, R8ECM	SEC. 4, T2N, R8ECM	SEC. 8, T2N, R8ECM
OWNER	TEXACO INC.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	12/11/58	05/05/61	01/23/62
SAMPLED	02/17/59	05/18/61	03/06/62
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4899	4446	4514
WELLHEAD PRESSURE,PSIG	633	898	908
OPEN FLOW, MCFD	3500	10700	3050
COMPONENT, MOLE PCT			
METHANE	68.8	75.4	76.1
ETHANE	5.3	5.9	2.6
PROPANE	2.2	2.4	2.9
N-BUTANE	0.5	0.6	0.7
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	20.5	14.4	13.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	1.30	0.50	0.48
HEATING VALUE*	912	980	995
SPECIFIC GRAVITY	0.712	0.688	0.691

	INDEX 5671 SAMPLE 9081	INDEX 5672 SAMPLE 9082	INDEX 5673 SAMPLE 9083
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	SAMPSEL NE	SAMPSEL NE	SAMPSEL NE
WELL NAME	DUNGAN A NO. 1	DUNGAN A NO. 1	DUNGAN A NO. 1
LOCATION	SEC. 21, T2N, R8ECM	SEC. 21, T2N, R8ECM	SEC. 21, T2N, R8ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	06/28/63	06/28/63	06/28/63
SAMPLED	09/08/63	09/08/63	09/08/63
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	4580	4818	4456
WELLHEAD PRESSURE,PSIG	964	800	875
OPEN FLOW, MCFD	6900	19000	4000
COMPONENT, MOLE PCT			
METHANE	83.9	81.5	81.5
ETHANE	5.9	6.1	6.1
PROPANE	2.2	2.5	2.5
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	6.0	7.7	7.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.30	0.50	0.58
HEATING VALUE*	1069	1069	1056
SPECIFIC GRAVITY	0.654	0.670	0.665

	INDEX 5674 SAMPLE 13826	INDEX 5675 SAMPLE 9984	INDEX 5676 SAMPLE 9985
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CLEVELAND	CLEVELAND
FIELD	STURGIS N	MOORE NW	MOORE NW
WELL NAME	STATE OF OKLAHOMA B-1	CORFF NO. 1	CORFF NO. 1
LOCATION	SEC. 14, T6N, R9ECM	SEC. 5, T10N, R3W	SEC. 5, T10N, R3W
OWNER	SHENANDOAH OIL CORP.	J. M. HUBER CORP.	J. M. HUBER CORP.
COMPLETED	10/06/73	08/03/64	08/03/64
SAMPLED	11/29/73	07/14/65	07/14/65
FORMATION	PENN-MARMATON	ORDO-VIOLA	PENN-PRUE
GEOLOGIC PROVINCE CODE	435	355	355
DEPTH, FEET	3798	7710	7075
WELLHEAD PRESSURE,PSIG	688	3299	2201
OPEN FLOW, MCFD	2100	43905	2500
COMPONENT, MOLE PCT			
METHANE	70.9	87.8	81.9
ETHANE	7.0	6.6	6.9
PROPANE	3.8	2.5	3.6
N-BUTANE	0.6	0.7	1.1
ISOBUTANE	0.3	0.5	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	16.9	1.2	4.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.53	0.04	0.08
HEATING VALUE*	987	1138	1139
SPECIFIC GRAVITY	0.719	0.646	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5677 SAMPLE 11368	INDEX 5678 SAMPLE 11374	INDEX 5679 SAMPLE 12232
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	MOORE W	MOORE W	MOORE W
WELL NAME	E. HARRIS NO. 2	E. HARRIS NO. 1	SILER HEIRS NO. 1-L
LOCATION	SEC. 29, T10N, R3W	SEC. 29, T10N, R3W	SEC. 26, T10N, R4W
OWNER	SUN OIL CO.	SUN OIL CO.	SHENANDOAH OIL CORP.
COMPLETED	08/29/58	12/09/51	11/25/69
SAMPLED	03/11/68	03/11/68	04/--/70
FORMATION	DEVO-HUNTON	ORDO-SIMPSON	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	7950	8600	9641
WELLHEAD PRESSURE,PSIG	900	1000	2950
OPEN FLOW, MCFD	250	1500	2327
COMPONENT, MOLE PCT			
METHANE	76.4	85.6	79.9
ETHANE	12.6	7.1	8.0
PROPANE	5.5	3.1	4.1
N-BUTANE	1.5	1.3	0.9
ISOBUTANE	0.8	0.6	0.6
N-PENTANE	0.8	0.5	0.4
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.6	0.2
NITROGEN	1.6	0.5	5.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.0
HELIUM	0.04	0.01	0.00
HEATING VALUE*	1278	1212	1137
SPECIFIC GRAVITY	0.743	0.687	0.694

	INDEX 5680 SAMPLE 3421	INDEX 5681 SAMPLE 3426	INDEX 5682 SAMPLE 3557
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	NORMAN N	NORMAN N	NORMAN N
WELL NAME	D. ALLEN NO. 1	FRANKLIN COM. NO. 1A	T. M. MARVEL NO. 1
LOCATION	SEC. 27, T10N, R2W	SEC. 21, T10N, R2W	SEC. 21, T10N, R2W
OWNER	GULF OIL CO.- U.S.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	10/--/36	05/29/35	03/27/36
SAMPLED	05/15/42	05/15/42	05/16/42
FORMATION	ORDO-SIMPSON	ORDO-SIMPSON	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	7370	6988	6960
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	925
OPEN FLOW, MCFD	100	23270	9898
COMPONENT, MOLE PCT			
METHANE	46.4	77.2	67.4
ETHANE	50.4	20.7	29.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.2	1.4	2.4
OXYGEN	0.5	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.05	0.09	0.09
HEATING VALUE*	1373	1153	1210
SPECIFIC GRAVITY	0.819	0.667	0.715

	INDEX 5683 SAMPLE 11523	INDEX 5684 SAMPLE 16793	INDEX 5685 SAMPLE 12193
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	NORMAN N	NORMAN NW	NORMAN S
WELL NAME	MAY WALKER & STERLING NO. 1	BOSWELL NO. 1	N. J. WALDUM NO. 1
LOCATION	SEC. 29, T10N, R2W	SEC. 7, T9N, R3W	SEC. 17, T8N, R2W
OWNER	TRICE PRODUCTION CO.	NATIONAL OIL CO.	UNION OIL CO. OF CALIF.
COMPLETED	--/--/59	02/--/83	04/23/68
SAMPLED	05/27/68	03/07/83	02/13/70
FORMATION	PENN-PRUE	ORDO-VIOLA & DEVO-HUNTON	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6500	8539	8065
WELLHEAD PRESSURE,PSIG	1200	350	NOT GIVEN
OPEN FLOW, MCFD	2000	1667	7100
COMPONENT, MOLE PCT			
METHANE	80.3	73.2	71.5
ETHANE	7.9	8.3	10.5
PROPANE	4.4	5.1	7.4
N-BUTANE	1.4	2.0	2.3
ISOBUTANE	0.5	0.9	0.9
N-PENTANE	0.5	0.6	0.6
ISOPENTANE	0.1	1.1	0.6
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	0.5	0.3
NITROGEN	4.4	6.0	5.7
OXYGEN	0.0	1.4	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.6	0.6
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.08	0.03	0.06
HEATING VALUE*	1173	1231	1283
SPECIFIC GRAVITY	0.704	0.777	0.786

	INDEX 5686 SAMPLE 11448	INDEX 5687 SAMPLE 11449	INDEX 5688 SAMPLE 17248
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CLEVELAND	CLEVELAND	CLEVELAND
FIELD	OKLAHOMA CITY S	OKLAHOMA CITY S	STELLA E
WELL NAME	M. T. REYNOLDS 1-A	A. C. ADAMS NO. 2	JOHNSON "B" NO. 1-2S
LOCATION	SEC. 6, T10N, R2W	SEC. 6, T10N, R2W	SEC. 25, T10N, R1E
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	ANADARKO PRODUCTION CO.
COMPLETED	09/28/58	10/29/60	08/26/83
SAMPLED	04/10/68	04/10/68	04/12/84
FORMATION	ORDO-WILCOX	ORDO-VIOLA	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	7375	7146	5936
WELLHEAD PRESSURE,PSIG	1230	1657	1500
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500
COMPONENT, MOLE PCT			
METHANE	79.5	83.7	37.5
ETHANE	7.9	7.2	26.1
PROPANE	4.5	3.6	22.5
N-BUTANE	2.0	1.3	7.2
ISOBUTANE	0.9	0.6	2.3
N-PENTANE	1.0	0.6	1.5
ISOPENTANE	.4	0.2	0.9
CYCLOPENTANE	0.3	0.2	0.3
HEXANES PLUS	0.7	0.6	0.6
NITROGEN	2.0	1.6	1.0
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.07	0.05	0.01
HEATING VALUE*	1269	1207	1897
SPECIFIC GRAVITY	0.743	0.696	1.127

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5689 SAMPLE 14792	INDEX 5690 SAMPLE 14812	INDEX 5691 SAMPLE 5017
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	ASHLAND	ASHLAND	ASHLAND S
WELL NAME	SMALLEY NO. 1-12	GOODMAN NO. 1	H. A. JONES NO. 1
LOCATION	SEC. 12, T3N, R11E	SEC. 1, T3N, R11E	SEC. 35, T3N, R11E
OWNER	CONTINENTAL OIL CO.	NFE PETROLEUM CORP.	OHIO OIL CO.
COMPLETED	--/--/00	06/17/76	10/19/50
SAMPLED	09/30/76	10/--/76	03/03/51
FORMATION	PENN-HARTSHORNE	PENN-HARTSHORNE	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3320	3347	8955
WELLHEAD PRESSURE,PSIG	500	486	2600
OPEN FLOW, MCFD	5300	4881	2500
COMPONENT, MOLE PCT			
METHANE	85.4	91.3	95.8
ETHANE	3.1	3.3	1.4
PROPANE	1.5	1.7	0.3
N-BUTANE	0.4	0.4	0.2
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.3	2.1	1.1
OXYGEN	0.3	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.5	1.0
HELIUM	0.12	0.13	0.04
HEATING VALUE*	993	1062	1015
SPECIFIC GRAVITY	0.639	0.616	0.585

	INDEX 5692 SAMPLE 15285	INDEX 5693 SAMPLE 3434	INDEX 5694 SAMPLE 3464
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	ASHLAND S	CENTRAHOMA	CENTRAHOMA
WELL NAME	SIDMORE NO. 1-35	MARRYMAN NO. 1	MARRYMAN NO. 2
LOCATION	SEC. 35, T3N, R11E	SEC. 27, T2N, R9E	SEC. 27, T2N, R9E
OWNER	ARKLA EXPLORATION CO.	RAMSEY PETROLEUM CORP.	RAMSEY PETROLEUM CORP.
COMPLETED	05/25/77	05/14/41	05/25/41
SAMPLED	05/26/77	05/23/42	05/23/42
FORMATION	PENN-CROMWELL & WAPANUCKA	PENN-CROMWELL	PENN-MCALESTER
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6877	4790	1208
WELLHEAD PRESSURE,PSIG	2125	1750	550
OPEN FLOW, MCFD	4800	5000	10634
COMPONENT, MOLE PCT			
METHANE	95.5	79.5	80.1
ETHANE	1.7	15.8	15.7
PROPANE	0.2	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.6	TRACE	3.3
OXYGEN	1.0	0.3	0.5
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.6	0.3	0.2
HELIUM	0.05	0.08	0.20
HEATING VALUE*	1016	1165	1093
SPECIFIC GRAVITY	0.588	0.657	0.650

	INDEX 5695 SAMPLE 3878	INDEX 5696 SAMPLE 8520	INDEX 5697 SAMPLE 8521
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	CENTRAHOMA	CENTRAHOMA	CENTRAHOMA
WELL NAME	PAYTE NO. 1	MIKE MAYER JR., A NO. 1	C. W. JOHNSTON NO. 1
LOCATION	SEC. 28, T2N, R9E	SEC. 1, T1N, R9E	SEC. 6, T1N, R10E
OWNER	PHILLIPS PETROLEUM CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	05/02/44	11/01/61	01/23/62
SAMPLED	08/05/44	04/21/62	04/21/62
FORMATION	PENN-CROMWELL	ORDO-OIL CREEK	ORDO-MCLISH
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4973	8218	8082
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3305	3222
OPEN FLOW, MCFD	1698	32400	141000
COMPONENT, MOLE PCT			
METHANE	82.2	94.7	95.1
ETHANE	17.2	1.6	1.7
PROPANE	---	0.4	0.9
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	0.0	2.5	2.1
OXYGEN	0.5	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	0.08	0.07	0.07
HEATING VALUE*	1141	1006	1015
SPECIFIC GRAVITY	0.645	0.585	0.583

	INDEX 5698 SAMPLE 13672	INDEX 5699 SAMPLE 13673	INDEX 5700 SAMPLE 11313
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	CENTRAHOMA	CENTRAHOMA	CHILES DOME
WELL NAME	MIKE MAYER JR., A NO. 2	MIKE MAYER JR., A NO. 2	A. D. CODY G.U. 2 NO. 1
LOCATION	SEC. 1, T1N, R9E	SEC. 1, T1N, R9E	SEC. 19, T3N, R10E
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	11/22/72	11/22/72	02/14/58
SAMPLED	08/01/73	08/01/73	02/27/68
FORMATION	ORDO-VIOLA & OIL CREEK	PENN-WAPANUCKA	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7475	6000	3650
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	613
OPEN FLOW, MCFD	1000	2000	8023
COMPONENT, MOLE PCT			
METHANE	89.5	87.1	88.0
ETHANE	4.7	7.0	6.3
PROPANE	1.9	2.8	2.2
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.8	0.9	1.6
OXYGEN	0.2	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.04	0.06	0.08
HEATING VALUE*	1105	1145	1119
SPECIFIC GRAVITY	0.638	0.654	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5701 SAMPLE 3670	INDEX 5702 SAMPLE 11660	INDEX 5703 SAMPLE 14112
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	LULA NE	LULA NE	LULA NE
WELL NAME	CUSHING ROYALTY CORP. B1	BRODRECHT NO. 1	MORGAN NO. 1
LOCATION	SEC. 22, T3N, R9E	SEC. 21, T3N, R9E	SEC. 27, T3N, R9E
OWNER	AMOCO PRODUCTION CO.	BBR OIL CORP.	WESTHEIMER-NEUSTADT CORP.
COMPLETED	05/22/43	01/04/68	09/25/73
SAMPLED	09/27/43	10/02/68	07/24/74
FORMATION	PENN-CROMWELL	PENN-WAPANUCKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3522	5114	4060
WELLHEAD PRESSURE,PSIG	1560	1290	1500
OPEN FLOW, MCFD	44800	6000	20000
COMPONENT, MOLE PCT			
METHANE	77.9	85.8	84.9
ETHANE	19.7	7.5	7.9
PROPANE	---	2.8	3.0
N-BUTANE	---	0.7	0.8
ISOBUTANE	---	0.2	0.3
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.1
NITROGEN	1.6	1.9	2.2
OXYGEN	0.4	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.08	0.08	0.09
HEATING VALUE*	1142	1134	1142
SPECIFIC GRAVITY	0.663	0.653	0.663

	INDEX 5704 SAMPLE 14126	INDEX 5705 SAMPLE 17242	INDEX 5706 SAMPLE 9058
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COAL	COAL
FIELD	LULA NE	OWL	TUPELO NE
WELL NAME	MORGAN NO. 1	PALMER ROYALTY NO. 1	SIMS NO. 1
LOCATION	SEC. 27, T3N, R9E	SEC. 6, T1N, R9E	SEC. 17, T2N, R9E
OWNER	WESTHEIMER-NEUSTADT CORP.	KEITH F. WALKER OIL PROD.	HEFNER PRODUCTION CO.
COMPLETED	09/25/73	10/08/83	11/30/61
SAMPLED	07/24/74	04/05/84	08/06/63
FORMATION	PENN-CROMWELL	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4060	5117	5520
WELLHEAD PRESSURE,PSIG	1500	1646	2225
OPEN FLOW, MCFD	20000	773	15500
COMPONENT, MOLE PCT			
METHANE	85.1	80.4	81.5
ETHANE	7.7	9.2	9.1
PROPANE	3.0	4.7	3.8
N-BUTANE	0.8	1.3	1.5
ISOBUTANE	0.3	0.6	0.1
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.5	0.8
CYCLOPENTANE	TRACE	0.3	0.3
HEXANES PLUS	0.1	0.5	0.6
NITROGEN	2.3	1.9	1.7
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.08	0.10	0.10
HEATING VALUE*	1137	1236	1219
SPECIFIC GRAVITY	0.660	0.720	0.709

	INDEX 5707 SAMPLE 6921	INDEX 5708 SAMPLE 5083	INDEX 5709 SAMPLE 17521
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COAL	COMANCHE	COMANCHE
FIELD	WILDCAT	APACHE S	FLETCHER
WELL NAME	COOK NO. 2	AYERS NO. 1	TEN BEARS NO. 1
LOCATION	SEC. 15, T1N, R11E	SEC. 10, T4N, R11W	SEC. 5, T4N, R9W
OWNER	ANDERSON-PRICHARD OIL CORP.	TIDEWATER OIL CO.	KERR-MCGEE CORP.
COMPLETED	--/--/00	03/21/51	07/--/84
SAMPLED	01/12/59	07/03/51	11/09/84
FORMATION	ORDO-BROMIDE	ORDO-SIMPSON	MISS-SPIERS
GEOLOGIC PROVINCE CODE	345	350	350
DEPTH, FEET	NOT GIVEN	3440	10910
WELLHEAD PRESSURE,PSIG	3095	1500	8850
OPEN FLOW, MCFD	205	1629	3500
COMPONENT, MOLE PCT			
METHANE	97.0	87.5	95.3
ETHANE	0.6	6.5	1.4
PROPANE	0.1	2.4	0.2
N-BUTANE	0.0	0.8	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	0.0	0.3	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	1.5	1.6
OXYGEN	TRACE	0.2	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.5	0.1	1.2
HELIUM	0.10	0.03	0.02
HEATING VALUE*	996	1126	996
SPECIFIC GRAVITY	0.574	0.651	0.583

	INDEX 5710 SAMPLE 3756	INDEX 5711 SAMPLE 3828	INDEX 5712 SAMPLE 14281
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	FORT SILL	FORT SILL	FORT SILL
WELL NAME	M. E. CLINE NO. 1	STEPHENS E NO. 1	RYAN NO. 1
LOCATION	SEC. 8, T3N, R10W	SEC. 20, T3N, R10W	SEC. 23, T3N, R10W
OWNER	TEXACO INC.	JOHN B. HAWLEY, JR.	SHEBESTER, INC.
COMPLETED	04/--/43	10/03/43	11/30/73
SAMPLED	04/01/44	05/06/44	02/28/75
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RYAN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	820	800	1395
WELLHEAD PRESSURE,PSIG	210	100	535
OPEN FLOW, MCFD	3000	3000	2340
COMPONENT, MOLE PCT			
METHANE	83.8	75.8	90.9
ETHANE	13.9	19.8	3.6
PROPANE	---	---	1.7
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	1.8	4.8	2.8
OXYGEN	0.4	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	TRACE	0.08	0.10
HEATING VALUE*	1098	1108	1062
SPECIFIC GRAVITY	0.634	0.671	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5713 SAMPLE 15014	INDEX 5714 SAMPLE 17385	INDEX 5715 SAMPLE 15015
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	FORT SILL	FORT SILL	FORT SILL E
WELL NAME	W. S. SANDERS NO. 10-1	DEEDEE NO. 2-9	HARDZOG NO. 15-1
LOCATION	SEC. 10, T3N, R10W	SEC. 9, T3N, R10W	SEC. 15, T3N, R10W
OWNER	WOODS PETROLEUM CORP.	TXO PRODUCTION CORP.	WOODS PETROLEUM CORP.
COMPLETED	01/13/77	10/13/83	02/04/77
SAMPLED	05/10/77	08/--/84	05/10/77
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5684	4906	7260
WELLHEAD PRESSURE,PSIG	2412	1920	2415
OPEN FLOW, MCFD	35622	1000	41399
COMPONENT, MOLE PCT			
METHANE	93.0	91.8	93.4
ETHANE	3.6	4.2	3.7
PROPANE	1.1	1.4	1.2
N-BUTANE	0.3	0.4	0.3
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.1	1.2	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.05	0.08	0.05
HEATING VALUE*	1075	1089	1080
SPECIFIC GRAVITY	0.608	0.616	0.605

	INDEX 5716 SAMPLE 5441	INDEX 5717 SAMPLE 15017	INDEX 5718 SAMPLE 11243
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	NANBURY SE	LAWTON	STERLING
WELL NAME	GOODY NO. 1	WATSON NO. B-2	MART G. VAUGHT NO. 1
LOCATION	SEC. 21, T2N, R9W	SEC. 16, T2N, R10W	SEC. 27, T3N, R9W
OWNER	WILLIAM H. ATKINSON	OUACHITA EXPLORATION, INC.	ARKLA EXPLORATION CO.
COMPLETED	11/05/52	--/--/00	01/03/67
SAMPLED	04/02/53	04/14/77	12/13/67
FORMATION	PERM-SAND	NOT GIVEN	PENN-MIX
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	728	NOT GIVEN	5215
WELLHEAD PRESSURE,PSIG	NOT GIVEN	380	600
OPEN FLOW, MCFD	NOT GIVEN	250	950
COMPONENT, MOLE PCT			
METHANE	87.8	84.3	90.2
ETHANE	4.8	4.8	4.2
PROPANE	1.9	1.9	1.4
N-BUTANE	0.6	0.6	0.5
ISOBUTANE	0.2	0.2	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	3.8	6.5	2.8
OXYGEN	TRACE	1.0	0.2
ARGON	0.0	0.1	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.06	0.06	0.05
HEATING VALUE*	1075	1034	1063
SPECIFIC GRAVITY	0.638	0.653	0.620

	INDEX 5719 SAMPLE 11357	INDEX 5720 SAMPLE 11	INDEX 5721 SAMPLE 925
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	COMANCHE	COTTON	CREEK
FIELD	STERLING	WALTERS	BRISTOW N
WELL NAME	SALLIE NO. 1	NEAL NO. 2	WRIGHT NO. 1
LOCATION	SEC. 1, T3N, R9W	SEC. 31, T1S, R10W	SEC. 19, T17N, R9E
OWNER	A. A. CAMERON	M.O. & G. CO. & H.J. PARKER	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/06/68	05/16/19	09/16/24
FORMATION	PENN-ROWE	PENN-CISCO	PENN-RED FORK
GEOLOGIC PROVINCE CODE	350	350	355
DEPTH, FEET	5692	2109	2645
WELLHEAD PRESSURE,PSIG	1400	540	850
OPEN FLOW, MCFD	300000	12000	11000
COMPONENT, MOLE PCT			
METHANE	86.6	0.0	72.9
ETHANE	4.0	0.0	18.9
PROPANE	1.9	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	5.4	0.0	7.1
OXYGEN	0.1	0.0	0.6
ARGON	0.1	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.0	0.2
HELIUM	0.08	TRACE	0.09
HEATING VALUE*	1070	0	1077
SPECIFIC GRAVITY	0.652	0.000	0.681

	INDEX 5722 SAMPLE 15363	INDEX 5723 SAMPLE 2491	INDEX 5724 SAMPLE 11097
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	BRISTOW S	CUSHING	CUSHING
WELL NAME	COLEMAN NO. 1	NORA WILLIAMS NO. 10	TURNER NO. 1
LOCATION	SEC. 17, T15N, R9E	SEC. 3, T16N, R7E	SEC. 26, T18N, R7E
OWNER	KRUMME OIL CO.	MOBIL OIL CORP.	M. L. MARRS
COMPLETED	01/03/78	03/01/32	09/08/67
SAMPLED	08/15/78	05/03/32	09/08/67
FORMATION	PENN-DUTCHER	PENN-TUCKER	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3081	2625	2955
WELLHEAD PRESSURE,PSIG	580	350	320
OPEN FLOW, MCFD	350	3000	1250
COMPONENT, MOLE PCT			
METHANE	81.0	67.4	68.8
ETHANE	7.8	23.6	5.2
PROPANE	4.5	---	0.5
N-BUTANE	1.3	---	0.2
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.3	---	0.1
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	4.1	8.5	3.9
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.06	0.12	0.08
HEATING VALUE*	1161	1106	1053
SPECIFIC GRAVITY	0.693	0.709	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5725 SAMPLE 2484	INDEX 5726 SAMPLE 3304	INDEX 5727 SAMPLE 3843
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	MITCHCOCK	IRON POST	IRON POST
WELL NAME	BARNETT NO. 1	LEWIS BEAR NO. 2	BEAVER NO. 1
LOCATION	SEC. 18, T17N, R10E	SEC. 3, T14N, R7E	SEC. 32, T14N, R8E
OWNER	CURTIS OIL CO., ET AL.	MID-CONTINENT REFINING CO.	NORTHERN ORDNANCE, INC.
COMPLETED	02/01/32	05/14/42	05/02/44
SAMPLED	03/24/32	04/22/42	05/22/44
FORMATION	NOT GIVEN	PENN-DUTCHER	PENN-FLAT TOP
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2166	3146	2491
WELLHEAD PRESSURE,PSIG	780	900	150
OPEN FLOW, MCFD	7000	12568	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.4	79.9	24.0
ETHANE	33.1	15.8	67.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.6	3.6	8.4
OXYGEN	0.1	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	0.16	0.12	0.00
HEATING VALUE*	1195	1093	1444
SPECIFIC GRAVITY	0.751	0.651	0.924

	INDEX 5728 SAMPLE 11108	INDEX 5729 SAMPLE 1622	INDEX 5730 SAMPLE 17320
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	IRON POST	MANNFORD	MANNFORD
WELL NAME	WINN NO. 1	HARMON NO. 1	P. B. JACKSON NO. 1
LOCATION	SEC. 23, T15N, R8E	SEC. 28, T19N, R9E	SEC. 7, T18N, R9E
OWNER	MORTON & POUND DRILLING CO.	CARTER OIL CO. & W.J. SHERRY	TEXACO INC.
COMPLETED	04/04/66	04/01/29	11/03/83
SAMPLED	09/09/67	08/03/29	04/25/84
FORMATION	PENN-DUTCHER	PENN-CLEVELAND	PENN-BURGESS
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3287	1359	2898
WELLHEAD PRESSURE,PSIG	400	555	781
OPEN FLOW, MCFD	2150	3000	1752
COMPONENT, MOLE PCT			
METHANE	83.9	75.5	78.7
ETHANE	8.1	13.2	9.4
PROPANE	3.2	---	4.9
N-BUTANE	0.6	---	1.2
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	3.0	11.0	12.3
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.06	0.17	0.07
HEATING VALUE*	1139	1001	1101
SPECIFIC GRAVITY	0.669	0.669	0.741

	INDEX 5731 SAMPLE 17388	INDEX 5732 SAMPLE 11765	INDEX 5733 SAMPLE 3391
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	MANNFORD	SLICK	STROUD
WELL NAME	FLORES NO. 2	BISHOP NO. 1	ROUNTREE NO. 1
LOCATION	SEC. 29, T18N, R9E	SEC. 29, T16N, R10E	SEC. 2, T14N, R7E
OWNER	LITTLE RIVER ENERGY CO.	KISKA OIL CO.	D. B. MALERNEE
COMPLETED	01/05/84	09/19/68	--/--/42
SAMPLED	08/22/84	02/19/69	05/13/42
FORMATION	PENN-SKINNER	PENN-BARTLESVILLE	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2337	2423	3117
WELLHEAD PRESSURE,PSIG	775	780	1150
OPEN FLOW, MCFD	1300	4500	12000
COMPONENT, MOLE PCT			
METHANE	68.1	81.2	78.9
ETHANE	7.4	4.1	15.9
PROPANE	5.3	2.9	---
N-BUTANE	1.3	1.0	---
ISOBUTANE	0.6	0.5	---
N-PENTANE	0.5	0.3	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	16.0	9.1	4.5
OXYGEN	TRACE	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.27	0.11	0.13
HEATING VALUE*	1059	1067	1084
SPECIFIC GRAVITY	0.756	0.688	0.655

	INDEX 5734 SAMPLE 3863	INDEX 5735 SAMPLE 4181	INDEX 5736 SAMPLE 17129
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CREEK	CREEK
FIELD	STROUD	STROUD	STROUD
WELL NAME	LEOTA GOFF NO. 1	MCVEY NO. 1	MANES NO. 1
LOCATION	SEC. 14, T14N, R7E	SEC. 29, T15N, R7E	SEC. 12, T14N, R7E
OWNER	ATLANTIC RICHFIELD CO.	DAVON OIL CO.	MAHAN-ROWSEY, INC.
COMPLETED	05/16/44	11/30/46	05/26/81
SAMPLED	07/28/44	11/--/46	10/26/83
FORMATION	PENN-PRUE	PENN-PRUE	PENN-UNCONFORMITY SAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2656	2860	3368
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1054
OPEN FLOW, MCFD	1705	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	76.7	75.0	83.4
ETHANE	17.4	19.0	8.2
PROPANE	---	---	2.6
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	5.4	5.6	3.6
OXYGEN	0.0	0.1	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.2	TRACE
HELIUM	0.11	0.11	0.06
HEATING VALUE*	1089	1100	1133
SPECIFIC GRAVITY	0.666	0.674	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5737 SAMPLE 3779	INDEX 5738 SAMPLE 17254	INDEX 5739 SAMPLE 17271
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	CUSTER	CUSTER
FIELD	VANDERSLICE	ALEDO SW	ALEDO SW
WELL NAME	ORA GIBSON	SMITH "HH" NO. 1	REINSCHMIEDT NO. 1
LOCATION	SEC. 31, T14N, R7E	SEC. 30, T15N, R19W	SEC. 30, T15N, R19W
OWNER	TEXACO INC.	TEXAS OIL & GAS CORP.	TXO PRODUCTION CORP.
COMPLETED	12/--/42	06/12/81	11/08/83
SAMPLED	04/11/44	04/17/84	04/29/84
FORMATION	PENN-PRUE	PENN-SKINNER	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	360	360
DEPTH, FEET	2857	11124	11174
WELLHEAD PRESSURE,PSIG	965	6175	3440
OPEN FLOW, MCFD	9580	3300	4400
COMPONENT, MOLE PCT			
METHANE	67.4	79.9	76.7
ETHANE	20.5	9.7	8.7
PROPANE	---	5.0	9.2
N-BUTANE	---	1.4	1.1
ISOBUTANE	---	0.9	0.7
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.7	0.2
CYCLOPENTANE	---	0.5	0.2
HEXANES PLUS	---	0.6	0.3
NITROGEN	11.4	0.4	5.6
OXYGEN	0.4	0.1	1.3
ARGON	---	0.0	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.7
HELIUM	0.15	0.03	0.02
HEATING VALUE*	1050	1178	1147
SPECIFIC GRAVITY	0.705	0.737	0.726

	INDEX 5740 SAMPLE 13291	INDEX 5741 SAMPLE 13660	INDEX 5742 SAMPLE 15505
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	ANTHON	ANTHON	ANTHON
WELL NAME	WRIGHT NO. 1-4	WRIGHT NO. 1-4	WOELKER NO. 1
LOCATION	SEC. 4, T14N, R17W	SEC. 4, T14N, R17W	SEC. 33, T15N, R17W
OWNER	ARKLA EXPLORATION CO.	ARKLA EXPLORATION CO.	FERGUSON OIL CO., INC.
COMPLETED	04/27/72	04/25/73	09/19/77
SAMPLED	07/07/72	07/26/73	06/22/78
FORMATION	MISS-OSAGE	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15600	13106	15708
WELLHEAD PRESSURE,PSIG	5599	7448	4200
OPEN FLOW, MCFD	3252	11682	8630
COMPONENT, MOLE PCT			
METHANE	96.0	95.9	92.2
ETHANE	0.3	1.6	0.2
PROPANE	TRACE	0.3	TRACE
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.7	0.4	2.1
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	1.3	5.3
HELIUM	0.02	0.03	0.03
HEATING VALUE*	978	1020	938
SPECIFIC GRAVITY	0.586	0.584	0.616

	INDEX 5743 SAMPLE 17742	INDEX 5744 SAMPLE 11288	INDEX 5745 SAMPLE 11289
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	ANTHON NE	ANTHON NW	ANTHON NW
WELL NAME	KINCAID NO. 1	LYLE COIT NO 1	RENE GRAFT NO. 1
LOCATION	SEC. 22, T15N, R17W	SEC. 17, T15N, R17W	SEC. 18, T15N, R17W
OWNER	WARD PETROLEUM CO.	HUNT OIL CO.	HUNT OIL CO.
COMPLETED	10/30/68	10/18/61	05/20/61
SAMPLED	--/--/00	02/16/68	02/16/68
FORMATION	PENN-SPRINGER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12160	11196	12240
WELLHEAD PRESSURE,PSIG	4600	4800	988
OPEN FLOW, MCFD	40233	796	915
COMPONENT, MOLE PCT			
METHANE	96.0	94.3	97.1
ETHANE	1.0	0.7	0.9
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	2.8	0.3
OXYGEN	0.2	0.6	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.4	1.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	996	970	1003
SPECIFIC GRAVITY	0.580	0.587	0.575

	INDEX 5746 SAMPLE 13289	INDEX 5747 SAMPLE 16862	INDEX 5748 SAMPLE 15800
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	ANTHON NW	ANTHON SE	ARAPAHO
WELL NAME	GRAFT NO. 1-A	GOODWIN NO. 1	COULSON NO. 1
LOCATION	SEC. 7, T15N, R17W	SEC. 18, T14N, R16W	SEC. 28, T13N, R17W
OWNER	A. J. WESSELY	OLD DOMINION OIL CORP.	HARPER OIL CO.
COMPLETED	10/30/71	07/25/82	--/--/00
SAMPLED	07/--/72	04/05/83	10/02/79
FORMATION	PENN-ATOKA	PENN-SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10742	13276	15740
WELLHEAD PRESSURE,PSIG	4978	2844	9800
OPEN FLOW, MCFD	2286	6408	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.3	93.7	96.9
ETHANE	10.8	3.5	0.7
PROPANE	4.5	0.6	0.1
N-BUTANE	1.0	0.1	TRACE
ISOBUTANE	0.7	0.1	TRACE
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.4	0.3	0.3
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.1	1.9
HELIUM	0.05	0.02	0.02
HEATING VALUE*	1222	1040	1002
SPECIFIC GRAVITY	0.702	0.594	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5749 SAMPLE 16844	INDEX 5750 SAMPLE 17349	INDEX 5751 SAMPLE 15740
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	ARAPAHO	ARAPAHO	ARAPAHO NE
WELL NAME	GANNAWAY NO. 1	STRONG NO. 1	STEHR NO. 1
LOCATION	SEC. 34, T14N, R17W	SEC. 18, T13N, R17W	SEC. 21, T13N, R16W
OWNER	HARPER OIL CO.	HARPER OIL CO.	AN-SON CORP.
COMPLETED	07/13/82	03/26/84	07/24/79
SAMPLED	03/25/83	07/06/84	09/06/79
FORMATION	PENN-MORROW	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14250	13387	13217
WELLHEAD PRESSURE,PSIG	8650	9300	NOT GIVEN
OPEN FLOW, MCFD	4634	3700	1200
COMPONENT, MOLE PCT			
METHANE	95.2	90.7	86.8
ETHANE	1.8	4.8	7.5
PROPANE	0.3	1.5	2.8
N-BUTANE	0.1	0.5	0.5
ISOBUTANE	TRACE	0.5	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	0.3	0.1	0.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.0	0.7
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1031	1109	1147
SPECIFIC GRAVITY	0.594	0.634	0.656

	INDEX 5752 SAMPLE 17791	INDEX 5753 SAMPLE 17910	INDEX 5754 SAMPLE 16089
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	BULTER	BUTLER-CUSTER	CANUTE N
WELL NAME	DICKERSON NO. 28-1	PHILLIPS DELOIS NO. 1-32	HUTSON NO. 1-15
LOCATION	SEC. 28, T14N, R17W	SEC. 32, T14N, R18W	SEC. 15, T12N, R20W
OWNER	SANTA FE MINERALS, INC.	MUSTANG PRODUCTION CO.	GHK GAS CORP.
COMPLETED	06/06/84	05/03/85	02/11/80
SAMPLED	07/19/85	11/18/85	10/13/80
FORMATION	PENN-MORROW	PENN-SKINNER	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14029	11473	14803
WELLHEAD PRESSURE,PSIG	2300	2800	9170
OPEN FLOW, MCFD	1500	1800	7600
COMPONENT, MOLE PCT			
METHANE	97.0	82.7	95.9
ETHANE	1.2	8.8	2.1
PROPANE	0.2	4.2	0.4
N-BUTANE	0.0	1.2	0.1
ISOBUTANE	0.0	0.4	TRACE
N-PENTANE	0.0	0.4	TRACE
ISOPENTANE	0.0	0.4	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	0.3	0.6	0.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.0	0.9
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1015	1212	1028
SPECIFIC GRAVITY	0.575	0.702	0.584

	INDEX 5755 SAMPLE 17898	INDEX 5756 SAMPLE 16875	INDEX 5757 SAMPLE 16502
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CANUTE N	CARPENTER E	CARPENTER NE
WELL NAME	SANDERS NO. 1-17	KEPHART NO. 1-20	K&C. CATTLE NO. 1-33
LOCATION	SEC. 17, T12N, R20W	SEC. 20, T12N, R20W	SEC. 33, T13N, R20W
OWNER	APACHE CORP.	GHK GAS CORP.	GHK GAS CORP.
COMPLETED	09/18/85	04/12/82	08/26/81
SAMPLED	11/08/85	04/11/83	04/27/82
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13547	13735	13145
WELLHEAD PRESSURE,PSIG	7200	8700	9600
OPEN FLOW, MCFD	2098	3148	2309
COMPONENT, MOLE PCT			
METHANE	91.5	87.8	87.6
ETHANE	4.5	6.6	7.0
PROPANE	1.2	2.2	2.3
N-BUTANE	0.3	0.5	0.4
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.4	0.5	0.8
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.2	0.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1035	1131	1127
SPECIFIC GRAVITY	0.622	0.653	0.649

	INDEX 5758 SAMPLE 16798	INDEX 5759 SAMPLE 17253	INDEX 5760 SAMPLE 17376
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CARPENTER NE	CARPENTER NE	CARPENTER NE
WELL NAME	BAKER NO. 21-1	FOSS NO. 1	EL PASO YOUNG STATE NO. 1
LOCATION	SEC. 21, T13N, R19W	SEC. 18, T12N, R19W	SEC. 31, T13N, R19W
OWNER	CONTINENTAL RESOURCES CORP.	TEXAS OIL & GAS CORP.	EL PASO EXPLORATION CO.
COMPLETED	03/08/82	06/26/82	08/13/84
SAMPLED	03/--/83	04/17/84	08/10/84
FORMATION	PENN-CHEROKEE	PENN-DES MOINES	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13224	13450	12976
WELLHEAD PRESSURE,PSIG	3600	4924	3638
OPEN FLOW, MCFD	2702	2100	1386
COMPONENT, MOLE PCT			
METHANE	90.3	93.0	80.6
ETHANE	4.0	4.0	8.8
PROPANE	1.7	0.7	4.7
N-BUTANE	0.4	0.1	1.4
ISOBUTANE	0.4	0.1	1.2
N-PENTANE	0.1	TRACE	0.4
ISOPENTANE	0.2	0.1	0.8
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.1	0.5
NITROGEN	0.5	0.7	0.3
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.0	0.9
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1104	1052	1268
SPECIFIC GRAVITY	0.651	0.604	0.732

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5761 SAMPLE 16851	INDEX 5762 SAMPLE 16852	INDEX 5763 SAMPLE 16889
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CLINTON	CLINTON	CLINTON
WELL NAME	STRATTON FARMS NO. 26-1	LEWIS NO. 8-1	STRATTON FARMS NO. 3-1
LOCATION	SEC. 26, T12N, R18W	SEC. 8, T12N, R17W	SEC. 3, T12N, R17W
OWNER	WOODS PETROLEUM CORP.	WOODS PETROLEUM CORP.	WOODS PETROLEUM CORP.
COMPLETED	08/10/82	08/27/81	05/26/82
SAMPLED	03/31/83	03/31/83	04/20/83
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15200	14666	14532
WELLHEAD PRESSURE,PSIG	9000	1000	10000
OPEN FLOW, MCFD	2000	100	750
COMPONENT, MOLE PCT			
METHANE	96.7	96.0	95.4
ETHANE	1.2	1.8	2.2
PROPANE	0.1	0.2	0.3
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.3	0.4	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	1.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1004	1011	1014
SPECIFIC GRAVITY	0.575	0.578	0.581

	INDEX 5764 SAMPLE 16971	INDEX 5765 SAMPLE 16317	INDEX 5766 SAMPLE 11431
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CLINTON	CLINTON E	CRANE SE
WELL NAME	STOCKTON NO. 1-19	MEAHAM NO. 1-13	CRANE STAR NO. 1
LOCATION	SEC. 19, T12N, R17W	SEC. 13, T12N, R16W	SEC. 17, T15N, R14W
OWNER	AN-SON CORP.	AN-SON CORP.	EASON OIL CO.
COMPLETED	09/19/82	12/22/80	04/05/66
SAMPLED	06/02/83	07/22/81	08/05/68
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-MORROW & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12732	12268	1100
WELLHEAD PRESSURE,PSIG	5000	7938	4500
OPEN FLOW, MCFD	4583	91081	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.4	85.8	94.6
ETHANE	7.7	8.0	3.0
PROPANE	3.0	3.3	0.7
N-BUTANE	0.7	0.7	0.2
ISOBUTANE	0.4	0.5	TRACE
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.5	0.2	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.5	0.6	0.3
OXYGEN	1.1	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	0.8
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1108	1162	1051
SPECIFIC GRAVITY	0.690	0.661	0.594

	INDEX 5767 SAMPLE 13922	INDEX 5768 SAMPLE 7648	INDEX 5769 SAMPLE 9785
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CUSTER CITY E	CUSTER CITY N	CUSTER CITY N
WELL NAME	PAULINE REINSON NO. 1	TED WEBB UNIT NO. 1	DIEHL ESTATE NO. 1
LOCATION	SEC. 20, T14N, R15W	SEC. 23, T15N, R16W	SEC. 20, T15N, R16W
OWNER	LYO CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	01/15/74	06/14/60	12/01/64
SAMPLED	02/18/74	08/17/60	03/05/65
FORMATION	PENN-MORROW	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12250	14174	14700
WELLHEAD PRESSURE,PSIG	6000	5335	4314
OPEN FLOW, MCFD	NOT GIVEN	13400	55000
COMPONENT, MOLE PCT			
METHANE	93.7	93.4	95.1
ETHANE	3.7	0.6	0.6
PROPANE	1.0	0.1	0.4
N-BUTANE	0.2	0.1	TRACE
ISOBUTANE	0.2	TRACE	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	0.4	1.0	0.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	4.0	2.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1064	992	990
SPECIFIC GRAVITY	0.602	0.615	0.595

	INDEX 5770 SAMPLE 9838	INDEX 5771 SAMPLE 11631	INDEX 5772 SAMPLE 11406
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	CUSTER CITY N	CUSTER CITY N	CUSTER CITY SE
WELL NAME	SHARP HUNT UNIT NO. 1	JONES NO. 1	BURGTORF NO. 1
LOCATION	SEC. 26, T15N, R16W	SEC. 31, T15N, R15W	SEC. 6, T13N, R15W
OWNER	MOBIL OIL CORP.	PARKER DRILLING CO.	GULF OIL CO.- U.S.
COMPLETED	01/03/65	04/15/67	08/--/59
SAMPLED	04/08/65	08/20/68	03/14/68
FORMATION	PENN-CHEROKEE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10249	11074	13365
WELLHEAD PRESSURE,PSIG	4965	3600	4152
OPEN FLOW, MCFD	11500	5000	1738
COMPONENT, MOLE PCT			
METHANE	84.8	95.2	95.6
ETHANE	7.5	1.3	2.5
PROPANE	3.2	0.0	0.5
N-BUTANE	0.7	0.2	0.3
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.1	0.7	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	2.1	1.1	0.4
OXYGEN	0.3	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.7
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1132	1044	1036
SPECIFIC GRAVITY	0.665	0.598	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5773 SAMPLE 15458	INDEX 5774 SAMPLE 16478	INDEX 5775 SAMPLE 16838
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	FAY E	HAMMON E	HAMMON E
WELL NAME	SOBER UNIT A NO. 1	RED MOON NO. 1-29	HUBBART NO. 1
LOCATION	SEC. 2, T15N, R14W	SEC. 29, T14N, R20W	SEC. 19, T14N, R19W
OWNER	AMOCO PRODUCTION CO.	READING & BATES PETROLEUM CO	SANTA FE MINERALS, INC.
COMPLETED	08/16/78	01/29/82	05/--/82
SAMPLED	10/26/78	03/--/82	03/--/83
FORMATION	PENN-MORROW	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10478	12290	12272
WELLHEAD PRESSURE,PSIG	5613	2050	5750
OPEN FLOW, MCFD	2405	3156	3100
COMPONENT, MOLE PCT			
METHANE	87.2	84.6	85.4
ETHANE	6.3	7.5	8.0
PROPANE	2.9	2.8	2.8
N-BUTANE	0.7	0.5	0.7
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	0.6	2.2	0.5
OXYGEN	TRACE	0.4	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.9	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.8
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1158	1129	1167
SPECIFIC GRAVITY	0.656	0.667	0.670

	INDEX 5776 SAMPLE 16955	INDEX 5777 SAMPLE 16980	INDEX 5778 SAMPLE 12752
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	HAMMON E	HAMMON E	INDIANAPOLIS
WELL NAME	WEIMS NO. 1-16	STINSON NO. 1-6	NICKEL NO. 35-1
LOCATION	SEC. 16, T14N, R19W	SEC. 6, T13N, R20W	SEC. 35, T13N, R16W
OWNER	INEXCO OIL CO.	HELMERICH & PAYNE, INC.	RODEN OIL CO.
COMPLETED	05/26/83	04/22/82	11/19/70
SAMPLED	05/26/83	06/17/83	04/02/71
FORMATION	PENN-MORROW	PENN-RED FORK	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15208	13089	14880
WELLHEAD PRESSURE,PSIG	2800	7527	9400
OPEN FLOW, MCFD	3229	4090	48000
COMPONENT, MOLE PCT			
METHANE	95.6	88.8	96.5
ETHANE	0.6	6.1	1.0
PROPANE	0.1	1.9	0.2
N-BUTANE	0.0	0.4	TRACE
ISOBUTANE	0.0	0.4	0.1
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.3	0.7	0.3
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.5	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	0.9	1.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	983	1108	1022
SPECIFIC GRAVITY	0.588	0.637	0.584

	INDEX 5779 SAMPLE 16877	INDEX 5780 SAMPLE 16952	INDEX 5781 SAMPLE 16854
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	MOOREWOOD NE	MOOREWOOD NE	PARKERSBURGH
WELL NAME	BAKER NO. 1-31	WILSON NO. 16-1	STRATTON FARMS NO. 10-1
LOCATION	SEC. 31, T15N, R19W	SEC. 16, T15N, R20W	SEC. 10, T12N, R17W
OWNER	COASTAL OIL & GAS CORP.	HARPER OIL CO.	WOODS PETROLEUM CORP.
COMPLETED	05/--/82	08/02/82	07/12/82
SAMPLED	04/13/83	05/23/83	03/31/83
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11251	11168	14296
WELLHEAD PRESSURE,PSIG	6095	4203	9000
OPEN FLOW, MCFD	4737	1196	3000
COMPONENT, MOLE PCT			
METHANE	86.5	79.4	93.0
ETHANE	6.3	10.3	3.3
PROPANE	2.6	5.2	0.7
N-BUTANE	0.4	1.5	0.2
ISOBUTANE	0.1	0.6	0.1
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.8	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	0.7	0.6	0.5
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.3	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	1.6
HELIUM	TRACE	0.03	0.02
HEATING VALUE*	1118	1252	1048
SPECIFIC GRAVITY	0.641	0.724	0.609

	INDEX 5782 SAMPLE 8016	INDEX 5783 SAMPLE 16555	INDEX 5784 SAMPLE 13560
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	PUTNAM	STAFFORD	STAFFORD N
WELL NAME	M. E. HORTON NO. 1	STRATTON FARMS NO. 1-5	BEAUCHAMP NO. 1-21
LOCATION	SEC. 14, T15N, R15W	SEC. 5, T12N, R16W	SEC. 21, T13N, R16W
OWNER	MOBIL OIL CO.	BRACKEN EXPLORATION CO.	ARKLA EXPLORATION CO.
COMPLETED	03/22/61	02/03/82	12/27/72
SAMPLED	06/12/61	06/--/82	01/06/73
FORMATION	MISS-MERAMEC	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13192	13145	12310
WELLHEAD PRESSURE,PSIG	7800	1300	6600
OPEN FLOW, MCFD	1018	1105	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.2	81.0	83.7
ETHANE	3.2	8.8	8.3
PROPANE	0.8	4.5	4.2
N-BUTANE	0.4	1.2	1.0
ISOBUTANE	0.4	1.1	0.8
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.8	0.4
CYCLOPENTANE	0.1	0.4	0.2
HEXANES PLUS	0.3	0.7	0.4
NITROGEN	0.9	0.4	0.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.5
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1081	1270	1220
SPECIFIC GRAVITY	0.616	0.732	0.694

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5785 SAMPLE 14979	INDEX 5786 SAMPLE 15908	INDEX 5787 SAMPLE 16386
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	THOMAS S	THOMAS S	TURKEY CREEK
WELL NAME	BOYD MILLER NO. 1	G. B. MCNEILL NO. 4	STRATTON FARM NO. 31-1
LOCATION	SEC. 18, T14N, R14W	SEC. 13, T14N, R14W	SEC. 31, T12N, R17W
OWNER	DAVIS OIL CO.	SOUTHPORT EXPLORATION, INC.	WOODS PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	10/13/81
SAMPLED	04/24/77	02/28/80	11/16/81
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	10630	15336
WELLHEAD PRESSURE,PSIG	4982	NOT GIVEN	10000
OPEN FLOW, MCFD	4350	449	13500
COMPONENT, MOLE PCT			
METHANE	83.0	78.3	96.9
ETHANE	9.3	9.1	1.2
PROPANE	4.8	9.6	0.1
N-BUTANE	0.9	1.0	0.0
ISOBUTANE	0.5	0.6	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.9	4.3	0.4
OXYGEN	0.0	1.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.4	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	1.3
HELIUM	0.03	0.04	0.02
HEATING VALUE*	1191	1156	1006
SPECIFIC GRAVITY	0.685	0.710	0.575

	INDEX 5788 SAMPLE 13559	INDEX 5789 SAMPLE 15809	INDEX 5790 SAMPLE 16023
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	WEATHERFORD	WEATHERFORD	WEATHERFORD
WELL NAME	URANIA LEONARD NO. 1	MAST NO. 1-16	GOUCHER NO. 1
LOCATION	SEC. 26, T13N, R15W	SEC. 16, T13N, R14W	SEC. 23, T13N, R14W
OWNER	ARKLA EXPLORATION CO.	TENNECO OIL CO.	TRICO DRILLING CO., INC.
COMPLETED	09/05/72	06/13/79	--/--/00
SAMPLED	03/06/73	10/17/79	07/31/80
FORMATION	PENN-RED FORK	PENN-MORROW & SPRINGER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13428	13820	13177
WELLHEAD PRESSURE,PSIG	6556	6600	5640
OPEN FLOW, MCFD	1450	6200	1500
COMPONENT, MOLE PCT			
METHANE	60.2	96.5	95.8
ETHANE	15.8	1.8	2.3
PROPANE	12.0	0.2	0.5
N-BUTANE	3.7	0.1	0.1
ISOBUTANE	2.8	0.0	TRACE
N-PENTANE	0.9	0.0	TRACE
ISOPENTANE	1.8	0.1	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	1.4	TRACE	TRACE
NITROGEN	0.3	0.3	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	0.9
HELIUM	TRACE	0.03	0.04
HEATING VALUE*	1618	1023	1028
SPECIFIC GRAVITY	0.951	0.580	0.581

	INDEX 5791 SAMPLE 16104	INDEX 5792 SAMPLE 16518	INDEX 5793 SAMPLE 17093
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	WEATHERFORD	WEATHERFORD	WEATHERFORD
WELL NAME	BERGNER NO. 1	STEINER NO. 1	HUNNICUTT UNIT
LOCATION	SEC. 21, T13N, R14W	SEC. 22, T13N, R14W	SEC. 26, T12N, R14W
OWNER	KAISER-FRANCIS OIL CO.	KAISER-FRANCIS OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	08/26/80	04/06/81	08/12/82
SAMPLED	10/28/80	05/14/82	10/17/83
FORMATION	PENN-BRITT	PENN-BRITT	PENN-SPRINGER & BRITT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13504	NOT GIVEN	13258
WELLHEAD PRESSURE,PSIG	5900	NOT GIVEN	11125
OPEN FLOW, MCFD	25396	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.3	96.5	97.1
ETHANE	1.8	1.7	1.1
PROPANE	0.3	0.3	0.2
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.5	0.5	0.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.2	1.4
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1019	1016	1009
SPECIFIC GRAVITY	0.579	0.579	0.575

	INDEX 5794 SAMPLE 17182	INDEX 5795 SAMPLE 17689	INDEX 5796 SAMPLE 16318
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	CUSTER	CUSTER
FIELD	WEATHERFORD	WEATHERFORD	WEATHERFORD SW
WELL NAME	CONNELL NO. 1-24	CUA ASSET NO. 2	PALMER NO. 1-17
LOCATION	SEC. 24, T13N, R15W	SEC. 29, T13N, R14W	SEC. 17, T12N, R15W
OWNER	ARKLA EXPLORATION CO.	AMOCO PRODUCTION CO.	AN-SON CORP.
COMPLETED	07/26/83	01/30/85	11/20/80
SAMPLED	02/14/84	05/17/85	07/22/81
FORMATION	PENN-ATOKA	PENN-CHEROKEE	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13007	11675	12533
WELLHEAD PRESSURE,PSIG	3850	5400	7925
OPEN FLOW, MCFD	6500	5235	8670
COMPONENT, MOLE PCT			
METHANE	84.3	79.4	84.8
ETHANE	7.9	9.0	8.3
PROPANE	3.5	5.4	3.7
N-BUTANE	0.9	1.9	0.8
ISOBUTANE	0.8	0.5	0.6
N-PENTANE	0.3	0.5	0.2
ISOPENTANE	0.5	0.9	0.3
CYCLOPENTANE	0.3	0.3	0.1
HEXANES PLUS	0.5	0.7	0.2
NITROGEN	0.5	0.8	0.7
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.4
HELIUM	0.02	0.04	0.02
HEATING VALUE*	1215	1297	1186
SPECIFIC GRAVITY	0.694	0.749	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5797 SAMPLE 16956	INDEX 5798 SAMPLE 11553	INDEX 5799 SAMPLE 12823
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CUSTER	DEWEY	DEWEY
FIELD	WEATHERFORD SW	ALEDO	ALEDO
WELL NAME	KAISER NO. 1-16	E. H. WALKER NO. 1	BRAY NO. 1
LOCATION	SEC. 16, T12N, R15W	SEC. 5, T15N, R18W	SEC. 29, T16N, R18W
OWNER	INEXCO OIL CO.	J. C. BARNES OIL CO.	MCCULLOCH OIL CORP.
COMPLETED	05/26/83	03/13/67	09/28/70
SAMPLED	05/26/83	06/19/68	05/21/71
FORMATION	PENN-CHEROKEE	DEVO-HUNTON	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12586	15372	9604
WELLHEAD PRESSURE,PSIG	6000	5222	NOT GIVEN
OPEN FLOW, MCFD	8351	115079	1910
COMPONENT, MOLE PCT			
METHANE	83.5	91.8	81.1
ETHANE	8.6	0.2	10.3
PROPANE	3.8	0.0	5.2
N-BUTANE	0.9	0.3	0.9
ISOBUTANE	0.5	0.0	0.7
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.5	0.2	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	0.6	1.8	0.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.3	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	5.5	0.5
HELIUM	0.02	0.04	0.04
HEATING VALUE*	1186	961	1209
SPECIFIC GRAVITY	0.683	0.626	0.696

	INDEX 5800 SAMPLE 12824	INDEX 5801 SAMPLE 17383	INDEX 5802 SAMPLE 14587
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	ALEDO	CANTON NW	CESTOS
WELL NAME	BRAY NO. 1	BLACK BULL NO. 1	TERREL NO. 1
LOCATION	SEC. 29, T16N, R18W	SEC. 22, T19N, R14W	SEC. 2, T19N, R18W
OWNER	MCCULLOCH OIL CORP.	TXO PRODUCTION CORP.	WOODS PETROLEUM CORP.
COMPLETED	09/28/70	01/15/84	01/15/76
SAMPLED	05/21/71	08/--/84	02/23/76
FORMATION	PENN-CHEROKEE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10945	8424	9102
WELLHEAD PRESSURE,PSIG	NOT GIVEN	350	3400
OPEN FLOW, MCFD	700	285	1000
COMPONENT, MOLE PCT			
METHANE	82.3	76.5	95.5
ETHANE	9.7	10.7	2.3
PROPANE	4.0	6.7	0.7
N-BUTANE	0.9	1.9	0.1
ISOBUTANE	0.7	1.0	0.1
N-PENTANE	0.3	0.5	TRACE
ISOPENTANE	0.2	0.6	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.3	0.1
NITROGEN	0.6	1.0	0.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.4
HELIUM	0.03	0.05	0.08
HEATING VALUE*	1216	1304	1043
SPECIFIC GRAVITY	0.698	0.757	0.586

	INDEX 5803 SAMPLE 12740	INDEX 5804 SAMPLE 14506	INDEX 5805 SAMPLE 14299
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	CESTOS SE	CESTOS SW	EAGLE CITY W
WELL NAME	CARTER NO. 1	KENNEDY BROTHERS NO. 1	KATY ZO WOMACK UNIT NO. 1
LOCATION	SEC. 2, T19N, R17W	SEC. 35, T19N, R19W	SEC. 25, T17N, R14W
OWNER	SNEE & EBERLY	JONES & PELLOW OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	02/26/70	06/27/75	10/15/74
SAMPLED	03/24/71	10/24/75	03/18/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9411	10160	9527
WELLHEAD PRESSURE,PSIG	3750	NOT GIVEN	5552
OPEN FLOW, MCFD	NOT GIVEN	26550	7503
COMPONENT, MOLE PCT			
METHANE	95.3	96.0	88.2
ETHANE	2.1	1.6	6.7
PROPANE	0.5	0.4	2.9
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	0.1	0.1	0.4
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	0.5	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.3	0.3
HELIUM	0.03	0.04	0.04
HEATING VALUE*	1023	1034	1133
SPECIFIC GRAVITY	0.592	0.587	0.641

	INDEX 5806 SAMPLE 14737	INDEX 5807 SAMPLE 12531	INDEX 5808 SAMPLE 14889
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	EAGLE CITY W	LEEDEY	LEEDEY
WELL NAME	ROY WOMACK UNIT NO. 1	HENRY MARRELL ET AL. NO. 1	GAMBLE NO. 1
LOCATION	SEC. 36, T17N, R14W	SEC. 10, T15N, R20W	SEC. 15, T16N, R20W
OWNER	BONRAY OIL CO.	MCCULLOCH OIL CORP.	UNION OIL CO. OF CALIF.
COMPLETED	04/24/76	04/28/70	05/28/76
SAMPLED	08/25/76	11/17/70	01/27/77
FORMATION	PENN-MORROW	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9700	16464	16582
WELLHEAD PRESSURE,PSIG	5430	5793	4340
OPEN FLOW, MCFD	1500	56000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.0	95.8	94.5
ETHANE	5.8	0.5	0.2
PROPANE	2.0	0.1	TRACE
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.6	2.3	2.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.2	3.0
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1106	982	963
SPECIFIC GRAVITY	0.626	0.579	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5809 SAMPLE 14499	INDEX 5810 SAMPLE 11255	INDEX 5811 SAMPLE 9818
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	LEONEL SE	NOBSCOT NW	OAKWOOD N
WELL NAME	BOND NO. 1	CROSS UNIT NO. 1	HARPER UNIT NO. 1
LOCATION	SEC. 12, T17N, R14W	SEC. 25, T17N, R16W	SEC. 4, T17N, R14W
OWNER	TEXAS OIL & GAS CORP.	AMOCO PRODUCTION CO.	TEXACO INC.
COMPLETED	--/--/00	10/01/67	09/24/64
SAMPLED	10/24/75	01/10/68	03/22/65
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	10244	9470
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4250	4239
OPEN FLOW, MCFD	NOT GIVEN	9245	7576
COMPONENT, MOLE PCT			
METHANE	88.0	91.9	85.9
ETHANE	6.7	3.6	7.7
PROPANE	2.8	1.1	3.2
N-BUTANE	0.6	0.3	0.7
ISOBUTANE	0.4	0.2	0.4
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.5	1.3	1.0
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.5
HELIUM	0.04	0.03	0.05
HEATING VALUE*	1136	1048	1146
SPECIFIC GRAVITY	0.647	0.615	0.657

	INDEX 5812 SAMPLE 13507	INDEX 5813 SAMPLE 13508	INDEX 5814 SAMPLE 14300
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	OAKWOOD N	OAKWOOD N	OAKWOOD N
WELL NAME	FEIKES NO. 1	STATE UNIT NO. 1	MURRY NO. 1
LOCATION	SEC. 31, T18N, R14W	SEC. 36, T18N, R15W	SEC. 7, T18N, R14W
OWNER	WOODS PETROLEUM CORP.	WOODS PETROLEUM CORP.	SNEE & EBERLY
COMPLETED	10/25/72	08/12/72	09/06/74
SAMPLED	01/18/73	01/18/73	03/18/74
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9370	9380	9135
WELLHEAD PRESSURE,PSIG	3712	3899	2000
OPEN FLOW, MCFD	6376	14277	5400
COMPONENT, MOLE PCT			
METHANE	82.0	54.0	82.8
ETHANE	7.6	26.5	8.4
PROPANE	3.8	13.6	4.6
N-BUTANE	1.5	2.7	1.1
ISOBUTANE	0.9	1.7	0.7
N-PENTANE	0.9	0.6	0.2
ISOPENTANE	0.7	0.1	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.9	0.3	0.3
NITROGEN	0.8	0.0	0.9
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.0	0.4
HELIUM	0.04	0.02	0.04
HEATING VALUE*	1268	1556	1214
SPECIFIC GRAVITY	0.731	0.915	0.697

	INDEX 5815 SAMPLE 16533	INDEX 5816 SAMPLE 8958	INDEX 5817 SAMPLE 12421
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	OAKWOOD N	OAKWOOD W	PUTNAM
WELL NAME	JACKSON NO. 2-14	LEO HEWITT NO. 1	CLARK NO. 1
LOCATION	SEC. 14, T17N, R14W	SEC. 24, T17N, R15W	SEC. 8, T16N, R17W
OWNER	MUSTANG PRODUCTION CO.	TEXACO INC. & SUN OIL CO.	WESSELY PETROLEUM, LTD.
COMPLETED	05/26/82	11/15/62	01/17/70
SAMPLED	05/26/82	05/14/63	--/--/00
FORMATION	PENN-MORROW	MISS-CHESTER	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9466	10117	14078
WELLHEAD PRESSURE,PSIG	4000	2995	4740
OPEN FLOW, MCFD	2300	815	12439
COMPONENT, MOLE PCT			
METHANE	87.9	83.4	93.6
ETHANE	6.6	7.3	0.3
PROPANE	2.7	4.6	TRACE
N-BUTANE	0.7	1.6	0.0
ISOBUTANE	0.3	0.5	0.0
N-PENTANE	0.1	0.5	0.0
ISOPENTANE	0.2	0.5	0.0
CYCLOPENTANE	0.1	0.2	0.0
HEXANES PLUS	0.2	0.7	0.0
NITROGEN	0.6	0.3	1.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.5
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	4.7
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1148	1257	954
SPECIFIC GRAVITY	0.649	0.714	0.607

	INDEX 5818 SAMPLE 6277	INDEX 5819 SAMPLE 8341	INDEX 5820 SAMPLE 9944
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	A. M. KUNC NO. 1	WELLS UNIT NO. 1	RIGG UNIT NO. 1
LOCATION	SEC. 11, T17N, R18W	SEC. 30, T17N, R17W	SEC. 30, T18N, R16W
OWNER	ATLANTIC RICHFIELD CO.	PETROLEUM, INC.	AMERADA HESS CORP.
COMPLETED	01/02/57	09/25/61	08/20/64
SAMPLED	03/14/57	12/17/61	06/29/65
FORMATION	PENN-OSWEGO	PENN-OSWEGO	PENN-COTTAGE GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9159	9092	7730
WELLHEAD PRESSURE,PSIG	3500	2775	2089
OPEN FLOW, MCFD	NOT GIVEN	57118	3520
COMPONENT, MOLE PCT			
METHANE	81.2	72.3	78.7
ETHANE	10.2	11.8	9.0
PROPANE	4.7	8.5	5.1
N-BUTANE	1.2	2.2	1.4
ISOBUTANE	0.8	2.0	1.0
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.2	0.5
NITROGEN	0.2	1.2	2.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.4
HELIUM	0.07	0.04	0.20
HEATING VALUE*	1235	1350	1230
SPECIFIC GRAVITY	0.705	0.794	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5821 SAMPLE 10011	INDEX 5822 SAMPLE 10502	INDEX 5823 SAMPLE 10503
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	RIGG UNIT NO. 1	FIELDS UNIT NO. 1-31	CALKINS UNIT NO. 1-25
LOCATION	SEC. 30, T18N, R16W	SEC. 31, T18N, R16W	SEC. 25, T18N, R17W
OWNER	AMERADA HESS CORP.	SARKEYS, INC.	SARKEYS, INC.
COMPLETED	07/11/64	09/16/63	01/27/65
SAMPLED	07/22/65	08/01/65	08/01/65
FORMATION	PENN-TONKAWA	PENN-OSWEGO	PENN-COTTAGE GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7239	8652	7795
WELLHEAD PRESSURE,PSIG	2059	1730	2054
OPEN FLOW, MCFD	2231	632	6200
COMPONENT, MOLE PCT			
METHANE	80.0	80.9	79.6
ETHANE	8.7	10.6	9.0
PROPANE	4.7	4.5	5.1
N-BUTANE	1.2	1.0	1.6
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.1	0.1	0.7
ISOPENTANE	1.0	0.8	0.1
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.4	0.1	0.5
NITROGEN	2.7	1.6	2.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.16	0.05	0.16
HEATING VALUE*	1220	1203	1234
SPECIFIC GRAVITY	0.718	0.695	0.723

	INDEX 5824 SAMPLE 10504	INDEX 5825 SAMPLE 10806	INDEX 5826 SAMPLE 10913
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	CALKINS UNIT NO. 1	HARRY BUTLER NO. 2	MERCER-HALLMARK UNIT NO. 1
LOCATION	SEC. 25, T18N, R17W	SEC. 8, T17N, R16W	SEC. 10, T16N, R18W
OWNER	SARKEYS, INC.	TENNECO OIL CO.	AMERADA HESS CORP.
COMPLETED	01/27/65	10/01/66	09/16/66
SAMPLED	08/01/65	11/29/66	04/06/67
FORMATION	PENN-TONKAWA	PENN-BIG LIME	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7282	8800	10186
WELLHEAD PRESSURE,PSIG	2111	1700	3350
OPEN FLOW, MCFD	1170	4500	56550
COMPONENT, MOLE PCT			
METHANE	80.9	77.8	95.7
ETHANE	9.0	8.9	1.9
PROPANE	4.5	5.2	0.4
N-BUTANE	1.2	1.7	0.1
ISOBUTANE	0.7	0.7	0.0
N-PENTANE	0.2	0.5	0.1
ISOPENTANE	0.4	0.5	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.1
NITROGEN	2.3	3.4	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	1.1
HELIUM	0.17	0.15	0.04
HEATING VALUE*	1206	1243	1027
SPECIFIC GRAVITY	0.704	0.740	0.585

	INDEX 5827 SAMPLE 11391	INDEX 5828 SAMPLE 11392	INDEX 5829 SAMPLE 11393
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	W. J. HOYT A UNIT	LITTLE HAWK UNIT NO. 1	D. C. PETREE
LOCATION	SEC. 27, T18N, R17W	SEC. 19, T18N, R17W	SEC. 2, T17N, R18W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/19/68	03/19/68	03/19/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9962	10134	9131
WELLHEAD PRESSURE,PSIG	2400	2500	2800
OPEN FLOW, MCFD	734	13000	1057
COMPONENT, MOLE PCT			
METHANE	94.6	94.3	82.1
ETHANE	2.7	1.7	9.9
PROPANE	0.7	0.5	4.4
N-BUTANE	0.1	0.0	1.0
ISOBUTANE	0.2	0.0	0.5
N-PENTANE	0.2	0.0	0.3
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.3	2.3	0.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	0.4
HELIUM	0.04	0.02	0.06
HEATING VALUE*	1054	999	1209
SPECIFIC GRAVITY	0.597	0.592	0.694

	INDEX 5830 SAMPLE 11541	INDEX 5831 SAMPLE 13203	INDEX 5832 SAMPLE 14733
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	PASTORIOUS NO. 1	KNOX NO. 1-33	GOSSA UNIT NO. 1
LOCATION	SEC. 10, T17N, R19W	SEC. 33, T17N, R18W	SEC. 8, T17N, R17W
OWNER	APACHE CORP.	MCCULLOCH OIL CORP.	ENERGY RESERVES GROUP, INC.
COMPLETED	06/15/62	05/26/71	04/18/76
SAMPLED	06/--/68	05/08/72	08/18/76
FORMATION	PENN-OSWEGO	MISS-	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9550	14388	13362
WELLHEAD PRESSURE,PSIG	3052	NOT GIVEN	4150
OPEN FLOW, MCFD	NOT GIVEN	4675	44
COMPONENT, MOLE PCT			
METHANE	77.8	96.5	93.3
ETHANE	5.6	0.3	0.4
PROPANE	6.2	TRACE	0.1
N-BUTANE	1.9	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	1.9	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	4.9	0.9	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	2.3	4.9
HELIUM	0.05	0.03	0.03
HEATING VALUE*	1215	983	955
SPECIFIC GRAVITY	0.752	0.582	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5833 SAMPLE 14959	INDEX 5834 SAMPLE 14960	INDEX 5835 SAMPLE 15826
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	FARRIS NO. 1	FARRIS NO. 1	NICHOLS NO. 1
LOCATION	SEC. 7, T16N, R18W	SEC. 7, T16N, R18W	SEC. 29, T16N, R15W
OWNER	WESSELY ENERGY CORP.	WESSELY ENERGY CORP.	FERGUSON OIL CO., INC.
COMPLETED	04/15/76	04/15/76	11/26/77
SAMPLED	04/07/77	04/07/77	10/--/79
FORMATION	PENN-COTTAGE GROVE	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8512	7883	11246
WELLHEAD PRESSURE,PSIG	2239	1836	4134
OPEN FLOW, MCFD	369	458	2545
COMPONENT, MOLE PCT			
METHANE	82.1	81.9	86.9
ETHANE	9.7	9.3	6.2
PROPANE	4.6	4.9	2.5
N-BUTANE	1.1	1.1	0.4
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.8
NITROGEN	0.9	1.5	0.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.7
HELIUM	0.07	0.10	0.04
HEATING VALUE*	1219	1191	1176
SPECIFIC GRAVITY	0.696	0.692	0.675

	INDEX 5836 SAMPLE 16364	INDEX 5837 SAMPLE 16365	INDEX 5838 SAMPLE 16682
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	VANDERWORK NO. 1	VANDERWORK NO. 1	COMBS NO. 1-36
LOCATION	SEC. 4, T18N, R17W	SEC. 4, T18N, R17W	SEC. 36, T16N, R15W
OWNER	SCARTH OIL & GAS CO.	SCARTH OIL & GAS CO.	SENECA OIL CO.
COMPLETED	--/--/--	--/--/--	10/05/82
SAMPLED	10/26/81	10/28/81	10/05/82
FORMATION	MISS-OSAGE	MISS-OSAGE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12076	12114	10868
WELLHEAD PRESSURE,PSIG	1100	1575	3300
OPEN FLOW, MCFD	50	6000	2100
COMPONENT, MOLE PCT			
METHANE	90.8	92.9	92.7
ETHANE	2.1	2.2	3.7
PROPANE	0.9	0.8	1.2
N-BUTANE	0.5	0.5	0.3
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.6	0.7	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.0	2.0	0.9
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1044	1056	1076
SPECIFIC GRAVITY	0.644	0.621	0.613

	INDEX 5839 SAMPLE 16969	INDEX 5840 SAMPLE 17138	INDEX 5841 SAMPLE 17358
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	PUTNAM	PUTNAM
WELL NAME	LEROY DENNIS NO. 1	VANDERWORK NO. 1	E. S. COLLIER UNIT NO. 2
LOCATION	SEC. 33, T19N, R17W	SEC. 4, T18N, R17W	SEC. 15, T17N, R18W
OWNER	ENERGY RESERVES GROUP, INC.	SCARTH OIL & GAS CO.	ARCO OIL & GAS CO.
COMPLETED	06/06/83	03/--/82	04/19/84
SAMPLED	06/06/83	12/09/81	07/24/84
FORMATION	MISS-OSAGE L	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11846	9800	10678
WELLHEAD PRESSURE,PSIG	3700	1280	3750
OPEN FLOW, MCFD	1800	228	4000
COMPONENT, MOLE PCT			
METHANE	88.9	93.2	85.1
ETHANE	4.0	3.3	8.0
PROPANE	1.9	0.9	3.1
N-BUTANE	0.9	0.2	0.7
ISOBUTANE	0.4	0.1	0.5
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	0.8	0.8	0.6
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.9	1.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1129	1050	1162
SPECIFIC GRAVITY	0.655	0.603	0.673

	INDEX 5842 SAMPLE 17359	INDEX 5843 SAMPLE 16697	INDEX 5844 SAMPLE 13521
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	DEWEY	DEWEY	DEWEY
FIELD	PUTNAM	SEILING NE	SEILING SW
WELL NAME	E. S. COLLIER UNIT NO. 2	MCDANIEL NO. 4	FUGUA NO. 1
LOCATION	SEC. 15, T17N, R18W	SEC. 4, T19N, R17W	SEC. 14, T19N, R17W
OWNER	ARCO OIL & GAS CO.	LADD PETROLEUM CORP.	TEXAS OIL & GAS CORP.
COMPLETED	04/19/84	10/28/82	11/13/72
SAMPLED	07/24/84	10/27/82	01/05/73
FORMATION	PENN-RED FORK	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9563	8950	9284
WELLHEAD PRESSURE,PSIG	3465	2850	1600
OPEN FLOW, MCFD	3000	1000	2122
COMPONENT, MOLE PCT			
METHANE	78.6	95.0	91.1
ETHANE	11.7	2.3	4.4
PROPANE	5.6	0.7	1.9
N-BUTANE	1.2	0.2	0.5
ISOBUTANE	0.7	0.1	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.6	0.3	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.1	0.7
HELIUM	0.04	0.03	0.05
HEATING VALUE*	1251	1050	1108
SPECIFIC GRAVITY	0.722	0.598	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5845 SAMPLE 14950		INDEX 5846 SAMPLE 15218		INDEX 5847 SAMPLE 13204	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	DEWEY		DEWEY		DEWEY	
FIELD	TRAIL S		TRAIL S		VICI	
WELL NAME	FARISS NO. 1		MOORE NO. 1-34		CAIN NO. 1-11	
LOCATION	SEC. 34, T17N, R20W		SEC. 34, T17N, R20W		SEC. 11, T19N, R20W	
OWNER	WOODS PETROLEUM CORP.		DYCO PETROLEUM CORP.		MCCULLOCH OIL CORP.	
COMPLETED	12/08/75		--/--/00		03/02/71	
SAMPLED	03/17/77		03/02/78		05/08/72	
FORMATION	PENN-RED FORK		PENN-OSWEGO		MISS-	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10406		10230		12328	
WELLHEAD PRESSURE,PSIG	2828		5000		900	
OPEN FLOW, MCFD	1290		NOT GIVEN		3099	
COMPONENT, MOLE PCT						
METHANE	82.1		80.2		96.4	
ETHANE	8.9		10.0		0.8	
PROPANE	4.4		4.3		0.3	
N-BUTANE	1.1		1.0		0.2	
ISOBUTANE	0.7		0.5		0.1	
N-PENTANE	0.4		0.2		TRACE	
ISOPENTANE	0.5		0.3		0.1	
CYCLOPENTANE	0.2		0.1		TRACE	
HEXANES PLUS	0.5		0.2		0.1	
NITROGEN	0.5		2.2		0.9	
OXYGEN	0.0		0.4		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.6		0.8	
HELIUM	0.03		0.03		0.02	
HEATING VALUE*	1237		1189		1019	
SPECIFIC GRAVITY	0.712		0.703		0.581	

	INDEX 5848 SAMPLE 14025		INDEX 5849 SAMPLE 16582		INDEX 5850 SAMPLE 17534	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	DEWEY		DEWEY		DEWEY	
FIELD	WICI SW		WATONGA-CHICKASHA TREND		WATONGA-CHICKASHA TREND	
WELL NAME	BASKETT NO. 1		DOWLING NO. 2-28		P. WILLS NO. 3	
LOCATION	SEC. 28, T19N, R20W		SEC. 28, T18N, R14W		SEC. 36, T18N, R14W	
OWNER	MONSANTO CO.		SOUTHLAND ROYALTY CO.		LADD PETROLEUM CORP.	
COMPLETED	12/27/73		07/20/82		08/08/84	
SAMPLED	06/10/74		07/20/82		12/07/84	
FORMATION	PENN-MORROW		PENN-MORROW		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10180		9352		11288	
WELLHEAD PRESSURE,PSIG	1350		250		3900	
OPEN FLOW, MCFD	1200		1100		4150	
COMPONENT, MOLE PCT						
METHANE	85.7		77.1		90.9	
ETHANE	7.6		10.1		4.4	
PROPANE	3.5		6.4		1.5	
N-BUTANE	0.8		1.8		0.4	
ISOBUTANE	0.4		1.1		0.3	
N-PENTANE	0.2		0.4		0.2	
ISOPENTANE	0.2		0.7		TRACE	
CYCLOPENTANE	0.1		0.3		0.2	
HEXANES PLUS	0.2		0.5		0.5	
NITROGEN	0.7		1.0		0.9	
OXYGEN	0.0		0.0		0.1	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		0.6		0.5	
HELIUM	0.05		0.03		0.02	
HEATING VALUE*	1167		1310		1104	
SPECIFIC GRAVITY	0.670		0.767		0.630	

	INDEX 5851 SAMPLE 16950		INDEX 5852 SAMPLE 11586		INDEX 5853 SAMPLE 13445	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	ARNETT		ARNETT E		ARNETT E	
WELL NAME	BUCKLES NO. 1		BOTD NO. 1		HANAN NO. 1	
LOCATION	SEC. 7, T19N, R24W		SEC. 32, T20N, R23W		SEC. 31, T20N, R23W	
OWNER	KAISER-FRANCIS OIL CO.		AMOCO PRODUCTION CO.		MAGNESS PETROLEUM CO.	
COMPLETED	--/--/82		06/17/65		06/16/72	
SAMPLED	05/17/83		07/16/68		10/02/72	
FORMATION	PENN-MORROW		DEVO-HUNTON		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		13426		10634	
WELLHEAD PRESSURE,PSIG	2300		3855		3657	
OPEN FLOW, MCFD	250		16190		4155	
COMPONENT, MOLE PCT						
METHANE	92.5		95.9		95.3	
ETHANE	2.4		0.4		1.9	
PROPANE	0.6		TRACE		0.5	
N-BUTANE	0.2		0.0		0.1	
ISOBUTANE	0.1		0.0		0.1	
N-PENTANE	0.1		0.0		TRACE	
ISOPENTANE	0.1		0.0		0.1	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1		0.0		0.1	
NITROGEN	1.5		1.7		0.3	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.3		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.0		1.9		1.6	
HELIUM	0.03		0.04		0.03	
HEATING VALUE*	1020		979		1029	
SPECIFIC GRAVITY	0.608		0.581		0.593	

	INDEX 5854 SAMPLE 13735		INDEX 5855 SAMPLE 11246		INDEX 5856 SAMPLE 11670	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	ARNETT N		ARNETT SE		ARNETT SE	
WELL NAME	RIDER UNIT NO. 1		BERRYMAN NO. 2		BERRYMAN UNIT NO. 1	
LOCATION	SEC. 8, T20N, R24W		SEC. 30, T19N, R23W		SEC. 6, T18N, R23W	
OWNER	WESSELY ENERGY CORP.		JONES & PELLOW OIL CO.		AMOCO PRODUCTION CO.	
COMPLETED	08/03/73		07/20/67		08/13/68	
SAMPLED	10/06/73		12/20/67		10/18/68	
FORMATION	PENN-MORROW		PENN-COTTAGE GROVE		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10130		8260		15154	
WELLHEAD PRESSURE,PSIG	3100		2100		4925	
OPEN FLOW, MCFD	3713		21090		7000	
COMPONENT, MOLE PCT						
METHANE	88.2		81.1		95.8	
ETHANE	5.3		9.8		0.3	
PROPANE	2.4		4.2		TRACE	
N-BUTANE	0.6		1.2		0.0	
ISOBUTANE	0.6		0.6		0.0	
N-PENTANE	0.3		0.9		0.0	
ISOPENTANE	0.3		0.3		0.0	
CYCLOPENTANE	0.1		0.2		0.0	
HEXANES PLUS	0.2		0.5		0.0	
NITROGEN	0.7		2.1		1.7	
OXYGEN	0.1		TRACE		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		0.4		2.1	
HELIUM	0.03		0.11		0.04	
HEATING VALUE*	1122		1216		976	
SPECIFIC GRAVITY	0.654		0.710		0.583	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5857 SAMPLE 13529	INDEX 5858 SAMPLE 10510	INDEX 5859 SAMPLE 10511
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	ARNETT SE	BISHOP	BISHOP
WELL NAME	A. C. BERRTMAN NO. 1-9	GRAY A-1	E. K. KING NO. 1
LOCATION	SEC. 9, T18N, R23W	SEC. 7, T17N, R25W	SEC. 20, T17N, R26W
OWNER	MCCULLOCH OIL CORP.	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	05/12/72	--/--/00	--/--/00
SAMPLED	05/12/73	04/09/66	04/09/66
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12068	7900	7900
WELLHEAD PRESSURE,PSIG	4000	1800	2200
OPEN FLOW, MCFD	4767	NOT GIVEN	1600
COMPONENT, MOLE PCT			
METHANE	92.6	82.5	79.6
ETHANE	3.8	8.1	10.0
PROPANE	0.9	4.4	4.7
N-BUTANE	0.4	1.3	1.3
ISOBUTANE	0.4	0.4	0.9
N-PENTANE	TRACE	0.3	0.6
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.3	0.7
NITROGEN	0.1	1.6	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.5	0.5
HELIUM	0.03	0.12	0.08
HEATING VALUE*	1061	1201	1259
SPECIFIC GRAVITY	0.613	0.698	0.730

	INDEX 5860 SAMPLE 10848	INDEX 5861 SAMPLE 6637	INDEX 5862 SAMPLE 13472
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	BISHOP	FARGO S	FARGO SE
WELL NAME	ARCHIE B NO. 1	T. M. MOORE NO. 1	PERRIN NO. 1
LOCATION	SEC. 18, T17N, R25W	SEC. 14, T21N, R23W	SEC. 1, T21N, R23W
OWNER	PHILLIPS PETROLEUM CO.	AMOCO PRODUCTION CO.	MESA PETROLEUM CO.
COMPLETED	05/11/64	02/19/58	12/06/71
SAMPLED	01/23/67	06/12/58	11/--/72
FORMATION	PENN-TONKAWA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7811	9319	9096
WELLHEAD PRESSURE,PSIG	2217	105	2795
OPEN FLOW, MCFD	19750	1290	18800
COMPONENT, MOLE PCT			
METHANE	82.7	91.8	83.1
ETHANE	8.0	4.6	4.2
PROPANE	4.4	1.4	1.3
N-BUTANE	1.1	0.3	0.3
ISOBUTANE	0.6	0.3	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.0	1.1	7.5
OXYGEN	0.0	TRACE	2.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.1	1.1
HELIUM	0.12	0.05	0.04
HEATING VALUE*	1184	1091	977
SPECIFIC GRAVITY	0.690	0.623	0.654

	INDEX 5863 SAMPLE 9070	INDEX 5864 SAMPLE 11582	INDEX 5865 SAMPLE 12697
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	GAGE	GAGE	GAGE
WELL NAME	FEERER NO. 1-33	MAMBY UNIT B NO. 1	HARVEY UNIT NO. 1
LOCATION	SEC. 33, T23N, R23W	SEC. 34, T22N, R24W	SEC. 24, T23N, R24W
OWNER	SHELL OIL CO.	AMOCO PRODUCTION CO.	SHENANDOAH OIL CORP.
COMPLETED	01/24/63	11/14/62	01/20/71
SAMPLED	08/23/63	07/16/68	03/03/71
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8226	8807	8268
WELLHEAD PRESSURE,PSIG	2625	1890	2390
OPEN FLOW, MCFD	84000	256	21000
COMPONENT, MOLE PCT			
METHANE	81.6	91.1	92.5
ETHANE	9.3	4.0	3.3
PROPANE	4.0	1.7	1.1
N-BUTANE	1.1	0.6	0.2
ISOBUTANE	0.9	0.2	0.2
N-PENTANE	0.3	0.3	0.0
ISOPENTANE	0.5	0.3	0.2
CYCLOPENTANE	0.4	0.1	0.1
HEXANES PLUS	1.0	0.3	0.2
NITROGEN	0.3	0.3	1.2
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.8
HELIUM	0.05	0.09	0.04
HEATING VALUE*	1265	1110	1061
SPECIFIC GRAVITY	0.727	0.635	0.612

	INDEX 5866 SAMPLE 15679	INDEX 5867 SAMPLE 9616	INDEX 5868 SAMPLE 9986
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	GABE	GAGE N	GAGE SE
WELL NAME	PREWETT NO. 1	NO. 1	PEER NO. 1
LOCATION	SEC. 29, T23N, R23W	SEC. 8, T22N, R24W	SEC. 36, T21N, R24W
OWNER	PHOENIX RESOURCES CO.	TIDEWATER OIL CO.	J. M. HUBER CORP.
COMPLETED	03/--/78	07/11/64	04/09/65
SAMPLED	06/23/79	10/28/64	07/17/65
FORMATION	MISS-MERAMEC	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11617	8589	9604
WELLHEAD PRESSURE,PSIG	1680	2600	3278
OPEN FLOW, MCFD	2151	1500	4390
COMPONENT, MOLE PCT			
METHANE	94.7	91.8	95.8
ETHANE	1.6	4.2	1.6
PROPANE	0.5	1.4	0.5
N-BUTANE	0.3	0.4	0.1
ISOBUTANE	0.1	0.3	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	1.1	0.5	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	1.3
HELIUM	0.04	0.05	0.04
HEATING VALUE*	1038	1097	1024
SPECIFIC GRAVITY	0.599	0.622	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5869 SAMPLE 11583	INDEX 5870 SAMPLE 11276	INDEX 5871 SAMPLE 12611
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	GAGE SE	GOODWIN S	GOODWIN S
WELL NAME	STATE OF OKLAHOMA K NO. 1	W. A. MEYERS NO. 1	LEAH TAYLOR NO. 1
LOCATION	SEC. 33, T21N, R24W	SEC. 36, T20N, R26W	SEC. 23, T20N, R26W
OWNER	AMOCO PRODUCTION CO.	MOBIL OIL CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	08/09/60	02/11/59	11/20/69
SAMPLED	07/16/68	02/12/68	12/24/70
FORMATION	PENN-MORROW	PENN-MORROW	DEVO-HUNTON & ORDO-VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9640	11360	13801
WELLHEAD PRESSURE,PSIG	2265	3145	4360
OPEN FLOW, MCFD	1242	13140	10745
COMPONENT, MOLE PCT			
METHANE	93.4	96.5	96.5
ETHANE	3.2	0.9	0.5
PROPANE	0.8	0.2	0.1
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.4	0.0	0.0
NITROGEN	0.4	0.2	1.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	2.1	1.9
HELIUM	0.04	0.03	0.06
HEATING VALUE*	1057	999	989
SPECIFIC GRAVITY	0.608	0.582	0.581

	INDEX 5872 SAMPLE 16341	INDEX 5873 SAMPLE 16238	INDEX 5874 SAMPLE 14630
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	GRAND NW	GRAND W	HARMON SE
WELL NAME	STATE OF OKLAHOMA NO. 1-36	STATE OF OKLAHOMA NO. 1	STATE NO. 1
LOCATION	SEC. 36, T19N, R25W	SEC. 16, T18N, R25W	SEC. 32, T19N, R21W
OWNER	HAMILTON BROTHERS OIL CO.	HAMILTON BROTHERS OIL CO.	ENSERCH EXPLORATION, INC.
COMPLETED	01/30/81	12/--/80	09/03/75
SAMPLED	09/25/81	04/20/81	03/26/76
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11214	11980	11060
WELLHEAD PRESSURE,PSIG	5000	2176	3850
OPEN FLOW, MCFD	10483	2020	3600
COMPONENT, MOLE PCT			
METHANE	93.6	94.1	89.1
ETHANE	3.4	2.4	5.7
PROPANE	0.5	0.5	2.1
N-BUTANE	0.2	0.1	0.5
ISOBUTANE	0.0	0.1	0.4
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	0.5	0.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	2.0	1.2
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1038	1025	1103
SPECIFIC GRAVITY	0.603	0.600	0.637

	INDEX 5875 SAMPLE 15904	INDEX 5876 SAMPLE 9581	INDEX 5877 SAMPLE 14938
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	HARMON SE	HIGGINS S	HIGGINS S
WELL NAME	MORAN NO. 1	STUCKER NO. 1	STATE NO. 1-11
LOCATION	SEC. 29, T19N, R22W	SEC. 8, T18N, R26W	SEC. 11, T18N, R26W
OWNER	MONSANTO CO.	SUN OIL CO.	HOOVER & BRACKEN, INC.
COMPLETED	02/22/79	04/08/64	12/05/76
SAMPLED	02/21/80	09/21/64	03/14/77
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11036	11674	11829
WELLHEAD PRESSURE,PSIG	3000	5200	NOT GIVEN
OPEN FLOW, MCFD	9354	4700	6000
COMPONENT, MOLE PCT			
METHANE	88.5	94.6	95.1
ETHANE	5.8	2.5	2.0
PROPANE	2.2	0.7	0.3
N-BUTANE	0.5	0.2	0.1
ISOBUTANE	0.5	TRACE	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	0.6	0.1	0.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.3	2.0
HELIUM	0.04	0.02	0.03
HEATING VALUE*	1115	1051	1019
SPECIFIC GRAVITY	0.644	0.600	0.593

	INDEX 5878 SAMPLE 16804	INDEX 5879 SAMPLE 9542	INDEX 5880 SAMPLE 11584
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	IDLAND N	MILDER	MILDER
WELL NAME	CHARLES HARRIS NO. 1-27	M. A. JONTRA NO. 1	SHATTUCK UNIT 1 NO. 2
LOCATION	SEC. 27, T18N, R22W	SEC. 14, T22N, R25W	SEC. 14, T22N, R26W
OWNER	AMQUEST CORP.	TEXACO INC.	AMOCO PRODUCTION CO.
COMPLETED	04/21/83	05/13/64	06/08/59
SAMPLED	04/21/83	08/19/64	07/16/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11943	8903	8984
WELLHEAD PRESSURE,PSIG	3200	2900	825
OPEN FLOW, MCFD	3027	3329	1428
COMPONENT, MOLE PCT			
METHANE	92.5	92.4	87.2
ETHANE	3.4	4.0	5.8
PROPANE	0.9	1.5	2.9
N-BUTANE	0.2	0.4	1.0
ISOBUTANE	0.3	0.1	0.4
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.4	0.3	0.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.9	1.0
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1071	1081	1149
SPECIFIC GRAVITY	0.619	0.615	0.664

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5881 SAMPLE 14885	INDEX 5882 SAMPLE 16260	INDEX 5883 SAMPLE 6349
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	MILDER	MILDER	ROCANE-LAVERNE GAS AREA
WELL NAME	MOGAN NO. 1	STUART UNIT NO. 1	L. PEETOOM NO. 1
LOCATION	SEC. 2, T22N, R25W	SEC. 9, T22N, R26W	SEC. 29, T24N, R25W
OWNER	M & L OPERATING CO.	MELBOURNE OIL CO.	SHELL OIL CO.
COMPLETED	10/21/76	02/99/80	05/14/57
SAMPLED	01/19/77	05/21/81	06/27/57
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8744	9118	7961
WELLHEAD PRESSURE,PSIG	2800	2500	2300
OPEN FLOW, MCFD	2600	2400	2400
COMPONENT, MOLE PCT			
METHANE	91.3	86.2	82.8
ETHANE	4.5	5.8	7.1
PROPANE	1.5	3.0	3.1
N-BUTANE	0.4	0.8	1.0
ISOBUTANE	0.2	0.7	1.0
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.8	1.1
CYCLOPENTANE	0.1	0.3	0.5
HEXANES PLUS	0.2	0.6	1.6
NITROGEN	0.5	0.6	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.1	0.7
HELIUM	0.04	0.04	0.06
HEATING VALUE*	1190	1190	1270
SPECIFIC GRAVITY	0.625	0.689	0.735

	INDEX 5884 SAMPLE 6618	INDEX 5885 SAMPLE 7320	INDEX 5886 SAMPLE 7613
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	ROCANE-LAVERNE GAS AREA	ROCANE-LAVERNE GAS AREA	ROCANE-LAVERNE GAS AREA
WELL NAME	RUSSELL TUNE UNIT NO. 1	STACEY A. WOOD NO. 1	MCCLUNG NO. 1
LOCATION	SEC. 35, T24N, R23W	SEC. 11, T23N, R26W	SEC. 17, T24N, R24W
OWNER	AMOCO PRODUCTION CO.	ATLANTIC RICHFIELD CO.	TEXOMA PRODUCTION CO.
COMPLETED	11/26/57	11/16/59	06/24/60
SAMPLED	05/27/58	12/31/59	07/21/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7849	8432	7720
WELLHEAD PRESSURE,PSIG	2315	NOT GIVEN	1789
OPEN FLOW, MCFD	19000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.5	90.1	87.2
ETHANE	4.3	4.8	6.9
PROPANE	1.6	1.5	3.0
N-BUTANE	0.4	0.6	0.9
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.3	0.7	0.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.6
HELIUM	0.10	0.04	0.10
HEATING VALUE*	1099	1108	1157
SPECIFIC GRAVITY	0.623	0.637	0.656

	INDEX 5887 SAMPLE 8005	INDEX 5888 SAMPLE 8233	INDEX 5889 SAMPLE 8313
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	ROCANE-LAVERNE GAS AREA	ROCANE-LAVERNE GAS AREA	ROCANE-LAVERNE GAS AREA
WELL NAME	PITTMAN UNIT A-1	MACE	CORLESS UNIT B
LOCATION	SEC. 2, T23N, R23W	SEC. 2, T23N, R25W	SEC. 4, T24N, R25W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	04/11/61	06/22/61	06/28/61
SAMPLED	05/31/61	10/10/61	12/04/61
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7891	8159	7562
WELLHEAD PRESSURE,PSIG	2375	2200	1850
OPEN FLOW, MCFD	1750	4200	1850
COMPONENT, MOLE PCT			
METHANE	93.0	91.1	82.6
ETHANE	3.5	4.6	7.8
PROPANE	1.1	1.8	4.0
N-BUTANE	0.3	0.5	1.4
ISOBUTANE	0.3	0.3	0.7
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	1.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.7	0.4	1.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.5
HELIUM	0.10	0.05	0.03
HEATING VALUE*	1072	1097	1226
SPECIFIC GRAVITY	0.609	0.625	0.707

	INDEX 5890 SAMPLE 8902	INDEX 5891 SAMPLE 9827	INDEX 5892 SAMPLE 9852
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	ROCANE-LAVERNE GAS AREA	ROCANE-LAVERNE GAS AREA	ROCANE-LAVERNE GAS AREA
WELL NAME	SNYDER NO. 1	SUTTER D NO. 1	SUTTER 1-29
LOCATION	SEC. 7, T23N, R24W	SEC. 21, T23N, R23W	SEC. 29, T22N, R23W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	10/17/62	02/15/65	01/29/65
SAMPLED	03/25/63	04/01/65	04/23/65
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8230	8142	8708
WELLHEAD PRESSURE,PSIG	2270	2560	2559
OPEN FLOW, MCFD	600	3000	6600
COMPONENT, MOLE PCT			
METHANE	87.1	82.3	91.2
ETHANE	4.4	8.9	4.8
PROPANE	1.4	3.8	1.7
N-BUTANE	0.3	0.9	0.4
ISOBUTANE	TRACE	0.7	0.1
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.0	0.6	0.2
NITROGEN	4.7	1.2	0.2
OXYGEN	1.0	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.9
HELIUM	0.05	0.05	0.05
HEATING VALUE*	1012	1214	1098
SPECIFIC GRAVITY	0.631	0.704	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5893 SAMPLE 13383	INDEX 5894 SAMPLE 13865	INDEX 5895 SAMPLE 14403
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	LATTA UNIT NO. 1	WHITTENBERG NO. 1	MARDY NO. 1
LOCATION	SEC. 5, T23N, R23W	SEC. 32, T24N, R23W	SEC. 7, T23N, R24W
OWNER	WESSELY ENERGY CORP.	TEXAS OIL & GAS CORP.	ZOLLER & DANNEBERG, INC.
COMPLETED	06/08/72	07/24/73	03/01/75
SAMPLED	09/18/72	01/17/74	06/--/75
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8038	8034	8292
WELLHEAD PRESSURE,PSIG	2645	2195	2100
OPEN FLOW, MCFD	19239	2480	4100
COMPONENT, MOLE PCT			
METHANE	94.7	94.8	86.0
ETHANE	3.5	2.6	6.5
PROPANE	0.8	0.9	3.1
N-BUTANE	0.2	0.2	0.9
ISOBUTANE	0.2	0.2	0.6
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.1	0.7
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	0.4	0.4	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.8	0.8
HELIUM	0.04	0.01	0.05
HEATING VALUE*	1056	1055	1185
SPECIFIC GRAVITY	0.600	0.597	0.682

	INDEX 5896 SAMPLE 16258	INDEX 5897 SAMPLE 10562	INDEX 5898 SAMPLE 10563
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	PEEK NE	PEEK S	PEEK S
WELL NAME	MILLER NO. 1-3	BERRYMAN A NO. 1	J. W. BERRYMAN NO. 1
LOCATION	SEC. 3, T18N, R22W	SEC. 26, T17N, R23W	SEC. 27, T17N, R23W
OWNER	NATOMAS NORTH AMERICA, INC.	SUN OIL CO.	SUN OIL CO.
COMPLETED	02/06/81	02/01/66	11/13/65
SAMPLED	05/08/81	05/12/66	05/12/66
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11512	8405	8400
WELLHEAD PRESSURE,PSIG	4210	2250	2250
OPEN FLOW, MCFD	5500	42000	3000
COMPONENT, MOLE PCT			
METHANE	91.2	91.5	84.2
ETHANE	4.7	8.4	7.9
PROPANE	1.4	4.2	3.3
N-BUTANE	0.3	1.6	1.1
ISOBUTANE	0.2	TRACE	0.2
N-PENTANE	TRACE	0.6	0.6
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	TRACE	0.3	0.3
HEXANES PLUS	0.1	0.7	0.7
NITROGEN	0.6	1.5	1.1
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.4	0.4
HELIUM	0.04	0.11	0.10
HEATING VALUE*	1071	1229	1201
SPECIFIC GRAVITY	0.618	0.716	0.690

	INDEX 5899 SAMPLE 14724	INDEX 5900 SAMPLE 15944	INDEX 5901 SAMPLE 6939
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	PEEK S	PEEK S	SHATTUCK
WELL NAME	WAGNON NO. 1-11	D. B. SMREKER NO. 1	BATT UNIT NO. 1
LOCATION	SEC. 11, T16N, R24W	SEC. 36, T18N, R23W	SEC. 32, T21N, R25W
OWNER	TENNECO OIL CO.	TEXAS PACIFIC OIL CO., INC.	AMOCO PRODUCTION CO.
COMPLETED	04/30/76	12/01/78	12/26/58
SAMPLED	07/--/76	04/24/80	02/13/59
FORMATION	PENN-TONKAWA	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8107	11070	9722
WELLHEAD PRESSURE,PSIG	2100	5464	2875
OPEN FLOW, MCFD	2600	3409	1817
COMPONENT, MOLE PCT			
METHANE	86.3	82.7	93.6
ETHANE	7.5	7.6	2.9
PROPANE	3.0	4.1	1.2
N-BUTANE	0.7	1.3	0.2
ISOBUTANE	0.4	0.9	0.2
N-PENTANE	0.1	2.3	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.6	0.3
NITROGEN	1.2	0.0	TRACE
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	1.1
HELIUM	0.11	0.03	0.03
HEATING VALUE*	1150	1287	1068
SPECIFIC GRAVITY	0.659	0.731	0.607

	INDEX 5902 SAMPLE 7492	INDEX 5903 SAMPLE 14306	INDEX 5904 SAMPLE 6827
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ELLIS	ELLIS	ELLIS
FIELD	SHATTUCK E	SHATTUCK N	SHATTUCK W
WELL NAME	SHERRILL OPER. UNIT NO. 1	WALTON NO. 1	M. J. SCHDENHALS UNIT NO. 1
LOCATION	SEC. 36, T21N, R25W	SEC. 15, T21N, R25W	SEC. 24, T21N, R26W
OWNER	AMOCO PRODUCTION CO.	ARKLA EXPLORATION CO.	MOBIL OIL CORP.
COMPLETED	11/16/59	--/--/00	06/10/58
SAMPLED	12/21/59	03/21/75	10/14/58
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9742	9430	9243
WELLHEAD PRESSURE,PSIG	2725	3100	2803
OPEN FLOW, MCFD	2000	NOT GIVEN	13500
COMPONENT, MOLE PCT			
METHANE	83.2	91.0	85.0
ETHANE	9.3	4.5	9.2
PROPANE	3.6	1.7	3.2
N-BUTANE	1.7	0.5	0.5
ISOBUTANE	1.5	0.3	0.4
N-PENTANE	1.1	0.1	TRACE
ISOPENTANE	1.1	0.2	0.3
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	2.0	0.2	0.1
NITROGEN	0.3	0.5	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.0	0.8
HELIUM	0.02	0.04	0.04
HEATING VALUE*	1333	1100	1157
SPECIFIC GRAVITY	0.765	0.631	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5905 SAMPLE 10717		INDEX 5906 SAMPLE 10770		INDEX 5907 SAMPLE 8488	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	TANGIER		TANGIER		TOUZALIN	
WELL NAME	F. H. MOREHART NO. 1		MOREHART NO. 1		STATE OF OKLAHOMA UNIT Y	
LOCATION	SEC. 12, T22N, R23W		SEC. 12, T22N, R23W		SEC. 36, T22N, R26W	
OWNER	SUN OIL CO.		SUN OIL CO.		AMOCO PRODUCTION CO.	
COMPLETED	07/14/66		06/28/66		02/09/62	
SAMPLED	09/14/66		11/07/66		04/02/62	
FORMATION	MISS-CHESTER		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8612		8403		9197	
WELLHEAD PRESSURE,PSIG	2535		2493		1125	
OPEN FLOW, MCFD	3902		2043		680	
COMPONENT, MOLE PCT						
METHANE	89.9		80.0		96.4	
ETHANE	3.9		8.8		1.3	
PROPANE	1.7		4.8		0.5	
N-BUTANE	0.5		1.5		0.1	
ISOBUTANE	0.3		0.9		TRACE	
N-PENTANE	0.1		0.5		TRACE	
ISOPENTANE	0.3		0.5		0.1	
CYCLOPENTANE	0.1		0.2		TRACE	
HEXANES PLUS	0.3		0.5		0.1	
NITROGEN	1.7		1.3		0.9	
OXYGEN	0.2		0.2		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.0		0.9		0.7	
HELIUM	0.06		0.05		0.07	
HEATING VALUE*	1088		1249		1020	
SPECIFIC GRAVITY	0.640		0.734		0.580	

	INDEX 5908 SAMPLE 8489		INDEX 5909 SAMPLE 11581		INDEX 5910 SAMPLE 13151	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		ELLIS	
FIELD	TOUZALIN		TOUZALIN		VICI W	
WELL NAME	STATE OF OKLAHOMA G.U. Y		STATE OF OKLAHOMA Y-T NO. 1		HAMILTON NO. 1	
LOCATION	SEC. 36, T22N, R26W		SEC. 36, T22N, R26W		SEC. 5, T19N, R21W	
OWNER	AMOCO PRODUCTION CO.		AMOCO PRODUCTION CO.		NATOL PETROLEUM CORP.	
COMPLETED	02/12/62		03/13/62		--/--/00	
SAMPLED	04/02/62		07/11/68		02/16/72	
FORMATION	MISS-CHESTER		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	9684		NOT GIVEN		10402	
WELLHEAD PRESSURE,PSIG	3075		2586		3363	
OPEN FLOW, MCFD	7600		33282		9225	
COMPONENT, MOLE PCT						
METHANE	95.2		95.3		85.9	
ETHANE	1.6		1.8		7.6	
PROPANE	0.3		0.4		3.2	
N-BUTANE	0.1		0.2		0.7	
ISOBUTANE	TRACE		0.0		0.4	
N-PENTANE	TRACE		0.1		0.2	
ISOPENTANE	0.1		0.0		0.1	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	TRACE		0.2		0.1	
NITROGEN	1.7		0.8		0.6	
OXYGEN	0.2		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.9		1.1	
HELIUM	0.06		0.10		0.04	
HEATING VALUE*	1008		1033		1148	
SPECIFIC GRAVITY	0.580		0.591		0.665	

	INDEX 5911 SAMPLE 13155		INDEX 5912 SAMPLE 13979		INDEX 5913 SAMPLE 16016	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ELLIS		ELLIS		GARFIELD	
FIELD	VICI W		VICI W		BARNES W	
WELL NAME	CLEM NO. 1		AARON MORGAN NO. 1		RANCH NO. 2	
LOCATION	SEC. 4, T19N, R21W		SEC. 3, T19N, R21W		SEC. 33, T23N, R3W	
OWNER	NATOL PETROLEUM CORP.		NATOL PETROLEUM CORP.		METAL OIL PRODUCING CO.	
COMPLETED	03/21/71		12/12/13		--/--/00	
SAMPLED	02/--/72		04/19/14		07/21/80	
FORMATION	PENN-MORROW		PENN-MORROW		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	10386		10329		980	
WELLHEAD PRESSURE,PSIG	4500		2500		200	
OPEN FLOW, MCFD	9149		10000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	97.5		85.1		78.4	
ETHANE	0.5		7.3		7.4	
PROPANE	0.1		3.3		3.3	
N-BUTANE	0.1		0.9		1.0	
ISOBUTANE	TRACE		0.6		0.5	
N-PENTANE	TRACE		0.5		0.3	
ISOPENTANE	0.0		0.4		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.4		0.2	
NITROGEN	0.7		0.5		8.2	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		1.0		0.2	
HELIUM	0.03		0.04		0.18	
HEATING VALUE*	1008		1183		1103	
SPECIFIC GRAVITY	0.573		0.683		0.701	

	INDEX 5914 SAMPLE 4946		INDEX 5915 SAMPLE 10059		INDEX 5916 SAMPLE 17736	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	GARFIELD		GARFIELD		GARFIELD	
FIELD	BILLINGS NW		BROWN S		DOUGLAS N	
WELL NAME	ENSMINGER NO. 1		JOHNSON NO. 1		EAST DOUGLAS NO. 32-1	
LOCATION	SEC. 12, T24N, R3W		SEC. 15, T20N, R4W		SEC. 32, T21N, R4W	
OWNER	NORTHERN OKLAHOMA GAS CO.		JORDON PETROLEUM CO.		CLARK RESOURCES, INC.	
COMPLETED	12/14/49		02/01/65		10/09/84	
SAMPLED	08/03/50		08/27/65		06/29/85	
FORMATION	MISS-LIME		PENN-RED FORK		MISS-CHESTER - COTTAGE GROVE	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4563		5576		6220	
WELLHEAD PRESSURE,PSIG	1560		1800		1800	
OPEN FLOW, MCFD	1360		1880		960	
COMPONENT, MOLE PCT						
METHANE	73.0		86.0		83.4	
ETHANE	9.5		5.6		7.0	
PROPANE	4.1		2.5		3.6	
N-BUTANE	1.2		0.8		1.4	
ISOBUTANE	0.3		0.4		0.6	
N-PENTANE	0.3		0.1		0.5	
ISOPENTANE	TRACE		0.3		0.5	
CYCLOPENTANE	0.1		0.1		0.2	
HEXANES PLUS	0.3		0.2		0.6	
NITROGEN	10.4		2.6		1.7	
OXYGEN	0.2		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	---		0.0		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.3		0.3		0.4	
HELIUM	0.17		0.10		0.06	
HEATING VALUE*	1101		1126		1212	
SPECIFIC GRAVITY	0.726		0.658		0.704	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5917 SAMPLE 5860	INDEX 5918 SAMPLE 9644	INDEX 5919 SAMPLE 9902
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	ELK HORN NW	ENID NE	ENID NE
WELL NAME	BENNETT NO- 1	BRAKHAGE NO. 1	LERKE NO. 1
LOCATION	SEC. 30, T20N, R3W	SEC. 14, T23N, R7W	SEC. 23, T23N, R5W
OWNER	M & M DRILLING CORP., ET AL.	SUN OIL CO.	LIVINGSTON OIL CO.
COMPLETED	10/24/54	11/22/62	03/26/65
SAMPLED	06/11/55	11/23/64	04/21/65
FORMATION	PENN-PERRY	PENN-SKINNER	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4054	5966	5947
WELLHEAD PRESSURE,PSIG	1625	1425	1040
OPEN FLOW, MCFD	4100	1420	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	84.8	72.1
ETHANE	5.9	5.9	9.6
PROPANE	2.6	3.1	6.6
N-BUTANE	0.9	1.0	3.4
ISOBUTANE	0.3	0.6	1.8
N-PENTANE	0.2	0.2	0.7
ISOPENTANE	0.1	0.3	1.3
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.3	0.2	0.9
NITROGEN	2.1	3.5	2.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.09	0.10	0.05
HEATING VALUE*	1129	1131	1392
SPECIFIC GRAVITY	0.653	0.670	0.828

	INDEX 5920 SAMPLE 12310	INDEX 5921 SAMPLE 12316	INDEX 5922 SAMPLE 12890
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	ENID NE	ENID NE	ENID NE
WELL NAME	ZALOUDEK NO. 3-1	ZALOUDEK NO. 3-1	HOMER P. KING NO. 1
LOCATION	SEC. 3, T23N, R6W	SEC. 3, T23N, R6W	SEC. 29, T23N, R5W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	05/27/70	04/09/70	03/26/70
SAMPLED	07/01/70	07/08/70	06/29/71
FORMATION	PENN-SKINNER	MISS-	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5658	6062	5937
WELLHEAD PRESSURE,PSIG	1697	1697	763
OPEN FLOW, MCFD	1650	2510	4249
COMPONENT, MOLE PCT			
METHANE	83.4	82.1	87.7
ETHANE	7.3	6.1	5.6
PROPANE	3.4	3.7	2.1
N-BUTANE	0.8	1.0	0.4
ISOBUTANE	0.5	0.7	0.2
N-PENTANE	0.2	0.4	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	3.9	5.0	3.4
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.09	0.12	0.10
HEATING VALUE*	1122	1135	1073
SPECIFIC GRAVITY	0.668	0.690	0.632

	INDEX 5923 SAMPLE 2361	INDEX 5924 SAMPLE 2362	INDEX 5925 SAMPLE 2363
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARBER	GARBER	GARBER
WELL NAME	KENDT NO. 1-A	WILCOX NO. 1	MAYES NO. 1
LOCATION	SEC. 36, T23N, R4W	SEC. 19, T23N, R3W	SEC. 30, T23N, R3W
OWNER	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.	CHAMPLIN REFINING CO.
COMPLETED	03/01/31	11/01/27	02/01/31
SAMPLED	07/17/31	07/17/31	07/17/31
FORMATION	MISS-	ORDD-WILCOX	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5095	5250	5080
WELLHEAD PRESSURE,PSIG	1700	1750	1700
OPEN FLOW, MCFD	6000	8000	12000
COMPONENT, MOLE PCT			
METHANE	69.7	69.7	74.4
ETHANE	24.8	27.5	23.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.7	1.6	1.1
OXYGEN	2.1	0.5	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.9	1.0
HELIUM	0.04	0.06	0.06
HEATING VALUE*	1150	1199	1173
SPECIFIC GRAVITY	0.707	0.708	0.685

	INDEX 5926 SAMPLE 4483	INDEX 5927 SAMPLE 5376	INDEX 5928 SAMPLE 9200
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	GARBER	GARBER E	GREEN VALLEY
WELL NAME	MARINER NO. 2	CASSADY NO. 2	BAMBERG NO. 1
LOCATION	SEC. 16, T22N, R3W	SEC. 23, T22N, R3W	SEC. 2, T21N, R3W
OWNER	CITIES SERVICE OIL CO.	PANDA DRILLING CO.	ROYCE & HERNDON., ET AL.
COMPLETED	--/--/00	10/02/52	11/15/63
SAMPLED	03/17/48	01/02/53	12/13/63
FORMATION	PENN-OSWEGO	NOT GIVEN	PENN-CREWS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4620	1421	2122
WELLHEAD PRESSURE,PSIG	1520	675	500
OPEN FLOW, MCFD	NOT GIVEN	1000	3000
COMPONENT, MOLE PCT			
METHANE	50.7	61.8	44.2
ETHANE	47.3	5.7	2.4
PROPANE	---	3.0	1.6
N-BUTANE	---	0.7	0.7
ISOBUTANE	---	0.5	0.1
N-PENTANE	---	0.5	0.1
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.8	27.3	49.9
OXYGEN	0.5	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	0.06	0.31	0.45
HEATING VALUE*	1561	873	581
SPECIFIC GRAVITY	0.800	0.756	0.809

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5929 SAMPLE 9948	INDEX 5930 SAMPLE 13713	INDEX 5931 SAMPLE 12190
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	HUNTER S	HUNTER S	KREMLIN E
WELL NAME	ATHEY NO. 1	FISCHBACHER NO. 2	IRENE GAU NO. 1
LOCATION	SEC. 20, T23N, R4W	SEC. 17, T23N, R4W	SEC. 35, T24N, R6W
OWNER	LIVINGSTON OIL CO.	MASSEY & MOORE CO.	EL PASO NATURAL GAS CO.
COMPLETED	03/28/64	02/--/73	12/16/69
SAMPLED	07/01/65	09/10/73	02/12/70
FORMATION	MISS-OSAGE	MISS-	PENN-SKINNER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5590	5500	5608
WELLHEAD PRESSURE,PSIG	2072	1120	1815
OPEN FLOW, MCFD	9368	1200	13000
COMPONENT, MOLE PCT			
METHANE	84.0	83.5	82.4
ETHANE	7.3	7.9	5.8
PROPANE	3.1	3.7	3.3
N-BUTANE	0.9	1.1	0.8
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.2	0.3	0.5
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	2.5	2.6	4.8
OXYGEN	0.2	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.6
HELIUM	0.09	0.08	0.13
HEATING VALUE*	1138	1180	1135
SPECIFIC GRAVITY	0.672	0.686	0.691

	INDEX 5932 SAMPLE 15083	INDEX 5933 SAMPLE 10095	INDEX 5934 SAMPLE 9016
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	KREMLIN E	MITCHELL	SOONER TREND
WELL NAME	THOMPSON NO. 1	FORSMEE NO. 1	M. C. LIEBHART NO. 1
LOCATION	SEC. 1, T24N, R 6W	SEC. 11, T20N, R3W	SEC. 35, T22N, R8W
OWNER	R. P. LAMMERTS OIL CO.	LIVINGSTON OIL CO.	HARPER OIL CO., ET AL.
COMPLETED	12/27/76	04/17/65	02/25/62
SAMPLED	08/26/77	09/26/65	06/17/63
FORMATION	PENN-SKINNER	PENN-SKINNER	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5326	5378	6746
WELLHEAD PRESSURE,PSIG	800	875	1525
OPEN FLOW, MCFD	1250	1350	750
COMPONENT, MOLE PCT			
METHANE	77.0	76.5	84.6
ETHANE	7.2	8.5	8.1
PROPANE	4.6	4.5	3.0
N-BUTANE	1.5	1.1	1.3
ISOBUTANE	0.6	0.7	0.5
N-PENTANE	0.4	0.5	0.3
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	7.8	7.3	1.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.12	0.12	0.10
HEATING VALUE*	1143	1140	1188
SPECIFIC GRAVITY	0.724	0.719	0.681

	INDEX 5935 SAMPLE 9356	INDEX 5936 SAMPLE 9558	INDEX 5937 SAMPLE 10291
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	LESTER DIERKSON NO. 1	J. LEE CROMWELL	HODGDEN NO. 1
LOCATION	SEC. 23, T22N, R8W	SEC. 10, T21N, R8W	SEC. 33, T22N, R8W
OWNER	ATLANTIC RICHFIELD CO.	HARPER OIL CO.	SUN OIL CO.
COMPLETED	03/27/64	05/23/64	08/01/65
SAMPLED	05/19/64	09/15/64	11/16/65
FORMATION	MISS-LIME	MISS-	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6961	7254	6840
WELLHEAD PRESSURE,PSIG	2094	1485	1958
OPEN FLOW, MCFD	345000	1950	4126
COMPONENT, MOLE PCT			
METHANE	82.1	86.4	80.2
ETHANE	8.5	7.5	8.2
PROPANE	3.7	2.6	3.5
N-BUTANE	1.7	0.8	1.2
ISOBUTANE	TRACE	0.3	0.6
N-PENTANE	0.5	0.1	0.6
ISOPENTANE	0.5	0.2	0.1
CYCLOPENTANE	0.2	0.1	0.3
HEXANES PLUS	0.5	0.1	0.9
NITROGEN	2.1	1.4	4.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.6
HELIUM	0.07	0.06	0.04
HEATING VALUE*	1215	1136	1193
SPECIFIC GRAVITY	0.702	0.654	0.719

	INDEX 5938 SAMPLE 10433	INDEX 5939 SAMPLE 10549	INDEX 5940 SAMPLE 10725
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	SAWYER NO. 1	MUNKRESS NO. 1	HENRY MOEMLE UNIT NO. 1
LOCATION	SEC. 15, T21N, R7W	SEC. 6, T21N, R8W	SEC. 3, T22N, R8W
OWNER	SKELLY OIL CO.	HARPER OIL CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/00	12/01/65	05/15/66
SAMPLED	03/07/66	05/03/66	09/09/66
FORMATION	MISS-MERAMEC	PENN-RED FORK	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6770	6550	6546
WELLHEAD PRESSURE,PSIG	1200	1600	1943
OPEN FLOW, MCFD	850	1285	17420
COMPONENT, MOLE PCT			
METHANE	84.5	92.9	89.0
ETHANE	7.7	3.7	5.7
PROPANE	3.2	1.0	2.2
N-BUTANE	1.1	0.2	0.7
ISOBUTANE	0.5	0.1	0.3
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.4	1.4	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.10	0.12	0.05
HEATING VALUE*	1166	1057	1117
SPECIFIC GRAVITY	0.677	0.602	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5941 SAMPLE 10741	INDEX 5942 SAMPLE 10749	INDEX 5943 SAMPLE 10772
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	ROBERTA BASS NO. 1	ANDERSON-BEARD NO. 1	NEWTON MCGILL UNIT NO. 1
LOCATION	SEC. 15, T22N, R7W	SEC. 19, T21N, R6W	SEC. 28, T22N, R7W
OWNER	TENNECO OIL CO.	GUNGOLL & GUNGOLL	ATLANTIC RICHFIELD CO.
COMPLETED	07/23/66	07/01/65	05/23/66
SAMPLED	--/--/00	10/15/66	11/09/66
FORMATION	PERM-WICHITA-ALBANY	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6520	6830	6573
WELLHEAD PRESSURE,PSIG	1649	2200	2022
OPEN FLOW, MCFD	3040	18000	13763
COMPONENT, MOLE PCT			
METHANE	84.3	86.5	84.3
ETHANE	7.6	7.0	8.4
PROPANE	3.3	3.0	3.4
N-BUTANE	1.1	0.9	1.0
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	2.0	1.1	1.5
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.07	0.05	0.06
HEATING VALUE*	1172	1139	1159
SPECIFIC GRAVITY	0.679	0.654	0.669

	INDEX 5944 SAMPLE 11651	INDEX 5945 SAMPLE 11759	INDEX 5946 SAMPLE 16345
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	BAKER NO. 26-1	EGGERS-BARBEE NO. 1	CLARENCE GIGOUX NO. 1
LOCATION	SEC. 26, T20N, R8W	SEC. 4, T21N, R5W	SEC. 26, T23N, R8W
OWNER	RODMAN CORP.	VIERSEN & COCHRAN	TEXAS AMERICAN OIL CORP.
COMPLETED	07/18/67	--/--/00	02/05/81
SAMPLED	09/20/68	02/07/69	10/01/81
FORMATION	DEVO-HUNTON	MISS-	ORDO-WILCOX 2ND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7995	6150	7361
WELLHEAD PRESSURE,PSIG	2200	2000	2400
OPEN FLOW, MCFD	2000	NOT GIVEN	1550
COMPONENT, MOLE PCT			
METHANE	70.3	55.5	76.1
ETHANE	14.5	18.3	6.2
PROPANE	8.0	14.4	3.5
N-BUTANE	2.0	5.0	1.1
ISOBUTANE	0.9	2.8	0.6
N-PENTANE	0.5	1.4	0.4
ISOPENTANE	0.1	0.6	0.2
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	0.7	0.4
NITROGEN	3.1	0.3	10.3
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.8
HELIUM	0.07	TRACE	0.10
HEATING VALUE*	1317	1659	1080
SPECIFIC GRAVITY	0.783	0.976	0.719

	INDEX 5947 SAMPLE 14930	INDEX 5948 SAMPLE 15103	INDEX 5949 SAMPLE 974
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	BUTTERFLY N	CIVIT SW	EOLA-ROBBERSON
WELL NAME	MCKINLEY NO. 1	MOODY NO. 1	F. J. PEARCE NO. 3
LOCATION	SEC. 15, T1N, R1E	SEC. 16, T3N, R2E	SEC. 13, T1N, R3W
OWNER	WESTHEIMER-NEUSTADT CORP.	SHEBESTER, INC.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	08/12/76	10/19/76	08/--/24
SAMPLED	02/24/77	09/21/77	01/15/25
FORMATION	PENN-HOXBAR	PERM-ADA	PERM-ROBBERSON
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3061	2628	1580
WELLHEAD PRESSURE,PSIG	540	1055	7
OPEN FLOW, MCFD	1200	3500	200
COMPONENT, MOLE PCT			
METHANE	78.2	80.7	65.0
ETHANE	10.2	2.0	27.0
PROPANE	4.8	TRACE	---
N-BUTANE	1.2	0.1	---
ISOBUTANE	0.4	0.0	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	4.6	16.6	7.4
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.05	0.15	0.10
HEATING VALUE*	1180	870	1142
SPECIFIC GRAVITY	0.708	0.641	0.722

	INDEX 5950 SAMPLE 1089	INDEX 5951 SAMPLE 6442	INDEX 5952 SAMPLE 15299
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	EOLA-ROBBERSON	EOLA-ROBBERSON	EOLA-ROBBERSON
WELL NAME	F. M. MARRIS NO. 6	MATS-RINGER NO. 1	ELLA COOK NO. B-4
LOCATION	SEC. 16, T1N, R3W	SEC. 8, T1N, R3W	SEC. 12, T1N, R3W
OWNER	MOBIL OIL CORP.	JOHN F. RINGER, ET AL.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	04/--/25	11/07/55	03/--/75
SAMPLED	07/07/25	11/11/57	06/--/78
FORMATION	PERM-ROBBERSON	PERM-PONTOTOC	MISS-SYCAMORE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1546	2690	5700
WELLHEAD PRESSURE,PSIG	350	780	1800
OPEN FLOW, MCFD	10000	8868	2000
COMPONENT, MOLE PCT			
METHANE	75.0	78.0	83.2
ETHANE	19.2	4.1	8.8
PROPANE	---	1.9	4.0
N-BUTANE	---	0.6	1.2
ISOBUTANE	---	0.4	0.4
N-PENTANE	---	0.0	0.4
ISOPENTANE	---	0.1	0.2
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	5.3	14.6	1.3
OXYGEN	0.2	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.08	0.10	0.05
HEATING VALUE*	1104	956	1198
SPECIFIC GRAVITY	0.674	0.673	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5953 SAMPLE 4614	INDEX 5954 SAMPLE 4704	INDEX 5955 SAMPLE 4705
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	GOLDEN TREND	GOLDEN TREND	GOLDEN TREND
WELL NAME	BRADSHAW-WATKINS NO. 1	G. O. CHRISTIAN NO. 1	ROSE-VOSE NO. 1
LOCATION	SEC. 4, T4N, R3W	SEC. 5, T1N, R1W	SEC. 3, T2N, R3W
OWNER	CARTER OIL CO.	CARTER OIL CO.	CONTINENTAL OIL CO.
COMPLETED	07/27/48	05/19/48	08/15/48
SAMPLED	11/03/48	09/22/48	09/22/48
FORMATION	-GIBSON	PENN-DEESE	PENN-DEESE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	7110	6090	8050
WELLHEAD PRESSURE,PSIG	500	2800	NOT GIVEN
OPEN FLOW, MCFD	197	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	35.4	75.5	62.6
ETHANE	61.2	9.9	15.1
PROPANE	---	5.9	12.3
N-BUTANE	---	1.6	4.5
ISOBUTANE	---	0.6	1.3
N-PENTANE	---	0.7	1.0
ISOPENTANE	---	0.0	0.5
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.7	0.5
NITROGEN	2.9	4.7	1.6
OXYGEN	0.2	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.03	0.07	0.02
HEATING VALUE*	1455	1234	1512
SPECIFIC GRAVITY	0.673	0.752	0.693

	INDEX 5956 SAMPLE 6802	INDEX 5957 SAMPLE 9815	INDEX 5958 SAMPLE 9816
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	GOLDEN TREND	GOLDEN TREND	GOLDEN TREND
WELL NAME	W. K. DONNEL NO. 9	WOODRUFF F NO. 1	WOODRUFF F NO. 1
LOCATION	SEC. 23, T4N, R3W	SEC. 14, T4N, R3W	SEC. 14, T4N, T3W
OWNER	ATLANTIC RICHFIELD CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	07/--/58	01/08/65	01/02/65
SAMPLED	09/10/58	03/12/65	03/12/65
FORMATION	ORDO-BROMIDE	ORDO-OIL CREEK	CAMO-ARBUCKLE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	9260	8571	8733
WELLHEAD PRESSURE,PSIG	1500	2775	2550
OPEN FLOW, MCFD	NOT GIVEN	4388	1532
COMPONENT, MOLE PCT			
METHANE	77.0	77.5	87.5
ETHANE	10.8	5.3	4.6
PROPANE	5.9	3.8	1.8
N-BUTANE	2.5	2.5	0.8
ISOBUTANE	1.0	0.9	0.4
N-PENTANE	0.7	0.6	0.3
ISOPENTANE	0.7	1.7	0.3
CYCLOPENTANE	0.2	0.3	TRACE
HEXANES PLUS	0.5	0.9	0.2
NITROGEN	0.5	6.4	3.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.03	0.10	0.07
HEATING VALUE*	1338	1233	1092
SPECIFIC GRAVITY	0.767	0.768	0.648

	INDEX 5959 SAMPLE 9885	INDEX 5960 SAMPLE 12802	INDEX 5961 SAMPLE 12803
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	GOLDEN TREND	GOLDEN TREND	GOLDEN TREND
WELL NAME	BOST-HAYS NO. 2	BROWN NO. 1	BROWN K NO. 1
LOCATION	SEC. 27, T4N, R3W	SEC. 16, T4N, R3W	SEC. 16, T4N, R3W
OWNER	TENACO INC.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	02/22/55	03/08/71	03/08/71
SAMPLED	05/05/55	04/29/71	04/29/71
FORMATION	ORDO-OIL CREEK	ORDO-OIL CREEK	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	10502	9104	9187
WELLHEAD PRESSURE,PSIG	2384	2277	2130
OPEN FLOW, MCFD	8325	4532	1455
COMPONENT, MOLE PCT			
METHANE	89.3	47.7	52.8
ETHANE	5.1	19.5	14.4
PROPANE	1.9	17.5	15.4
N-BUTANE	0.7	6.6	7.4
ISOBUTANE	0.3	3.1	5.6
N-PENTANE	0.1	2.0	2.5
ISOPENTANE	0.3	1.4	1.3
CYCLOPENTANE	TRACE	0.3	0.3
HEXANES PLUS	0.2	1.1	1.3
NITROGEN	1.8	0.7	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.05	TRACE	0.02
HEATING VALUE*	1106	1827	1804
SPECIFIC GRAVITY	0.636	1.076	1.061

	INDEX 5962 SAMPLE 14789	INDEX 5963 SAMPLE 14790	INDEX 5964 SAMPLE 17482
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	GOLDEN TREND	GOLDEN TREND	GOLDEN TREND
WELL NAME	ELLITHORPE "A" NO. 1	ELLITHORPE "A" NO. 1	YAUGHN RANCHES A NO. 1
LOCATION	SEC. 12, T3N, R3W	SEC. 12, T3N, R3W	SEC. 10, T3N, R3W
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS OIL CO.
COMPLETED	11/07/74	11/20/74	04/26/84
SAMPLED	10/01/76	10/01/76	10/09/84
FORMATION	ORDO-BROMIDE	ORDO-BROMIDE	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	8496	8232	8378
WELLHEAD PRESSURE,PSIG	2500	2200	2350
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	750
COMPONENT, MOLE PCT			
METHANE	77.8	39.7	75.8
ETHANE	9.3	15.5	13.8
PROPANE	6.0	23.5	5.6
N-BUTANE	2.1	9.6	2.0
ISOBUTANE	0.8	6.2	TRACE
N-PENTANE	0.5	1.8	0.1
ISOPENTANE	0.5	2.3	0.5
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.8	0.1
NITROGEN	2.5	0.3	1.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.04	TRACE	0.05
HEATING VALUE*	1265	2096	1259
SPECIFIC GRAVITY	0.741	1.211	0.735

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5965 SAMPLE 17546	INDEX 5966 SAMPLE 17788	INDEX 5967 SAMPLE 4657
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	GOLDEN TREND	GOLDEN TREND	KATIE SE
WELL NAME	VAUGHN RANCHES A NO. 1	COREY NO. 1	NEARY-VAUGHN NO. 1
LOCATION	SEC. 10, T3N, R3W	SEC. 15, T4N, R4W	SEC. 9, T1N, R1W
OWNER	PHILLIPS OIL CO.	RACHALK PRODUCTION, INC.	CARTER OIL CO.
COMPLETED	04/26/84	04/25/85	11/05/48
SAMPLED	12/17/84	07/26/85	02/25/49
FORMATION	MISS-SYCAMORE	PENN-OSBORNE	PENN-HOXBAR
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	8092	8060	4730
WELLHEAD PRESSURE,PSIG	2400	1750	1200
OPEN FLOW, MCFD	750	1240	10025
COMPONENT, MOLE PCT			
METHANE	63.5	78.3	82.5
ETHANE	16.6	10.3	8.6
PROPANE	9.8	4.8	3.8
N-BUTANE	3.9	1.5	1.0
ISOBUTANE	1.3	0.4	0.7
N-PENTANE	1.4	0.5	0.5
ISOPENTANE	0.9	0.4	0.8
CYCLOPENTANE	0.4	0.1	0.1
HEXANES PLUS	1.3	0.3	0.4
NITROGEN	0.6	3.3	2.0
OXYGEN	0.1	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE*	0.0	0.0	---
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	TRACE	0.08	0.08
HEATING VALUE*	1351	1224	1192
SPECIFIC GRAVITY	0.902	0.722	0.691

	INDEX 5968 SAMPLE 17854	INDEX 5969 SAMPLE 3546	INDEX 5970 SAMPLE 3642
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	PANTHER CREEK	PAULS VALLEY	PAULS VALLEY E
WELL NAME	MAYES HEIRS NO. 1-34	TETER NO. 1	A. P. BURNS NO. 1
LOCATION	SEC. 34, T3N, R3W	SEC. 31, T4N, R1E	SEC. 17, T3N, R2E
OWNER	SONAT EXPLORATION CO.	UNION OIL CO. OF CALIF.	OHIO OIL CO.
COMPLETED	01/20/85	04/08/42	--/--/00
SAMPLED	10/04/85	05/19/42	05/08/43
FORMATION	DEVO-HUNTON	ORDO-SIMPSON	PENN-
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	9300	3898	2880
WELLHEAD PRESSURE,PSIG	1100	800	175
OPEN FLOW, MCFD	500	3500	30000
COMPONENT, MOLE PCT			
METHANE	77.7	31.0	85.5
ETHANE	11.7	68.0	10.1
PROPANE	5.2	---	---
N-BUTANE	1.6	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.7	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	0.7	---	---
NITROGEN	1.1	0.2	1.7
OXYGEN	0.0	0.5	0.3
ARGON	0.0	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.3	2.3
HELIUM	0.03	TRACE	0.06
HEATING VALUE*	1292	1533	1047
SPECIFIC GRAVITY	0.746	0.897	0.635

	INDEX 5971 SAMPLE 3852	INDEX 5972 SAMPLE 17551	INDEX 5973 SAMPLE 12336
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	PAULS VALLEY E	PAULS VALLEY N	PAULS VALLEY W
WELL NAME	A. J. BRUNDIGE NO. 1	ALBERT UNIT NO. 1	MATCHER C NO. 4
LOCATION	SEC. 17, T3N, R2E	SEC. 2, T3N, R1W	SEC. 28, T4N, R1W
OWNER	OHIO OIL CO.	PETROLEUM, INC.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	12/07/83	06/17/70
SAMPLED	--/--/00	--/--/00	07/28/70
FORMATION	PENN-	ORDO-BROMIDE	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	NOT GIVEN	4063	4504
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1000	1250
OPEN FLOW, MCFD	NOT GIVEN	1877	35000
COMPONENT, MOLE PCT			
METHANE	82.4	87.7	78.6
ETHANE	10.8	3.2	9.8
PROPANE	---	0.2	4.6
N-BUTANE	---	TRACE	1.1
ISOBUTANE	---	0.2	0.5
N-PENTANE	---	TRACE	0.3
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	TRACE	0.2
NITROGEN	5.9	5.8	4.4
OXYGEN	0.4	0.7	0.0
ARGON	---	0.1	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE*	---	0.0	0.0
CARBON DIOXIDE	0.4	1.7	TRACE
HELIUM	0.06	0.03	0.08
HEATING VALUE*	1028	966	1176
SPECIFIC GRAVITY	0.638	0.623	0.704

	INDEX 5974 SAMPLE 12517	INDEX 5975 SAMPLE 16733	INDEX 5976 SAMPLE 11058
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GARVIN	GARVIN	GARVIN
FIELD	WHITEBEAD	WILLOW-GARVIN	WYNNEWOOD
WELL NAME	FRANKLIN UNIT NO.1	LAWSON NO. 1-2	ANDERSON B NO. 1
LOCATION	SEC. 4, T3N, R1W	SEC. 2, T3N, R2E	SEC. 23, T2N, R1E
OWNER	PETROLEUM, INC.	READING & BATES PETROLEUM CO	SUPERIOR OIL CO.
COMPLETED	03/27/70	10/06/81	03/08/67
SAMPLED	12/15/70	12/11/82	08/11/67
FORMATION	ORDO-BROMIDE	PENN-TONKAWA	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4580	2842	2955
WELLHEAD PRESSURE,PSIG	1450	750	1260
OPEN FLOW, MCFD	3270	2414	12614
COMPONENT, MOLE PCT			
METHANE	81.6	82.9	93.8
ETHANE	7.6	0.2	0.2
PROPANE	3.7	TRACE	TRACE
N-BUTANE	0.9	0.1	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.3	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	1.7	15.8	5.3
OXYGEN	0.1	0.2	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	0.2	0.4
HELIUM	0.03	0.10	0.15
HEATING VALUE*	1137	861	954
SPECIFIC GRAVITY	0.699	0.630	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 5977 SAMPLE 14815	INDEX 5978 SAMPLE 15869	INDEX 5979 SAMPLE 13519
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	ALEX NW	ALEX NW	AMBER NE
WELL NAME	WEAVER NO. 1	SOUTHERLAND "A" NO. 1	MARSHALL NO. 1
LOCATION	SEC. 21, T6N, R6W	SEC. 3, T5N, R6W	SEC. 9, T8N, R6W
OWNER	KERR-MCGEE CORP.	CITIES SERVICE CO	W. C. PAYNE
COMPLETED	06/21/76	--/--/00	12/31/71
SAMPLED	10/15/76	--/--/00	01/30/73
FORMATION	PENN-SPRINGER	PENN-MORROW & SPRINGER	PENN-OSBORNE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12997	13216	10464
WELLHEAD PRESSURE,PSIG	4150	4394	1600
OPEN FLOW, MCFD	5117	3650	1100
COMPONENT, MOLE PCT			
METHANE	85.7	88.7	86.9
ETHANE	7.8	6.2	7.2
PROPANE	3.7	2.4	2.8
N-BUTANE	0.7	0.5	0.6
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.7	1.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.5
HELIUM	0.03	0.03	0.07
HEATING VALUE*	1164	1117	1130
SPECIFIC GRAVITY	0.663	0.637	0.647

	INDEX 5980 SAMPLE 16769	INDEX 5981 SAMPLE 17308	INDEX 5982 SAMPLE 17853
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	AMBER NE	AMBER NE	AMBER NE
WELL NAME	ALL NO. 1	WEAVER NO. 2	ROYAL NO. 1
LOCATION	SEC. 30, T8N, R5W	SEC. 11, T8N, R6W	SEC. 14, T8N, R6W
OWNER	ANDERMAN SMITH OPERATING CO.	SULLIVAN & CO.	SULLIVAN & CO.
COMPLETED	02/14/83	11/02/83	05/07/82
SAMPLED	02/14/83	05/24/84	10/03/85
FORMATION	PENN-OSBORNE	PENN-BOYD	PENN-MOXBAR
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10474	6949	7000
WELLHEAD PRESSURE,PSIG	1500	2300	2250
OPEN FLOW, MCFD	1750	250	860
COMPONENT, MOLE PCT			
METHANE	87.2	78.3	74.1
ETHANE	6.3	4.4	3.9
PROPANE	2.7	1.5	1.7
N-BUTANE	0.8	0.4	0.5
ISOBUTANE	0.3	0.3	0.8
N-PENTANE	0.2	0.2	0.7
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	0.1	0.1	1.5
HEXANES PLUS	0.2	0.3	3.5
NITROGEN	1.0	13.9	12.2
OXYGEN	TRACE	0.5	1.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	TRACE
HELIUM	0.05	0.09	0.07
HEATING VALUE*	1144	961	1174
SPECIFIC GRAVITY	0.657	0.676	0.792

	INDEX 5983 SAMPLE 8041	INDEX 5984 SAMPLE 17863	INDEX 5985 SAMPLE 4647
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	BLANCHARD NW	BRADLEY GOLDEN TREND	BRADLEY NE
WELL NAME	HILLTOP NO. 2	RATBURN NO. A-1	TOM MAINKA NO. 1
LOCATION	SEC. 17, T4N, R5W	SEC. 25, T5N, R5W	SEC. 12, T5N, R5W
OWNER	CLEARY PETROLEUM, INC.	CITIES SERVICE OIL & GAS COR	GULF OIL CORP.
COMPLETED	--/--/00	11/28/82	10/05/48
SAMPLED	06/24/61	10/11/85	12/28/48
FORMATION	ORDO-BROMIDE	PERM-HART	ORDO-TULIP CREEK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11810	8622	13137
WELLHEAD PRESSURE,PSIG	3560	1577	2560
OPEN FLOW, MCFD	11454	400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.4	75.5	73.3
ETHANE	6.1	9.8	25.6
PROPANE	2.4	5.5	---
N-BUTANE	0.8	2.1	---
ISOBUTANE	0.7	0.7	---
N-PENTANE	0.2	0.8	---
ISOPENTANE	0.2	0.3	---
CYCLOPENTANE	0.1	0.5	---
HEXANES PLUS	0.2	1.0	---
NITROGEN	1.3	3.3	0.4
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.3	0.5
HELIUM	0.04	0.08	0.03
HEATING VALUE*	1139	1299	1201
SPECIFIC GRAVITY	0.656	0.773	0.689

	INDEX 5986 SAMPLE 3643	INDEX 5987 SAMPLE 10744	INDEX 5988 SAMPLE 1211
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CEMENT	CEMENT SE	CHICKASHA
WELL NAME	G. C. LAFLIN NO. 1	RUNKLE UNIT NO. 1	IRWIN NO. 1
LOCATION	SEC. 7, T5N, R8W	SEC. 29, T5N, R8W	NOT GIVEN
OWNER	OHIO OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	05/--/45	06/15/66	--/--/00
SAMPLED	05/08/45	09/29/66	--/--/00
FORMATION	PENN-KISTLER	PENN-SPRINGER	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5040	15076	9100
WELLHEAD PRESSURE,PSIG	1735	6800	NOT GIVEN
OPEN FLOW, MCFD	41000	23800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	90.0	70.9
ETHANE	7.5	5.3	6.6
PROPANE	---	1.5	---
N-BUTANE	---	0.5	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.5	---
NITROGEN	5.1	0.5	21.2
OXYGEN	1.7	0.0	0.7
ARGON	---	0.0	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.6	0.6
HELIUM	TRACE	TRACE	0.17
HEATING VALUE*	1001	1131	836
SPECIFIC GRAVITY	0.624	0.643	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES -

	INDEX 5989 SAMPLE 1320	INDEX 5990 SAMPLE 1321	INDEX 5991 SAMPLE 1788
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA	CHICKASHA	CHICKASHA
WELL NAME	EDMONDSON	E. C. SMITH	WOODS NO. 4
LOCATION	SEC. 23, T5N, R8W	SEC. 11, T4N, R8W	SEC. 2, T4N, R8W
OWNER	MOBIL OIL CORP.	OKLAHOMA NATURAL GAS CO.	MERIDIAN GAS CO.
COMPLETED	--/--/00	--/--/00	03/14/29
SAMPLED	11/11/26	11/12/26	06/01/29
FORMATION	PERM-RAMSEY	PERM-NICHOLAS	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2000	1215	2107
WELLHEAD PRESSURE, PSIG	600	100	440
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6435
COMPONENT, MOLE PCT			
METHANE	93.7	79.7	96.1
ETHANE	4.5	5.5	3.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.0	14.5	0.6
OXYGEN	0.6	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.06	0.19	0.07
HEATING VALUE*	1030	906	1027
SPECIFIC GRAVITY	0.586	0.645	0.575

	INDEX 5992 SAMPLE 1847	INDEX 5993 SAMPLE 1848	INDEX 5994 SAMPLE 3268
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA	CHICKASHA	CHICKASHA
WELL NAME	DRYDEN NO. 4	GOERTZ NO. 2	CHARLSON NO. 7
LOCATION	SEC. 35, T5N, R8W	SEC. 26, T5N, R8W	SEC. 22, T5N, R8W
OWNER	OKLAHOMA GAS UTILITIES CO.	OKLAHOMA GAS UTILITIES CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/29	01/01/29	12/10/41
SAMPLED	08/30/29	08/30/29	04/16/42
FORMATION	PENN-	PENN-MERIDIAN	PENN-CHARLSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2200	2083	3860
WELLHEAD PRESSURE, PSIG	410	500	1805
OPEN FLOW, MCFD	43000	3500	194000
COMPONENT, MOLE PCT			
METHANE	93.6	83.0	96.4
ETHANE	4.6	5.8	3.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.4	10.9	0.0
OXYGEN	0.0	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	TRACE	0.20	0.08
HEATING VALUE*	1031	945	1036
SPECIFIC GRAVITY	0.587	0.628	0.578

	INDEX 5995 SAMPLE 3560	INDEX 5996 SAMPLE 3864	INDEX 5997 SAMPLE 5242
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA	CHICKASHA	CHICKASHA
WELL NAME	POOLER NO. A5	RIDER NO. 1	GLOVER NO. 4
LOCATION	SEC. 22, T5N, R8W	SEC. 15, T5N, R8W	SEC. 27, T5N, R8W
OWNER	SINCLAIR-PRAIRIE OIL CO.	OKLAHOMA NATURAL GAS CO.	LITTLE NICK OIL CO.
COMPLETED	01/30/42	07/05/44	08/--/51
SAMPLED	05/18/42	08/28/44	05/13/52
FORMATION	PENN-CHARLSON	PERM-BASAL	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4735	3106	8963
WELLHEAD PRESSURE, PSIG	1805	NOT GIVEN	4950
OPEN FLOW, MCFD	157192	6000	25000
COMPONENT, MOLE PCT			
METHANE	93.0	96.2	96.8
ETHANE	6.3	2.8	1.4
PROPANE	---	---	0.2
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	0.1	0.0	1.0
OXYGEN	0.4	0.4	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.6	0.3
HELIUM	0.07	0.02	0.03
HEATING VALUE*	1055	1025	1018
SPECIFIC GRAVITY	0.589	0.576	0.574

	INDEX 5998 SAMPLE 15561	INDEX 5999 SAMPLE 16762	INDEX 6000 SAMPLE 17869
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA	CHICKASHA	CHICKASHA N
WELL NAME	RUSH SPRINGS UNIT NO. 4	ROBERTS A NO. 1	DOVER "A" NO. 2
LOCATION	SEC. 32, T4N, R7W	SEC. 30, T4N, R7W	SEC. 17, T7N, R7W
OWNER	MCK OIL CO.	COTTON PETROLEUM CORP.	COTTON PETROLEUM CORP.
COMPLETED	03/24/76	06/--/82	01/13/85
SAMPLED	02/02/79	01/31/83	10/14/85
FORMATION	PENN-SPRINGER	PENN-BRITT	PERM-WADE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16970	17742	8408
WELLHEAD PRESSURE, PSIG	3595	9000	2275
OPEN FLOW, MCFD	1389	4250	1075
COMPONENT, MOLE PCT			
METHANE	93.6	94.9	90.7
ETHANE	3.6	2.7	3.1
PROPANE	0.9	0.9	1.4
N-BUTANE	0.1	0.1	0.4
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.5	0.3	3.2
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	0.3
HELIUM	0.03	0.02	0.09
HEATING VALUE*	1055	1029	1059
SPECIFIC GRAVITY	0.600	0.586	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6001 SAMPLE 12176	INDEX 6002 SAMPLE 16310	INDEX 6003 SAMPLE 16694
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA NW	CHICKASHA NW	CHICKASHA NW
WELL NAME	DIETRICH NO. 1	UNRUH NO. 1	MCCARTHY NO. 1
LOCATION	SEC. 13, T7N, R8W	SEC. 29, T7N, R8W	SEC. 18, T7N, R8W
OWNER	PHILLIPS PETROLEUM CO.	COTTON PETROLEUM CORP.	COTTON PETROLEUM CORP.
COMPLETED	01/11/70	06/--/80	07/09/82
SAMPLED	01/26/70	08/06/81	10/18/82
FORMATION	PENN-SPRINGER	PENN-SPRINGER	MISS-BOATWRIGHT
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14393	15333	16079
WELLHEAD PRESSURE,PSIG	8120	NOT GIVEN	10000
OPEN FLOW, MCFD	28000	2147	6000
COMPONENT, MOLE PCT			
METHANE	91.8	95.6	94.2
ETHANE	4.3	2.4	3.4
PROPANE	1.7	0.9	0.6
N-BUTANE	0.3	0.1	0.2
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.4	0.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.0	0.9
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1074	1030	1055
SPECIFIC GRAVITY	0.610	0.586	0.598

	INDEX 6004 SAMPLE 16906	INDEX 6005 SAMPLE 17357	INDEX 6006 SAMPLE 16267
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHICKASHA NW	CHICKASHA NW	CHICKASHA SE
WELL NAME	THOMAS NO. 1-7	LILLY B. NO. 1	W. B. SMITH NO. 1
LOCATION	SEC. 7, T6N, R7W	SEC. 2, T6N, R8W	SEC. 14, T6N, R7W
OWNER	DEVON ENERGY CORP.	J. WALTER DUNCAN	WAGNER & BROWN OIL & GAS PRO
COMPLETED	07/20/82	03/21/84	02/07/80
SAMPLED	04/28/83	06/28/84	05/27/81
FORMATION	PENN-WADE	PENN-YULE	PENN-MEDRANO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8440	8248	9122
WELLHEAD PRESSURE,PSIG	2175	2000	2575
OPEN FLOW, MCFD	6500	1145	6400
COMPONENT, MOLE PCT			
METHANE	91.4	94.6	85.4
ETHANE	2.8	2.7	5.9
PROPANE	1.5	0.6	4.0
N-BUTANE	0.5	0.1	1.1
ISOBUTANE	0.2	0.1	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.3	TRACE	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.9	1.5	2.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.09	0.09	0.08
HEATING VALUE*	1065	1042	1168
SPECIFIC GRAVITY	0.616	0.592	0.678

	INDEX 6007 SAMPLE 8458	INDEX 6008 SAMPLE 10984	INDEX 6009 SAMPLE 10985
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	CHITWOOD	CHITWOOD	CHITWOOD
WELL NAME	D. CRADDOCK NO. 1	J. D. HOLBROOK NO. 1	J. D. HOLBROOK NO. 1
LOCATION	SEC. 33, T5N, R6W	SEC. 35, T5N, R6W	SEC. 35, T5N, R6W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	01/03/62	10/01/66	10/01/66
SAMPLED	03/09/62	06/08/67	06/08/67
FORMATION	ORDO-BROMIDE	PENN-CUNNINGHAM	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16193	11460	15926
WELLHEAD PRESSURE,PSIG	5134	3080	2750
OPEN FLOW, MCFD	45000	22434	5032
COMPONENT, MOLE PCT			
METHANE	85.7	84.7	84.5
ETHANE	7.1	5.3	7.3
PROPANE	3.5	2.4	2.9
N-BUTANE	1.1	0.9	1.0
ISOBUTANE	0.7	0.3	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.7	4.0	2.1
OXYGEN	TRACE	0.8	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.5
HELIUM	0.02	0.05	0.02
HEATING VALUE*	1186	1091	1146
SPECIFIC GRAVITY	0.678	0.665	0.673

	INDEX 6010 SAMPLE 15912	INDEX 6011 SAMPLE 5720	INDEX 6012 SAMPLE 14813
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	DIBBLE SW	GOLDEN TREND	GOLDEN TREND
WELL NAME	BARNETT NO. 1	COSTELLO NO. 1	SIMMS A NO. 1
LOCATION	SEC. 14, T6N, R5W	SEC. 14, T5N, R5W	SEC. 9, T4N, R5W
OWNER	ARKLA EXPLORATION CO.	GULF OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	11/17/79	09/26/54	08/12/76
SAMPLED	03/04/80	10/26/54	10/15/76
FORMATION	ORDO-SIMPSON	ORDO-BROMIDE & SIMPSON	ORDO-BROMIDE 1ST
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13192	11747	15297
WELLHEAD PRESSURE,PSIG	3900	1200	4353
OPEN FLOW, MCFD	2600	NOT GIVEN	13633
COMPONENT, MOLE PCT			
METHANE	85.1	82.3	87.6
ETHANE	7.3	9.3	7.0
PROPANE	3.2	3.8	2.8
N-BUTANE	0.9	1.2	0.7
ISOBUTANE	0.4	0.7	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	1.6	1.0	0.4
OXYGEN	0.3	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.6
HELIUM	0.03	0.04	0.02
HEATING VALUE*	1155	1212	1145
SPECIFIC GRAVITY	0.671	0.699	0.651

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6013 SAMPLE 14814	INDEX 6014 SAMPLE 17287	INDEX 6015 SAMPLE 4304
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	GOLDEN TREND	HARNESS	KNOX
WELL NAME	SIMMS A NO. 1	AGAWAM NO. 28-A	WOODS NO. B-1
LOCATION	SEC. 9, T4N, R5W	SEC. 28, T5N, R7W	SEC. 17, T 3N, R 5W
OWNER	CITIES SERVICE OIL CO.	CITIES EXPLORATION CO.	MCCASLAND & RAE
COMPLETED	08/12/76	09/19/82	01/--/47
SAMPLED	10/15/76	05/15/84	03/15/47
FORMATION	ORDO-BROMIDE 1ST	PENN-CUNNINGHAM	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15297	NOT GIVEN	3098
WELLHEAD PRESSURE,PSIG	4353	3000	1200
OPEN FLOW, MCFD	13633	2300	15000
COMPONENT, MOLE PCT			
METHANE	88.0	90.9	79.3
ETHANE	6.7	5.5	17.6
PROPANE	2.8	1.6	---
N-BUTANE	0.7	0.2	---
ISOBUTANE	0.3	0.1	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.3	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.4	0.5	2.6
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.6	0.2
HELIUM	0.02	0.04	0.05
HEATING VALUE*	1140	1093	1119
SPECIFIC GRAVITY	0.647	0.621	0.655

	INDEX 6016 SAMPLE 6086	INDEX 6017 SAMPLE 10319	INDEX 6018 SAMPLE 12128
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	KNOX	KNOX	LAVERTY
WELL NAME	HARRISON NO. 2	L. H. HARRISON NO. 16	C. T. WANGENSTEEN NO. 1
LOCATION	SEC. 29, T 3N, R 5W	SEC. 28, T 3N, R 5W	SEC. 19, T6N, R8W
OWNER	BRITISH AMERICAN OIL CO. LTD	MOBIL OIL CORP.	SUN OIL CO.
COMPLETED	02/19/56	10/13/65	07/28/69
SAMPLED	06/16/56	12/09/65	11/28/69
FORMATION	ORDO-BROMIDE	PERM-	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15120	2366	15816
WELLHEAD PRESSURE,PSIG	6700	500	7850
OPEN FLOW, MCFD	31000	3500	38000
COMPONENT, MOLE PCT			
METHANE	88.9	90.8	92.2
ETHANE	5.5	4.9	4.3
PROPANE	2.7	2.1	1.2
N-BUTANE	0.6	0.6	0.2
ISOBUTANE	0.6	0.2	0.2
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.2	0.7	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.8
HELIUM	0.03	0.05	0.02
HEATING VALUE*	1151	1107	1065
SPECIFIC GRAVITY	0.647	0.624	0.609

	INDEX 6019 SAMPLE 15594	INDEX 6020 SAMPLE 13344	INDEX 6021 SAMPLE 11943
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	MARLOW DISTRICT	MIDDLEBURG S	MIDDLEBURG SE
WELL NAME	FRITTS NO. 2	BOYD B NO. 1	SPROWLS NO. 1
LOCATION	SEC. 31, T3N, R8W	SEC. 29, T7N, R5W	SEC. 14, T7N, R5W
OWNER	PETRO-LEWIS CORP.	PHILLIPS PETROLEUM CO.	SENECA OIL CO.
COMPLETED	08/18/78	05/05/72	12/20/68
SAMPLED	03/30/79	08/01/72	06/20/69
FORMATION	PENN-MEDRANO	PENN-MOXBAR-BOYD	PENN-OSBORNE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8980	7257	10300
WELLHEAD PRESSURE,PSIG	2376	975	3183
OPEN FLOW, MCFD	1800	31	9564
COMPONENT, MOLE PCT			
METHANE	92.1	50.3	85.5
ETHANE	4.1	6.4	6.9
PROPANE	1.8	7.8	3.3
N-BUTANE	0.5	3.3	0.7
ISOBUTANE	0.2	2.1	0.5
N-PENTANE	0.1	1.0	0.3
ISOPENTANE	0.2	0.5	0.0
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.4	0.4
NITROGEN	0.5	27.4	1.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.03	0.09	0.05
HEATING VALUE*	1104	1097	1157
SPECIFIC GRAVITY	0.620	0.904	0.669

	INDEX 6022 SAMPLE 9672	INDEX 6023 SAMPLE 15846	INDEX 6024 SAMPLE 11629
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	MINCO E	MINCO W	RUSH SPRINGS SW
WELL NAME	STERNER NO. 1	WEHLING NO. 1	RUSH SPRINGS UNIT NO. 2
LOCATION	SEC. 19, T10N, R6W	SEC. 21, T10N, R8W	SEC. 5, T3N, R7W
OWNER	MONSANTO CO.	NOVA ENERGY CORP.	CHEVRON OIL CO.
COMPLETED	10/17/64	12/19/78	07/08/67
SAMPLED	12/14/64	11/99/79	08/20/68
FORMATION	PENN-OSBORNE	DEVO-HUNTON	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9775	13002	16852
WELLHEAD PRESSURE,PSIG	1645	4856	10925
OPEN FLOW, MCFD	10250	14910	30000
COMPONENT, MOLE PCT			
METHANE	85.0	94.8	96.9
ETHANE	8.5	1.1	1.5
PROPANE	3.2	0.2	0.3
N-BUTANE	0.8	0.1	0.0
ISOBUTANE	0.4	0.1	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.4	0.1	0.0
NITROGEN	0.7	1.7	0.9
OXYGEN	TRACE	0.2	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.6	0.9
HELIUM	0.04	0.02	0.03
HEATING VALUE*	1178	997	1017
SPECIFIC GRAVITY	0.676	0.590	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6025 SAMPLE 11630	INDEX 6026 SAMPLE 16164	INDEX 6027 SAMPLE 12096
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	RUSH SPRINGS SW	TABLER NE	TUTTLE E
WELL NAME	RUSH SPRINGS UNIT NO. 1	MCCALLA RANCH NO. 1	SURBECK NO. 1
LOCATION	SEC. 8, T3N, R7W	SEC. 12, T7N, R6W	SEC. 13, T9N, R5W
OWNER	CHEVRON OIL CO.	SHELL OIL CO.	CHARLES R. WALBERT, ET AL.
COMPLETED	12/01/67	08/29/80	05/22/69
SAMPLED	08/20/68	01/09/81	11/05/69
FORMATION	PENN-SPRINGER	PENN-HOXBAR	PENN-BERRY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16877	7234	8899
WELLHEAD PRESSURE, PSIG	10484	2850	2500
OPEN FLOW, MCFD	6050	3680	2526
COMPONENT, MOLE PCT			
METHANE	83.8	80.9	89.2
ETHANE	2.1	3.8	5.3
PROPANE	0.3	1.4	2.2
N-BUTANE	0.2	0.4	0.5
ISOBUTANE	0.0	0.3	0.4
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	9.8	11.0	1.4
OXYGEN	2.4	1.5	0.0
ARGON	0.1	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.3
HELIUM	0.02	0.07	0.06
HEATING VALUE*	923	961	1123
SPECIFIC GRAVITY	0.642	0.660	0.643

	INDEX 6028 SAMPLE 13099	INDEX 6029 SAMPLE 13396	INDEX 6030 SAMPLE 17593
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	TUTTLE E	PLUMLEE UNIT NO. 1	TUTTLE E
WELL NAME	ENGELKE NO. 1	AMOCO PRODUCTION CO.	W. C. FREEZE NO. 1
LOCATION	SEC. 31, T9N, R5W	--/--/00	SEC. 2, T9N, R5W
OWNER	MACKELLAR, INC.	09/25/72	KAISER-FRANCIS OIL CO.
COMPLETED	10/12/71	PENN-BERRY	--/--/00
SAMPLED	10/20/71	360	12/15/85
FORMATION	PENN-BERRY	8806	PENN-BERRY
GEOLOGIC PROVINCE CODE	360	620	360
DEPTH, FEET	8815	NOT GIVEN	10732
WELLHEAD PRESSURE, PSIG	2500		175
OPEN FLOW, MCFD	3577		605
COMPONENT, MOLE PCT			
METHANE	85.1	86.9	85.6
ETHANE	5.5	6.0	5.4
PROPANE	3.0	2.7	2.2
N-BUTANE	0.8	0.8	0.6
ISOBUTANE	0.6	0.4	0.5
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	3.8	2.3	1.5
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	2.5
HELIUM	0.08	0.07	0.06
HEATING VALUE*	1126	1116	1087
SPECIFIC GRAVITY	0.672	0.649	0.673

	INDEX 6031 SAMPLE 13790	INDEX 6032 SAMPLE 13791	INDEX 6033 SAMPLE 14167
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	MAIER NO. 1	MAIER NO. 1	LITTLE NO. 1
LOCATION	SEC. 4, T7N, R7W	SEC. 4, T7N, R7W	SEC. 8, T9N, R8W
OWNER	APEXCO, INC.	APEXCO, INC.	WOODS PETROLEUM CORP.
COMPLETED	09/29/73	09/29/73	04/19/74
SAMPLED	10/28/73	10/28/73	10/04/74
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	12938	12388
WELLHEAD PRESSURE, PSIG	NOT GIVEN	7492	8253
OPEN FLOW, MCFD	NOT GIVEN	40000	80000
COMPONENT, MOLE PCT			
METHANE	87.8	87.2	96.7
ETHANE	6.7	6.4	1.7
PROPANE	2.9	2.7	0.3
N-BUTANE	0.5	0.5	TRACE
ISOBUTANE	0.5	0.4	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	1.5	0.2
OXYGEN	TRACE	0.3	0.0
ARGON	0.0	0.2	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.9
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1141	1112	1026
SPECIFIC GRAVITY	0.650	0.647	0.579

	INDEX 6034 SAMPLE 14168	INDEX 6035 SAMPLE 14503	INDEX 6036 SAMPLE 14618
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRADY
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND
WELL NAME	MAJOR NO. 1	CIRCLE BAR K	SHOCKEY NO. 1
LOCATION	SEC. 16, T9N, R8W	SEC. 24, T7N, R7W	SEC. 36, T7N, R7W
OWNER	WOODS PETROLEUM CORP.	COTTON PETROLEUM CORP.	COTTON PETROLEUM CORP.
COMPLETED	11/11/73	09/01/75	01/03/76
SAMPLED	10/04/74	10/17/75	03/--/76
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12444	12930	13843
WELLHEAD PRESSURE, PSIG	8306	7500	9861
OPEN FLOW, MCFD	37759	30000	37000
COMPONENT, MOLE PCT			
METHANE	96.8	86.4	86.7
ETHANE	1.7	7.4	7.7
PROPANE	0.3	3.1	2.9
N-BUTANE	TRACE	0.6	0.6
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.2	0.7	1.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.5
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1027	1162	1132
SPECIFIC GRAVITY	0.578	0.664	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6037 SAMPLE 15903	INDEX 6038 SAMPLE 16643	INDEX 6039 SAMPLE 6363
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	GRADY	GRANT
FIELD	WATONGA-CHICKASHA TREND	WATONGA-CHICKASHA TREND	CHEROKITA TREND
WELL NAME	ETSENHOUR NO. 14	RALPH JACOBS NO. 2-30	JOHNSON NO. 1
LOCATION	SEC. 12, T9N, R8W	SEC. 30, T9N, R7W	SEC. 18, T27N, R8W
OWNER	LADD PETROLEUM CORP.	GULF OIL EXPL. & PROD. CO.	DAVON DRILLING CO.
COMPLETED	07/02/79	11/20/81	05/25/57
SAMPLED	02/15/80	09/14/82	08/10/57
FORMATION	PENN-TONKAWA	PENN-TONKAWA	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7894	7781	5133
WELLHEAD PRESSURE,PSIG	2350	2100	1875
OPEN FLOW, MCFD	2500	1200	15000
COMPONENT, MOLE PCT			
METHANE	89.4	87.9	72.9
ETHANE	3.2	3.4	4.7
PROPANE	1.6	1.9	1.6
N-BUTANE	0.4	0.6	0.8
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	4.7	4.7	17.6
OXYGEN	TRACE	0.1	0.9
ARGON	TRACE	TRACE	0.2
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.13	0.13	0.06
HEATING VALUE*	1042	1055	940
SPECIFIC GRAVITY	0.622	0.635	0.710

	INDEX 6040 SAMPLE 9718	INDEX 6041 SAMPLE 11371	INDEX 6042 SAMPLE 11372
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	GLYDE SW	DEER CREEK	DEER CREEK
WELL NAME	FITCHER NO. 1	LANE B NO. 1	MOXSEY NO. 1
LOCATION	SEC. 10, T27N, R6W	SEC. 22, T27N, R3W	SEC. 14, T27N, R3W
OWNER	VIERSEN & COCHRAN	APPLETON OIL CO.	APPLETON OIL CO.
COMPLETED	12/22/64	08/04/59	12/01/59
SAMPLED	02/05/65	03/13/68	03/13/68
FORMATION	PENN-CHEROKEE	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4828	4335	4028
WELLHEAD PRESSURE,PSIG	1780	300	400
OPEN FLOW, MCFD	4339	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.8	78.7	82.0
ETHANE	6.4	7.8	7.6
PROPANE	2.3	4.3	3.8
N-BUTANE	0.9	1.5	1.4
ISOBUTANE	0.3	0.7	0.5
N-PENTANE	0.3	0.4	0.5
ISOPENTANE	0.2	0.6	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	9.2	5.0	3.3
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.13	0.11	0.10
HEATING VALUE*	1059	1190	1179
SPECIFIC GRAVITY	0.684	0.724	0.697

	INDEX 6043 SAMPLE 11370	INDEX 6044 SAMPLE 11373	INDEX 6045 SAMPLE 12532
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	DEER CREEK S	DEER CREEK S	HANLEY SW
WELL NAME	DESTER A NO. 3	LANE A NO. 1	GROENDYKE RANCH NO. 1
LOCATION	SEC. 27, T27N, R3W	SEC. 27, T27N, R3W	SEC. 17, T26N, R8W
OWNER	APPLETON OIL CO.	APPLETON OIL CO.	JONES & PELLOW OIL CO.
COMPLETED	06/05/63	06/18/59	02/18/70
SAMPLED	03/13/68	03/13/68	11/12/70
FORMATION	MISS---	MISS---	DEVO-MISENER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4162	3989	5900
WELLHEAD PRESSURE,PSIG	160	720	2150
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5654
COMPONENT, MOLE PCT			
METHANE	73.0	67.9	89.0
ETHANE	8.9	7.4	4.1
PROPANE	4.7	3.9	1.9
N-BUTANE	1.5	1.2	0.7
ISOBUTANE	0.7	0.5	0.4
N-PENTANE	0.7	0.4	0.3
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	9.6	15.8	2.9
OXYGEN	0.0	1.9	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.25	0.22	0.11
HEATING VALUE*	1049	1019	1102
SPECIFIC GRAVITY	0.743	0.752	0.641

	INDEX 6046 SAMPLE 16615	INDEX 6047 SAMPLE 15003	INDEX 6048 SAMPLE 11358
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	LYLE NW	MAYFLOWER NW	MEDFORD W
WELL NAME	GILE NO. 1-16	PICKETT NO. 1	BLUBAUGH NO. 1
LOCATION	SEC. 16, T29N, R6W	SEC. 30, T28N, R3W	SEC. 13, T27N, R6W
OWNER	MID-AMERICA PETROLEUM, INC.	PETROLEUM RESOURCES CO.	TEXACO INC.
COMPLETED	04/29/82	12/28/76	12/31/58
SAMPLED	08/09/82	05/19/77	03/07/68
FORMATION	MISS-LIME	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5006	4556	4824
WELLHEAD PRESSURE,PSIG	1650	1288	910
OPEN FLOW, MCFD	4900	5479	1598
COMPONENT, MOLE PCT			
METHANE	68.0	78.5	87.5
ETHANE	7.2	6.9	5.7
PROPANE	3.9	2.4	2.5
N-BUTANE	1.7	0.7	1.0
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	0.5	0.2	0.1
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	17.0	10.1	1.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.25	0.16	0.07
HEATING VALUE*	1046	1046	1134
SPECIFIC GRAVITY	0.759	0.687	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6049 SAMPLE 16472	INDEX 6050 SAMPLE 14670	INDEX 6051 SAMPLE 11361
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GRANT	GRANT
FIELD	WASH	WASH SE	WAKITA TREND
WELL NAME	SNAGGS NO. 1-15	OVERTON NO. 1	CARRIE RIKSE NO. 1
LOCATION	SEC. 15, T25N, R8W	SEC. 8, T25N, R7W	SEC. 9, T28N, R7W
OWNER	MESA, INC.	MACK OIL CO.	GULF OIL CO.- U.S.
COMPLETED	11/25/81	02/10/76	05/12/57
SAMPLED	03/31/82	05/17/76	03/07/68
FORMATION	DEVO-HUNTON	DEVO-HUNTON	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6248	6112	4758
WELLHEAD PRESSURE,PSIG	2180	2200	1056
OPEN FLOW, MCFD	1400	NOT GIVEN	1348
COMPONENT, MOLE PCT			
METHANE	88.6	73.5	76.3
ETHANE	6.0	8.0	7.9
PROPANE	2.0	7.8	3.7
N-BUTANE	0.7	4.4	1.1
ISOBUTANE	0.3	1.6	0.5
N-PENTANE	0.3	1.4	0.4
ISOPENTANE	0.1	1.2	0.0
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	1.6	2.0	9.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.06	0.06	0.24
HEATING VALUE*	1127	1422	1097
SPECIFIC GRAVITY	0.643	0.832	0.707

	INDEX 6052 SAMPLE 1979	INDEX 6053 SAMPLE 6575	INDEX 6054 SAMPLE 7309
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRANT	GREER	GREER
FIELD	WEBB	ERICK GAS AREA S	JESTER S
WELL NAME	WEBB NO. 2	TANDY NO. 1	J. W. MCDONALD
LOCATION	SEC. 2, T27N, R3W	SEC. 11, T7N, R24W	SEC. 25, T6N, R24W
OWNER	KAY COUNTY GAS CO.	EL PASO NATURAL GAS CO.	DIAMOND SHAMROCK CORP.
COMPLETED	12/14/29	09/01/57	08/23/59
SAMPLED	03/25/30	05/06/58	12/12/59
FORMATION	MISS---	PERM-DOLOMITE	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	350	350
DEPTH, FEET	4153	1650	1260
WELLHEAD PRESSURE,PSIG	570	429	330
OPEN FLOW, MCFD	9500	940	1040
COMPONENT, MOLE PCT			
METHANE	78.4	91.7	65.3
ETHANE	18.4	3.6	8.9
PROPANE	---	1.3	8.7
N-BUTANE	---	0.9	3.3
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	2.6	2.2	31.3
OXYGEN	0.3	0.2	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.10	0.10	1.00
HEATING VALUE*	1124	1057	723
SPECIFIC GRAVITY	0.661	0.609	0.704

	INDEX 6055 SAMPLE 15016	INDEX 6056 SAMPLE 15240	INDEX 6057 SAMPLE 11725
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GREER	HARPER	HARPER
FIELD	WILLOW NW	BOILING SPRINGS N	BUFFALO
WELL NAME	KOPECEK NO. 1	ROOT NO. 1	VIOLET COOK NO. 1
LOCATION	SEC. 33, T7N, R22W	SEC. 9, T25N, R20W	SEC. 6, T27N, R22W
OWNER	THERMO DYNE, INC.	SUN PRODUCTION CO.	EASON OIL CO.
COMPLETED	--/--/00	06/15/77	04/10/68
SAMPLED	06/08/77	03/-/78	12/31/68
FORMATION	PERM-GRANITE WASH	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	350	360	360
DEPTH, FEET	1500	6676	5891
WELLHEAD PRESSURE,PSIG	250	2768	2560
OPEN FLOW, MCFD	NOT GIVEN	9966	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	92.5	91.1
ETHANE	4.2	3.8	3.4
PROPANE	1.8	1.3	1.6
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	2.0	0.9	2.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.08	0.07	0.15
HEATING VALUE*	1089	1078	1081
SPECIFIC GRAVITY	0.623	0.611	0.624

	INDEX 6058 SAMPLE 11325	INDEX 6059 SAMPLE 11326	INDEX 6060 SAMPLE 11455
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	BUFFALO N	BUFFALO N	BUFFALO N
WELL NAME	ROBERT R. ROHRER NO. 1	ROSA LEE KUHN NO. 1	MALCOMB-MILLER UNIT NO. 2
LOCATION	SEC. 6, T28N, R22W	SEC. 6, T28N, R22W	SEC. 7, T28N, R22W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	08/24/59	03/31/59	01/29/60
SAMPLED	03/01/68	03/01/68	04/16/68
FORMATION	PENN-MORROW	PENN-OSWEGO	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7220	5950	7304
WELLHEAD PRESSURE,PSIG	1406	1469	1362
OPEN FLOW, MCFD	4053	1191	2302
COMPONENT, MOLE PCT			
METHANE	91.8	86.0	76.5
ETHANE	3.7	5.7	7.9
PROPANE	1.6	3.5	4.3
N-BUTANE	0.5	1.1	1.4
ISOBUTANE	0.2	0.2	0.7
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.9	2.5	7.7
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.09	0.13	0.11
HEATING VALUE*	1102	1143	1139
SPECIFIC GRAVITY	0.623	0.665	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6061 SAMPLE 15479	INDEX 6062 SAMPLE 14641	INDEX 6063 SAMPLE 14957
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	BUFFALO NW	BUFFALO SE	BUFFALO SE
WELL NAME	PROCTOR NO. 15	RICHARDSON NO. 1	MAPNET NO. 1
LOCATION	SEC. 35, T26N, R23W	SEC. 24, T27N, R22W	SEC. 14, T27N, R22W
OWNER	KENNEDY & MITCHELL, INC.	NATIONAL COOP. REFINERY ASSN	NATIONAL COOP. REFINERY ASSN
COMPLETED	10/31/78	11/19/75	06/23/76
SAMPLED	11/09/78	04/23/76	03/30/77
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5678	5959	6047
WELLHEAD PRESSURE,PSIG	1684	1987	1528
OPEN FLOW, MCFD	3073	9038	16442
COMPONENT, MOLE PCT			
METHANE	84.9	87.3	94.0
ETHANE	5.5	4.7	2.5
PROPANE	3.8	3.1	0.7
N-BUTANE	1.1	1.1	0.3
ISOBUTANE	0.7	0.6	TRACE
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	2.2	1.9	1.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.5
HELIUM	0.13	0.10	0.08
HEATING VALUE*	1176	1151	1039
SPECIFIC GRAVITY	0.685	0.665	0.593

	INDEX 6064 SAMPLE 17686	INDEX 6065 SAMPLE 11331	INDEX 6066 SAMPLE 17252
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	BUFFALO SW	CLARK CREEK E	CLARK CREEK W
WELL NAME	DOWNS NO. 1	CLAUDE SHORT NO. 1	NADINE NO. 1021
LOCATION	SEC. 14, T27N, R23W	SEC. 22, T29N, R22W	SEC. 21, T29N, R24W
OWNER	TXO PRODUCTION CORP.	MOBIL OIL CORP.	NATURAL GAS ANADARKO, INC.
COMPLETED	09/26/84	07/30/64	05/16/83
SAMPLED	05/29/85	03/04/68	04/12/84
FORMATION	PENN-MORROW	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5940	5595	6050
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1365	1490
OPEN FLOW, MCFD	1800	15713	2892
COMPONENT, MOLE PCT			
METHANE	88.8	91.7	84.4
ETHANE	4.5	3.2	5.1
PROPANE	2.6	1.3	4.4
N-BUTANE	0.9	0.5	0.8
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.5	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	1.4	2.2	5.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.10	0.11	0.20
HEATING VALUE*	1140	1066	1084
SPECIFIC GRAVITY	0.654	0.613	0.663

	INDEX 6067 SAMPLE 9937	INDEX 6068 SAMPLE 13950	INDEX 6069 SAMPLE 14247
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	FORT SUPPLY NE	FORT SUPPLY NE	FORT SUPPLY NE
WELL NAME	DEWEESE NO. 1	SMITH NO. 1	DEWEESE NO. 1
LOCATION	SEC. 21, T25N, R21W	SEC. 23, T25N, R21W	SEC. 22, T25N, R21W
OWNER	CONTINENTAL OIL CO.	OKLAHOMA NATURAL GAS CO.	DYCO PETROLEUM CORP.
COMPLETED	09/09/65	01/23/74	10/10/74
SAMPLED	06/23/65	03/13/74	12/30/74
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7026	6994	6946
WELLHEAD PRESSURE,PSIG	1951	1756	1436
OPEN FLOW, MCFD	5601	2900	8250
COMPONENT, MOLE PCT			
METHANE	90.3	92.5	93.3
ETHANE	4.6	3.6	3.9
PROPANE	1.9	1.4	1.7
N-BUTANE	0.5	0.3	0.4
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.0	0.7	1.2
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.5
HELIUM	0.08	0.10	0.10
HEATING VALUE*	1109	1085	1080
SPECIFIC GRAVITY	0.633	0.617	0.618

	INDEX 6070 SAMPLE 11083	INDEX 6071 SAMPLE 11356	INDEX 6072 SAMPLE 11578
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE	LOVEDALE	LOVEDALE
WELL NAME	JOHNSON NO. 1	LOCKMART UNIT C	STATE NO. 1
LOCATION	SEC. 5, T26N, R21W	SEC. 14, T26N, R21W	SEC. 21, T26N, R21W
OWNER	EDWIN L. COX	AMOCO PRODUCTION CO.	AIKMAN BROTHERS CORP.
COMPLETED	05/22/67	12/29/61	05/20/66
SAMPLED	08/05/67	03/09/68	07/22/68
FORMATION	PENN-TONKAWA	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4929	6250	5104
WELLHEAD PRESSURE,PSIG	1642	1450	1200
OPEN FLOW, MCFD	9182	NOT GIVEN	16000
COMPONENT, MOLE PCT			
METHANE	81.1	80.7	78.7
ETHANE	8.1	8.2	8.1
PROPANE	3.8	4.0	4.7
N-BUTANE	1.1	1.1	1.3
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.3	0.4	0.6
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	4.2	4.1	4.9
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.19	0.20	0.24
HEATING VALUE*	1156	1161	1182
SPECIFIC GRAVITY	0.691	0.694	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6073 SAMPLE 11636	INDEX 6074 SAMPLE 15233	INDEX 6075 SAMPLE 15597
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE	LOVEDALE	LOVEDALE
WELL NAME	WAITS NO. 1	RUBLE NO. 1	SMITH NO. 1
LOCATION	SEC. 12, T26N, R20W	SEC. 1, T25N, R21W	SEC. 32, T26N, R21W
OWNER	KIRKPATRICK OIL CO.	TEXAS OIL & GAS CORP.	NORTHERN NATURAL GAS EXPL. C
COMPLETED	--/--/00	12/08/77	07/06/78
SAMPLED	08/23/68	03/21/78	03/27/79
FORMATION	DEVO-HUNTON	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6724	6564
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2653	1878
OPEN FLOW, MCFD	NOT GIVEN	4800	5485
COMPONENT, MOLE PCT			
METHANE	84.3	91.7	92.7
ETHANE	6.9	3.9	2.8
PROPANE	2.9	1.6	1.1
N-BUTANE	1.1	0.5	0.4
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	3.9	1.1	1.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.11	0.09	0.09
HEATING VALUE*	1135	1085	1065
SPECIFIC GRAVITY	0.674	0.618	0.610

	INDEX 6076 SAMPLE 9049	INDEX 6077 SAMPLE 9710	INDEX 6078 SAMPLE 11696
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE NW	LOVEDALE NW	LOVEDALE NW
WELL NAME	SHARP	BESSIE NO. 1	WOOLFOLK UNIT NO. 1
LOCATION	SEC. 32, T29N, R21W	SEC. 11, T28N, R21W	SEC. 18, T27N, R20W
OWNER	DAVE MORGAN OIL CO., ET AL.	GULF OIL CO.- U.S.	TENNECO OIL CO.
COMPLETED	12/06/62	11/13/64	12/22/67
SAMPLED	07/22/63	01/19/65	--/--/00
FORMATION	PENN-MORROW	PENN-MORROW	SILU-CHIMNEYHILL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5660	5678	7384
WELLHEAD PRESSURE,PSIG	1900	1773	2452
OPEN FLOW, MCFD	3500	1449	5800
COMPONENT, MOLE PCT			
METHANE	92.1	93.5	86.9
ETHANE	4.0	2.9	4.0
PROPANE	1.4	0.9	1.7
N-BUTANE	0.5	0.2	0.5
ISOBUTANE	0.1	TRACE	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.9	1.5	5.2
OXYGEN	0.0	TRACE	0.3
ARGON	TRACC	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.0	0.2
HELIUM	0.10	0.08	0.12
HEATING VALUE*	1092	1030	1051
SPECIFIC GRAVITY	0.619	0.597	0.640

	INDEX 6079 SAMPLE 12683	INDEX 6080 SAMPLE 13799	INDEX 6081 SAMPLE 15316
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	LOVEDALE NW	LOVEDALE NW	LOVEDALE NW
WELL NAME	ART HEPNER NO. 1-19	O. E. HOWARD NO. 1	CANFIELD GAS UNIT NO. 3
LOCATION	SEC. 19, T27N, R20W	SEC. 11, T27N, R21W	SEC. 23, T28N, R21W
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	11/17/73	06/12/73	01/28/78
SAMPLED	02/15/71	11/05/73	07/17/78
FORMATION	DEVO-HUNTON	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7330	5880	5761
WELLHEAD PRESSURE,PSIG	1830	1850	1300
OPEN FLOW, MCFD	4440	1658	1500
COMPONENT, MOLE PCT			
METHANE	88.5	91.8	93.9
ETHANE	4.2	3.9	2.3
PROPANE	1.8	1.6	0.7
N-BUTANE	0.5	0.4	0.3
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.0	1.1	1.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.13	0.08	0.09
HEATING VALUE*	1068	1087	1042
SPECIFIC GRAVITY	0.633	0.616	0.596

	INDEX 6082 SAMPLE 11420	INDEX 6083 SAMPLE 2224	INDEX 6084 SAMPLE 4380
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MAY E	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	EASTERWOOD NO. 1	MOWELL NO. 1	HEIRONYMUS NO. 1
LOCATION	SEC. 21, T25N, R23W	SEC. 14, T26N, R24W	SEC. 3, T26N, R24W
OWNER	AMOCO PRODUCTION CO.	ATLANTIC RICHFIELD CO.	J. M. HUBER CORP.
COMPLETED	07/07/64	--/--/00	09/01/47
SAMPLED	03/29/68	10/31/30	12/23/47
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9710	5400	5439
WELLHEAD PRESSURE,PSIG	2040	1459	1495
OPEN FLOW, MCFD	4600	11250	834
COMPONENT, MOLE PCT			
METHANE	92.7	76.7	78.5
ETHANE	3.7	20.5	18.4
PROPANE	1.5	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.5	2.7	2.5
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	0.07	0.21	0.18
HEATING VALUE*	1095	1144	1125
SPECIFIC GRAVITY	0.618	0.668	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6085 SAMPLE 5270	INDEX 6086 SAMPLE 5414	INDEX 6087 SAMPLE 6082
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	M. WOLFE NO. 1	LEROY LONG NO. 1	MCCLUNG A NO. 1
LOCATION	SEC. 4, T25N, R25W	SEC. 3, T25N, R25W	SEC. 11, T26N, R25W
OWNER	SUN OIL CO.	SUN OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	08/31/52	05/25/56
SAMPLED	09/26/52	03/11/53	06/12/56
FORMATION	PENN-HOOVER	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7280	5455
WELLHEAD PRESSURE, PSIG	NOT GIVEN	1700	1590
OPEN FLOW, MCFD	NOT GIVEN	640	100000
COMPONENT, MOLE PCT			
METHANE	74.3	80.8	81.1
ETHANE	6.8	7.9	7.5
PROPANE	4.9	5.7	3.7
N-BUTANE	2.0	1.7	1.0
ISOBUTANE	1.0	1.0	0.6
N-PENTANE	1.9	0.4	0.3
ISOPENTANE	2.6	0.3	0.4
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	1.0	0.2	0.4
NITROGEN	4.1	1.3	4.2
OXYGEN	0.7	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.10	0.09	0.17
HEATING VALUE*	1353	1243	1164
SPECIFIC GRAVITY	0.822	0.720	0.697

	INDEX 6088 SAMPLE 6083	INDEX 6089 SAMPLE 6106	INDEX 6090 SAMPLE 6121
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	MCCLUNG A NO. 1	HILL NO. 1	EFFIE STINSON NO. 1
LOCATION	SEC. 11, T26N, R25W	SEC. 6, T25N, R26W	SEC. 12, T26N, R25W
OWNER	CITIES SERVICE OIL CO.	SUN OIL CO.	MOBIL OIL CORP.
COMPLETED	05/25/56	06/22/56	07/08/56
SAMPLED	06/12/56	07/13/56	08/08/56
FORMATION	MISS-CHESTER	PENN-HOOVER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6945	4346	5540
WELLHEAD PRESSURE, PSIG	1809	1364	1587
OPEN FLOW, MCFD	11500	53000	22500
COMPONENT, MOLE PCT			
METHANE	77.1	48.0	86.1
ETHANE	3.5	16.2	6.6
PROPANE	1.8	18.2	3.3
N-BUTANE	0.8	8.7	1.0
ISOBUTANE	0.6	3.4	0.7
N-PENTANE	0.3	2.2	0.2
ISOPENTANE	0.8	1.8	0.3
CYCLOPENTANE	0.7	0.3	0.1
HEXANES PLUS	1.3	1.2	0.4
NITROGEN	10.0	0.0	0.8
OXYGEN	2.1	0.1	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.3
HELIUM	0.06	0.03	0.08
HEATING VALUE*	1078	1901	1179
SPECIFIC GRAVITY	0.733	1.114	0.672

	INDEX 6091 SAMPLE 6124	INDEX 6092 SAMPLE 6130	INDEX 6093 SAMPLE 6133
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	EFFIE STINSON NO. 1	FREEMAN NO. 1	CARLISLE NO. 1
LOCATION	SEC. 12, T26N, R25W	SEC. 5, T27N, R25W	SEC. 25, T26N, R25W
OWNER	MOBIL OIL CORP.	AN-SON CORP.	SUN OIL CO.
COMPLETED	03/08/56	04/28/56	06/14/56
SAMPLED	08/08/56	08/18/56	08/21/56
FORMATION	PENN-MORROW	PENN-MORROW	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6908	6620	4152
WELLHEAD PRESSURE, PSIG	1754	1320	1360
OPEN FLOW, MCFD	12300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.6	91.4	85.5
ETHANE	5.8	4.7	6.4
PROPANE	3.2	1.8	2.5
N-BUTANE	1.0	0.5	0.7
ISOBUTANE	0.7	0.2	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	0.5	0.6	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.08	0.10	0.19
HEATING VALUE*	1187	1098	1123
SPECIFIC GRAVITY	0.673	0.620	0.662

	INDEX 6094 SAMPLE 6140	INDEX 6095 SAMPLE 6154	INDEX 6096 SAMPLE 6155
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	STINSON NO. 1	W. M. STURGEON UNIT NO. 1	W. M. STURGEON UNIT NO. 1
LOCATION	SEC. 34, T26N, R25W	SEC. 2, T25N, R25W	SEC. 2, T26N, R25W
OWNER	SUN OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	07/20/56	08/30/56	08/30/56
SAMPLED	10/02/56	12/01/56	10/01/56
FORMATION	PENN-HOOVER	PENN-HOOVER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7278	4186	6893
WELLHEAD PRESSURE, PSIG	1349	1287	1517
OPEN FLOW, MCFD	6100	17000	3690
COMPONENT, MOLE PCT			
METHANE	86.5	84.1	91.0
ETHANE	6.1	6.4	4.2
PROPANE	2.5	2.5	1.9
N-BUTANE	0.5	0.9	0.4
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	0.4	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.3	0.2
HEXANES PLUS	0.2	0.8	0.4
NITROGEN	3.4	4.0	0.7
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.8
HELIUM	0.19	0.20	0.06
HEATING VALUE*	1099	1146	1109
SPECIFIC GRAVITY	0.646	0.681	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6097 SAMPLE 6168	INDEX 6098 SAMPLE 6208	INDEX 6099 SAMPLE 6224
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	BARBY NO. 1	LOUIS BARBY NO. 1	ELMA A. ODELL NO. 1
LOCATION	SEC. 12, T26N, R26W	SEC. 6, T26N, R25W	SEC. 1, T25N, R25W
OWNER	SUN OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	04/20/56	08/03/56	12/02/56
SAMPLED	10/25/56	12/06/56	12/26/57
FORMATION	PENN-HOOVER	MISS-CHESTER	PENN-HOOVER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4205	6918	4228
WELLHEAD PRESSURE,PSIG	1348	1796	1195
OPEN FLOW, MCFD	3750	27	650
COMPONENT, MOLE PCT			
METHANE	85.0	83.6	85.6
ETHANE	6.4	4.1	5.9
PROPANE	2.4	1.4	3.5
N-BUTANE	0.8	2.8	0.8
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.4	1.6	0.2
ISOPENTANE	0.0	3.2	0.0
CYCLOPENTANE	TRACE	0.4	TRACE
HEXANES PLUS	0.2	1.1	0.2
NITROGEN	3.9	0.7	3.2
OXYGEN	0.3	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.17	0.06	0.21
HEATING VALUE*	1102	1338	1116
SPECIFIC GRAVITY	0.657	0.772	0.655

	INDEX 6100 SAMPLE 6253	INDEX 6101 SAMPLE 6511	INDEX 6102 SAMPLE 6512
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	STATE UNIT NO. 1	LOWE UNIT NO. 1	LOWE UNIT NO. 1
LOCATION	SEC. 34, T27N, R25W	SEC. 8, T26N, R24W	SEC. 8, T26N, R24W
OWNER	SHELL OIL CO.	J. M. HUBER CORP.	J. M. HUBER CORP.
COMPLETED	11/28/56	02/24/58	02/24/58
SAMPLED	02/11/57	02/25/58	02/24/58
FORMATION	PENN-HOOVER	PENN-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4180	6904	6956
WELLHEAD PRESSURE,PSIG	1336	1764	1844
OPEN FLOW, MCFD	16000	40000	5000
COMPONENT, MOLE PCT			
METHANE	85.2	85.0	92.2
ETHANE	6.1	6.9	3.5
PROPANE	2.3	3.5	1.3
N-BUTANE	0.6	1.1	0.4
ISOBUTANE	0.4	0.7	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.3	0.7	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	1.1	0.0
CARBON DIOXIDE	0.4	0.0	1.1
HELIUM	0.22	0.10	0.10
HEATING VALUE*	1085	1172	1077
SPECIFIC GRAVITY	0.652	0.676	0.620

	INDEX 6103 SAMPLE 7160	INDEX 6104 SAMPLE 7327	INDEX 6105 SAMPLE 7338
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	EARL MCATEE UNIT NO. 1	A. D. STARBUCK NO. 1	DUNAWAY NO. 1
LOCATION	SEC. 34, T28N, R24W	SEC. 11, T26N, R24W	SEC. 32, T27N, R25W
OWNER	UNITED PRODUCING CO., INC.	ATLANTIC RICHFIELD CO.	OKLAHOMA NATURAL GAS CO.
COMPLETED	05/22/59	11/09/59	09/28/59
SAMPLED	07/28/59	12/31/59	02/--/60
FORMATION	MISS-CHESTER	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6512	5534	6760
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1554	1709
OPEN FLOW, MCFD	5900	12500	10000
COMPONENT, MOLE PCT			
METHANE	90.1	79.0	87.8
ETHANE	4.8	7.8	4.9
PROPANE	1.8	4.7	2.9
N-BUTANE	0.7	1.3	1.0
ISOBUTANE	0.8	0.8	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.4	0.8
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.1	5.2	0.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.8
CARBON DIOXIDE	0.0	0.3	0.5
HELIUM	0.10	0.20	0.10
HEATING VALUE*	1143	1167	1170
SPECIFIC GRAVITY	0.638	0.712	0.666

	INDEX 6106 SAMPLE 7497	INDEX 6107 SAMPLE 7567	INDEX 6108 SAMPLE 7802
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	J. F. MOBERLY	TAFT NO. 1	STUART UNIT NO. 1
LOCATION	SEC. 18, T26N, R23W	SEC. 22, T26N, R26W	SEC. 18, T26N, R25W
OWNER	TEXOMA PRODUCTION CO.	SHELL OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	03/14/60	11/19/60	09/09/60
SAMPLED	04/11/60	05/25/60	12/23/60
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6582	7183	5419
WELLHEAD PRESSURE,PSIG	1540	1734	1541
OPEN FLOW, MCFD	14400	4000	15250
COMPONENT, MOLE PCT			
METHANE	81.0	87.0	82.5
ETHANE	8.4	6.7	8.0
PROPANE	3.0	2.9	3.6
N-BUTANE	1.0	0.7	0.9
ISOBUTANE	1.5	0.6	0.5
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.8	0.5	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.6	1.0	3.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.20	0.10	0.20
HEATING VALUE*	1109	1151	1138
SPECIFIC GRAVITY	0.687	0.657	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6109 SAMPLE 8363	INDEX 6110 SAMPLE 8364	INDEX 6111 SAMPLE 10859
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	I. L. ADAMS NO. 1	HEIRONYMUS NO. 1	STATE OF OKLAHOMA L NO. 1
LOCATION	SEC. 28, T28N, R24W	SEC. 17, T28N, R23E	SEC. 36, T25N, R25W
OWNER	MAY EXPLORATION VENTURES	MAY EXPLORATION VENTURES	CABOT CORP.
COMPLETED	01/02/62	11/02/61	02/01/66
SAMPLED	--/--/00	--/--/00	01/31/67
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6236	6030	7850
WELLHEAD PRESSURE,PSIG	1741	NOT GIVEN	1860
OPEN FLOW, MCFD	4250	5389	7100
COMPONENT, MOLE PCT			
METHANE	90.6	89.5	87.6
ETHANE	4.5	4.4	6.2
PROPANE	2.0	2.0	2.9
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.0	1.9	0.7
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.6
HELIUM	0.11	0.15	0.08
HEATING VALUE*	1107	1110	1138
SPECIFIC GRAVITY	0.629	0.639	0.652

	INDEX 6112 SAMPLE 11277	INDEX 6113 SAMPLE 11278	INDEX 6114 SAMPLE 12897
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	ERPLE PROPHET NO. 1	N. P. WOOD NO. 1	MILLER-LOTSPEICH NO. 1
LOCATION	SEC. 35, T27N, R23W	SEC. 36, T27N, R23W	SEC. 19, T29N, R25W
OWNER	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.	EXXON CO., U.S.A.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/13/68	02/13/68	07/20/71
FORMATION	PENN-TONKAWA	PENN-TONKAWA	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5236	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1490	1421	300
OPEN FLOW, MCFD	NOT GIVEN	14500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.4	80.3	90.9
ETHANE	7.4	7.7	4.6
PROPANE	2.8	3.3	2.1
N-BUTANE	1.0	0.9	0.6
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	9.0	5.8	0.8
OXYGEN	1.5	0.5	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.16	0.19	0.08
HEATING VALUE*	1068	1113	1111
SPECIFIC GRAVITY	0.708	0.687	0.626

	INDEX 6115 SAMPLE 14859	INDEX 6116 SAMPLE 14860	INDEX 6117 SAMPLE 17475
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HARPER	HARPER	HARPER
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA
WELL NAME	CRAWFORD NO. 1	CARLISLE NO. 1-36	HIERONYMUS UNIT "D" NO. 2
LOCATION	SEC. 12, T25N, R24W	SEC. 36, T26N, R25W	SEC. 2, T26N, R24W
OWNER	MCM	MCM	AMOCO PRODUCTION CO.
COMPLETED	05/10/76	11/04/76	--/--/00
SAMPLED	11/12/76	11/12/76	10/12/84
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7030	7066	5349
WELLHEAD PRESSURE,PSIG	1850	1227	175
OPEN FLOW, MCFD	3800	2124	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.8	84.5	80.0
ETHANE	4.7	6.9	8.3
PROPANE	2.0	4.7	4.5
N-BUTANE	0.6	1.5	1.5
ISOBUTANE	0.3	0.7	0.6
N-PENTANE	0.3	0.3	0.5
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.6	0.8	3.4
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.07	0.08	0.15
HEATING VALUE*	1122	1204	1201
SPECIFIC GRAVITY	0.635	0.689	0.715

	INDEX 6118 SAMPLE 16363	INDEX 6119 SAMPLE 14006	INDEX 6120 SAMPLE 3469
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MASKELL	MASKELL	MASKELL
FIELD	BROOKEN	KEOTA NE	KINTA
WELL NAME	MURPHY NO. 1	CARSON NO. 1-30	E. JOHNSON NO. 1
LOCATION	SEC. 8, T9N, R18E	SEC. 30, T10N, R23E	SEC. 26, T8N, R20E
OWNER	SUN GAS CO.	CLEARY PETROLEUM CORP.	OKLAHOMA NATURAL GAS CO.
COMPLETED	07/--/81	01/24/74	06/13/27
SAMPLED	10/20/81	05/03/74	06/02/42
FORMATION	PENN-BOOCH	PENN-SPIRO	-COAL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1350	7396	837
WELLHEAD PRESSURE,PSIG	310	1571	245
OPEN FLOW, MCFD	3000	15815	556
COMPONENT, MOLE PCT			
METHANE	96.6	96.2	96.4
ETHANE	0.9	0.9	1.4
PROPANE	0.3	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.6	0.3	0.9
OXYGEN	0.0	0.0	0.8
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	2.3	0.9
HELIUM	0.06	0.09	0.04
HEATING VALUE*	1020	993	1002
SPECIFIC GRAVITY	0.572	0.583	0.576

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6121 SAMPLE 8179	INDEX 6122 SAMPLE 8354	INDEX 6123 SAMPLE 8355
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	GLADYS HENDERSON UNIT NO. 1	ADAMS STATE UNIT NO. 1	ADAMS STATE UNIT NO. 1
LOCATION	SEC. 10, T7N, R19E	SEC. 12, T7N, R19E	SEC. 12, T7N, R19E
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	06/29/61	09/21/61	09/21/61
SAMPLED	08/19/61	01/07/62	01/07/62
FORMATION	PENN-CROMWELL	PENN-SPIRO	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6522	5788	6238
WELLHEAD PRESSURE,PSIG	1391	1231	1409
OPEN FLOW, MCFD	2740	1980	5700
COMPONENT, MOLE PCT			
METHANE	95.4	94.9	95.8
ETHANE	1.3	0.8	1.2
PROPANE	0.4	0.1	0.5
N-BUTANE	0.0	TRACE	TRACE
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	2.2	0.8
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.2	1.6
HELIUM	0.10	0.07	0.04
HEATING VALUE*	1038	979	1000
SPECIFIC GRAVITY	0.589	0.580	0.582

	INDEX 6124 SAMPLE 9031	INDEX 6125 SAMPLE 9712	INDEX 6126 SAMPLE 9796
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	E. VAUGHN NO. 1	MCKINNEY UNIT NO. 1	FED. COLLEGE UNIT NO. 1
LOCATION	SEC. 3, T7N, R21E	SEC. 32, T8N, R21E	SEC. 15, T8N, R22E
OWNER	MOBIL OIL CORP.	EXXON CO., U.S.A.	TEXAS PACIFIC OIL CO.
COMPLETED	08/08/62	11/30/64	11/25/64
SAMPLED	07/05/63	01/20/65	03/12/65
FORMATION	PENN-SPIRO	PENN-CROMWELL	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	8064	7498	5860
WELLHEAD PRESSURE,PSIG	1145	1500	1175
OPEN FLOW, MCFD	1629	1930	4596
COMPONENT, MOLE PCT			
METHANE	94.4	95.0	95.9
ETHANE	0.7	0.6	0.8
PROPANE	0.2	0.0	0.4
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	0.2	1.6	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.8	2.7	2.2
HELIUM	0.10	0.07	0.07
HEATING VALUE*	1001	973	996
SPECIFIC GRAVITY	0.610	0.590	0.586

	INDEX 6127 SAMPLE 9854	INDEX 6128 SAMPLE 10089	INDEX 6129 SAMPLE 10090
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	GREENWOOD UNIT NO. 1	J. FRED DITTMAN UNIT NO. 1	J. FRED DITTMAN UNIT NO. 1
LOCATION	SEC. 26, T10N, R23E	SEC. 21, T8N, R21E	SEC. 21, T8N, R21E
OWNER	EXXON CO., U.S.A.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	04/26/64	06/30/65	06/30/65
SAMPLED	04/22/65	08/30/65	08/30/65
FORMATION	PENN-SPIRO	PENN-CROMWELL	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5808	6342	5932
WELLHEAD PRESSURE,PSIG	1100	1600	1700
OPEN FLOW, MCFD	1919	3000	6000
COMPONENT, MOLE PCT			
METHANE	96.8	96.4	96.1
ETHANE	1.0	0.6	0.6
PROPANE	0.2	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	1.5	1.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.4	1.8
HELIUM	0.09	0.10	0.08
HEATING VALUE*	1004	987	984
SPECIFIC GRAVITY	0.575	0.577	0.580

	INDEX 6130 SAMPLE 10188	INDEX 6131 SAMPLE 10347	INDEX 6132 SAMPLE 11719
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	LONE STAR NO. 1	ABBOTT UNIT A NO. 1	FENTON NO. 1
LOCATION	SEC. 8, T8N, R22E	SEC. 22, T8N, R21E	SEC. 17, T8N, R21E
OWNER	MONSANTO CO.	ANDCO PRODUCTION CO.	SUNSET INTERNATL. PET. CORP.
COMPLETED	05/18/65	10/01/65	11/13/68
SAMPLED	10/03/65	12/29/65	12/30/68
FORMATION	PENN-SPIRO	PENN-SPIRO	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6286	6570	6520
WELLHEAD PRESSURE,PSIG	1180	1150	2250
OPEN FLOW, MCFD	15000	2600	3540
COMPONENT, MOLE PCT			
METHANE	96.2	94.4	95.7
ETHANE	0.9	0.7	0.6
PROPANE	0.1	0.6	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	1.3	2.2
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.6	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	2.0	1.3
HELIUM	0.07	0.07	0.08
HEATING VALUE*	993	984	983
SPECIFIC GRAVITY	0.582	0.587	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6133 SAMPLE 13758	INDEX 6134 SAMPLE 16594	INDEX 6135 SAMPLE 17176
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	KINTA	KINTA
WELL NAME	CARSON NO. 1-29	BONHAM B NO. 1-1	ROSE NO. 2-24
LOCATION	SEC. 29, T10N, R23E	SEC. 1, T9N, R22E	SEC. 24, T7N, R19E
OWNER	CLEARY PETROLEUM CORP.	HADSON PETROLEUM CO.	SAMSON RESOURCES CO.
COMPLETED	07/31/73	--/--/81	11/02/81
SAMPLED	09/27/73	07/--/82	02/14/84
FORMATION	PENN-SPIRO	PENN-ATOKA	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6761	7314	9635
WELLHEAD PRESSURE,PSIG	1532	165	780
OPEN FLOW, MCFD	8528	NOT GIVEN	3100
COMPONENT, MOLE PCT			
METHANE	92.5	95.8	94.1
ETHANE	0.9	1.0	0.6
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	3.9	0.7	0.3
OXYGEN	0.5	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	2.2	4.3
HELIUM	0.08	0.08	0.04
HEATING VALUE*	956	991	984
SPECIFIC GRAVITY	0.598	0.584	0.609

	INDEX 6136 SAMPLE 17598	INDEX 6137 SAMPLE 15727	INDEX 6138 SAMPLE 15728
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	KINTA	RUSSELL SE	RUSSELL SE
WELL NAME	SMITH NO. 2-9	BROWN "L" NO. 1	BROWN "L" NO. 1
LOCATION	SEC. 9, T9N, R23E	SEC. 33, T9N, R18E	SEC. 33, T9N, R18E
OWNER	C & S EXPLORATION, INC.	CITIES SERVICE CO.	CITIES SERVICE CO.
COMPLETED	05/26/84	03/08/79	03/08/79
SAMPLED	02/28/85	08/17/79	08/17/79
FORMATION	PENN-ATOKA	PENN-CROMWELL	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1218	5454	4887
WELLHEAD PRESSURE,PSIG	140	815	837
OPEN FLOW, MCFD	2673	1884	10391
COMPONENT, MOLE PCT			
METHANE	96.7	95.2	96.0
ETHANE	2.2	0.8	0.8
PROPANE	0.2	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.7	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.1	2.2
HELIUM	0.05	0.09	0.09
HEATING VALUE*	1024	981	989
SPECIFIC GRAVITY	0.572	0.592	0.584

	INDEX 6139 SAMPLE 14382	INDEX 6140 SAMPLE 14952	INDEX 6141 SAMPLE 15726
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HASKELL	HASKELL
FIELD	STIGLER	STIGLER W	STIGLER W
WELL NAME	MCCARROLL NO. 1	JOHNSON NO. 1	COLLEGE UNIT NO. 1
LOCATION	SEC. 10, T9N, R21E	SEC. 17, T9N, R20E	SEC. 15, T9N, R20E
OWNER	SOUTHERN UNION PRODUCTION CO	SERVICE DRILLING CO.	E. LYLE JOHNSON, INC.
COMPLETED	02/01/74	10/12/76	09/20/78
SAMPLED	06/11/75	03/29/77	08/20/79
FORMATION	PENN-SPIRO	PENN-SPIRO	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4011	3900	4235
WELLHEAD PRESSURE,PSIG	1550	1375	1394
OPEN FLOW, MCFD	2200	10310	10141
COMPONENT, MOLE PCT			
METHANE	96.5	97.0	96.2
ETHANE	1.1	1.0	1.5
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	1.6	1.4	1.7
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.5
HELIUM	0.09	0.09	0.11
HEATING VALUE*	1000	1015	1009
SPECIFIC GRAVITY	0.572	0.572	0.578

	INDEX 6142 SAMPLE 17084	INDEX 6143 SAMPLE 3450	INDEX 6144 SAMPLE 3459
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HASKELL	HUGHES	HUGHES
FIELD	STIGLER W	ADAMS DISTRICT	ADAMS DISTRICT
WELL NAME	GOLDEN NO. 1-23	M. K. FREAM NO. 1	ADAMS ESTATE NO. 2
LOCATION	SEC. 23, T9N, R19E	SEC. 29, T9N, R9E	SEC. 31, T9N, R9E
OWNER	EARLSBORO OIL & GAS CO., INC	AMERADA HESS CORP.	AMERADA HESS CORP.
COMPLETED	10/20/82	03/30/38	01/11/39
SAMPLED	10/05/83	05/27/42	05/27/42
FORMATION	DEVO-HUNTON	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	355	355
DEPTH, FEET	4816	3328	3358
WELLHEAD PRESSURE,PSIG	2175	NOT GIVEN	580
OPEN FLOW, MCFD	29000	14000	27416
COMPONENT, MOLE PCT			
METHANE	93.7	61.2	72.4
ETHANE	1.2	35.0	19.8
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	3.7	3.0	7.0
OXYGEN	0.2	0.5	0.4
ARGON	0.1	---	---
HYDROGEN	0.6	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.14	0.12	0.16
HEATING VALUE*	975	1247	1088
SPECIFIC GRAVITY	0.578	0.744	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6145 SAMPLE 3461	INDEX 6146 SAMPLE 4431	INDEX 6147 SAMPLE 3472
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	ADAMS DISTRICT	ALABAMA E	ALABAMA SE
WELL NAME	ADAMS ESTATE NO. 1	HENEHA NO. 1	GRANNEMAN NO. 1
LOCATION	SEC. 31, T9N, R9E	SEC. 2, T8N, R11E	SEC. 23, T9N, R11E
OWNER	AMERADA HESS CORP.	MID-CONTINENT PETROLEUM CORP	J. P. WALKER
COMPLETED	04/01/35	08/26/47	06/15/41
SAMPLED	05/27/42	02/04/48	05/28/42
FORMATION	DEVO-HISENER	NOT GIVEN	PENN-800CH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4023	2952	2245
WELLHEAD PRESSURE,PSIG	NOT GIVEN	975	685
OPEN FLOW, MCFD	119	8500	7000
COMPONENT, MOLE PCT			
METHANE	49.3	74.7	81.6
ETHANE	48.1	22.8	13.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.9	1.8	4.2
OXYGEN	0.3	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.07	0.10	0.18
HEATING VALUE*	1361	1165	1067
SPECIFIC GRAVITY	0.804	0.679	0.641

	INDEX 6148 SAMPLE 15649	INDEX 6149 SAMPLE 5103	INDEX 6150 SAMPLE 3451
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	ATWOOD S	CALVIN	CALVIN S
WELL NAME	POOL NO. 1-13	A. F. LYONS NO. 1	BEAKER NO. 1
LOCATION	SEC. 13, T5N, R9E	SEC. 35, T6N, R10E	SEC. 8, T5N, R10E
OWNER	JOHN A. TAYLOR	SKELLY OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/03/76	--/--/40	03/28/40
SAMPLED	06/14/79	11/29/51	05/27/42
FORMATION	PENN-GILCREASE	PENN-ATOKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3806	NOT GIVEN	4398
WELLHEAD PRESSURE,PSIG	1300	NOT GIVEN	1680
OPEN FLOW, MCFD	2400	NOT GIVEN	8609
COMPONENT, MOLE PCT			
METHANE	89.3	81.0	85.6
ETHANE	4.5	8.8	13.1
PROPANE	1.7	3.5	---
N-BUTANE	0.5	1.0	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	0.2	0.4	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	2.7	3.9	0.4
OXYGEN	0.3	0.2	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE*	0.0	---	---
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.11	0.11	0.10
HEATING VALUE*	1071	1149	1102
SPECIFIC GRAVITY	0.625	0.689	0.626

	INDEX 6151 SAMPLE 3460	INDEX 6152 SAMPLE 13685	INDEX 6153 SAMPLE 14939
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	CALVIN S	CALVIN W	CARSON
WELL NAME	SHEMWELL NO. 1	RAPER NO. 1	MCKAY NO. 1-31
LOCATION	SEC. 8, T5N, R10E	SEC. 30, T6N, R10E	SEC. 31, T 9N, R12E
OWNER	PHILLIPS PETROLEUM CO.	FERGUSON OIL CO., INC.	N.W.P.C. PETROLEUM CORP.
COMPLETED	12/22/39	02/21/73	11/02/76
SAMPLED	05/27/42	08/10/73	03/11/77
FORMATION	PENN-CROMWELL	PENN-CROMWELL	PENN-800CH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4361	4398	2820
WELLHEAD PRESSURE,PSIG	1650	1660	454
OPEN FLOW, MCFD	22500	4500	3401
COMPONENT, MOLE PCT			
METHANE	87.4	88.7	85.8
ETHANE	11.1	5.4	6.3
PROPANE	---	2.0	2.6
N-BUTANE	---	0.5	0.6
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.7	2.5	4.5
OXYGEN	0.4	TRACE	0.6
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE*	---	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.11	0.13	0.09
HEATING VALUE*	1084	1093	1074
SPECIFIC GRAVITY	0.617	0.633	0.655

	INDEX 6154 SAMPLE 16628	INDEX 6155 SAMPLE 9913	INDEX 6156 SAMPLE 10516
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	CARSON	DUSTIN N	DUSTIN S
WELL NAME	JOHNSON NO. 1	COPE NO. 1	BRANNON A NO. 1-LC
LOCATION	SEC. 2, T8N, R12E	SEC. 3, T9N, R12E	SEC. 17, T9N, R12E
OWNER	JAY PETROLEUM, INC.	SNEE & EBERLY	PHILLIPS PETROLEUM CO.
COMPLETED	03/28/82	05/04/65	12/29/64
SAMPLED	08/30/82	06/04/65	04/07/66
FORMATION	PENN-GILCREASE	PENN-GILCREASE	PENN-800CH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3002	2660	1972
WELLHEAD PRESSURE,PSIG	170	1000	640
OPEN FLOW, MCFD	1000	15619	7269
COMPONENT, MOLE PCT			
METHANE	83.8	90.4	94.6
ETHANE	6.0	4.9	2.0
PROPANE	2.8	1.7	0.5
N-BUTANE	0.7	0.5	0.2
ISOBUTANE	0.3	0.3	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	3.1	1.6	2.5
OXYGEN	0.5	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.09	0.08	0.10
HEATING VALUE*	1125	1088	1014
SPECIFIC GRAVITY	0.664	0.622	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6157 SAMPLE 10517	INDEX 6158 SAMPLE 10058	INDEX 6159 SAMPLE 10059
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	DUSTIN S	FUHRMAN SE	FUHRMAN SE
WELL NAME	BRANNON A NO. 1-UE	MEADORS NO. 1	DARKS NO. 1
LOCATION	SEC. 17, T9N, R12E	SEC. 36, T9N, R9E	SEC. 36, T9N, R9E
OWNER	PHILLIPS PETROLEUM CO.	WOOD OIL CO.	WOOD OIL CO.
COMPLETED	12/29/64	05/03/65	06/16/65
SAMPLED	04/07/66	08/10/65	08/10/65
FORMATION	PENN-BARTLESVILLE	PENN-GILCREASE	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1362	2836	2519
WELLHEAD PRESSURE, PSIG	440	1160	1100
OPEN FLOW, MCFD	2017	4000	750
COMPONENT, MOLE PCT			
METHANE	93.8	82.9	76.7
ETHANE	2.1	4.4	5.4
PROPANE	0.5	2.3	2.3
N-BUTANE	0.2	0.6	0.6
ISOBUTANE	0.0	0.2	0.3
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	3.1	8.8	15.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	1.0
HELIUM	0.01	0.14	0.13
HEATING VALUE	1008	1023	946
SPECIFIC GRAVITY	0.587	0.658	0.609

	INDEX 6160 SAMPLE 15814	INDEX 6161 SAMPLE 1307	INDEX 6162 SAMPLE 3463
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GERTY	GILCREST SW	GREASY CREEK
WELL NAME	COSPER NO. 7-1	I.T.T.O. NO. 1	CANARD NO. 2
LOCATION	SEC. 7, T4N, R10E	SEC. 19, T9N, R9E	SEC. 27, T9N, R10E
OWNER	JONES & PELLOW OIL CO.	INDIAN TERR. ILLUM. OIL CO.	DR. T. J. LYNCH
COMPLETED	08/20/79	05/17/26	10/21/41
SAMPLED	10/23/79	09/23/26	05/25/42
FORMATION	PENN-BOOCH	PENN-GILCREASE	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2910	3370	2310
WELLHEAD PRESSURE, PSIG	956	1100	570
OPEN FLOW, MCFD	2433	8000	3720
COMPONENT, MOLE PCT			
METHANE	89.4	61.2	81.2
ETHANE	3.7	31.5	14.9
PROPANE	1.7	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	4.0	6.6	3.2
OXYGEN	0.0	0.3	0.4
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.17	0.11	0.04
HEATING VALUE	1058	1184	1090
SPECIFIC GRAVITY	0.626	0.743	0.645

	INDEX 6163 SAMPLE 3473	INDEX 6164 SAMPLE 3754	INDEX 6165 SAMPLE 3896
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	BYRD NO. 1	AUSTIN NO. 1	DANNENBURG NO. 1
LOCATION	SEC. 5, T8N, R11E	SEC. 4, T7N, R10E	SEC. 35, T9N, R10E
OWNER	DR. T. J. LYNCH	ALADDIN PETROLEUM CORP.	CREEKMORE-ROONEY CO.
COMPLETED	09/--/37	01/27/44	03/21/44
SAMPLED	05/25/42	03/30/44	08/29/44
FORMATION	PENN-CALVIN	PENN-CROMWELL	PENN-GILCREASE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1540	3482	3172
WELLHEAD PRESSURE, PSIG	420	1445	NOT GIVEN
OPEN FLOW, MCFD	1500	27	1000
COMPONENT, MOLE PCT			
METHANE	91.6	81.4	78.2
ETHANE	4.9	16.3	27.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.8	1.8	1.1
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.13	0.13	0.08
HEATING VALUE	1016	1117	1208
SPECIFIC GRAVITY	0.594	0.645	0.703

	INDEX 6166 SAMPLE 3905	INDEX 6167 SAMPLE 4391	INDEX 6168 SAMPLE 4392
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	BAILEY CONSOLIDATED NO. 1	F. MEADORS NO. 1	T. MEADORS NO. 1
LOCATION	SEC. 19, T8N, R11E	SEC. 36, T9N, R10E	SEC. 36, T9N, R10E
OWNER	OTHA M. GRIMES	MID-CONTINENT PETROLEUM CORP	MID-CONTINENT PETROLEUM CORP
COMPLETED	11/29/42	06/30/47	07/18/47
SAMPLED	06/09/44	12/15/47	12/15/47
FORMATION	PENN-GILCREASE	PENN-BOOCH	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2870	2224	2242
WELLHEAD PRESSURE, PSIG	960	715	800
OPEN FLOW, MCFD	14000	3880	2100
COMPONENT, MOLE PCT			
METHANE	89.6	79.0	81.1
ETHANE	9.0	17.5	16.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.7	2.9	2.3
OXYGEN	0.2	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.10	0.09	0.09
HEATING VALUE	1069	1114	1108
SPECIFIC GRAVITY	0.606	0.656	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6169 SAMPLE 4474	INDEX 6170 SAMPLE 4557	INDEX 6171 SAMPLE 4558
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	STEEL NO. 1	SMITH B NO. 1	NICKS NO. 1
LOCATION	SEC. 17, T8N, R11E	SEC. 12, T8N, R10E	SEC. 12, T8N, R10E
OWNER	OTHA H. GRIMES	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	01/--/48	05/18/48	06/16/48
SAMPLED	04/16/48	09/10/48	09/10/48
FORMATION	PENN-GILCREASE	PENN-BOOCH	PENN-BOOCH
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2972	2330	2305
WELLHEAD PRESSURE,PSIG	940	875	800
OPEN FLOW, MCFD	1050	1100	5540
COMPONENT, MOLE PCT			
METHANE	89.0	80.1	80.7
ETHANE	8.5	14.9	---
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.7	4.4	3.9
OXYGEN	0.3	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	---
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.09	0.12	0.14
HEATING VALUE*	1054	1079	837
SPECIFIC GRAVITY	0.609	0.659	0.491

	INDEX 6172 SAMPLE 4559	INDEX 6173 SAMPLE 5070	INDEX 6174 SAMPLE 5115
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	RASBERRY	MYERS NO. 1	CORDELL NO. 1
LOCATION	SEC. 12, T8N, R10E	SEC. 9, T7N, R10E	SEC. 2, T8N, R10E
OWNER	CITIES SERVICE OIL CO.	WHITE EAGLE OIL CO.	DAVIDOR & DAVIDOR, INC.
COMPLETED	06/16/48	03/01/51	--/--/00
SAMPLED	09/10/48	06/01/51	12/03/51
FORMATION	PENN-BOOCH	PENN-CROMWELL	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2333	3580	NOT GIVEN
WELLHEAD PRESSURE,PSIG	800	1400	NOT GIVEN
OPEN FLOW, MCFD	638	2144	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.1	84.3	89.4
ETHANE	15.3	8.7	3.8
PROPANE	---	2.9	2.2
N-BUTANE	---	0.7	0.9
ISOBUTANE	---	0.1	0.0
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.0	0.2
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.2	0.3
NITROGEN	4.1	2.3	2.8
OXYGEN	0.1	0.1	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.11	0.11	0.11
HEATING VALUE*	1086	1141	1093
SPECIFIC GRAVITY	0.650	0.662	0.640

	INDEX 6175 SAMPLE 9956	INDEX 6176 SAMPLE 9957	INDEX 6177 SAMPLE 16449
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	GREASY CREEK	GREASY CREEK	GREASY CREEK
WELL NAME	TOWNSEND NO. 2	ROGERS-BRUNER NO. 1	HUGHES NO. 1-A
LOCATION	SEC. 29, T8N, R11E	SEC. 20, T8N, R11E	SEC. 28, T8N, R10E
OWNER	OTHA H. GRIMES	OTHA H. GRIMES	LEMA PETROLEUM, INC.
COMPLETED	03/05/65	11/06/56	03/15/82
SAMPLED	07/06/65	07/06/65	03/13/82
FORMATION	PENN-BARTLESVILLE	PENN-GILCREASE	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1722	2898	2500
OPEN FLOW, MCFD	1660	1210	3000
COMPONENT, MOLE PCT			
METHANE	90.0	90.2	93.6
ETHANE	2.9	4.2	2.5
PROPANE	1.5	1.5	1.0
N-BUTANE	0.9	0.3	0.2
ISOBUTANE	0.5	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.3
NITROGEN	4.2	2.7	1.9
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	TRACE
HELIUM	0.10	0.07	0.05
HEATING VALUE*	1044	1053	1059
SPECIFIC GRAVITY	0.622	0.616	0.601

	INDEX 6178 SAMPLE 4636	INDEX 6179 SAMPLE 3465	INDEX 6180 SAMPLE 3866
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	HILL S	HILL TOP	HILL TOP
WELL NAME	DERRICK A NO. 1	A. C. MCKAT NO. 1	R. & CLARKE A NO. 1
LOCATION	SEC. 32, T6N, R11E	SEC. 16, T8N, R11E	SEC. 21, T8N, R11E
OWNER	PURE OIL CO.	MOBIL OIL CORP.	STANOLIND OIL & GAS CO.
COMPLETED	07/21/48	03/04/41	07/21/44
SAMPLED	11/24/48	05/25/42	09/12/44
FORMATION	PENN---	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4866	5360	5463
WELLHEAD PRESSURE,PSIG	1948	2200	NOT GIVEN
OPEN FLOW, MCFD	2650	23500	30000
COMPONENT, MOLE PCT			
METHANE	82.2	90.6	93.8
ETHANE	11.6	8.5	5.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.6	TRACE	0.0
OXYGEN	0.9	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.3	0.7
HELIUM	0.07	0.07	0.10
HEATING VALUE*	1041	1070	1042
SPECIFIC GRAVITY	0.641	0.602	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6181 SAMPLE 3998	INDEX 6182 SAMPLE 13977	INDEX 6183 SAMPLE 1739
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	MILL TOP	MILL TOP	HOLDENVILLE
WELL NAME	C. PEARSON NO. 1	WILBANKS NO. 1	JACKSON NO. 1
LOCATION	SEC. 16, T5N, R11E	SEC. 29, T5N, R11E	SEC. 11, T7N, R8E
OWNER	TEXACO INC.	WOODS PETROLEUM CORP.	INDEPENDENT OIL & GAS CO.
COMPLETED	01/28/45	04/11/74	02/20/29
SAMPLED	03/27/45	04/15/74	04/12/29
FORMATION	PENN-CROMWELL	PENN-BOGGY	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5428	1511	3029
WELLHEAD PRESSURE,PSIG	1500	650	990
OPEN FLOW, MCFD	2250	NOT GIVEN	55806
COMPONENT, MOLE PCT			
METHANE	92.9	92.6	67.2
ETHANE	6.1	2.2	24.5
PROPANE	---	0.2	---
N-BUTANE	---	TRACE	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	TRACE	---
NITROGEN	0.0	4.6	7.5
OXYGEN	0.3	0.0	0.3
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.6	TRACE	0.5
HELIUM	0.10	0.17	0.10
HEATING VALUE*	1050	990	1120
SPECIFIC GRAVITY	0.592	0.589	0.713

	INDEX 6184 SAMPLE 2242	INDEX 6185 SAMPLE 16638	INDEX 6186 SAMPLE 4130
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	HOLDENVILLE	HOLDENVILLE NE	KICKAPOO E
WELL NAME	LOUISA TIGER NO. 1	WILLIAMS NO.1-29	B. L. PRICE NO. 1
LOCATION	SEC. 9, T7N, R8E	SEC. 29, T8N, R9E	SEC. 26, T8N, R10E
OWNER	MID-CONTINENT PETROLEUM CORP	LUSELL OIL CO.	SKELLY OIL CO.
COMPLETED	10/20/30	03/--/82	01/19/46
SAMPLED	11/22/30	09/07/82	10/10/46
FORMATION	PENN-BOOCH	PENN-GILCREASE	PENN-UNION VALLEY
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2950	3200	3370
WELLHEAD PRESSURE,PSIG	NOT GIVEN	940	1500
OPEN FLOW, MCFD	10000	3000	1000
COMPONENT, MOLE PCT			
METHANE	76.4	86.8	80.2
ETHANE	19.7	4.0	19.5
PROPANE	---	2.1	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	---
NITROGEN	3.7	5.2	0.0
OXYGEN	0.1	TRACE	0.0
ARGON	---	0.0	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.09	0.11	0.12
HEATING VALUE*	1127	1071	1162
SPECIFIC GRAVITY	0.670	0.647	0.654

	INDEX 6187 SAMPLE 4770	INDEX 6188 SAMPLE 11655	INDEX 6189 SAMPLE 11656
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	KICKAPOO E	LAMAR E	LAMAR E
WELL NAME	B. L. PRICE NO. 1	SANDERS NO. 1	SANDERS NO. 1
LOCATION	SEC. 26, T8N, R10E	SEC. 25, T8N, R11E	SEC. 25, T8N, R11E
OWNER	SKELLY OIL CO.	LUSELL OIL CO.	LUSELL OIL CO.
COMPLETED	06/22/49	04/14/68	04/14/68
SAMPLED	10/20/49	09/24/68	09/24/68
FORMATION	PENN-BOOCH	PENN-HARTSHORNE	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2360	2406	3466
WELLHEAD PRESSURE,PSIG	710	640	910
OPEN FLOW, MCFD	1200	3500	3000
COMPONENT, MOLE PCT			
METHANE	88.3	88.5	82.5
ETHANE	5.7	5.6	10.6
PROPANE	2.3	2.2	3.4
N-BUTANE	0.6	0.4	0.8
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.3	TRACE	1.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.3
NITROGEN	4.3	2.4	1.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.12	0.10	0.08
HEATING VALUE*	1066	1091	1187
SPECIFIC GRAVITY	0.634	0.631	0.680

	INDEX 6190 SAMPLE 17895	INDEX 6191 SAMPLE 13640	INDEX 6192 SAMPLE 1040
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	LAMAR W	LEGAL N	PAPOOSE
WELL NAME	TAROSLASKI NO. 1	MARTIN NO. 1	ALEXANDER NO. 1
LOCATION	SEC. 8, T7N, R11E	SEC. 23, T4N, R11E	SEC. 4, T9N, R9E
OWNER	GLENCO INTERNATIONAL CORP.	WESTERN DIVERSIFIED MGMT. CO	PAPOOSE OIL CO.
COMPLETED	03/26/85	10/13/72	04/--/24
SAMPLED	11/07/85	07/05/73	04/28/25
FORMATION	PENN-RED FORK	PENN-CROMWELL	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1798	7300	3314
WELLHEAD PRESSURE,PSIG	220	2600	20
OPEN FLOW, MCFD	130	2600	200
COMPONENT, MOLE PCT			
METHANE	88.8	94.5	58.9
ETHANE	3.2	2.0	42.0
PROPANE	1.6	0.4	---
N-BUTANE	0.6	0.1	---
ISOBUTANE	0.2	0.1	---
N-PENTANE	0.5	TRACE	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.5	0.1	---
NITROGEN	4.0	1.0	4.0
OXYGEN	0.0	0.1	0.7
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.6	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	1.1	0.4
HELIUM	0.10	0.04	0.06
HEATING VALUE*	1085	1017	1239
SPECIFIC GRAVITY	0.644	0.586	0.787

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6193 SAMPLE 3814	INDEX 6194 SAMPLE 4729	INDEX 6195 SAMPLE 11328
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	PAPOOSE	PECAN GROVE	STUART SW
WELL NAME	NORTON NO. 1	DAVIS-MURTA NO. 1	WOODFORD NO. 1
LOCATION	SEC. 6, T9N, R10E	SEC. 20, T8N, R9E	SEC. 26, T5N, R11E
OWNER	KEENER OIL & GAS CO.	GULF OIL CO.- U.S.	LUBELL OIL CO.
COMPLETED	01/02/42	01/23/49	05/31/59
SAMPLED	04/25/44	05/16/49	02/29/68
FORMATION	PENN-BOOCH	PENN-CROMWELL	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2580	3320	3085
WELLHEAD PRESSURE,PSIG	275	190	640
OPEN FLOW, MCFD	500	1300	40
COMPONENT, MOLE PCT			
METHANE	68.8	67.5	87.3
ETHANE	21.5	19.5	4.8
PROPANE	---	6.4	2.4
N-BUTANE	---	1.2	0.6
ISOBUTANE	---	0.4	0.2
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.4	0.2
NITROGEN	10.0	3.5	3.5
OXYGEN	0.4	0.1	0.4
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.4	0.2
HELIUM	0.07	0.02	0.15
HEATING VALUE*	1074	1292	1082
SPECIFIC GRAVITY	0.704	0.777	0.643

	INDEX 6196 SAMPLE 3868	INDEX 6197 SAMPLE 16464	INDEX 6198 SAMPLE 962
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	HUGHES	HUGHES	HUGHES
FIELD	WETUMKA DISTRICT E	WETUMKA DISTRICT E	WEWOKA DISTRICT
WELL NAME	JARRETT NO. 1	ALPHA NO. 1	A. LONG NO. 1
LOCATION	SEC. 19, T9N, R10E	SEC. 19, T9N, R10E	SEC. 9, T7N, R8E
OWNER	MEALY-WOLFE DRILLING CO.	W&W EXPLORATION, INC.	PRAIRIE OIL & GAS CO.
COMPLETED	04/10/44	04/07/81	06/--/24
SAMPLED	08/25/44	02/22/82	01/09/25
FORMATION	NOT GIVEN	PENN-GILCREASE	PENN---
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2632	2662	3194
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	12
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.1	87.6	5.7
ETHANE	14.6	4.2	84.2
PROPANE	---	2.2	---
N-BUTANE	---	0.7	---
ISOBUTANE	---	0.3	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	3.6	4.2	9.1
OXYGEN	0.3	0.0	0.6
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.1	0.5
HELIUM	0.00	0.13	0.04
HEATING VALUE*	1083	1080	1567
SPECIFIC GRAVITY	0.647	0.643	1.017

	INDEX 6199 SAMPLE 4129	INDEX 6200 SAMPLE 7576	INDEX 6201 SAMPLE 1751
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	JEFFERSON	JEFFERSON	KAY
FIELD	OSCAR	SEAY	BLACKWELL DISTRICT
WELL NAME	W. D. SEAY NO. 46	NO. 6	VICKERY NO. 4
LOCATION	SEC. 19, T1S, R5W	SEC. 19, T7S, R5W	SEC. 28, T27N, R1E
OWNER	CONTINENTAL OIL CO.	THERMAL PRODUCERS, INC.	MAG OIL CO.
COMPLETED	12/--/45	02/05/60	03/16/29
SAMPLED	10/23/46	06/10/60	04/22/29
FORMATION	PENN-CISCO	PENN-CISCO	-LIME
GEOLOGIC PROVINCE CODE	359	350	355
DEPTH, FEET	845	698	794
WELLHEAD PRESSURE,PSIG	215	NOT GIVEN	75
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	100
COMPONENT, MOLE PCT			
METHANE	51.2	57.7	55.4
ETHANE	4.1	2.4	5.4
PROPANE	---	0.1	---
N-BUTANE	---	0.1	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	43.1	37.5	38.1
OXYGEN	0.0	0.0	0.2
ARGON	---	0.1	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.9	0.5
HELIUM	1.19	0.90	0.62
HEATING VALUE*	592	643	658
SPECIFIC GRAVITY	0.752	0.733	0.745

	INDEX 6202 SAMPLE 16732	INDEX 6203 SAMPLE 15717	INDEX 6204 SAMPLE 11527
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	BRAMAN	BRAMAN N	BRAMAN NW
WELL NAME	BULL NO. 1-16	W. A. TAYLOR NO. 1	CORBIN NO.3
LOCATION	SEC. 16, T28N, R1W	SEC. 22, T29N, R1W	SEC. 25, T29N, R2W
OWNER	WESTERN PACIFIC PET., INC.	CHASE EXPLORATION CORP.	STRUBY-KIERNAN
COMPLETED	12/22/81	11/10/77	--/--/00
SAMPLED	12/13/82	07/26/79	05/31/68
FORMATION	PENN-STALNAKER	PENN-NEVA	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2410	900	3656
WELLHEAD PRESSURE,PSIG	850	110	1536
OPEN FLOW, MCFD	760	225	2000
COMPONENT, MOLE PCT			
METHANE	59.7	62.8	77.9
ETHANE	5.1	3.8	6.7
PROPANE	2.8	2.0	3.0
N-BUTANE	0.9	0.5	1.0
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	29.3	29.8	9.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.1
HELIUM	0.51	0.75	0.36
HEATING VALUE*	850	797	1071
SPECIFIC GRAVITY	0.764	0.733	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6205 SAMPLE 10019	INDEX 6206 SAMPLE 11546	INDEX 6207 SAMPLE 5343
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	BRAMAN W	CHILOCCO E	DILWORTH DISTRICT
WELL NAME	WILLIAMSON NO. 1	WIDENER NO. 2	J. COURTNEY NO. 1
LOCATION	SEC. 4, T28N, R2W	SEC. 20, T29N, R3E	SEC. 21, T29N, R1E
OWNER	CONSOLIDATED OIL & GAS, INC.	FELL & WOLFE OIL CO.	DAVE MORGAN OIL CO.
COMPLETED	07/19/65	--/--/00	09/15/52
SAMPLED	07/31/65	06/20/66	12/02/52
FORMATION	MISS-CHAT	PENN-BARTLESWILLE	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4050	3200	3041
WELLHEAD PRESSURE,PSIG	1300	190	NOT GIVEN
OPEN FLOW, MCFD	2444	NOT GIVEN	1300
COMPONENT, MOLE PCT			
METHANE	58.8	73.8	65.0
ETHANE	7.1	7.8	7.8
PROPANE	2.8	3.9	4.5
N-BUTANE	0.9	1.2	1.1
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.6	0.3
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.7	0.1
NITROGEN	28.2	11.2	20.3
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.84	0.37	0.24
HEATING VALUE*	862	1103	984
SPECIFIC GRAVITY	0.765	0.734	0.752

	INDEX 6208 SAMPLE 5344	INDEX 6209 SAMPLE 13192	INDEX 6210 SAMPLE 14917
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	DILWORTH DISTRICT	DILWORTH DISTRICT	DILWORTH DISTRICT
WELL NAME	SEIPEL NO. 1	COLE NO. 5	GREEL NO. 1
LOCATION	SEC. 21, T29N, R1E	SEC. 18, T29N, R1E	SEC. 6, T28N, R1E
OWNER	DAVE MORGAN OIL CO.	PERRY, ADAMS & LEWIS, INC.	UNIT OPERATIONS, INC.
COMPLETED	07/22/52	03/03/72	07/12/76
SAMPLED	12/02/52	04/15/72	02/27/77
FORMATION	PENN-CLEVELAND	PENN-OSWEGO	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3058	3019	2995
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1285	695
OPEN FLOW, MCFD	2000	3000	2398
COMPONENT, MOLE PCT			
METHANE	69.8	76.4	76.6
ETHANE	7.8	7.7	8.3
PROPANE	4.5	3.6	4.0
N-BUTANE	1.1	1.0	1.2
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	20.3	9.6	8.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.23	0.35	0.18
HEATING VALUE*	991	1091	1109
SPECIFIC GRAVITY	0.758	0.709	0.708

	INDEX 6211 SAMPLE 4562	INDEX 6212 SAMPLE 1053	INDEX 6213 SAMPLE 1312
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	GARRETT NW	HUBBARD	HUBBARD
WELL NAME	SCHOOLLAND DUCK NO. 1	NORTH NO. 2	KANEY NO. 1
LOCATION	SEC. 13, T27N, R1E	SEC. 12, T26N, R2W	SEC. 7, T26N, R1W
OWNER	CARTER OIL CO.	MARLAND OIL CO.	BLACKWELL OIL & GAS CO.
COMPLETED	09/06/48	01/05/25	09/10/26
SAMPLED	09/14/48	05/01/25	10/01/26
FORMATION	PENN-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3562	2554	874
WELLHEAD PRESSURE,PSIG	1300	650	200
OPEN FLOW, MCFD	500	45000	4500
COMPONENT, MOLE PCT			
METHANE	63.0	37.6	15.4
ETHANE	21.6	31.1	5.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.5	30.4	77.6
OXYGEN	0.2	0.2	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.34	0.34	1.04
HEATING VALUE*	1025	938	253
SPECIFIC GRAVITY	0.725	0.838	0.903

	INDEX 6214 SAMPLE 6148	INDEX 6215 SAMPLE 10351	INDEX 6216 SAMPLE 27
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	MUNNEWELL W	NARDIN N	NEWKIRK
WELL NAME	ANNA LUTZ WELL NO. 1	STATE 16-1	MCMICHAEL NO. 1
LOCATION	SEC. 14, T29N, R2W	SEC. 16, T27N, R2W	SEC. 17, T28N, R3E
OWNER	UNION OIL CO. OF CALIF.	AMAX PETROLEUM CORP.	MARLAND REFINING CO.
COMPLETED	--/--/00	10/18/65	--/--/00
SAMPLED	--/--/00	01/09/66	06/19/19
FORMATION	NOT GIVEN	PENN-RED FORK	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	4229	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1275	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2016	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	53.8	87.1	51.3
ETHANE	3.0	6.1	11.6
PROPANE	1.8	2.4	---
N-BUTANE	0.6	0.8	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	36.6	2.0	32.4
OXYGEN	2.1	TRACE	4.7
ARGON	0.1	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.53	0.08	0.00
HEATING VALUE*	719	1130	728
SPECIFIC GRAVITY	0.783	0.654	0.771

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6217 SAMPLE 35	INDEX 6218 SAMPLE 58	INDEX 6219 SAMPLE 929
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	NEWKIRK	PONCA CITY	THOMAS
WELL NAME	NO. 1	MARGUERITE PRIMEAUX NO. 7	SILES NO. 1
LOCATION	SEC. 17, T28N, R3E	SEC. 4, T25N, R2E	SEC. 22, T25N, R2W
OWNER	MARLAND OIL CO.	MARLAND OIL CO.	TWIN STATES OIL CO.
COMPLETED	07/--/18	10/10/19	--/--/00
SAMPLED	07/27/19	--/--/00	09/20/24
FORMATION	NOT GIVEN	NOT GIVEN	-WAGGONER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	500	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	112	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	19.0	44.6	32.4
ETHANE	58.2	14.8	5.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	22.6	39.7	60.3
OXYGEN	0.7	0.4	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.1	0.2
HELIUM	TRACE	0.35	0.95
HEATING VALUE*	1185	717	425
SPECIFIC GRAVITY	0.945	0.793	0.832

	INDEX 6220 SAMPLE 930	INDEX 6221 SAMPLE 1328	INDEX 6222 SAMPLE 1391
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	THOMAS	THOMAS	THOMAS
WELL NAME	THOMAS NO. 1	THOMAS NO. 7	NO. 8
LOCATION	SEC. 15, T25N, R2W	SEC. 15, T25N, R2W	SEC. 15, T25N, R2W
OWNER	MARLAND OIL CO.	MARLAND OIL CO.	MARLAND OIL CO.
COMPLETED	05/20/24	--/--/00	--/--/00
SAMPLED	09/20/24	12/02/26	05/20/27
FORMATION	-WAGGONER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2063	2573	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	19	190
OPEN FLOW, MCFD	150000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	28.5	40.1	37.8
ETHANE	1.9	37.5	16.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	67.6	21.1	44.1
OXYGEN	0.6	1.1	0.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	1.01	0.23	0.41
HEATING VALUE*	1321	1078	677
SPECIFIC GRAVITY	0.843	0.835	0.822

	INDEX 6223 SAMPLE 1584	INDEX 6224 SAMPLE 4002	INDEX 6225 SAMPLE 4194
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	THOMAS	THOMAS	THOMAS
WELL NAME	FRUITTS NO. 1	FRUITS	JUESCHKE NO. 1
LOCATION	SEC. 2, T25N, R2W	SEC. 3, T25N, R2W	SEC. 3, T25N, R2W
OWNER	SARNSDALL & MARGAY OIL COS.	KAY COUNTY GAS CO.	C. L. JENKINS, ET AL.
COMPLETED	--/--/28	02/11/45	08/31/45
SAMPLED	03/06/28	--/--/00	11/09/46
FORMATION	-STRAY	MISS-CHAT	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1156	4356	4411
WELLHEAD PRESSURE,PSIG	475	1350	1300
OPEN FLOW, MCFD	1350	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.7	67.2	71.8
ETHANE	1.6	24.5	22.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	73.4	7.5	5.3
OXYGEN	0.3	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.4	0.5
HELIUM	0.92	0.19	0.29
HEATING VALUE*	269	1120	1127
SPECIFIC GRAVITY	0.866	0.711	0.692

	INDEX 6226 SAMPLE 12158	INDEX 6227 SAMPLE 12159	INDEX 6228 SAMPLE 12160
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	ALTONA	ALTONA	ALTONA
WELL NAME	FRAKES NO. 1	STANGL A NO. 1	JUNG
LOCATION	SEC. 28, T15N, R9W	SEC. 23, T15N, R9W	SEC. 22, T15N, R9W
OWNER	MARION CORP.	MARION CORP.	MARION CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/22/69	12/22/69	12/22/69
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8592	8822	8908
WELLHEAD PRESSURE,PSIG	2350	2600	2550
OPEN FLOW, MCFD	20000	20000	1800
COMPONENT, MOLE PCT			
METHANE	92.1	94.4	93.6
ETHANE	3.8	2.9	3.7
PROPANE	1.7	1.0	1.4
N-BUTANE	0.5	0.2	0.3
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.7	0.7	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1100	1054	1077
SPECIFIC GRAVITY	0.621	0.592	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6229 SAMPLE 12370	INDEX 6230 SAMPLE 13124	INDEX 6231 SAMPLE 13930
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	ALTONA	ALTONA	ALTONA
WELL NAME	GENE NO. 3-1	TEDERS NO. 1	FIRESTONE NO. 1
LOCATION	SEC. 3, T16N, R9W	SEC. 29, T17N, R9W	SEC. 9, T16N, R9W
OWNER	WHITE SHIELD OIL & GAS CORP.	VIERSEN & COCHRAN	CAYMAN EXPLORATION CORP.
COMPLETED	06/24/70	10/06/71	03/03/73
SAMPLED	08/18/70	12/21/71	02/28/74
FORMATION	MISS-CHESTER	MISS-CHESTER & MANNING	MISS-CHESTER & MANNING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8146	8174	8243
WELLHEAD PRESSURE,PSIG	900	3700	2659
OPEN FLOW, MCFD	2750	3500	2083
COMPONENT, MOLE PCT			
METHANE	93.0	68.6	92.2
ETHANE	3.3	11.4	3.9
PROPANE	1.2	9.7	1.7
N-BUTANE	0.3	3.2	0.4
ISOBUTANE	0.1	2.0	0.4
N-PENTANE	0.1	0.9	0.1
ISOPENTANE	0.1	0.6	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	1.1	2.2	0.5
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.7	0.3
HELIUM	0.02	TRACE	0.03
HEATING VALUE*	1069	1420	1102
SPECIFIC GRAVITY	0.607	0.845	0.620

	INDEX 6232 SAMPLE 15927	INDEX 6233 SAMPLE 7219	INDEX 6234 SAMPLE 7726
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	EDMOND W	OKARCHE N	OKARCHE N
WELL NAME	M. MAKWINDA NO. 2	NOT GIVEN	SIOUX UNIT NO. 1
LOCATION	SEC. 13, T15N, R5W	SEC. 19, T15N, R7W	SEC. 32, T16N, R7W
OWNER	UNION TEXAS PETROLEUM CORP.	CALVERT DRILLING, INC.	APACHE OIL CORP.
COMPLETED	01/28/80	08/18/58	06/15/60
SAMPLED	03/27/80	09/15/59	10/10/60
FORMATION	PENN-SKINNER	MISS-CHESTER	MISS-MANNING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6460	8198	7805
WELLHEAD PRESSURE,PSIG	1649	2725	3000
OPEN FLOW, MCFD	7288	13164	8320
COMPONENT, MOLE PCT			
METHANE	84.3	93.1	93.6
ETHANE	6.2	3.8	3.6
PROPANE	3.8	1.4	1.0
N-BUTANE	1.1	0.3	0.3
ISOBUTANE	0.5	0.1	0.2
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	2.8	0.7	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.5
HELIUM	0.06	0.04	0.04
HEATING VALUE*	1166	1084	1074
SPECIFIC GRAVITY	0.682	0.611	0.604

	INDEX 6235 SAMPLE 9842	INDEX 6236 SAMPLE 16308	INDEX 6237 SAMPLE 17309
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	OKARCHE N	OKARCHE N	OKARCHE N
WELL NAME	VIETH UNIT NO. 1	AHLDEN NO. 1	ANNUSCHAFT NO.1-11
LOCATION	SEC. 10, T16N, R7W	SEC. 28, T15N, R7W	SEC. 11, T15N, R8W
OWNER	AMOCO PRODUCTION CO.	NOVA ENERGY CORP.	NGG, INC.
COMPLETED	02/02/65	03/29/80	10/--/82
SAMPLED	04/11/65	08/14/81	05/17/84
FORMATION	MISS-MANNING	DEVO-BOIS D'ARC & MISS	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7398	8621	9200
WELLHEAD PRESSURE,PSIG	2650	1663	1200
OPEN FLOW, MCFD	2461	482	1700
COMPONENT, MOLE PCT			
METHANE	93.6	77.5	43.9
ETHANE	3.5	10.4	26.8
PROPANE	1.1	5.3	17.5
N-BUTANE	0.3	2.1	5.7
ISOBUTANE	0.1	0.8	2.9
N-PENTANE	TRACE	0.6	1.6
ISOPENTANE	0.1	0.5	0.7
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.2	0.4	0.6
NITROGEN	0.5	1.8	6.0
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.05	0.03	TRACE
HEATING VALUE*	1071	1282	1806
SPECIFIC GRAVITY	0.603	0.747	1.059

	INDEX 6238 SAMPLE 12678	INDEX 6239 SAMPLE 7699	INDEX 6240 SAMPLE 9024
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	WINNIFRED GARMS NO. 1	HUNTSBERGER NO. 1	NORRIS
LOCATION	SEC. 36, T18N, R9W	SEC. 11, T19N, R7W	SEC. 20, T19N, R9W
OWNER	INEXCO OIL CO.	EXXON CO., U.S.A.	CLEARY PETROLEUM, INC.
COMPLETED	02/24/70	07/10/60	02/09/62
SAMPLED	02/--/71	10/12/60	07/--/63
FORMATION	PENN-RED FORK	MISS-LIME	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7447	6992	8333
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2157	3000
OPEN FLOW, MCFD	4000	44000	400
COMPONENT, MOLE PCT			
METHANE	94.3	87.2	86.2
ETHANE	3.2	5.4	8.4
PROPANE	1.0	2.3	2.6
N-BUTANE	0.2	0.7	0.7
ISOBUTANE	0.1	0.7	0.3
N-PENTANE	0.0	0.5	0.1
ISOPENTANE	0.2	0.6	0.2
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	TRACE	1.0	0.1
NITROGEN	0.6	1.2	1.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.05	0.04	0.03
HEATING VALUE*	1057	1191	1143
SPECIFIC GRAVITY	0.594	0.684	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6241 SAMPLE 9353	INDEX 6242 SAMPLE 9809	INDEX 6243 SAMPLE 9810
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	J. MLADIK NO. 1	FOREMAN NO. 1	FOREMAN NO. 1
LOCATION	SEC. 11, T19N, R5W	SEC. 22, T16N, R5W	SEC. 22, T16N, R5W
OWNER	GETTY OIL CO.	RUSSELL MAGUIRE	RUSSELL MAGUIRE
COMPLETED	07/20/63	01/05/65	01/05/65
SAMPLED	05/19/64	--/--/00	--/--/00
FORMATION	MISS-MERAMEC	PENN-SKINNER	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6066	6544	6788
WELLHEAD PRESSURE,PSIG	2000	1600	100
OPEN FLOW, MCFD	1577	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.0	78.0	77.1
ETHANE	7.9	5.2	10.3
PROPANE	4.4	2.9	5.5
N-BUTANE	1.7	1.0	1.9
ISOBUTANE	0.2	0.3	0.8
N-PENTANE	0.4	0.3	0.5
ISOPENTANE	0.4	0.3	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.4
NITROGEN	2.2	10.6	2.5
OXYGEN	0.1	0.3	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.08	0.16	0.05
HEATING VALUE*	1199	1052	1266
SPECIFIC GRAVITY	0.701	0.701	0.745

	INDEX 6244 SAMPLE 9921	INDEX 6245 SAMPLE 10686	INDEX 6246 SAMPLE 10758
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	R. R. RUDD NO. 1	WINANS NO. 1	GEORGE GREEN NO. 1
LOCATION	SEC. 2, T18N, R5W	SEC. 9, T15N, R5W	SEC. 30, T19N, R7W
OWNER	GETTY OIL CO.	CHARLES J. RICHARD	ASHLAND OIL & REFINING CO.
COMPLETED	04/11/65	--/--/00	01/09/66
SAMPLED	06/12/65	07/29/66	10/19/66
FORMATION	PENN-CLEVELAND	PENN-OSWEGO	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6066	6625	7480
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1070	1764
OPEN FLOW, MCFD	NOT GIVEN	2100	13699
COMPONENT, MOLE PCT			
METHANE	73.1	80.1	83.0
ETHANE	12.8	8.4	8.6
PROPANE	7.1	4.7	3.7
N-BUTANE	2.3	1.6	1.1
ISOBUTANE	0.7	0.6	0.4
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	1.0	0.8	0.3
CYCLOPENTANE	0.2	0.3	0.1
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	1.6	2.2	2.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.03	0.06	0.06
HEATING VALUE*	1338	1256	1182
SPECIFIC GRAVITY	0.783	0.730	0.687

	INDEX 6247 SAMPLE 11366	INDEX 6248 SAMPLE 11403	INDEX 6249 SAMPLE 11404
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	MOBBS NO. 1	POPE UTAH NO. 2	POPE UTAH NO. 2
LOCATION	SEC. 23, T18N, R8W	SEC. 10, T18N, R9W	SEC. 10, T18N, R9W
OWNER	KING RESOURCES CO.	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.
COMPLETED	--/--/00	01/22/64	01/22/64
SAMPLED	03/09/68	03/14/68	03/14/68
FORMATION	MISS-MANNING	MISS-LIME	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7412	7996	8472
WELLHEAD PRESSURE,PSIG	1600	844	2336
OPEN FLOW, MCFD	607	2000	5690
COMPONENT, MOLE PCT			
METHANE	88.2	78.0	84.2
ETHANE	5.8	7.2	8.8
PROPANE	2.7	4.2	3.2
N-BUTANE	0.9	0.3	0.9
ISOBUTANE	0.3	1.3	0.4
N-PENTANE	0.2	0.6	0.2
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	1.0	6.5	1.6
OXYGEN	0.2	1.4	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.09	0.03	0.03
HEATING VALUE*	1143	1132	1165
SPECIFIC GRAVITY	0.650	0.714	0.672

	INDEX 6250 SAMPLE 11456	INDEX 6251 SAMPLE 12162	INDEX 6252 SAMPLE 12163
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	J. L. WRIGHT NO. 1	STRACK NO. 25-1	HARTMAN NO. 25-1
LOCATION	SEC. 16, T19N, R7W	SEC. 25, T17N, R8W	SEC. 25, T17N, R8W
OWNER	ASHLAND OIL & REFINING CO.	WHITE SHIELD OIL & GAS CORP.	WHITE SHIELD OIL & GAS CORP.
COMPLETED	03/06/62	10/19/69	09/01/69
SAMPLED	04/17/68	12/22/69	12/22/69
FORMATION	PENN-RED FORK	MISS-LIME	PENN-RED FORK & MISS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6747	8606	7459
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1500	2050
OPEN FLOW, MCFD	NOT GIVEN	3506	1187
COMPONENT, MOLE PCT			
METHANE	90.2	66.4	81.5
ETHANE	3.9	9.0	9.4
PROPANE	1.4	6.4	3.8
N-BUTANE	0.5	6.5	0.9
ISOBUTANE	0.1	3.7	0.5
N-PENTANE	0.1	3.4	0.2
ISOPENTANE	0.3	1.2	0.2
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.2	1.5	0.3
NITROGEN	2.5	2.1	2.6
OXYGEN	0.3	0.3	0.2
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.1
HELIUM	0.04	0.02	0.03
HEATING VALUE*	1071	1596	1176
SPECIFIC GRAVITY	0.628	0.944	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6253 SAMPLE 12247	INDEX 6254 SAMPLE 12344	INDEX 6255 SAMPLE 12679
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KINGFISHER
FIELD	SOONER TREND	SOONER TREND	SOONER TREND
WELL NAME	ELOISE M. BOLLENBACH NO. 1	HAZEL S. PETERSEN NO. 1-11	WINNIFRED GARMS NO. 1
LOCATION	SEC. 8, T18N, R8W	SEC. 11, T19N, R9W	SEC. 36, T18N, R9W
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	INEXCO OIL CO.
COMPLETED	11/29/69	03/20/70	02/24/70
SAMPLED	04/28/70	08/07/70	02/--/71
FORMATION	PENN-RED FORK	ORDO-VIOLA	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7044	8509	7447
WELLHEAD PRESSURE,PSIG	2217	2915	NOT GIVEN
OPEN FLOW, MCFD	32950	14188	4000
COMPONENT, MOLE PCT			
METHANE	92.9	90.0	85.8
ETHANE	3.5	5.2	8.1
PROPANE	1.4	1.9	2.2
N-BUTANE	0.3	0.6	0.6
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.9	1.1	2.2
OXYGEN	0.1	TRACE	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.05	0.05	0.04
HEATING VALUE*	1071	1111	1120
SPECIFIC GRAVITY	0.605	0.632	0.651

	INDEX 6256 SAMPLE 13743	INDEX 6257 SAMPLE 14666	INDEX 6258 SAMPLE 11352
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KINGFISHER	KINGFISHER	KIOWA
FIELD	SOONER TREND	SOONER TREND	CARNEGIE W
WELL NAME	FLORENE NO. 4	SMITH BROS. NO. 1	CODY NO. 1
LOCATION	SEC. 5, T19N, R9W	SEC. 6, T16N, R6W	SEC. 15, T7N, R14W
OWNER	HARPER OIL CO.	AN-SON CORP.	EXXON CO., U.S.A.
COMPLETED	08/27/73	03/13/76	12/06/57
SAMPLED	10/05/73	04/29/76	03/06/68
FORMATION	PENN-OSWEGO	PENN-RED FORK	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	360	360	350
DEPTH, FEET	NOT GIVEN	6934	3202
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1635	1141
OPEN FLOW, MCFD	NOT GIVEN	6597	4247
COMPONENT, MOLE PCT			
METHANE	84.2	84.3	92.8
ETHANE	7.6	7.4	2.6
PROPANE	4.1	3.6	0.6
N-BUTANE	1.2	1.4	0.1
ISOBUTANE	0.7	0.7	0.3
N-PENTANE	0.3	0.6	0.2
ISOPENTANE	0.3	0.5	TRACE
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	1.1	0.7	2.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.07	0.04	0.11
HEATING VALUE*	1199	1222	1055
SPECIFIC GRAVITY	0.687	0.696	0.619

	INDEX 6259 SAMPLE 5276	INDEX 6260 SAMPLE 7021	INDEX 6261 SAMPLE 1018
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KIOWA	KIOWA	KIOWA
FIELD	GOTEBO N	KONAWA	RAINEY S
WELL NAME	JAMES SHAFER NO. 1	DONLEY MILLIGAN NO. 1	NOT GIVEN
LOCATION	SEC. 1, T7N, R16W	SEC. 29, T6N, R17W	SEC. 3, T7N, R17W
OWNER	STANOLIND OIL & GAS CO.	R. E. MAXEY & G. P. LIVERMOR	MARLAND OIL CO.
COMPLETED	05/27/52	--/--/00	--/--/00
SAMPLED	07/23/52	04/08/59	--/--/00
FORMATION	PENN-SPRINGER	PERM-PONTOTOC	-SILTY
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5628	800	1082
WELLHEAD PRESSURE,PSIG	2299	240	40
OPEN FLOW, MCFD	3000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.3	37.2	79.4
ETHANE	1.4	1.0	17.5
PROPANE	0.5	0.5	---
N-BUTANE	0.1	0.4	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	TRACE	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	1.4	59.3	2.5
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.3	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.03	0.90	0.07
HEATING VALUE*	1026	433	1118
SPECIFIC GRAVITY	0.579	0.820	0.658

	INDEX 6262 SAMPLE 10719	INDEX 6263 SAMPLE 10748	INDEX 6264 SAMPLE 10751
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	KINTA	KINTA	KINTA
WELL NAME	WHITE B NO. 1	WHITE B NO. 1	C. R. BUTLER UNIT NO. 1
LOCATION	SEC. 3, T6N, R18E	SEC. 3, T6N, R18E	SEC. 29, T7N, R19E
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	MOBIL OIL CORP.
COMPLETED	06/11/66	06/11/66	06/28/66
SAMPLED	09/09/66	10/03/66	10/05/66
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	4999	6996	10304
WELLHEAD PRESSURE,PSIG	1382	2487	3227
OPEN FLOW, MCFD	23302	13992	13100
COMPONENT, MOLE PCT			
METHANE	87.1	90.6	95.6
ETHANE	2.2	6.7	0.7
PROPANE	0.8	1.5	0.1
N-BUTANE	0.3	0.3	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	9.2	0.2	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	3.3
HELIUM	0.07	0.03	0.03
HEATING VALUE*	954	1104	984
SPECIFIC GRAVITY	0.620	0.617	0.592

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6265 SAMPLE 10882	INDEX 6266 SAMPLE 16474	INDEX 6267 SAMPLE 16051
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	KINTA	KINTA	PANOLA
WELL NAME	WHITE F NO. 1A	WHITE "H" NO. 2	FOSTER NO. 1-35
LOCATION	SEC. 13, T6N, R18E	SEC. 12, T6N, R17E	SEC. 35, T6N, R20E
OWNER	SKELLY OIL CO.	GETTY OIL CO.	MUSTANG PRODUCTION CO.
COMPLETED	09/14/66	10/31/81	06/20/80
SAMPLED	02/10/67	04/01/82	08/22/80
FORMATION	PENN-ATOKA	PENN-RED OAK	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7299	6970	12630
WELLHEAD PRESSURE,PSIG	2530	600	4200
OPEN FLOW, MCFD	25776	1900	4000
COMPONENT, MOLE PCT			
METHANE	96.2	96.1	93.8
ETHANE	1.6	1.6	0.4
PROPANE	0.3	0.3	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.6	0.6	0.3
OXYGEN	0.2	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.9	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.4	5.2
HELIUM	0.04	0.03	0.04
HEATING VALUE*	1011	1013	965
SPECIFIC GRAVITY	0.582	0.569	0.611

	INDEX 6268 SAMPLE 16431	INDEX 6269 SAMPLE 4053	INDEX 6270 SAMPLE 8098
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	PANOLA	RED OAK-NORRIS	RED OAK-NORRIS
WELL NAME	PIERCE NO. 1-30	HARDAWAY NO. RO-52	MAXEY NO. 1
LOCATION	SEC. 30, T6N, R20E	SEC. 10, T6N, R22E	SEC. 19, T6N, R22E
OWNER	TENNECO OIL CO.	LE FLORE COUNTY GAS & ELEC.	MIDWEST OIL CORP.
COMPLETED	12/07/81	--/--/00	--/--/00
SAMPLED	02/23/82	06/22/45	07/26/61
FORMATION	PENN-SPIRO	PENN-ATOKA	PENN-RED OAK & SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	13840	5881	6983
WELLHEAD PRESSURE,PSIG	4400	2100	3150
OPEN FLOW, MCFD	1140	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.4	96.2	95.7
ETHANE	0.3	2.8	2.2
PROPANE	TRACE	---	0.4
N-BUTANE	0.0	---	TRACE
ISOBUTANE	0.0	---	TRACE
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.1
NITROGEN	0.9	0.0	0.1
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	1.4
CARBON DIOXIDE	4.6	0.9	TRACE
HELIUM	0.04	0.01	1019
HEATING VALUE*	962	1025	0.583
SPECIFIC GRAVITY	0.602	0.578	

	INDEX 6271 SAMPLE 8408	INDEX 6272 SAMPLE 8421	INDEX 6273 SAMPLE 8922
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	RED OAK-NORRIS	RED OAK-NORRIS	RED OAK-NORRIS
WELL NAME	MAXEY NO. 1	ORR NO. 1	LEWIS
LOCATION	SEC. 10, T6N, R22E	SEC. 8, T6N, R22E	SEC. 4, T6N, R22E
OWNER	MIDWEST OIL CORP.	MIDWEST OIL CORP.	MIDWEST OIL CORP.
COMPLETED	07/07/61	05/31/60	02/20/62
SAMPLED	02/13/61	05/01/62	04/05/63
FORMATION	PENN-RED OAK	PENN-SPIRO	PENN-FANSHAWE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7000	11514	6064
WELLHEAD PRESSURE,PSIG	3110	4000	2842
OPEN FLOW, MCFD	5300	15000	550
COMPONENT, MOLE PCT			
METHANE	96.1	92.8	95.9
ETHANE	1.9	0.4	2.5
PROPANE	0.2	0.1	0.4
N-BUTANE	TRACE	TRACE	TRACE
ISOBUTANE	TRACE	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	0.9	0.4
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	5.5	0.7
HELIUM	0.03	0.06	0.02
HEATING VALUE*	1013	950	1027
SPECIFIC GRAVITY	0.579	0.616	0.579

	INDEX 6274 SAMPLE 14810	INDEX 6275 SAMPLE 1733	INDEX 6276 SAMPLE 9826
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LATIMER
FIELD	RED OAK-NORRIS	WILBURTON	WILBURTON
WELL NAME	SMALLWOOD NO. 1	MCMURRAY NO. 1	J. L. HENLEY UNIT NO. 1
LOCATION	SEC. 28, T6N, R21E	SEC. 15, T5N, R18E	SEC. 25, T5N, R17E
OWNER	MUSTANG PRODUCTION CO.	LIMESTONE OIL & GAS CO.	ATLANTIC RICHFIELD CO.
COMPLETED	08/10/76	--/--/00	12/30/64
SAMPLED	10/09/76	04/06/29	04/01/65
FORMATION	PENN-SPIRO	-SAND	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	12181	2518	10022
WELLHEAD PRESSURE,PSIG	4000	125	3750
OPEN FLOW, MCFD	20000	1500	20500
COMPONENT, MOLE PCT			
METHANE	93.2	73.8	96.1
ETHANE	0.4	13.4	1.0
PROPANE	TRACE	---	0.0
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.2	10.4	0.5
OXYGEN	0.0	1.9	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	6.1	0.6	2.4
HELIUM	0.04	0.06	0.05
HEATING VALUE*	951	988	991
SPECIFIC GRAVITY	0.616	0.681	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6277 SAMPLE 10945	INDEX 6278 SAMPLE 13684	INDEX 6279 SAMPLE 9953
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LATIMER	LATIMER	LE FLORE
FIELD	WILBURTON	WILBURTON	BOKOSHE S
WELL NAME	DOVIE WEAVER B NO. 1	MCKEOWN NO. 1	JOE COCHRAN UNIT NO. 1
LOCATION	SEC. 20, T6N, R19E	SEC. 20, T5N, R19E	SEC. 32, T8N, R24E
OWNER	MOBIL OIL CORP.	FERGUSON OIL CO., INC.	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	03/13/73	10/05/64
SAMPLED	04/13/67	08/14/73	07/02/65
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-FANSHAWE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	11174	7450	6651
WELLHEAD PRESSURE,PSIG	3675	1780	2871
OPEN FLOW, MCFD	13000	7300	5400
COMPONENT, MOLE PCT			
METHANE	94.7	93.6	94.9
ETHANE	0.7	3.7	1.8
PROPANE	TRACE	1.2	0.4
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.4	0.8
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.1	0.4	1.9
HELIUM	0.04	0.05	0.05
HEATING VALUE*	972	1073	1004
SPECIFIC GRAVITY	0.599	0.603	0.590

	INDEX 6280 SAMPLE 9954	INDEX 6281 SAMPLE 15482	INDEX 6282 SAMPLE 1769
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	BOKOSHE S	BOKOSHE S	CAMERON
WELL NAME	JOE COCHRAN UNIT NO. 1	MACY MCBEE NO. 1	KRAMER NO. 1
LOCATION	SEC. 32, T8N, R24E	SEC. 30, T8N, R24E	SEC. 7, T7N, R26E
OWNER	AMOCO PRODUCTION CO.	RESERVE OIL, INC.	SOONER OIL & GAS CO.
COMPLETED	10/05/64	--/--/00	12/--/28
SAMPLED	07/02/65	10/26/78	05/03/29
FORMATION	PENN-ATOKA	PENN-BRAZIL	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7940	NOT GIVEN	2200
WELLHEAD PRESSURE,PSIG	2171	NOT GIVEN	90
OPEN FLOW, MCFD	970	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.0	85.4	99.2
ETHANE	1.5	1.3	0.1
PROPANE	0.2	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.4	8.8	0.4
OXYGEN	0.0	2.3	0.1
ARGON	TRACE	0.1	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.8	1.9	0.1
HELIUM	0.10	0.04	0.12
HEATING VALUE*	1005	891	1007
SPECIFIC GRAVITY	0.583	0.630	0.558

	INDEX 6283 SAMPLE 9955	INDEX 6284 SAMPLE 10918	INDEX 6285 SAMPLE 16758
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	CAMERON	CAMERON	CEDARS
WELL NAME	CLYDE CALDWELL UNIT NO. 1	MILL NO. 1	BLACKMAN NO. 2
LOCATION	SEC. 21, T8N, R26E	SEC. 31, T8N, R26E	SEC. 26, T9N, R26E
OWNER	AMOCO PRODUCTION CO.	GOSE PETROLEUM CO.	SAMSON RESOURCES CO.
COMPLETED	09/04/65	11/14/66	03/10/82
SAMPLED	07/02/65	04/05/67	01/27/83
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6326	5910	6868
WELLHEAD PRESSURE,PSIG	2054	1810	685
OPEN FLOW, MCFD	6200	6837	1800
COMPONENT, MOLE PCT			
METHANE	95.4	96.8	93.7
ETHANE	1.4	1.4	0.8
PROPANE	0.2	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	0.9	0.4
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.2	4.7
HELIUM	0.09	0.07	0.10
HEATING VALUE*	997	1011	967
SPECIFIC GRAVITY	0.584	0.577	0.607

	INDEX 6286 SAMPLE 11107	INDEX 6287 SAMPLE 16146	INDEX 6288 SAMPLE 2799
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	CEDARS W	CEDARS W	KINTA
WELL NAME	PETTIGREW NO. 1	FRAZIER UNIT NO. 1	MCBEE NO. 1
LOCATION	SEC. 16, T9N, R26E	SEC. 16, T9N, R26E	SEC. 29, T9N, R24E
OWNER	SOUTHLAND ROYALTY CO.	SAMSON RESOURCES CO.	ARKANSAS OKLAHOMA GAS CO.
COMPLETED	12/21/65	09/30/80	04/19/42
SAMPLED	09/13/67	12/11/80	04/01/44
FORMATION	PENN-CROMWELL	PENN-SPIRO	PENN-GILCREASE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7740	7372	5240
WELLHEAD PRESSURE,PSIG	1327	NOT GIVEN	949
OPEN FLOW, MCFD	7200	2200	55000
COMPONENT, MOLE PCT			
METHANE	94.2	94.4	95.6
ETHANE	0.8	0.8	0.8
PROPANE	TRACE	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.7	0.5	1.9
OXYGEN	0.0	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	4.0	4.1	1.3
HELIUM	0.25	0.10	0.02
HEATING VALUE*	969	973	983
SPECIFIC GRAVITY	0.599	0.602	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6289 SAMPLE 8466	INDEX 6290 SAMPLE 9003	INDEX 6291 SAMPLE 9606
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	KINTA	KINTA	KINTA
WELL NAME	E. D. BURRIS UNIT NO. 1	ZOE MOLT	TACKETT UNIT NO. 1
LOCATION	SEC. 5, T9N, R24E	SEC. 20, T9N, R25E	SEC. 28, T8N, R23E
OWNER	EXXON CO., U.S.A.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	09/08/61	--/-/--	08/--/63
SAMPLED	03/19/62	05/30/63	10/13/64
FORMATION	PENN-SPIRO	NOT GIVEN	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6184	NOT GIVEN	5626
WELLHEAD PRESSURE,PSIG	880	NOT GIVEN	1220
OPEN FLOW, MCFD	3000	NOT GIVEN	3500
COMPONENT, MOLE PCT			
METHANE	96.0	94.6	95.6
ETHANE	1.1	0.9	1.5
PROPANE	0.1	0.1	0.2
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.6	1.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	2.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	1.5	1.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	995	985	1000
SPECIFIC GRAVITY	0.585	0.563	0.580

	INDEX 6292 SAMPLE 9853	INDEX 6293 SAMPLE 10127	INDEX 6294 SAMPLE 12165
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	KINTA	KINTA	KINTA
WELL NAME	REES UNIT NO. 1	MILLER UNIT C NO. 1	HERBERT SHARD NO. 1
LOCATION	SEC. 2, T8N, R23E	SEC. 30, T8N, R23E	SEC. 4, T9N, R25E
OWNER	EXXON CO., U.S.A.	AMOCO PRODUCTION CO.	JAKE L. HAMON
COMPLETED	11/30/64	09/16/65	09/01/65
SAMPLED	04/22/65	09/16/65	12/19/69
FORMATION	PENN-SPIRO	PENN-SPIRO	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5392	5690	5552
WELLHEAD PRESSURE,PSIG	1000	1115	931
OPEN FLOW, MCFD	9370	NOT GIVEN	1200
COMPONENT, MOLE PCT			
METHANE	96.4	96.1	94.9
ETHANE	0.9	1.0	1.8
PROPANE	0.1	0.4	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.7	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.5	1.5
HELIUM	0.07	0.07	0.11
HEATING VALUE*	995	1002	999
SPECIFIC GRAVITY	0.580	0.579	0.584

	INDEX 6295 SAMPLE 16607	INDEX 6296 SAMPLE 14604	INDEX 6297 SAMPLE 10382
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	KINTA	PAW PAW NE	PENO
WELL NAME	DEN NO. 1	ARKANSAS VALLEY FARMS NO. 1	B. E. COBB NO. 1
LOCATION	SEC. 13, T8N, R24E	SEC. 34, T11N, R27E	SEC. 17, T10N, R27E
OWNER	UNIT DRILLING & EXPL. CO.	STEPHENS PRODUCTION CO.	SUN OIL CO.
COMPLETED	02/--/82	11/15/75	10/15/65
SAMPLED	08/06/82	02/23/76	02/02/66
FORMATION	PENN-BRAZIL	PENN-CROMWELL	PERM-ALMA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7202	5263	3016
WELLHEAD PRESSURE,PSIG	2462	903	270
OPEN FLOW, MCFD	2896	14000	1044
COMPONENT, MOLE PCT			
METHANE	96.1	93.1	97.0
ETHANE	1.4	1.3	1.2
PROPANE	0.2	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.2	0.5	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.9	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	1.9	4.0	0.3
HELIUM	0.05	0.05	0.11
HEATING VALUE*	1009	972	1009
SPECIFIC GRAVITY	0.582	0.598	0.570

	INDEX 6298 SAMPLE 10383	INDEX 6299 SAMPLE 10627	INDEX 6300 SAMPLE 10628
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	PENO	PENO	PENO
WELL NAME	B. E. COBB NO. 1	FORSGREN BROS. NO. 1	FORSGREN BROS. NO. 1
LOCATION	SEC. 17, T10N, R27E	SEC. 16, T10N, R27E	SEC. 16, T10N, R27E
OWNER	SUN OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	10/15/65	03/25/66	03/25/66
SAMPLED	02/02/66	06/18/66	06/18/66
FORMATION	PENN-SPIRO	PENN-SPIRO	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5950	5950	6350
WELLHEAD PRESSURE,PSIG	990	925	2025
OPEN FLOW, MCFD	2225	1020	4600
COMPONENT, MOLE PCT			
METHANE	94.2	96.8	93.7
ETHANE	1.3	1.1	1.3
PROPANE	0.6	0.4	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.5	0.7	3.1
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.8	1.7
HELIUM	0.15	0.14	0.10
HEATING VALUE*	993	1011	972
SPECIFIC GRAVITY	0.588	0.575	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES -

	INDEX 6301 SAMPLE 14423	INDEX 6302 SAMPLE 14538	INDEX 6303 SAMPLE 10784
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	PENO	PENO	POCOLA S
WELL NAME	KERR ESTATE NO. 1	CLAWSON NO. 1	HARDIN NO. 1
LOCATION	SEC. 27, T10N, R27E	SEC. 34, T10N, R27E	SEC. 32, T9N, R27E
OWNER	CHEYENNE PETROLEUM CO.	LEAR PETROLEUM CORP.	MONSANTO CO.
COMPLETED	--/--/00	06/23/75	07/13/66
SAMPLED	07/25/75	11/26/75	11/25/66
FORMATION	PENN-SPIRO	PENN-CROMWELL	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5904	6203	7545
WELLHEAD PRESSURE,PSIG	905	706	900
OPEN FLOW, MCFD	3758	6300	2550
COMPONENT, MOLE PCT			
METHANE	93.5	96.0	94.4
ETHANE	1.3	1.2	0.7
PROPANE	0.1	0.2	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.6	0.8	0.3
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.6	4.5
HELIUM	0.10	0.12	0.12
HEATING VALUE*	973	999	971
SPECIFIC GRAVITY	0.595	0.580	0.604

	INDEX 6304 SAMPLE 300	INDEX 6305 SAMPLE 14864	INDEX 6306 SAMPLE 16763
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LE FLORE	LE FLORE
FIELD	POTEAU-GILMORE	RED DAK-NORRIS	SPIRO N
WELL NAME	NO. 14	STOUT NO. 1-17	TURMAN NO. 1
LOCATION	SEC. 26, T7N, R26E	SEC. 17, T7N, R23E	SEC. 11, T9N, R25E
OWNER	LE FLORE COUNTY GAS & ELEC.	SNEE & EBERLY	SAMSON RESOURCES CO.
COMPLETED	12/--/18	09/04/76	05/--/82
SAMPLED	05/28/20	11/30/76	02/03/83
FORMATION	PENN-HARTSHORNE	PENN-SPIRO	PENN-SPIRO
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1753	12551	7876
WELLHEAD PRESSURE,PSIG	278	NOT GIVEN	1670
OPEN FLOW, MCFD	2530	42199	5600
COMPONENT, MOLE PCT			
METHANE	95.9	90.1	95.0
ETHANE	0.0	0.4	1.1
PROPANE	---	TRACE	0.1
N-BUTANE	---	0.1	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	1.7	0.8	0.4
OXYGEN	1.9	TRACE	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.3
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	8.4	3.0
HELIUM	0.10	0.08	0.09
HEATING VALUE*	971	923	986
SPECIFIC GRAVITY	0.575	0.642	0.591

	INDEX 6307 SAMPLE 11952	INDEX 6308 SAMPLE 3320	INDEX 6309 SAMPLE 3939
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LE FLORE	LINCOLN	LINCOLN
FIELD	SPIRO SE	AGRA N	AGRA N
WELL NAME	GLENN NO. 1	MCLAURY NO. 1	BONEBRAKE NO. 1
LOCATION	SEC. 25, T9N, R25E	SEC. 28, T17N, R5E	SEC. 32, T17N, R5E
OWNER	MONSANTO CO.	WALMAN OIL CO.	DUDLEY MORGAN
COMPLETED	12/22/67	11/02/41	12/01/42
SAMPLED	06/24/68	09/21/42	12/21/44
FORMATION	PENN-SPIRO	NOT GIVEN	PENN-SKINNER
GEOLOGIC PROVINCE CODE	345	355	355
DEPTH, FEET	8106	3400	3431
WELLHEAD PRESSURE,PSIG	1100	1160	875
OPEN FLOW, MCFD	1250	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.8	76.6	76.6
ETHANE	0.5	17.6	14.0
PROPANE	TRACE	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	7.5	5.1	9.1
OXYGEN	1.5	0.4	0.1
ARGON	0.1	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.3	0.2	0.1
HELIUM	0.10	0.09	0.11
HEATING VALUE*	899	1091	1027
SPECIFIC GRAVITY	0.628	0.666	0.662

	INDEX 6310 SAMPLE 3390	INDEX 6311 SAMPLE 4176	INDEX 6312 SAMPLE 13818
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	ARLINGTON	DAVENPORT DISTRICT W	FALLIS
WELL NAME	FOUQUET NO. 1	E. E. MASTEN NO. 1	MUFFINE NO. 1
LOCATION	SEC. 9, T13N, R6E	SEC. 35, T14N, R4E	SEC. 20, T15N, R2E
OWNER	HERNDON DRILLING CO.	OLSON DRILLING CO.	PACIFIC OIL & GAS CO.
COMPLETED	04/08/38	09/30/46	--/--/00
SAMPLED	05/13/42	11/12/46	11/10/01
FORMATION	DEVO-HUNTON	PENN-CLEVELAND	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4105	2995	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1380	1250	NOT GIVEN
OPEN FLOW, MCFD	6525	3399	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.6	80.9	26.2
ETHANE	26.1	18.9	19.8
PROPANE	---	---	26.0
N-BUTANE	---	---	14.2
ISOBUTANE	---	---	5.5
N-PENTANE	---	---	4.6
ISOPENTANE	---	---	3.4
CYCLOPENTANE	---	---	0.4
HEXANES PLUS	---	---	1.6
NITROGEN	4.6	0.8	2.1
OXYGEN	0.4	0.3	0.3
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.0	TRACE
HELIUM	0.13	0.07	TRACE
HEATING VALUE*	1163	1144	2323
SPECIFIC GRAVITY	0.705	0.650	1.403

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6313 SAMPLE 13410	INDEX 6314 SAMPLE 3703	INDEX 6315 SAMPLE 3307
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	KICKAPOO E	KICKAPOO N	LAFFOON
WELL NAME	BULLARD NO. 1	N. V. LEONARD	SCHOOL LAND NO. 2
LOCATION	SEC. 26, T12N, R2E	SEC. 10, T12N, R2E	SEC. 16, T13N, R6E
OWNER	OKLAHOMA NATURAL GAS CO.	STANOLIND OIL & GAS CO.	MID-CONTINENT PETROLEUM CORP
COMPLETED	02/26/72	04/05/43	12/20/39
SAMPLED	12/03/72	11/19/43	04/22/42
FORMATION	PENN-RED FORK	ORDO-WILCOX	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5086	5635	4051
WELLHEAD PRESSURE, PSIG	1850	600	846
OPEN FLOW, MCFD	4147	NOT GIVEN	18572
COMPONENT, MOLE PCT			
METHANE	67.7	58.6	69.1
ETHANE	9.0	21.6	25.4
PROPANE	5.8	---	---
N-BUTANE	1.6	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	14.5	19.1	4.9
OXYGEN	TRACE	0.5	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.13	0.12	0.11
HEATING VALUE*	1094	981	1155
SPECIFIC GRAVITY	0.761	0.743	0.703

	INDEX 6316 SAMPLE 3305	INDEX 6317 SAMPLE 16563	INDEX 6318 SAMPLE 17642
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	LINCREEK DISTRICT	MERRICK N	MERRICK N
WELL NAME	UNGELBY NO. 2	ELMO NO. 1	PATRICK NO. 1
LOCATION	NOT GIVEN	SEC. 8, T16N, R2E	SEC. 8, T16N, R2E
OWNER	UNION OIL CO. OF CALIF.	PHILLIPS OIL OPERATING CO.	ROYAL OAKS PETROLEUM CORP.
COMPLETED	01/10/33	06/10/82	--/--/00
SAMPLED	04/22/42	06/10/82	04/06/85
FORMATION	PENN-CLEVELAND	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2070	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	705	1560	250
OPEN FLOW, MCFD	796	NOT GIVEN	300
COMPONENT, MOLE PCT			
METHANE	74.7	81.3	75.5
ETHANE	20.3	8.7	7.9
PROPANE	---	3.8	5.3
N-BUTANE	---	1.2	1.7
ISOBUTANE	---	0.4	0.9
N-PENTANE	---	0.4	0.4
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	4.5	3.4	7.4
OXYGEN	0.3	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.12	0.08	0.07
HEATING VALUE*	1120	1172	1175
SPECIFIC GRAVITY	0.676	0.692	0.738

	INDEX 6319 SAMPLE 4606	INDEX 6320 SAMPLE 11730	INDEX 6321 SAMPLE 13595
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	MIDLOTHIAN NW	MIDLOTHIAN SW	MOUNT VERNON N
WELL NAME	YANCY NO. 1	MILLS NO. 1	ANDERSON NO. 1
LOCATION	SEC. 26, T14N, R3E	SEC. 35, T14N, R3E	SEC. 35, T16N, R3E
OWNER	TONKAWA PRODUCTION CO.	EARL BARNES	DAUBE EXPLORATION CO.
COMPLETED	06/--/48	11/10/68	10/23/72
SAMPLED	10/29/48	01/01/69	04/27/73
FORMATION	PENN-PRUE	PENN-SKINNER	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4117	4362	4032
WELLHEAD PRESSURE, PSIG	1480	1700	1624
OPEN FLOW, MCFD	4150	5695	3011
COMPONENT, MOLE PCT			
METHANE	70.8	81.8	83.0
ETHANE	27.1	5.7	8.5
PROPANE	---	3.0	3.8
N-BUTANE	---	1.0	1.0
ISOBUTANE	---	0.4	0.6
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	1.2	6.8	2.4
OXYGEN	0.1	0.2	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.05	0.08	0.08
HEATING VALUE*	1214	1087	1172
SPECIFIC GRAVITY	0.699	0.677	0.680

	INDEX 6322 SAMPLE 11206	INDEX 6323 SAMPLE 5913	INDEX 6324 SAMPLE 3322
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	MOUNT VERNON NE	MOUNT VERNON SW	NOT GIVEN
WELL NAME	GRIMM NO. 1	MASON NO. 1	MILNER NO. 1
LOCATION	SEC. 30, T16N, R4E	SEC. 18, T15N, R3E	SEC. 26, T17N, R3E
OWNER	GREENLAND DRILLING CO.	DAVIDOR & DAVIDOR, INC.	SKELLY OIL CO.
COMPLETED	--/--/00	07/06/55	11/--/41
SAMPLED	11/03/67	08/15/55	04/22/42
FORMATION	PENN-RED FORK	PENN-PRUE	CAMO-DOLOMITE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4114	3945	4420
WELLHEAD PRESSURE, PSIG	1480	1520	1650
OPEN FLOW, MCFD	8800	6400	11000
COMPONENT, MOLE PCT			
METHANE	76.1	79.2	68.2
ETHANE	6.5	7.0	20.7
PROPANE	3.3	3.2	---
N-BUTANE	1.2	1.1	---
ISOBUTANE	0.3	0.5	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.3	0.4	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	11.2	7.7	10.3
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.10	0.27
HEATING VALUE*	1063	1113	1062
SPECIFIC GRAVITY	0.707	0.700	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6325 SAMPLE 5634	INDEX 6326 SAMPLE 17573	INDEX 6327 SAMPLE 3427
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	OLIVET	PARKLAND W	PECK DISTRICT
WELL NAME	MOORE NO. 1	MINNIE B. MARTIN NO. 1	GRAY
LOCATION	SEC. 21, T17N, R2E	SEC. 28, T16N, R4E	SEC. 3, T13N, R6E
OWNER	OKLAHOMA NATURAL GAS CO.	PAN WESTERN ENERGY CORP.	HERNDON DRILLING CO.
COMPLETED	04/05/54	--/--/00	01/--/42
SAMPLED	06/09/54	01/24/85	05/13/42
FORMATION	PENN-CLEVELAND	PENN-RED FORK	PENN---
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3607	4000	4138
WELLHEAD PRESSURE,PSIG	1485	250	760
OPEN FLOW, MCFD	18000	425	7650
COMPONENT, MOLE PCT			
METHANE	79.5	71.0	67.4
ETHANE	6.9	5.9	27.0
PROPANE	3.2	3.6	---
N-BUTANE	0.9	1.4	---
ISOBUTANE	0.5	0.5	---
N-PENTANE	0.3	0.4	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	7.8	15.0	5.2
OXYGEN	0.0	1.1	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.12	0.10	0.10
HEATING VALUE*	1095	1036	1167
SPECIFIC GRAVITY	0.689	0.741	0.712

	INDEX 6328 SAMPLE 3845	INDEX 6329 SAMPLE 5005	INDEX 6330 SAMPLE 15476
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	PECK W	RED MOUND	RED MOUND W
WELL NAME	LONG COMMUNITY NO. 1	C. POTTER NO. 1	STATE ORR NO. 1
LOCATION	SEC. 6, T13N, R6E	SEC. 21, T16N, R3E	SEC. 36, T16N, R2E
OWNER	JOHN B. HAWLEY, JR.	WILCOX OIL CO.	SULLIVAN & CO.
COMPLETED	03/25/44	11/30/50	09/01/78
SAMPLED	05/22/44	02/08/51	10/26/78
FORMATION	PENN-FLAT TOP	DEVO-HUNTON	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4079	3751	4500
WELLHEAD PRESSURE,PSIG	1200	2400	1625
OPEN FLOW, MCFD	1000	6500	54000
COMPONENT, MOLE PCT			
METHANE	65.6	78.0	79.6
ETHANE	24.5	7.3	7.8
PROPANE	---	3.3	1.9
N-BUTANE	---	1.0	0.3
ISOBUTANE	---	0.3	0.7
N-PENTANE	---	0.2	0.5
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	0.1	0.4
NITROGEN	9.4	9.0	4.8
OXYGEN	0.4	0.2	0.4
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.3	0.0
HELIUM	0.10	0.12	0.08
HEATING VALUE*	1104	1074	1177
SPECIFIC GRAVITY	0.716	0.694	0.713

	INDEX 6331 SAMPLE 17471	INDEX 6332 SAMPLE 10963	INDEX 6333 SAMPLE 1062
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	SPONG	STONE NE	STROUD
WELL NAME	HERT TRUST NO. 1-22	STATE NO. 1	ANNA SUKOVATX NO. 1
LOCATION	SEC. 22, T17N, R3E	SEC. 36, T15N, R4E	SEC. 2, T14N, R5E
OWNER	NONDORF OIL & GAS, INC.	GREENLAND DRILLING CO.	MOBIL OIL CORP.
COMPLETED	04/22/84	02/14/67	04/--/25
SAMPLED	10/02/84	05/23/67	05/23/25
FORMATION	PENN-RED FORK	PENN-RED FORK	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3958	3979	3345
WELLHEAD PRESSURE,PSIG	1325	1400	1250
OPEN FLOW, MCFD	1000	2230	10000
COMPONENT, MOLE PCT			
METHANE	76.8	81.4	73.8
ETHANE	7.7	6.0	21.9
PROPANE	3.8	3.6	---
N-BUTANE	1.2	0.1	---
ISOBUTANE	0.5	1.1	---
N-PENTANE	0.3	0.5	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	8.9	6.8	3.9
OXYGEN	TRACE	0.1	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.10	0.09	0.06
HEATING VALUE*	1103	1101	1140
SPECIFIC GRAVITY	0.709	0.683	0.682

	INDEX 6334 SAMPLE 5144	INDEX 6335 SAMPLE 9905	INDEX 6336 SAMPLE 16791
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	STROUD	STROUD	STROUD
WELL NAME	M. RUEB NO. 1	MCCALL NO 1	JOHN ROBERSON NO. 1-A
LOCATION	SEC. 23, T15N, R5E	SEC. 32, T14N, R5E	SEC. 12, T14N, R5E
OWNER	MID-CONTINENT PETROLEUM CORP	CRAWFORD O&G RESERVES, INC.	TIERRA ENERGY CORP.
COMPLETED	09/01/51	03/17/65	12/03/82
SAMPLED	12/27/51	05/25/65	03/03/83
FORMATION	PENN-PRUE	PENN-RED FORK	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3327	3875	3720
WELLHEAD PRESSURE,PSIG	1320	1375	1150
OPEN FLOW, MCFD	1920	19570	2100
COMPONENT, MOLE PCT			
METHANE	86.1	78.2	86.8
ETHANE	5.8	5.7	3.9
PROPANE	2.2	2.9	1.9
N-BUTANE	0.6	1.1	0.6
ISOBUTANE	0.1	0.6	0.2
N-PENTANE	0.2	0.9	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	4.8	9.8	5.4
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.1
HELIUM	0.09	0.10	0.10
HEATING VALUE*	1071	1082	1061
SPECIFIC GRAVITY	0.643	0.706	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6337 SAMPLE 5222	INDEX 6338 SAMPLE 1906	INDEX 6339 SAMPLE 17187
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	STROUD NE	TRYON	TRYON
WELL NAME	ENGLISH NO. 1	SCHOOL LAND NO. 1	SPORN ESTATE NO. 23-1
LOCATION	SEC. 13, T15N, R6E	SEC. 36, T17N, R3E	SEC. 23, T16N, R3E
OWNER	NED BIFFLE	CONTINENTAL OIL CO.	CHAMPLIN EXPLORATION, INC.
COMPLETED	11/12/51	10/06/29	03/05/82
SAMPLED	04/18/52	12/11/29	02/--/84
FORMATION	PENN-SKINNER	PENN-BARTLESVILLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2949	3923	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1100	1600	NOT GIVEN
OPEN FLOW, MCFD	2420	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.7	69.2	76.0
ETHANE	6.2	22.0	7.6
PROPANE	2.6	---	3.6
N-BUTANE	0.7	---	1.2
ISOBUTANE	0.3	---	0.5
N-PENTANE	0.2	---	0.4
ISOPENTANE	0.2	---	0.3
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	6.3	8.4	9.8
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.69	0.10	0.16
HEATING VALUE	1081	1195	1101
SPECIFIC GRAVITY	0.668	0.702	0.716

	INDEX 6340 SAMPLE 9915	INDEX 6341 SAMPLE 16429	INDEX 6342 SAMPLE 16967
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	WELLSTON N	WELLSTON S	WELLSTON S
WELL NAME	STEWARD NO. 1	DAVIS UNIT NO. 1-27	VAN GUNDY NO. 1-36
LOCATION	SEC. 18, T14N, R3E	SEC. 27, T14N, R2E	SEC. 36, T14N, R2E
OWNER	REX OIL REFINING, INC.	PSEC, INC.	PSEC, INC.
COMPLETED	01/20/65	01/--/82	07/19/82
SAMPLED	06/04/65	02/18/82	05/25/83
FORMATION	PENN-SKINNER	PENN-CLEVELAND-JONES	PENN-CLEVELAND-JONES
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4400	4207	4040
WELLHEAD PRESSURE,PSIG	1643	2620	241
OPEN FLOW, MCFD	14424	7000	627
COMPONENT, MOLE PCT			
METHANE	81.6	77.4	84.2
ETHANE	5.4	8.2	7.4
PROPANE	2.5	4.1	3.7
N-BUTANE	0.5	1.2	1.5
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	TRACE	0.3	0.5
ISOPENTANE	0.1	0.2	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	8.8	7.8	3.8
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.09	0.09	0.07
HEATING VALUE	1031	1124	1182
SPECIFIC GRAVITY	0.663	0.707	0.702

	INDEX 6343 SAMPLE 3402	INDEX 6344 SAMPLE 1839	INDEX 6345 SAMPLE 2303
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LINCOLN	LOGAN	LOGAN
FIELD	WILZETTA NE	CRESCENT-LOVELL	CRESCENT-LOVELL
WELL NAME	HICKS NO. 1	QUIGLEY NO. 1	KATSCHOR NO. 1
LOCATION	SEC. 30, T13N, R6E	SEC. 21, T18N, R4W	SEC. 34, T17N, R4W
OWNER	ALLIED MATERIALS CORP.	BLACKWELL OIL & GAS CO.	EASON OIL CO.
COMPLETED	07/15/41	08/22/29	12/13/30
SAMPLED	09/13/42	08/13/29	03/24/31
FORMATION	DEVO-HUNTON	NOT GIVEN	PENN-LAYTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4075	4020	4918
WELLHEAD PRESSURE,PSIG	1600	1550	NOT GIVEN
OPEN FLOW, MCFD	25800	24000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.6	66.4	67.7
ETHANE	18.9	27.1	30.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.7	6.0	1.2
OXYGEN	0.6	0.3	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.6
HELIUM	0.14	0.01	0.05
HEATING VALUE	1074	1158	1232
SPECIFIC GRAVITY	0.684	0.717	0.716

	INDEX 6346 SAMPLE 2646	INDEX 6347 SAMPLE 5044	INDEX 6348 SAMPLE 5726
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CRESCENT-LOVELL	CRESCENT-LOVELL	CRESCENT-LOVELL
WELL NAME	W. MILLER NO. 1	POLLARD NO. 1	HILL NO. 1
LOCATION	SEC. 28, T17N, R4W	SEC. 6, T18N, R4W	SEC. 9, T18N, R4W
OWNER	GYPSY OIL CO. & CARTER OIL C	TRIGG DRILLING CO., INC.	E. R. BAHAN
COMPLETED	07/12/33	12/28/50	09/22/54
SAMPLED	09/22/33	04/17/53	11/05/54
FORMATION	CROO-WILCOX	PENN-LAYTON	PENN-LAYTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6120	4612	4788
WELLHEAD PRESSURE,PSIG	2814	2000	1800
OPEN FLOW, MCFD	6500	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	66.0	85.9	83.8
ETHANE	25.5	6.9	7.8
PROPANE	---	3.1	3.6
N-BUTANE	---	1.0	0.9
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	7.7	1.9	2.7
OXYGEN	0.4	0.1	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.8	0.2
HELIUM	0.00	0.09	0.07
HEATING VALUE*	1126	1153	1144
SPECIFIC GRAVITY	0.718	0.666	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6349 SAMPLE 5727	INDEX 6350 SAMPLE 10276	INDEX 6351 SAMPLE 11236
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CRESCENT-LOVELL	CRESCENT-LOVELL	CRESCENT-LOVELL
WELL NAME	POLLARD NO. 1	FICKEN NO. 2	ROUT NO. 1
LOCATION	SEC. 5, T18N, R4W	SEC. 17, T18N, R4W	SEC. 12, T17N, R4W
OWNER	E. R. BAMAN	EARL R. RAPP	PETROLEUM RESOURCES CO.
COMPLETED	10/17/54	09/24/65	04/21/67
SAMPLED	11/05/54	11/10/65	12/04/67
FORMATION	PENN-LAYTON	PENN-CARMICHAEL	PENN-PERRY
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4680	3530	4570
WELLHEAD PRESSURE, PSIG	1500	595	1450
OPEN FLOW, MCFD	4500	3500	16595
COMPONENT, MOLE PCT			
METHANE	85.2	81.7	78.9
ETHANE	6.9	7.5	8.6
PROPANE	3.2	4.0	4.2
N-BUTANE	1.1	1.4	1.4
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.3	0.5	0.3
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	2.6	3.6	5.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.09	0.11	0.10
HEATING VALUE*	1151	1179	1166
SPECIFIC GRAVITY	0.672	0.699	0.708

	INDEX 6352 SAMPLE 11738	INDEX 6353 SAMPLE 4363	INDEX 6354 SAMPLE 13932
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CRESCENT-LOVELL	EDMOND W	ELK HORN S
WELL NAME	PRESTON NO. 3	R. N. CHRISTNER NO. 2	EASTWOOD NO. 5
LOCATION	SEC. 16, T18N, R4W	SEC. 30, T15N, R4W	SEC. 8, T18N, R3W
OWNER	H. E. R. DRILLING CO.	STANOLIND OIL & GAS CO.	GENIE OIL & GAS CORP.
COMPLETED	11/12/68	04/24/47	01/31/74
SAMPLED	01/15/69	10/07/47	03/05/74
FORMATION	PENN-CARMICHAEL	DEVO-HUNTON	PENN-JACK E SAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3548	6527	2652
WELLHEAD PRESSURE, PSIG	1035	2800	1150
OPEN FLOW, MCFD	10200	20000	16800
COMPONENT, MOLE PCT			
METHANE	78.0	76.8	75.0
ETHANE	6.8	22.0	6.0
PROPANE	3.8	---	3.4
N-BUTANE	1.2	---	1.0
ISOBUTANE	0.6	---	0.3
N-PENTANE	0.4	---	0.2
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	8.4	0.6	13.1
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.14	0.04	0.24
HEATING VALUE*	1111	1172	1032
SPECIFIC GRAVITY	0.706	0.671	0.708

	INDEX 6355 SAMPLE 17501	INDEX 6356 SAMPLE 16433	INDEX 6357 SAMPLE 17795
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	GUTHRIE LAKE	GUTHRIE LAKE E	GUTHRIE NE
WELL NAME	SHANNON NO. 1-36	ELLIS NO. 2	WHITELEY NO. 1-32
LOCATION	SEC. 36, T16N, R3W	SEC. 10, T15N, R2W	SEC. 32, T17N, R1W
OWNER	PSEC, INC.	ARTHUR FINSTON	BLUE QUAIL OIL & GAS, INC.
COMPLETED	04/26/84	08/24/81	04/11/85
SAMPLED	10/12/84	02/24/82	08/02/85
FORMATION	PENN-SKINNER	ORDO-VIOLA	PENN-HOOVER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5517	5658	2315
WELLHEAD PRESSURE, PSIG	1000	1200	965
OPEN FLOW, MCFD	2300	750	2766
COMPONENT, MOLE PCT			
METHANE	68.4	81.8	67.8
ETHANE	11.0	9.2	5.9
PROPANE	7.8	3.9	4.0
N-BUTANE	2.5	1.3	1.6
ISOBUTANE	0.8	0.4	0.6
N-PENTANE	0.5	0.4	0.5
ISOPENTANE	0.6	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	5.3	2.0	18.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	2.2	TRACE	TRACE
HYDROGEN	0.2	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.08	0.04	0.26
HEATING VALUE*	1265	1197	1028
SPECIFIC GRAVITY	0.805	0.695	0.758

	INDEX 6358 SAMPLE 10507	INDEX 6359 SAMPLE 16647	INDEX 6360 SAMPLE 3411
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	ICONIUM S	LANGSTON S	NAVINA
WELL NAME	KIGHTLINGER	KNIGHTLINGER NO. 1	ICIA LINESER NO. 1
LOCATION	SEC. 21, T16N, R1E	SEC. 5, T16N, R1E	SEC. 17, T15N, R3W
OWNER	OK & B DRILLING CO.	WIL-MC OIL CORP.	CONTINENTAL OIL CO.
COMPLETED	02/08/66	03/14/82	07/03/41
SAMPLED	04/06/66	09/03/82	05/14/42
FORMATION	PENN-SKINNER	PENN-LAYTON	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4787	3745	6201
WELLHEAD PRESSURE, PSIG	1740	1050	2489
OPEN FLOW, MCFD	6090	1176	550
COMPONENT, MOLE PCT			
METHANE	82.3	79.7	78.2
ETHANE	8.6	7.8	20.3
PROPANE	3.6	3.7	---
N-BUTANE	1.2	1.2	---
ISOBUTANE	0.4	0.5	---
N-PENTANE	0.4	0.3	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	2.4	5.9	0.8
OXYGEN	0.0	TRACE	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.07	0.06	0.08
HEATING VALUE*	1189	1140	1156
SPECIFIC GRAVITY	0.694	0.699	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6361 SAMPLE 3419	INDEX 6362 SAMPLE 3760	INDEX 6363 SAMPLE 5855
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	NAVINA	PLEASANT VALLEY	PLEASANT VALLEY NE
WELL NAME	BABCOCK NO. 1	SCHOOL LAND NO. 1	POTEET NO. 1
LOCATION	SEC. 10, T15N, R4W	SEC. 16, T15N, R2W	SEC. 11, T15N, R2W
OWNER	CITIES SERVICE OIL CO.	EASON OIL CO.	POWELL BRISCOE, INC.
COMPLETED	12/30/41	08/15/43	11/01/54
SAMPLED	05/14/42	04/02/44	06/07/55
FORMATION	PENN-LAYTON	PENN-BARTLESVILLE	PENN-LAYTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5012	5677	4580
WELLHEAD PRESSURE,PSIG	1155	1520	2300
OPEN FLOW, MCFD	2250	4000	15
COMPONENT, MOLE PCT			
METHANE	44.2	69.0	78.6
ETHANE	54.9	25.4	5.0
PROPANE	---	---	2.2
N-BUTANE	---	---	0.7
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.2	4.4	12.1
OXYGEN	0.4	0.9	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.02	0.06	0.20
HEATING VALUE*	1032	1154	1011
SPECIFIC GRAVITY	0.632	0.706	0.682

	INDEX 6364 SAMPLE 14713	INDEX 6365 SAMPLE 17500	INDEX 6366 SAMPLE 17609
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	PRAIRIE BELL NW	SEWARD NE	WATERLOO N
WELL NAME	VAUGHTER NO. 1	KELLOGG NO. 1	EMMONS NO. 1-35
LOCATION	SEC. 31, T15N, R3W	SEC. 23, T16N, R3W	SEC. 35, T15N, R3W
OWNER	FERGUSON OIL CO., INC.	PUBLISHERS PETROLEUM	AMCANA OIL CO.
COMPLETED	01/06/76	--/--/82	06/28/83
SAMPLED	06/27/76	10/--/84	02/25/85
FORMATION	PENN-LAYTON	PENN-LAYTON	DEVO-MISENER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6071
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	276
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	952
COMPONENT, MOLE PCT			
METHANE	81.7	74.0	70.0
ETHANE	8.9	5.9	10.8
PROPANE	5.8	3.7	8.6
N-BUTANE	1.2	1.3	3.4
ISOBUTANE	0.5	0.5	0.9
N-PENTANE	0.4	0.4	1.0
ISOPENTANE	0.4	0.4	0.2
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	2.7	12.8	3.9
OXYGEN	TRACE	0.1	0.4
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.06	0.13	0.04
HEATING VALUE*	1196	1073	1342
SPECIFIC GRAVITY	0.698	0.730	0.811

	INDEX 6367 SAMPLE 9823	INDEX 6368 SAMPLE 9824	INDEX 6369 SAMPLE 9825
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	WELLSTON W	WELLSTON W	WELLSTON W
WELL NAME	SHAW 1	GRAHAM NO. 1	GRAHAM NO. 1
LOCATION	SEC. 26, T15N, R1E	SEC. 35, T15N, R1E	SEC. 35, T15N, R1E
OWNER	MOORE, MOORE & MILLER	MOORE, MOORE & MILLER	MOORE, MOORE & MILLER
COMPLETED	10/15/64	02/03/65	02/03/65
SAMPLED	03/27/65	03/27/65	03/27/65
FORMATION	DEVO-HUNTON	PENN-CHECKERBOARD	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5061	4034	4990
WELLHEAD PRESSURE,PSIG	1740	900	1700
OPEN FLOW, MCFD	12000	NOT GIVEN	2113
COMPONENT, MOLE PCT			
METHANE	79.3	71.7	83.1
ETHANE	11.0	12.0	7.0
PROPANE	4.7	7.5	3.0
N-BUTANE	1.1	3.1	0.9
ISOBUTANE	0.6	1.1	0.4
N-PENTANE	0.3	0.8	0.2
ISOPENTANE	0.2	0.7	0.3
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.6	0.2
NITROGEN	2.3	2.1	4.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.05	0.03	0.09
HEATING VALUE*	1215	1380	1124
SPECIFIC GRAVITY	0.710	0.809	0.675

	INDEX 6370 SAMPLE 14471	INDEX 6371 SAMPLE 7728	INDEX 6372 SAMPLE 11353
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOVE	LOVE	LOVE
FIELD	ENVILLE NW	ENVILLE SW	ENVILLE SW
WELL NAME	STATE TRACT 5 NO. 1	E. L. SADLER UNIT NO. 1	E. L. SADLER NO. 1
LOCATION	SEC. 13, T6S, R2E	SEC. 13, T7S, R2E	SEC. 7, T7S, R3E
OWNER	APCO OIL CORP.	TEXACO INC.	SHELL OIL CO., ET AL.
COMPLETED	05/09/75	08/24/60	09/04/58
SAMPLED	09/18/75	10/19/60	03/04/68
FORMATION	PENN-SPRINGER	ORDO-OIL CREEK	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	9526	10979	8175
WELLHEAD PRESSURE,PSIG	4715	5072	2600
OPEN FLOW, MCFD	3147	57000	41000
COMPONENT, MOLE PCT			
METHANE	93.1	84.6	87.7
ETHANE	3.2	6.9	6.1
PROPANE	1.6	2.9	2.7
N-BUTANE	0.3	1.5	1.1
ISOBUTANE	0.2	0.8	0.2
N-PENTANE	0.1	0.8	0.2
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	1.1	0.2
NITROGEN	0.9	0.6	1.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.04	0.02	0.03
HEATING VALUE*	1072	1248	1143
SPECIFIC GRAVITY	0.608	0.710	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6373 SAMPLE 11933	INDEX 6374 SAMPLE 11359	INDEX 6375 SAMPLE 6813
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	LOVE	LOVE	LOVE
FIELD	ENVILLE SW	ENVILLE W	OVERBROOK
WELL NAME	TIPPETT NO. 1	CLEMMIE S. STEVENS	TUCKER NO. 1
LOCATION	SEC. 2, T7S, R2E	SEC. 32, T6S, R3E	SEC. 32, T6S, R2E
OWNER	EDWIN L. COX	MOBIL OIL CORP.	ATLANTIC RICHFIELD CO.
COMPLETED	04/26/69	01/23/61	04/--/55
SAMPLED	06/13/69	03/08/68	09/24/58
FORMATION	ORDO-OIL CREEK	ORDO-OIL CREEK	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	7611	10400	10620
WELLHEAD PRESSURE,PSIG	3682	3331	5274
OPEN FLOW, MCFD	29502	10547	14
COMPONENT, MOLE PCT			
METHANE	86.4	90.2	89.7
ETHANE	6.2	4.7	4.8
PROPANE	3.1	1.7	1.7
N-BUTANE	1.0	0.7	0.7
ISOBUTANE	0.5	0.2	0.3
N-PENTANE	0.6	0.2	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.2	0.1
NITROGEN	1.4	1.8	1.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.2
HELIUM	0.03	0.07	0.03
HEATING VALUE*	1073	1095	1099
SPECIFIC GRAVITY	0.669	0.628	0.631

	INDEX 6376 SAMPLE 17602	INDEX 6377 SAMPLE 17604	INDEX 6378 SAMPLE 7923
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	BADD E	BADD E	CAMPBELL
WELL NAME	CLASSEN A NO. 4	DYE "A" NO. 1	BARNES UNIT 8
LOCATION	SEC. 9, T20N, R14W	SEC. 4, T20N, R14W	SEC. 29, T23N, R15W
OWNER	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	AMOCO PRODUCTION CO.
COMPLETED	03/21/83	11/20/83	08/29/60
SAMPLED	02/26/85	02/26/85	04/11/61
FORMATION	DEVO-HUNTON	MISS---	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9290	8370	8023
WELLHEAD PRESSURE,PSIG	2900	2450	2650
OPEN FLOW, MCFD	1750	3500	9100
COMPONENT, MOLE PCT			
METHANE	89.9	86.7	82.4
ETHANE	5.4	6.5	8.4
PROPANE	1.7	3.0	5.1
N-BUTANE	0.5	1.1	1.5
ISOBUTANE	0.1	0.5	0.5
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.6	1.1	2.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.04	0.03	0.10
HEATING VALUE*	1090	1162	1168
SPECIFIC GRAVITY	0.623	0.665	0.687

	INDEX 6379 SAMPLE 12294	INDEX 6380 SAMPLE 13459	INDEX 6381 SAMPLE 14712
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CAMPBELL	CAMPBELL	CAMPBELL
WELL NAME	JACQUITH NO. 1	PHILLIPS NO. 13-1	BOUMA NO. 1
LOCATION	SEC. 12, T23N, R16W	SEC. 13, T22N, R15W	SEC. 14, T23N, R16W
OWNER	W. B. OSBORN, OPERATOR	HARPER OIL CO.	L. R. FRENCH, JR.
COMPLETED	05/04/70	03/20/72	10/07/75
SAMPLED	05/12/70	10/25/72	06/28/76
FORMATION	MISS---	MISS---	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5994	7502	7113
WELLHEAD PRESSURE,PSIG	2334	1300	1526
OPEN FLOW, MCFD	4861	1690	1168
COMPONENT, MOLE PCT			
METHANE	92.5	88.0	92.3
ETHANE	2.7	5.9	2.6
PROPANE	1.1	2.4	0.9
N-BUTANE	0.5	0.9	0.4
ISOBUTANE	0.2	0.5	0.1
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.4	0.1
NITROGEN	1.7	0.9	2.5
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.00	0.0
CARBON DIOXIDE	0.9	0.2	0.4
HELIUM	0.06	0.04	0.05
HEATING VALUE*	1064	1157	1040
SPECIFIC GRAVITY	0.611	0.657	0.606

	INDEX 6382 SAMPLE 14731	INDEX 6383 SAMPLE 6485	INDEX 6384 SAMPLE 7006
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CAMPBELL	CEDARDALE NE	CEDARDALE NE
WELL NAME	COT NO. 1	ANNA M. HARRIS NO. 1	EARL E. SPAFFORD
LOCATION	SEC. 1, T23N, R16W	SEC. 13, T22N, R16W	SEC. 33, T23N, R16W
OWNER	W. B. OSBORN, OPERATOR	AMOCO PRODUCTION CO.	ATLANTIC RICHFIELD CO.
COMPLETED	06/01/76	11/26/57	02/06/59
SAMPLED	08/12/76	01/19/58	03/23/59
FORMATION	MISS-	PENN-COTTAGE GROVE	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7860	6209	8271
WELLHEAD PRESSURE,PSIG	2225	2152	3015
OPEN FLOW, MCFD	4000	17300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.3	94.2	94.0
ETHANE	2.8	2.9	2.0
PROPANE	1.0	1.4	0.6
N-BUTANE	0.5	0.3	0.1
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.7	0.2	1.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.2	0.6
HELIUM	0.05	0.04	TRACE
HEATING VALUE*	1062	1074	1047
SPECIFIC GRAVITY	0.616	0.599	0.602

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6385 SAMPLE 7210	INDEX 6386 SAMPLE 10106	INDEX 6387 SAMPLE 10300
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	EARL E. SPAFFORD NO. 1	SCHLARB UNIT NO. 2	KEPNER UNIT B NO. 1
LOCATION	SEC. 33, T23N, R16W	SEC. 22, T22N, R16W	SEC. 24, T22N, R16W
OWNER	ATLANTIC RICHFIELD CO.	UNION OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	02/06/59	06/26/65	10/07/65
SAMPLED	09/18/59	09/08/65	11/30/65
FORMATION	MISS-CHESTER	PENN-OSWEGO	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8271	6936	7442
WELLHEAD PRESSURE, PSIG	2997	2350	2375
OPEN FLOW, MCFD	32921	3500	4075
COMPONENT, MOLE PCT			
METHANE	94.4	94.2	90.7
ETHANE	1.9	2.8	3.4
PROPANE	0.5	0.9	1.9
N-BUTANE	0.2	0.3	0.5
ISOBUTANE	0.2	0.2	TRACE
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.9	0.5	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	2.7
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1031	1072	1068
SPECIFIC GRAVITY	0.595	0.605	0.635

	INDEX 6388 SAMPLE 12777	INDEX 6389 SAMPLE 13186	INDEX 6390 SAMPLE 14732
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	JOHNSON NO. 2	SMITH NO. 1	ANGELL NO. 1-36
LOCATION	SEC. 4, T21N, R15W	SEC. 14, T22N, R16W	SEC. 36, T23N, R16W
OWNER	APACHE CORP.	FERGUSON OIL CO., INC.	JOSEPH I. O'NEILL, JR.
COMPLETED	09/19/70	12/28/71	03/25/76
SAMPLED	04/22/71	04/11/72	08/13/76
FORMATION	PENN-RED FORK	PENN-OSWEGO	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7120	6600	7376
WELLHEAD PRESSURE, PSIG	1600	2372	2219
OPEN FLOW, MCFD	16204	NOT GIVEN	11200
COMPONENT, MOLE PCT			
METHANE	81.6	94.1	92.3
ETHANE	6.3	2.9	3.7
PROPANE	3.8	1.1	1.3
N-BUTANE	0.9	0.3	0.4
ISOBUTANE	0.7	0.2	0.1
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	4.6	0.4	1.2
OXYGEN	0.7	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.4	0.3
HELIUM	0.09	0.04	0.04
HEATING VALUE*	1132	1073	1083
SPECIFIC GRAVITY	0.693	0.603	0.616

	INDEX 6391 SAMPLE 11327	INDEX 6392 SAMPLE 13490	INDEX 6393 SAMPLE 13949
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHESTER W	CHESTER W	CHESTER W
WELL NAME	C. A. SEVERN UNIT NO. 1	MCCLELLUM NO. 1-27	HAYNES NO. 1-28
LOCATION	SEC. 6, T20N, R16W	SEC. 27, T21N, R16W	SEC. 28, T21N, R16W
OWNER	ATLANTIC RICHFIELD CO.	ASHLAND OIL, INC.	ASHLAND OIL, INC.
COMPLETED	01/12/62	06/24/72	10/15/73
SAMPLED	03/01/68	12/27/72	--/--/00
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8093	7844	7792
WELLHEAD PRESSURE, PSIG	472	2220	2139
OPEN FLOW, MCFD	1157	3765	4103
COMPONENT, MOLE PCT			
METHANE	94.4	92.8	93.8
ETHANE	2.8	4.0	3.3
PROPANE	0.8	1.5	1.1
N-BUTANE	0.3	0.4	0.3
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	0.6	0.4
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.5
HELIUM	0.06	0.04	0.04
HEATING VALUE*	1063	1085	1077
SPECIFIC GRAVITY	0.600	0.615	0.607

	INDEX 6394 SAMPLE 6988	INDEX 6395 SAMPLE 9856	INDEX 6396 SAMPLE 11744
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHEYENNE VALLEY	CHEYENNE VALLEY	CHEYENNE VALLEY
WELL NAME	FAIRVIEW NO. 1	C. G. CASE NO. 1	PHILLIPS NO. 1
LOCATION	SEC. 32, T22N, R14W	SEC. 11, T21N, R15W	SEC. 19, T22N, R14W
OWNER	CITIES SERVICE OIL CO.	AMOCO PRODUCTION CO.	MIDWEST OIL CORP.
COMPLETED	11/17/58	03/25/65	12/04/68
SAMPLED	03/02/59	04/26/65	01/28/69
FORMATION	PENN-CHEROKEE	PENN-CHEROKEE	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6856	7502	7537
WELLHEAD PRESSURE, PSIG	2000	2025	2293
OPEN FLOW, MCFD	NOT GIVEN	2169	14500
COMPONENT, MOLE PCT			
METHANE	94.5	86.4	89.4
ETHANE	0.8	5.4	4.7
PROPANE	0.6	3.3	2.1
N-BUTANE	0.7	1.0	0.5
ISOBUTANE	0.4	0.8	0.4
N-PENTANE	0.5	0.5	0.3
ISOPENTANE	0.5	0.2	TRACE
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.5	0.3
NITROGEN	0.8	1.4	1.5
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.2
HELIUM	0.30	0.08	0.05
HEATING VALUE*	1110	1169	1107
SPECIFIC GRAVITY	0.622	0.675	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6397 SAMPLE 12388	INDEX 6398 SAMPLE 12389	INDEX 6399 SAMPLE 12403
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHEYENNE VALLEY	CHEYENNE VALLEY	CHEYENNE VALLEY
WELL NAME	EDWARD SUTTER NO. 1	ORVILLE BYFIELD NO. 1	NELLIE E. NOBLE NO. 1
LOCATION	SEC. 20, T22N, R13W	SEC. 31, T22N, R13W	SEC. 10, T22N, R14W
OWNER	ASHLAND OIL, INC.	ASHLAND OIL, INC.	TENNECO OIL CO.
COMPLETED	06/08/70	09/25/69	04/13/70
SAMPLED	08/25/70	08/25/70	09/02/70
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7898	7558	7370
WELLHEAD PRESSURE,PSIG	2180	2310	1952
OPEN FLOW, MCFD	5897	9671	4817
COMPONENT, MOLE PCT			
METHANE	86.8	87.3	85.5
ETHANE	6.6	6.0	7.0
PROPANE	3.1	2.9	3.6
N-BUTANE	0.7	0.9	0.9
ISOBUTANE	0.7	0.6	0.7
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.5	0.2
NITROGEN	1.2	0.9	1.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.04	0.04	0.07
HEATING VALUE*	1161	1177	1180
SPECIFIC GRAVITY	0.662	0.668	0.670

	INDEX 6400 SAMPLE 12404	INDEX 6401 SAMPLE 13952	INDEX 6402 SAMPLE 12391
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	CHEYENNE VALLEY	CHEYENNE VALLEY	CHEYENNE VALLEY S
WELL NAME	NELLIE E. NOBLE NO. 1	SUTTER NO. 1	EDWARDS NO. 1
LOCATION	SEC. 10, T22N, R14W	SEC. 27, T22N, R13W	SEC. 20, T21N, R14W
OWNER	TENNECO OIL CO.	L. R. FRENCH, JR.	SOUTHERN UNION PRODUCTION CO
COMPLETED	04/15/70	06/13/73	06/21/70
SAMPLED	09/02/70	03/13/74	08/27/70
FORMATION	PENN-RED FORK	DEVO-HUNTON	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6536	8100	7323
WELLHEAD PRESSURE,PSIG	1639	3100	2413
OPEN FLOW, MCFD	8627	80000	5705
COMPONENT, MOLE PCT			
METHANE	88.4	61.3	92.7
ETHANE	4.6	16.4	4.1
PROPANE	2.9	11.4	1.2
N-BUTANE	0.7	5.1	0.2
ISOBUTANE	0.6	1.7	0.1
N-PENTANE	0.3	1.6	TRACE
ISOPENTANE	0.3	1.0	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.4	0.7	0.1
NITROGEN	1.3	0.4	1.2
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.07	TRACE	0.07
HEATING VALUE*	1147	1595	1063
SPECIFIC GRAVITY	0.656	0.928	0.602

	INDEX 6403 SAMPLE 7925	INDEX 6404 SAMPLE 8225	INDEX 6405 SAMPLE 8547
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	FREED UNIT NO. 1	REAMES UNIT C	KRAUSE
LOCATION	SEC. 28, T20N, R11W	SEC. 32, T20N, R11W	SEC. 18, T20N, R11W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	KINGWOOD OIL CO.
COMPLETED	11/18/60	08/20/61	11/16/61
SAMPLED	04/11/61	10/09/61	05/07/62
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7330	7357	7287
WELLHEAD PRESSURE,PSIG	3575	3700	3442
OPEN FLOW, MCFD	4700	11200	1500
COMPONENT, MOLE PCT			
METHANE	90.2	92.6	91.5
ETHANE	4.6	4.2	4.5
PROPANE	1.9	1.3	1.8
N-BUTANE	0.9	0.2	0.5
ISOBUTANE	0.6	0.1	0.3
N-PENTANE	0.4	TRACE	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	0.3	0.4	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.3
HELIUM	0.04	0.04	0.03
HEATING VALUE*	1151	1067	1113
SPECIFIC GRAVITY	0.647	0.605	0.624

	INDEX 6406 SAMPLE 8548	INDEX 6407 SAMPLE 8809	INDEX 6408 SAMPLE 9711
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	KRAUSE	KARBER NO. 1	HUBBLE NO. 1
LOCATION	SEC. 18, T20N, R11W	SEC. 22, T20N, R12W	SEC. 26, T21N, R13W
OWNER	KINGWOOD OIL CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	11/16/61	10/18/62	11/16/64
SAMPLED	05/08/62	12/17/62	01/22/65
FORMATION	PENN-RED FORK	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7144	7438	7260
WELLHEAD PRESSURE,PSIG	3377	3475	2820
OPEN FLOW, MCFD	3000	7120	3120
COMPONENT, MOLE PCT			
METHANE	91.4	89.6	92.9
ETHANE	4.5	5.8	4.0
PROPANE	1.7	1.1	1.4
N-BUTANE	0.5	0.1	0.3
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	TRACE	0.1
NITROGEN	0.4	3.7	0.4
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.4
HELIUM	0.04	0.07	0.03
HEATING VALUE*	1119	1011	1080
SPECIFIC GRAVITY	0.627	0.611	0.607

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6409 SAMPLE 10482	INDEX 6410 SAMPLE 10483	INDEX 6411 SAMPLE 11312
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	MOLLIE EWING NO. 1	MOLLIE EWING NO. 1	TAYLOR NO. 1
LOCATION	SEC. 9, T20N, R11W	SEC. 9, T20N, R11W	SEC. 9, T20N, R12W
OWNER	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.	WOODS PETROLEUM CORP.
COMPLETED	02/15/66	02/15/66	01/01/68
SAMPLED	03/29/66	03/29/66	02/27/68
FORMATION	PENN-RED FORK	MISS-CHESTER	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7133	7260	8583
WELLHEAD PRESSURE,PSIG	2800	2750	3090
OPEN FLOW, MCFD	11990	1082	22642
COMPONENT, MOLE PCT			
METHANE	91.8	91.9	94.4
ETHANE	4.0	4.0	2.4
PROPANE	1.4	1.4	0.6
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.3	0.3
NITROGEN	0.8	0.8	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.06	0.06	0.03
HEATING VALUE*	1102	1094	1064
SPECIFIC GRAVITY	0.629	0.620	0.603

	INDEX 6412 SAMPLE 11319	INDEX 6413 SAMPLE 11324	INDEX 6414 SAMPLE 11461
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	MOLLIE EWING NO. 1	MOLLIE EWING NO. 1	EWING NO. 1
LOCATION	SEC. 9, T20N, R11W	SEC. 9, T20N, R11W	SEC. 24, T20N, R12W
OWNER	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.	EASON OIL CO.
COMPLETED	02/19/66	02/15/66	07/--/62
SAMPLED	02/29/68	02/29/68	04/24/68
FORMATION	PENN-RED FORK	MISS-CHESTER	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7133	7260	7220
WELLHEAD PRESSURE,PSIG	2274	2180	800
OPEN FLOW, MCFD	1490	1230	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.3	85.7	92.7
ETHANE	3.6	3.8	3.6
PROPANE	1.9	2.0	1.1
N-BUTANE	1.1	1.3	0.4
ISOBUTANE	0.9	0.8	0.1
N-PENTANE	0.9	1.0	0.2
ISOPENTANE	1.4	1.0	0.3
CYCLOPENTANE	0.5	0.7	0.2
HEXANES PLUS	1.9	2.3	0.6
NITROGEN	0.9	1.0	0.5
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.06	0.06	0.04
HEATING VALUE*	1277	1289	1109
SPECIFIC GRAVITY	0.729	0.739	0.622

	INDEX 6415 SAMPLE 12233	INDEX 6416 SAMPLE 13084	INDEX 6417 SAMPLE 13085
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	MARTENS NO. 1	MCGEE NO. 1	MCGEE NO. 1
LOCATION	SEC. 17, T21N, R13W	SEC. 24, T21N, R13W	SEC. 24, T21N, R13W
OWNER	CHAMPLIN EXPLORATION, INC.	PUBLISHERS PETROLEUM	PUBLISHERS PETROLEUM
COMPLETED	--/--/00	08/09/71	08/09/71
SAMPLED	04/07/70	10/--/71	10/--/71
FORMATION	DEVO-HUNTON	PENN-RED FORK	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8785	7036	7186
WELLHEAD PRESSURE,PSIG	670	2340	2986
OPEN FLOW, MCFD	3640	1759	3700
COMPONENT, MOLE PCT			
METHANE	86.2	92.2	83.6
ETHANE	6.0	3.3	5.0
PROPANE	3.1	1.8	2.5
N-BUTANE	1.0	0.3	0.6
ISOBUTANE	0.7	0.2	0.4
N-PENTANE	0.5	TRACE	0.1
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.5	TRACE	0.2
NITROGEN	1.6	1.9	1.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.03	0.10	0.05
HEATING VALUE*	1182	1057	1119
SPECIFIC GRAVITY	0.677	0.606	0.633

	INDEX 6418 SAMPLE 13181	INDEX 6419 SAMPLE 14991	INDEX 6420 SAMPLE 15040
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	OKEENE NW	OKEENE NW
WELL NAME	NUEFELD NO. 1	EDWARDS NO. 1	MARTIN NO. 2-32
LOCATION	SEC. 11, T21N, R13W	SEC. 28, T21N, R13W	SEC. 32, T20N, R13W
OWNER	L. C. FRENCH, JR.	TEXAS OIL & GAS CORP.	UNIVERSAL RESOURCES CORP.
COMPLETED	--/--/00	08/21/76	11/20/76
SAMPLED	04/11/72	05/09/77	06/29/77
FORMATION	MISS--	PENN-RED FORK	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7622	7264	7919
WELLHEAD PRESSURE,PSIG	1500	1850	2700
OPEN FLOW, MCFD	2826	3950	6700
COMPONENT, MOLE PCT			
METHANE	82.1	89.2	91.2
ETHANE	8.2	4.9	4.5
PROPANE	4.8	2.4	1.9
N-BUTANE	1.7	0.8	0.6
ISOBUTANE	0.9	0.4	0.2
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.9	1.1	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	0.03	0.07	0.04
HEATING VALUE*	1244	1121	1102
SPECIFIC GRAVITY	0.711	0.641	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6421 SAMPLE 16171	INDEX 6422 SAMPLE 15248	INDEX 6423 SAMPLE 4303
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	OKEENE NW	ORION SE	RINGWOOD
WELL NAME	NIGHTENGALE NO. 4	THOMPSON UNIT NO. 1	OTT NO. 1
LOCATION	SEC. 12, T20N, R12W	SEC. 21, T20N, R11W	SEC. 6, T21N, R9W
OWNER	DOME PETROLEUM CORP.	CRESLENN OIL CO.	R. OLSEN OIL CO.
COMPLETED	10/11/80	07/09/77	12/15/46
SAMPLED	01/15/81	04/05/78	04/20/47
FORMATION	DEVO-HUNTON	MISS-	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8460	9146	8012
WELLHEAD PRESSURE,PSIG	1654	NOT GIVEN	1700
OPEN FLOW, MCFD	2108	5170	13000
COMPONENT, MOLE PCT			
METHANE	93.7	87.4	81.2
ETHANE	3.1	6.1	14.5
PROPANE	0.9	2.7	---
N-BUTANE	0.3	0.9	---
ISOBUTANE	0.2	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.7	1.4	3.8
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE*	0.0	0.0	---
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.02	0.04	0.02
HEATING VALUE*	1072	1140	1082
SPECIFIC GRAVITY	0.605	0.656	0.645

	INDEX 6424 SAMPLE 4691	INDEX 6425 SAMPLE 5009	INDEX 6426 SAMPLE 8920
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	MAYES 58-22	BATMAN NO. 1	D. M. CORNELSEN UNIT NO. 1
LOCATION	SEC. 22, T22N, R10W	SEC. 13, T21N, R11W	SEC. 5, T22N, R12W
OWNER	SUPERIOR OIL CO.	MAZDA OIL CORP.	ASHLAND OIL & REFINING CO.
COMPLETED	04/20/48	--/--/08	02/10/63
SAMPLED	02/28/49	03/20/51	04/10/63
FORMATION	PENN-OSWEGO	NOT GIVEN	MISS-MANNING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6704	NOT GIVEN	6642
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	2100
OPEN FLOW, MCFD	3	NOT GIVEN	1500
COMPONENT, MOLE PCT			
METHANE	91.9	89.4	90.8
ETHANE	4.2	4.3	4.7
PROPANE	1.5	2.5	1.9
N-BUTANE	0.6	1.1	0.7
ISOBUTANE	0.0	0.5	0.2
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	0.8	0.9	0.7
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	---	---	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.04	0.06	0.10
HEATING VALUE*	1096	1138	1110
SPECIFIC GRAVITY	0.623	0.650	0.626

	INDEX 6427 SAMPLE 9513	INDEX 6428 SAMPLE 9522	INDEX 6429 SAMPLE 10189
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	SPEECE NO. 1	DIETZ NO. 1	FRICKEL NO. 1
LOCATION	SEC. 17, T22N, R10W	SEC. 29, T23N, R12W	SEC. 6, T22N, R11W
OWNER	CLEARY PETROLEUM, INC.	LIVINGSTON OIL CO.	CLEARY PETROLEUM, INC.
COMPLETED	04/28/64	04/11/64	09/01/65
SAMPLED	07/29/64	08/--/64	09/30/65
FORMATION	MISS-MANNING	MISS-MANNING	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6710	7819	6216
WELLHEAD PRESSURE,PSIG	1420	1550	2516
OPEN FLOW, MCFD	5480	1900	3098
COMPONENT, MOLE PCT			
METHANE	91.3	88.4	89.2
ETHANE	4.1	5.4	5.3
PROPANE	1.6	2.3	2.2
N-BUTANE	0.7	1.0	0.8
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.5	0.6	0.3
NITROGEN	0.5	0.8	1.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.05	0.05	0.06
HEATING VALUE*	1125	1166	1138
SPECIFIC GRAVITY	0.634	0.662	0.645

	INDEX 6430 SAMPLE 10190	INDEX 6431 SAMPLE 10191	INDEX 6432 SAMPLE 10211
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	FRICKEL NO. 1	FRICKEL NO. 1	LECRONE A NO. 1-C
LOCATION	SEC. 6, T22N, R11W	SEC. 6, T22N, R11W	SEC. 10, T23N, R10W
OWNER	CLEARY PETROLEUM, INC.	CLEARY PETROLEUM, INC.	CHAMPLIN PETROLEUM CO.
COMPLETED	09/01/65	09/01/65	05/22/65
SAMPLED	09/30/65	09/30/65	10/14/65
FORMATION	PENN-CHEROKEE	MISS-MANNING	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6460	6593	6300
WELLHEAD PRESSURE,PSIG	2037	1923	1965
OPEN FLOW, MCFD	6821	1815	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.3	89.5	91.2
ETHANE	6.6	5.2	2.7
PROPANE	2.6	2.2	0.6
N-BUTANE	0.6	0.7	0.1
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	1.3	1.0	4.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.3
HELIUM	0.10	0.06	0.19
HEATING VALUE*	1112	1132	1004
SPECIFIC GRAVITY	0.652	0.641	0.602

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
---DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6433 SAMPLE 10297	INDEX 6434 SAMPLE 10363	INDEX 6435 SAMPLE 10739
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	WARFIELD NO. 1	WARFIELD 1	ROSE NO. 1-12
LOCATION	SEC. 5, T22N, R11W	SEC. 5, T22N, R11W	SEC. 12, T22N, R12W
OWNER	SHELL OIL CO.	SHELL OIL CO.	CLEARY PETROLEUM, INC.
COMPLETED	06/08/65	06/28/65	--/--/00
SAMPLED	11/14/65	01/17/66	10/02/66
FORMATION	PENN-CHEROKEE	PENN-OSWEGO	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6490	6238	6424
WELLHEAD PRESSURE,PSIG	1980	2080	NOT GIVEN
OPEN FLOW, MCFD	9400	1620	16200
COMPONENT, MOLE PCT			
METHANE	86.7	79.8	85.8
ETHANE	7.4	7.7	7.4
PROPANE	2.8	4.0	3.5
N-BUTANE	0.7	1.9	1.0
ISOBUTANE	0.2	0.6	0.4
N-PENTANE	0.2	1.1	0.2
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	1.9	0.2
NITROGEN	1.3	1.4	0.9
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.05	0.05	0.06
HEATING VALUE*	1141	1523	1175
SPECIFIC GRAVITY	0.652	0.768	0.671

	INDEX 6436 SAMPLE 10762	INDEX 6437 SAMPLE 10763	INDEX 6438 SAMPLE 11306
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	BLASER NO. 1	BLASER NO. 1	K. E. FISHER NO. 1
LOCATION	SEC. 18, T22N, R12W	SEC. 18, T22N, R12W	SEC. 3, T20N, R10W
OWNER	EARLSBORO OIL & GAS CO., INC	EARLSBORO OIL & GAS CO., INC	MIDWEST OIL CORP.
COMPLETED	05/03/66	04/29/66	12/00/67
SAMPLED	10/26/66	10/26/66	02/24/68
FORMATION	PENN-RED FORK	MISS-MANNING	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6687	7128	8014
WELLHEAD PRESSURE,PSIG	1890	1943	2475
OPEN FLOW, MCFD	1339	2809	9400
COMPONENT, MOLE PCT			
METHANE	86.0	85.6	81.3
ETHANE	5.3	6.2	9.7
PROPANE	1.8	3.1	3.5
N-BUTANE	1.3	1.0	1.3
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.5	0.3
ISOPENTANE	0.4	0.2	0.4
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	1.7	2.3	2.4
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.02	0.06	0.07
HEATING VALUE*	1162	1157	1195
SPECIFIC GRAVITY	0.673	0.677	0.699

	INDEX 6439 SAMPLE 11314	INDEX 6440 SAMPLE 11315	INDEX 6441 SAMPLE 11316
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	REXROAT NO. 1	BIERIG C	UNIT 28 NO. 1
LOCATION	SEC. 9, T22N, R11W	SEC. 33, T21N, R10W	SEC. 28, T22N, R11W
OWNER	LIVINGSTON OIL CO.	LIVINGSTON OIL CO.	LIVINGSTON OIL CO.
COMPLETED	11/22/60	03/03/64	02/17/62
SAMPLED	02/27/68	02/27/68	02/27/68
FORMATION	PENN-CHEROKEE	MISS---	MISS-MANNING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6530	7267	6878
WELLHEAD PRESSURE,PSIG	1298	1215	975
OPEN FLOW, MCFD	7281	3882	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.1	86.2	90.9
ETHANE	8.3	7.3	4.0
PROPANE	3.8	2.8	1.5
N-BUTANE	1.1	1.1	0.5
ISOBUTANE	0.6	0.3	0.1
N-PENTANE	0.9	0.2	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	1.7	1.1	2.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.05	0.05	0.06
HEATING VALUE*	1191	1154	1073
SPECIFIC GRAVITY	0.691	0.662	0.621

	INDEX 6442 SAMPLE 12097	INDEX 6443 SAMPLE 12151	INDEX 6444 SAMPLE 12264
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MAJOR	MAJOR	MAJOR
FIELD	RINGWOOD	RINGWOOD	RINGWOOD
WELL NAME	BIERIG C NO. 1	ARCHIE F. DICKSON	RUTH B. DAVIS UNIT NO. 1
LOCATION	SEC. 33, T21N, R10W	SEC. 21, T20N, R10W	SEC. 15, T23N, R9W
OWNER	LVO CORP.	TENNECO OIL CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	10/05/68	09/18/69	07/27/64
SAMPLED	11/04/69	12/16/69	05/19/70
FORMATION	PENN-OSWEGO	DEVO-HUNTON	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6575	8371	6470
WELLHEAD PRESSURE,PSIG	2073	2302	2165
OPEN FLOW, MCFD	21096	3030	23808
COMPONENT, MOLE PCT			
METHANE	80.0	77.7	88.3
ETHANE	8.1	9.5	5.6
PROPANE	5.3	4.5	2.4
N-BUTANE	1.2	1.3	0.7
ISOBUTANE	0.7	1.3	0.4
N-PENTANE	0.3	1.7	0.2
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.2	0.3	0.1
HEXANES PLUS	0.3	1.3	0.2
NITROGEN	3.2	1.9	1.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.11	0.03	0.04
HEATING VALUE*	1210	1323	1126
SPECIFIC GRAVITY	0.716	0.768	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6445 SAMPLE 12265		INDEX 6446 SAMPLE 12434		INDEX 6447 SAMPLE 12435	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	RINGWOOD		RINGWOOD		RINGWOOD	
WELL NAME	V. J. BURHAM UNIT NO. 1		BISEL NO. 1		BISEL NO. 1	
LOCATION	SEC. 22, T23N, R9W		SEC. 5, T20N, R9W		SEC. 5, T20N, R9W	
OWNER	CHAMPLIN PETROLEUM CO.		HARPER OIL CO.		HARPER OIL CO.	
COMPLETED	05/22/65		02/13/70		08/14/69	
SAMPLED	05/19/70		10/09/70		10/09/70	
FORMATION	MISS---		DEVO-HUNTON		MISS---	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	6533		8155		7483	
WELLHEAD PRESSURE,PSIG	1570		2100		1575	
OPEN FLOW, MCFD	1290		40300		78	
COMPONENT, MOLE PCT						
METHANE	85.9		77.5		81.4	
ETHANE	6.4		11.0		7.7	
PROPANE	3.1		5.0		4.7	
N-BUTANE	0.8		1.4		1.8	
ISOBUTANE	0.6		0.7		0.9	
N-PENTANE	0.4		0.6		0.7	
ISOPENTANE	0.0		0.1		0.6	
CYCLOPENTANE	0.1		0.2		0.2	
HEXANES PLUS	0.4		0.5		0.6	
NITROGEN	2.2		2.8		1.0	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	TRACE		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.3	
HELIUM	0.04		0.07		0.04	
HEATING VALUE*	1154		1246		1270	
SPECIFIC GRAVITY	0.667		0.732		0.731	

	INDEX 6448 SAMPLE 12889		INDEX 6449 SAMPLE 16698		INDEX 6450 SAMPLE 5268	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	RINGWOOD		RINGWOOD		SEILING NE	
WELL NAME	SCANNELL C NO. 1		LESLIE E. SWART NO. 1		KIMBALL NO. 1	
LOCATION	SEC. 11, T21N, R11W		SEC. 15, T20N, R9W		SEC. 34, T20N, R16W	
OWNER	SUN OIL CO.		DIAMOND SHAMROCK CORP.		CONTINENTAL OIL CO.	
COMPLETED	04/12/71		05/18/82		04/03/52	
SAMPLED	06/29/71		10/26/82		07/02/52	
FORMATION	DEVO-HUNTON		DEVO-HUNTON		MISS-CHESTER	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7882		8256		8362	
WELLHEAD PRESSURE,PSIG	2107		1550		2491	
OPEN FLOW, MCFD	7400		2000		3000	
COMPONENT, MOLE PCT						
METHANE	87.3		83.7		80.1	
ETHANE	7.2		9.6		7.9	
PROPANE	2.7		3.2		1.7	
N-BUTANE	0.7		0.9		1.3	
ISOBUTANE	0.4		0.4		0.5	
N-PENTANE	0.3		0.3		0.0	
ISOPENTANE	0.0		0.3		2.6	
CYCLOPENTANE	TRACE		0.1		0.3	
HEXANES PLUS	0.1		0.2		0.8	
NITROGEN	1.2		1.2		3.7	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		0.0		0.1	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.1		0.2		1.0	
HELIUM	0.03		0.03		0.08	
HEATING VALUE*	1138		1187		1204	
SPECIFIC GRAVITY	0.648		0.679		0.735	

	INDEX 6451 SAMPLE 7151		INDEX 6452 SAMPLE 7211		INDEX 6453 SAMPLE 14542	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	SEILING NE		SEILING NE		SEILING NE	
WELL NAME	BRANSTETTER NO. 1		LOUTHAN NO. 1-22		JELLISON NO. 1-6	
LOCATION	SEC. 19, T20N, R16W		SEC. 22, T20N, R16W		SEC. 6, T20N, R15W	
OWNER	CALVERT DRILLING, INC.		SHELL OIL CO.		PIONEER PRODUCTION CORP.	
COMPLETED	--/--/00		03/04/59		05/18/75	
SAMPLED	07/23/59		08/24/59		12/11/75	
FORMATION	MISS-CHESTER		PENN-LAYTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8268		6956		9895	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		2265		1600	
OPEN FLOW, MCFD	NOT GIVEN		12000		4179	
COMPONENT, MOLE PCT						
METHANE	85.8		79.9		94.1	
ETHANE	6.3		9.3		2.9	
PROPANE	3.4		4.7		0.7	
N-BUTANE	0.9		1.3		0.2	
ISOBUTANE	0.7		0.8		0.1	
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	0.8		1.1		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.3		0.3		0.1	
NITROGEN	1.4		1.9		1.5	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.5		0.7	
HELIUM	0.10		0.10		0.04	
HEATING VALUE*	1179		1235		1038	
SPECIFIC GRAVITY	0.677		0.722		0.597	

	INDEX 6454 SAMPLE 14543		INDEX 6455 SAMPLE 8699		INDEX 6456 SAMPLE 12035	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MAJOR		MAJOR		MAJOR	
FIELD	SEILING NE		SOONER TREND		SOONER TREND	
WELL NAME	JELLISON NO. 1-6		SCHEFFE NO. 1		MAY 36-1	
LOCATION	SEC. 6, T20N, R15W		SEC. 36, T22N, R9W		SEC. 36, T21N, R9W	
OWNER	PIONEER PRODUCTION CORP.		HARPER OIL CO.		WHITE SHIELD OIL & GAS CORP.	
COMPLETED	05/18/75		10/19/61		12/12/68	
SAMPLED	12/11/75		10/09/62		05/11/69	
FORMATION	MISS-CHESTER		PENN-RED FORK		MISS-MANNING	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	7996		6466		6958	
WELLHEAD PRESSURE,PSIG	1300		1850		2050	
OPEN FLOW, MCFD	1464		NOT GIVEN		2000	
COMPONENT, MOLE PCT						
METHANE	77.7		93.1		86.0	
ETHANE	9.6		1.5		6.7	
PROPANE	6.2		0.7		3.1	
N-BUTANE	2.2		0.2		0.9	
ISOBUTANE	1.4		0.1		0.5	
N-PENTANE	0.4		TRACE		0.2	
ISOPENTANE	0.9		0.1		0.2	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	1.0		1.8		1.6	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		0.1		0.3	
HELIUM	0.04		0.10		0.04	
HEATING VALUE*	1311		1053		1150	
SPECIFIC GRAVITY	0.758		0.690		0.663	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6457 SAMPLE 11415	INDEX 6458 SAMPLE 11416	INDEX 6459 SAMPLE 11417
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	AYLESWORTH	AYLESWORTH	AYLESWORTH
WELL NAME	M. A. NEFF	DRUMMOND N	A. A. DRUMMOND N
LOCATION	SEC. 12, T6S, R6E	SEC. 12, T6S, R6E	SEC. 11, T6S, R6E
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	05/06/57	05/20/65	10/23/67
SAMPLED	03/28/68	03/28/68	03/28/68
FORMATION	MISS-WOODFORD	MISS-SYCAMORE	ORDO-TULIP CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	2536	3560	5005
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.5	74.3	74.7
ETHANE	9.7	10.2	11.3
PROPANE	5.7	7.4	7.7
N-BUTANE	1.6	2.6	1.9
ISOBUTANE	0.2	0.6	0.8
N-PENTANE	0.5	0.9	0.6
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	3.1	2.9	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1218	1307	1290
SPECIFIC GRAVITY	0.720	0.773	0.758

	INDEX 6460 SAMPLE 11418	INDEX 6461 SAMPLE 11812	INDEX 6462 SAMPLE 3429
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	AYLESWORTH	AYLESWORTH	CUMBERLAND
WELL NAME	J. F. HENDRICKS	DRUMMOND-NOBLE UNIT NO. 1	LITTLE 106 NO. 3
LOCATION	SEC. 12, T6S, R6E	SEC. 3, T6S, R6E	SEC. 34, T5S, R7E
OWNER	TEXACO INC.	ROY A. GODFREY	UNION OIL CO. OF CALIF.
COMPLETED	02/20/57	09/24/67	--/--/00
SAMPLED	03/28/68	04/09/69	05/22/42
FORMATION	DEVO-HUNTON	ORDO-OIL CREEK	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3550	4278	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1670	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	9995	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.3	84.6	87.7
ETHANE	10.7	5.9	8.4
PROPANE	8.7	3.8	---
N-BUTANE	2.7	1.2	---
ISOBUTANE	0.9	0.3	---
N-PENTANE	0.6	0.4	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	4.1	2.8	2.1
OXYGEN	0.0	0.1	0.9
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.3	0.4	1.3
HELIUM	0.04	0.09	0.08
HEATING VALUE*	1310	1148	1039
SPECIFIC GRAVITY	0.790	0.677	0.619

	INDEX 6463 SAMPLE 3436	INDEX 6464 SAMPLE 3437	INDEX 6465 SAMPLE 3438
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	CUMBERLAND	CUMBERLAND	CUMBERLAND
WELL NAME	WILLIAM 109 NO. 1	LITTLE 100 NO. 1	LITTLE 106 NO. 3
LOCATION	SEC. 20, T5S, R7E	SEC. 28, T5S, R7E	SEC. 34, T5S, R7E
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	04/01/42	03/13/40	03/04/41
SAMPLED	05/22/42	05/22/42	05/22/42
FORMATION	ORDO-MCLISH	ORDO-BROMIDE	ORDO-BROMIDE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5891	4857	4860
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1298	4214	3475
COMPONENT, MOLE PCT			
METHANE	80.0	82.4	80.0
ETHANE	16.9	15.2	17.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.5	1.8	1.7
OXYGEN	0.4	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.07	0.05
HEATING VALUE*	1113	1107	1129
SPECIFIC GRAVITY	0.651	0.640	0.652

	INDEX 6466 SAMPLE 3439	INDEX 6467 SAMPLE 10480	INDEX 6468 SAMPLE 11813
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MARSHALL
FIELD	CUMBERLAND	MADILL	MADILL
WELL NAME	CHRISMAN 104 NO. 2	R. L. GRIFFIN NO. 5	DILLEY UNIT NO. 1
LOCATION	SEC. 20, T5S, R7E	SEC. 16, T5S, R5E	SEC. 32, T5S, R6E
OWNER	UNION OIL CO. OF CALIF.	ATLANTIC RICHFIELD CO.	ROY A. GODFREY
COMPLETED	07/08/41	12/26/65	07/20/67
SAMPLED	05/22/42	03/28/68	04/09/69
FORMATION	ORDO-BROMIDE	ORDO-OIL CREEK	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4983	7446	4703
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2600	1730
OPEN FLOW, MCFD	266	42847	6753
COMPONENT, MOLE PCT			
METHANE	61.6	81.4	85.3
ETHANE	37.1	8.7	5.8
PROPANE	---	4.1	3.6
N-BUTANE	---	1.4	1.2
ISOBUTANE	---	0.5	0.3
N-PENTANE	---	0.3	0.4
ISOPENTANE	---	0.3	0.0
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	0.7	2.6	2.7
OXYGEN	0.3	0.0	0.8
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.05	0.04	0.10
HEATING VALUE*	1289	1191	1143
SPECIFIC GRAVITY	0.744	0.700	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6469 SAMPLE 16059	INDEX 6470 SAMPLE 12081	INDEX 6471 SAMPLE 7131
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MARSHALL	MARSHALL	MAYES
FIELD	POWELL S	WILDCAT	WILDCAT
WELL NAME	FED. NO. 1	DUKE NO. 1	NO. 1
LOCATION	SEC. 11, T8S, R4E	SEC. 21, T5S, R4E	SEC. 29, T20N, R19E
OWNER	AMERICAN QUASAR PET. CO.	UNION OIL CO. OF CALIF.	U.S. BUREAU OF MINES
COMPLETED	12/99/79	--/--/00	--/--/00
SAMPLED	08/03/80	10/10/69	06/24/59
FORMATION	ORDO-OIL CREEK	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	355
DEPTH, FEET	16162	7515	NOT GIVEN
WELLHEAD PRESSURE,PSIG	9800	3648	NOT GIVEN
OPEN FLOW, MCFD	4400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.6	91.7	66.5
ETHANE	2.5	4.1	0.4
PROPANE	0.7	2.1	0.0
N-BUTANE	0.3	0.4	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.9	0.9	23.3
OXYGEN	TRACE	0.1	5.3
ARGON	TRACE	TRACE	0.3
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	3.1
HELIUM	0.02	0.09	0.20
HEATING VALUE*	1061	1087	681
SPECIFIC GRAVITY	0.599	0.612	0.727

	INDEX 6472 SAMPLE 6084	INDEX 6473 SAMPLE 11138	INDEX 6474 SAMPLE 16709
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCLAIN
FIELD	BYARS SW	FREENY N	FREENY N
WELL NAME	CAMBELL NO. 1	KIDWELL NO. 1	JOHNSON NO. 1
LOCATION	SEC. 33, T5N, R2E	SEC. 23, T8N, R4W	SEC. 14, T8N, R4W
OWNER	SUN OIL CO.	SUN OIL CO.	BLUE QUAIL ENERGY, INC.
COMPLETED	02/29/56	02/17/66	11/--/81
SAMPLED	06/12/56	09/27/67	11/17/82
FORMATION	PENN-LAYTON	ORDO-OIL CREEK	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3244	10925	9800
WELLHEAD PRESSURE,PSIG	1300	NOT GIVEN	1250
OPEN FLOW, MCFD	1788	4059	3250
COMPONENT, MOLE PCT			
METHANE	75.4	84.8	87.7
ETHANE	7.6	5.9	6.5
PROPANE	3.6	2.5	2.3
N-BUTANE	1.0	0.7	0.7
ISOBUTANE	0.6	0.6	0.3
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	10.2	4.7	0.7
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.12	0.05	0.03
HEATING VALUE*	1088	1096	1139
SPECIFIC GRAVITY	0.711	0.659	0.651

	INDEX 6475 SAMPLE 6122	INDEX 6476 SAMPLE 11123	INDEX 6477 SAMPLE 13724
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCLAIN
FIELD	NEWCASTLE NE	PAOLI N	TUTTLE E
WELL NAME	MARTHA SMITH	MANNER NO. 1	VON HARDEGEN NO. 1
LOCATION	SEC. 2, T9N, R4W	SEC. 25, T5N, R1W	SEC. 18, T9N, R4W
OWNER	GREAT SWEET GRASS OILS CO.	EDWIN L. COX	MIDWEST OIL CORP.
COMPLETED	05/16/56	12/27/66	11/06/72
SAMPLED	08/08/56	09/19/67	09/19/73
FORMATION	PENN-BARTLESVILLE	PERM-HART	PENN-BERRY
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	8075	5770	8874
WELLHEAD PRESSURE,PSIG	2380	1722	2357
OPEN FLOW, MCFD	24000	10760	5100
COMPONENT, MOLE PCT			
METHANE	36.4	74.5	88.2
ETHANE	15.1	12.5	5.5
PROPANE	20.7	5.3	2.2
N-BUTANE	10.8	1.3	0.6
ISOBUTANE	4.3	0.7	0.3
N-PENTANE	3.0	0.5	0.1
ISOPENTANE	2.7	0.1	0.3
CYCLOPENTANE	0.5	0.1	0.1
HEXANES PLUS	1.8	0.3	0.2
NITROGEN	0.4	4.2	2.0
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.3
HELIUM	TRACE	0.09	0.07
HEATING VALUE*	2113	1229	1111
SPECIFIC GRAVITY	1.258	0.738	0.642

	INDEX 6478 SAMPLE 14111	INDEX 6479 SAMPLE 15600	INDEX 6480 SAMPLE 9987
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCLAIN
FIELD	TUTTLE E	TUTTLE E	WASHINGTON DISTRICT
WELL NAME	BABB NO. 1-19	DUNNING NO. 1	PETERS NO. 1
LOCATION	SEC. 19, T9N, R4W	SEC. 30, T9N, R4W	SEC. 10, T7N, R4W
OWNER	MESA PETROLEUM CO.	NATIONAL COOP. REFINERY ASSN	J. M. HUBER CORP.
COMPLETED	11/05/73	01/31/79	01/29/64
SAMPLED	07/--/74	04/09/79	07/14/65
FORMATION	PENN-OSBORNE	PENN---	PENN-OSBORNE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	9040	9036	9400
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3000	2984
OPEN FLOW, MCFD	NOT GIVEN	3493	7390
COMPONENT, MOLE PCT			
METHANE	87.4	86.8	85.9
ETHANE	5.8	7.0	7.1
PROPANE	2.4	3.1	2.9
N-BUTANE	0.6	0.8	0.8
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	2.5	1.5	1.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.5
HELIUM	0.08	0.06	0.10
HEATING VALUE*	1107	1158	1140
SPECIFIC GRAVITY	0.645	0.665	0.661

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6481 SAMPLE 11307	INDEX 6482 SAMPLE 11742	INDEX 6483 SAMPLE 11838
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCLAIN	MCCLAIN
FIELD	WASHINGTON DISTRICT	WASHINGTON DISTRICT	WASHINGTON DISTRICT
WELL NAME	MADDEN NO. 1	MARY JO TURNER NO. 1	L. C. GILES NO. 1
LOCATION	SEC. 2, T7N, R3W	SEC. 35, T8N, R4W	SEC. 4, T7N, R3W
OWNER	MONSANTO CO.	SUN OIL CO.	UNION TEXAS PETROLEUM CORP.
COMPLETED	12/31/63	11/10/68	08/12/68
SAMPLED	02/26/68	01/24/69	04/25/69
FORMATION	PENN-OSBORNE	PENN-OSBORNE	PENN-OSBORNE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	8140	9458	9100
WELLHEAD PRESSURE,PSIG	1161	2286	2909
OPEN FLOW, MCFD	8393	8300	2750
COMPONENT, MOLE PCT			
METHANE	84.4	85.2	85.2
ETHANE	8.0	7.3	7.3
PROPANE	3.3	3.1	2.9
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	1.5	1.5	1.7
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	0.07	0.06	0.07
HEATING VALUE*	1171	1171	1150
SPECIFIC GRAVITY	0.676	0.676	0.667

	INDEX 6484 SAMPLE 17071	INDEX 6485 SAMPLE 12351	INDEX 6486 SAMPLE 12352
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCCLAIN	MCCURTAIN	MCCURTAIN
FIELD	WASHINGTON DISTRICT	GLOVER NE	GLOVER NE
WELL NAME	LESLIE NO. 2	WEYERHAEUSER NO. 25-1	WEYERHAEUSER NO. 25-1
LOCATION	SEC. 3, T7N, R4W	SEC. 25, T5S, R23E	SEC. 25, T5S, R23E
OWNER	MONSANTO OIL CO.	WIERSEN & COCHRAN	WIERSEN & COCHRAN
COMPLETED	05/09/83	08/02/70	08/02/70
SAMPLED	09/26/83	08/12/70	08/12/70
FORMATION	PENN-OSBORNE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	400	400
DEPTH, FEET	9452	7000	7000
WELLHEAD PRESSURE,PSIG	1791	62	62
OPEN FLOW, MCFD	1231	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.1	53.4	53.4
ETHANE	7.4	1.4	1.5
PROPANE	3.3	0.1	0.1
N-BUTANE	1.3	0.0	0.0
ISOBUTANE	0.5	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.8	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	2.0	40.4	39.9
OXYGEN	0.2	0.0	0.2
ARGON	TRACE	0.1	0.1
HYDROGEN	0.3	0.5	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	3.9	3.6
HELIUM	0.06	0.06	0.07
HEATING VALUE*	1188	570	574
SPECIFIC GRAVITY	0.695	0.759	0.760

	INDEX 6487 SAMPLE 3318	INDEX 6488 SAMPLE 3771	INDEX 6489 SAMPLE 11783
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCINTOSH	MCINTOSH	MCINTOSH
FIELD	CHECOTAH	CHECOTAH SE	CUMMINGS
WELL NAME	ALTUS RHYME	SOUTH CHECOTAH NO. 1	CITIES SERVICE NO. 2
LOCATION	SEC. 30, T11N, R17E	SEC. 16, T11N, R17E	SEC. 9, T9N, R14E
OWNER	OKLAHOMA NATURAL GAS CO.	PHILLIPS PETROLEUM CO.	RAPP OIL & GAS CO.
COMPLETED	--/--/15	05/24/42	11/05/68
SAMPLED	04/23/42	04/06/44	02/28/69
FORMATION	EOCE-GREEN RIVER	PENN-SALT SAND	PENN-GILCREASE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1923	1503	2667
WELLHEAD PRESSURE,PSIG	70	100	774
OPEN FLOW, MCFD	320	11	5421
COMPONENT, MOLE PCT			
METHANE	87.9	91.0	92.8
ETHANE	9.8	6.9	4.0
PROPANE	---	---	0.6
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	1.3	1.3	1.9
OXYGEN	0.4	0.4	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.16	0.21	0.10
HEATING VALUE*	1045	1046	1038
SPECIFIC GRAVITY	0.613	0.597	0.595

	INDEX 6490 SAMPLE 12754	INDEX 6491 SAMPLE 17776	INDEX 6492 SAMPLE 2485
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	MCINTOSH	MCINTOSH	MCINTOSH
FIELD	HANNA W	HITCHITA NE	HOFFMAN
WELL NAME	WELLS NO. 1-A	BROTTON NO. 1	SR. BARNETT
LOCATION	SEC. 4, T8N, R13E	SEC. 16, T12N, R15E	SEC. 19, T12N, R14E
OWNER	LUBELL OIL CO.	MOFFITT, W.G.	R. D. THOMPSON & JOHN PENROD
COMPLETED	09/05/70	01/24/85	03/01/32
SAMPLED	04/01/71	--/--/00	03/28/32
FORMATION	PENN-CROMWELL	PENN-GILCREASE	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4120	2010	3072
WELLHEAD PRESSURE,PSIG	1820	396	1320
OPEN FLOW, MCFD	12000	3231	15
COMPONENT, MOLE PCT			
METHANE	93.7	83.5	65.0
ETHANE	3.8	8.7	12.8
PROPANE	0.7	3.1	---
N-BUTANE	0.1	0.8	---
ISOBUTANE	0.1	0.4	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.0	0.2	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	0.8	2.3	21.2
OXYGEN	0.3	TRACE	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.07	0.13	0.37
HEATING VALUE*	1092	1159	888
SPECIFIC GRAVITY	0.597	0.673	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6493 SAMPLE 16974		INDEX 6494 SAMPLE 10828		INDEX 6495 SAMPLE 11322	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MCINTOSH		MCINTOSH		MURRAY	
FIELD	SALEM SE		ULAN N		DAVIS	
WELL NAME	WELLS NO. 1-11		DES NO. 1		M. N. HORNER NO. 1	
LOCATION	SEC. 12, T10N, R13E		SEC. 14, T8N, R13E		SEC. 32, T1N, R2E	
OWNER	MOLD OIL CORP.		TRIDEN OIL, INC.		SOMIO PETROLEUM CO.	
COMPLETED	02/16/83		01/15/66		08/14/62	
SAMPLED	06/13/83		01/03/67		02/28/68	
FORMATION	PENN-GILCREASE		PENN-CROMWELL		ORDO-BROMIDE	
GEOLOGIC PROVINCE CODE	355		355		350	
DEPTH, FEET	2712		4180		5400	
WELLHEAD PRESSURE,PSIG	1164		1750		2000	
OPEN FLOW, MCFD	2308		4000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	81.5		94.6		84.4	
ETHANE	8.3		3.5		4.6	
PROPANE	4.6		0.7		2.8	
N-BUTANE	1.1		0.2		0.5	
ISOBUTANE	0.9		0.0		0.5	
N-PENTANE	0.2		0.0		0.1	
ISOPENTANE	0.8		0.0		0.1	
CYCLOPENTANE	0.1		0.0		TRACE	
HEXANES PLUS	0.4		0.0		0.1	
NITROGEN	1.4		0.6		5.5	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.3		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		1.3	
HELIUM	0.07		0.09		0.05	
HEATING VALUE*	1229		1046		1054	
SPECIFIC GRAVITY	0.709		0.593		0.660	

	INDEX 6496 SAMPLE 12660		INDEX 6497 SAMPLE 2571		INDEX 6498 SAMPLE 3468	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MURRAY		MUSKOGEE		MUSKOGEE	
FIELD	DAVIS NE		HASKELL		OKTAHA NW	
WELL NAME	O. C. DAVIS NO. 6		BARNETT NO. 1		REINHARDT NO. 1	
LOCATION	SEC. 14, T1N, R2E		SEC. 34, T16N, R15E		SEC. 21, T13N, R17E	
OWNER	SUN OIL CO.		W. B. PINE		CLAUDE E GARRETT	
COMPLETED	07/14/70		09/24/32		05/--/41	
SAMPLED	11/--/70		11/23/32		06/02/42	
FORMATION	ORDO-OIL CREEK		NOT GIVEN		PENN-DUTCHER	
GEOLOGIC PROVINCE CODE	350		355		355	
DEPTH, FEET	2004		1081		1385	
WELLHEAD PRESSURE,PSIG	1997		63		465	
OPEN FLOW, MCFD	3690		877		2250	
COMPONENT, MOLE PCT						
METHANE	97.3		66.2		85.8	
ETHANE	0.1		29.8		12.2	
PROPANE	0.2		---		---	
N-BUTANE	TRACE		---		---	
ISOBUTANE	0.2		---		---	
N-PENTANE	0.1		---		---	
ISOPENTANE	0.0		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	TRACE		---		---	
NITROGEN	1.3		3.4		2.1	
OXYGEN	0.1		0.4		0.4	
ARGON	TRACE		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.8		0.1		0.1	
HELIUM	0.01		0.09		0.24	
HEATING VALUE*	1004		1205		1080	
SPECIFIC GRAVITY	0.576		0.719		0.626	

	INDEX 6499 SAMPLE 15275		INDEX 6500 SAMPLE 3471		INDEX 6501 SAMPLE 17669	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	MUSKOGEE		MUSKOGEE		NOBLE	
FIELD	PORUM		WARNER SW		BILLINGS TOWNSITE	
WELL NAME	HOLCOMB NO. 1		L. POOLE NO. 1892		ELDEN C. GERKIN NO. 1	
LOCATION	SEC. 24, T10N, R19E		SEC. 31, T12N, R19E		SEC. 32, T24N, R2W	
OWNER	SERVICE DRILLING CO.		OKLAHOMA NATURAL GAS CO.		HEXAGON OIL & GAS, INC.	
COMPLETED	09/22/77		06/13/39		06/09/84	
SAMPLED	05/01/78		06/02/42		05/15/85	
FORMATION	PENN-SPIRO		PENN-DUTCHER		MISS-CHAT	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	2995		539		4577	
WELLHEAD PRESSURE,PSIG	1450		120		445	
OPEN FLOW, MCFD	1146		787		436	
COMPONENT, MOLE PCT						
METHANE	94.8		90.0		79.5	
ETHANE	1.0		7.9		7.8	
PROPANE	0.2		---		3.3	
N-BUTANE	0.0		---		1.5	
ISOBUTANE	0.0		---		0.4	
N-PENTANE	0.0		---		0.3	
ISOPENTANE	0.0		---		0.3	
CYCLOPENTANE	0.0		---		0.1	
HEXANES PLUS	0.0		---		0.3	
NITROGEN	3.5		1.1		5.5	
OXYGEN	0.3		0.9		0.2	
ARGON	TRACE		---		TRACE	
HYDROGEN	0.1		---		0.0	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1		0.4		0.4	
HELIUM	0.12		0.15		0.18	
HEATING VALUE*	984		1053		1142	
SPECIFIC GRAVITY	0.578		0.603		0.702	

	INDEX 6502 SAMPLE 9073		INDEX 6503 SAMPLE 17288		INDEX 6504 SAMPLE 17702	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	NOBLE		NOBLE		NOBLE	
FIELD	ECHO E		FOURDEE E		GREEN VALLEY E	
WELL NAME	MASON NO. 1		MOE JEROME NO. 2		VEDA NO. 1	
LOCATION	SEC. 13, T23N, R2W		SEC. 26, T22N, R1W		SEC. 20, T22N, R2W	
OWNER	NATURAL GAS DRILLING CO.		WIL-MC OIL CORP.		MACKELLAR, INC.	
COMPLETED	06/--/61		05/15/84		01/10/85	
SAMPLED	08/30/63		05/15/84		06/10/85	
FORMATION	PERM-CHASE GROUP		PENN-AVANT		PENN-RED FORK	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	804		3176		4812	
WELLHEAD PRESSURE,PSIG	75		100		1363	
OPEN FLOW, MCFD	50		250		3611	
COMPONENT, MOLE PCT						
METHANE	79.9		78.0		69.9	
ETHANE	7.6		5.7		10.0	
PROPANE	3.9		3.8		4.6	
N-BUTANE	1.4		1.0		1.1	
ISOBUTANE	0.6		0.5		0.4	
N-PENTANE	0.3		0.3		0.4	
ISOPENTANE	0.6		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.5		0.2		0.3	
NITROGEN	5.3		10.0		12.6	
OXYGEN	TRACE		TRACE		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.3	
HELIUM	0.11		0.20		0.05	
HEATING VALUE*	1172		1077		1098	
SPECIFIC GRAVITY	0.712		0.702		0.747	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6505 SAMPLE 2650	INDEX 6506 SAMPLE 4957	INDEX 6507 SAMPLE 1858
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	LUCIEN	LUCIEN	PERRY DISTRICT
WELL NAME	SCHOENWALD NO. 1	FREDERICK NO. 2	MCCORMICK NO. 1
LOCATION	SEC. 20, T20N, R2W	SEC. 34, T20N, R2W	SEC. 33, T21N, R1W
OWNER	SHELL OIL CO., ET AL.	THOMAS N. BERRY & CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	08/25/33	07/16/50	08/18/29
SAMPLED	10/17/33	11/18/50	09/04/29
FORMATION	ORDO-BROMIDE	PENN-TONKAWA	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5070	3100	3365
WELLHEAD PRESSURE,PSIG	700	1200	1400
OPEN FLOW, MCFD	9000	4000	18000
COMPONENT, MOLE PCT			
METHANE	16.1	66.9	72.8
ETHANE	76.7	3.2	12.9
PROPANE	---	1.9	---
N-BUTANE	---	0.7	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.2	---
NITROGEN	6.4	26.1	14.5
OXYGEN	0.3	0.1	0.0
ARGON	---	TRACE	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.1
HELIUM	0.05	0.26	0.22
HEATING VALUE*	1533	1312	960
SPECIFIC GRAVITY	0.965	0.721	0.676

	INDEX 6508 SAMPLE 2983	INDEX 6509 SAMPLE 9074	INDEX 6510 SAMPLE 11470
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	PERRY DISTRICT	PERRY DISTRICT	PERRY DISTRICT
WELL NAME	WALTERMIRE NO. 1	DAUMAN	W. S. MCGUIRE NO. 5
LOCATION	SEC. 33, T21N, R1W	SEC. 32, T21N, R1W	SEC. 5, T21N, R1W
OWNER	KAY COUNTY GAS CO.	TOTO GAS CO.	GULF OIL CO.- U.S.
COMPLETED	--/--/00	06/--/62	06/07/65
SAMPLED	11/17/41	08/30/63	05/07/66
FORMATION	PENN-HOOVER	PENN-TONKAWA	PENN-AVANT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2295	3080	3325
WELLHEAD PRESSURE,PSIG	670	1420	750
OPEN FLOW, MCFD	2700	950	2727
COMPONENT, MOLE PCT			
METHANE	9.3	65.0	76.9
ETHANE	14.9	4.3	6.2
PROPANE	---	2.8	3.7
N-BUTANE	---	0.9	1.2
ISOBUTANE	---	0.5	0.5
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	75.0	25.3	10.2
OXYGEN	0.2	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.52	0.30	0.19
HEATING VALUE*	361	891	1083
SPECIFIC GRAVITY	0.938	0.746	0.708

	INDEX 6511 SAMPLE 15055	INDEX 6512 SAMPLE 4472	INDEX 6513 SAMPLE 4793
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	PERRY SW	POLO	POLO
WELL NAME	MARTIN KNORI "A" NO. 1	ALICE BRADBURY NO. 1	ELLWOOD A-1
LOCATION	SEC. 7, T20N, R 1W	SEC. 29, T22N, R1W	SEC. 26, T22N, R2W
OWNER	BONRAY DRILLING CO.	ATLANTIC RICHFIELD CO.	ANDERSON-PRICHARD OIL CORP.
COMPLETED	10/24/74	10/06/47	09/21/49
SAMPLED	07/13/74	04/27/48	11/18/49
FORMATION	PENN-CAMPBELL	MISS-LIME	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1835	4710	4732
WELLHEAD PRESSURE,PSIG	725	860	1568
OPEN FLOW, MCFD	14108	886	1000
COMPONENT, MOLE PCT			
METHANE	67.2	65.2	73.3
ETHANE	6.3	24.0	9.8
PROPANE	3.7	---	4.7
N-BUTANE	1.2	---	1.3
ISOBUTANE	0.6	---	0.4
N-PENTANE	0.4	---	0.5
ISOPENTANE	0.2	---	TRACE
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.3
NITROGEN	19.8	9.9	9.1
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	0.27	0.16	0.12
HEATING VALUE*	990	1091	1138
SPECIFIC GRAVITY	0.750	0.719	0.735

	INDEX 6514 SAMPLE 1202	INDEX 6515 SAMPLE 8997	INDEX 6516 SAMPLE 8622
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOBLE	NOBLE
FIELD	SAMS	SAMS	THREE SANDS E
WELL NAME	A. WOLLSESON NO. 1	MCCRACKEN NO. 2	W. CASE A NO. 2
LOCATION	SEC. 23, T21N, R2E	SEC. 26, T21N, R2W	SEC. 7, T24N, R1E
OWNER	MOBIL OIL CORP.	TOTO GAS CO.	OLYMPIC PETROLEUM CO.
COMPLETED	--/--/00	10/23/61	03/23/61
SAMPLED	11/15/25	06/03/63	07/26/62
FORMATION	NOT GIVEN	PENN-AVANT	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2396	3519	4221
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1320	950
OPEN FLOW, MCFD	NOT GIVEN	150	750
COMPONENT, MOLE PCT			
METHANE	50.0	82.5	78.3
ETHANE	12.6	6.1	7.5
PROPANE	---	3.4	4.1
N-BUTANE	---	1.2	1.3
ISOBUTANE	---	0.4	0.7
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.2	0.4
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.3
NITROGEN	36.7	5.1	6.5
OXYGEN	0.2	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.40	0.10	0.17
HEATING VALUE*	732	1128	1150
SPECIFIC GRAVITY	0.770	0.682	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6517 SAMPLE 11987	INDEX 6518 SAMPLE 230	INDEX 6519 SAMPLE 3326
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOBLE	NOWATA	NOWATA
FIELD	TONKAWA S	CALIFORNIA CREEK	WOODY
WELL NAME	BELLMAN NO. 1	TAYLOR NO. 5	BUNCH NO. 1
LOCATION	SEC. 30, T24N, R1W	SEC. 16, T28N, R16E	SEC. 1, T25N, R14E
OWNER	KETAL OIL PRODUCING CO.	LUDOWICI-CELADON TILE CO.	T. S. & C. R. COLPITT
COMPLETED	07/21/69	--/--/18	08/19/37
SAMPLED	07/28/69	04/29/20	04/24/42
FORMATION	PENN-TONKAWA	PENN-—	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2692	687	1390
WELLHEAD PRESSURE,PSIG	900	70	525
OPEN FLOW, MCFD	1000	40	3000
COMPONENT, MOLE PCT			
METHANE	56.8	96.5	95.8
ETHANE	6.3	0.0	1.3
PROPANE	3.4	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	31.8	2.7	1.1
OXYGEN	0.0	0.7	0.3
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.1	1.4
HELIUM	0.36	TRACE	0.09
HEATING VALUE*	822	978	994
SPECIFIC GRAVITY	0.770	0.570	0.580

	INDEX 6520 SAMPLE 15309	INDEX 6521 SAMPLE 1302	INDEX 6522 SAMPLE 4274
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	ALABAMA	BEARDEN	BEARDEN NE
WELL NAME	DOUGLAS NO. 2	E. BRUNNER NO. 1	SAM NO. 1
LOCATION	SEC. 34, T10N, R11E	SEC. 16, T10N, R9E	SEC. 10, T10N, R9E
OWNER	ESTATE PRODUCING CORP.	BURKE-GREIS OIL CO.	SUN OIL CO.
COMPLETED	02/28/78	05/--/24	11/30/46
SAMPLED	06/27/78	09/23/26	01/28/47
FORMATION	PENN-BOOCH	PENN-PAPOOSE	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2124	3293	3056
WELLHEAD PRESSURE,PSIG	825	1250	550
OPEN FLOW, MCFD	2825	50000	1500
COMPONENT, MOLE PCT			
METHANE	84.8	57.6	79.3
ETHANE	5.0	26.0	15.5
PROPANE	2.6	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	5.1	13.3	4.1
OXYGEN	0.3	2.7	0.4
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.5	0.6
HELIUM	0.11	0.06	0.09
HEATING VALUE*	1081	1049	1081
SPECIFIC GRAVITY	0.660	0.758	0.656

	INDEX 6523 SAMPLE 17751	INDEX 6524 SAMPLE 16498	INDEX 6525 SAMPLE 4116
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	BLAKELY	BLAKELY N	CANARD
WELL NAME	WOODS NO. 1	SPERRY NO. 4-A	ROLY CANARD NO. 1
LOCATION	SEC. 11, T11N, R10E	SEC. 24, T12N, R10E	SEC. 16, T10N, R10E
OWNER	EAGLE OIL CO.	LOGOS OIL, INC.	AMERADA HESS CORP.
COMPLETED	07/11/85	01/19/82	08/18/45
SAMPLED	07/11/85	04/18/82	10/18/45
FORMATION	PENN-DUTCHER	PENN-DUTCHER	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3009	2756	3309
WELLHEAD PRESSURE,PSIG	950	1100	1180
OPEN FLOW, MCFD	1000	2000	8574
COMPONENT, MOLE PCT			
METHANE	69.9	42.8	66.9
ETHANE	11.9	4.7	27.6
PROPANE	5.9	3.1	---
N-BUTANE	1.9	0.9	---
ISOBUTANE	0.6	0.3	---
N-PENTANE	0.6	0.2	---
ISOPENTANE	0.5	0.1	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.6	0.2	---
NITROGEN	7.1	36.5	3.8
OXYGEN	0.8	9.0	0.9
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.0	0.6
HELIUM	0.11	0.06	0.15
HEATING VALUE*	1239	666	1172
SPECIFIC GRAVITY	0.784	0.848	0.717

	INDEX 6526 SAMPLE 3784	INDEX 6527 SAMPLE 1837	INDEX 6528 SAMPLE 1838
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	CASTLE E	CLEARVIEW DISTRICT	CLEARVIEW DISTRICT
WELL NAME	TANNER NO. 1	DOLLY DINDY NO. 1	DOLLY DINDY NO. C-1
LOCATION	SEC. 28, T12N, R9E	SEC. 31, T11N, R11E	SEC. 31, T11N, R11E
OWNER	TEXACO INC.	MID-CONTINENT OIL CORP.	MID-CONTINENT OIL CORP.
COMPLETED	03/12/44	07/13/28	07/01/29
SAMPLED	04/13/44	08/12/29	08/11/29
FORMATION	PENN-CROMWELL	MISS-JEFFERSON	MISS-JEFFERSON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3272	3071	3088
WELLHEAD PRESSURE,PSIG	1300	1100	1100
OPEN FLOW, MCFD	13140	25000	25000
COMPONENT, MOLE PCT			
METHANE	68.6	58.0	60.5
ETHANE	20.5	32.8	31.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.2	8.9	6.6
OXYGEN	0.4	0.2	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.6	0.6
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1062	1175	1183
SPECIFIC GRAVITY	0.702	0.758	0.748

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6529 SAMPLE 4122	INDEX 6530 SAMPLE 4478	INDEX 6531 SAMPLE 1054
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	DUSTIN	DUSTIN	DUSTIN NE
WELL NAME	ROSE NO. 1	ROSE NO. 1	NO. 1
LOCATION	SEC. 28, T10N, R12E	SEC. 31, T10N, R12E	SEC. 36, T10N, R12E
OWNER	PUBLIC SERVICE CO. OF OKLA.	W. B. WELLS	CARTER OIL CO.
COMPLETED	02/07/46	12/01/47	06/--/28
SAMPLED	09/29/46	03/18/48	05/07/25
FORMATION	PENN-NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2360	NOT GIVEN	3235
WELLHEAD PRESSURE,PSIG	930	560	1100
OPEN FLOW, MCFD	3500	980	2110
COMPONENT, MOLE PCT			
METHANE	81.6	83.4	75.9
ETHANE	16.3	14.4	22.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	1.6	1.2
OXYGEN	0.8	0.2	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.09	0.10	0.05
HEATING VALUE*	1119	1103	1165
SPECIFIC GRAVITY	0.646	0.636	0.674

	INDEX 6532 SAMPLE 4182	INDEX 6533 SAMPLE 3329	INDEX 6534 SAMPLE 16691
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	GREENLEASE	GREGORY	GREGORY
WELL NAME	OVERALL NO. 2	GREGORY NO. 3	STANFORD NO. 1-26
LOCATION	SEC. 15, T11N, R9E	SEC. 36, T10N, R11E	SEC. 26, T10N, R11E
OWNER	PHILLIPS PETROLEUM CO.	EAGLE PICHER CO.	STAR RESOURCES, INC.
COMPLETED	08/29/45	02/13/34	10/19/82
SAMPLED	11/08/46	04/24/42	10/19/82
FORMATION	PENN-BASAL	PENN-GILCREASE	PENN-GILCREASE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	2513	2513
WELLHEAD PRESSURE,PSIG	660	850	450
OPEN FLOW, MCFD	716	1800	75
COMPONENT, MOLE PCT			
METHANE	68.0	40.3	81.1
ETHANE	27.5	52.9	8.8
PROPANE	---	---	4.0
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.4
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.3
NITROGEN	4.2	6.0	3.0
OXYGEN	0.1	0.4	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.12	0.12	0.05
HEATING VALUE*	1182	1356	1186
SPECIFIC GRAVITY	0.711	0.846	0.699

	INDEX 6535 SAMPLE 16692	INDEX 6536 SAMPLE 4117	INDEX 6537 SAMPLE 10169
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	GREGORY	HICKORY RIDGE	IRON POST
WELL NAME	STANFORD NO. 1-26	E. I. BARRY NO. 1	WIGINTON NO. 1
LOCATION	SEC. 26, T10N, R11E	SEC. 23, T10N, R10E	SEC. 11, T13N, R7E
OWNER	STAR RESOURCES, INC.	AMERADA HESS CORP.	TURLEY OIL CO.
COMPLETED	10/19/82	09/01/45	08/01/65
SAMPLED	10/19/82	12/18/46	09/26/65
FORMATION	PENN-STUART	PENN-WAPANUCKA	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	931	3157	3940
WELLHEAD PRESSURE,PSIG	250	942	1450
OPEN FLOW, MCFD	50	4394	4500
COMPONENT, MOLE PCT			
METHANE	81.1	66.7	79.9
ETHANE	3.7	27.7	7.3
PROPANE	1.6	---	3.5
N-BUTANE	0.4	---	1.1
ISOBUTANE	0.3	---	0.5
N-PENTANE	0.1	---	0.4
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	10.6	4.0	6.6
OXYGEN	1.6	0.9	0.0
ARGON	0.1	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	1.1	0.1
HELIUM	0.13	0.12	0.10
HEATING VALUE*	967	1172	1125
SPECIFIC GRAVITY	0.659	0.721	0.697

	INDEX 6538 SAMPLE 10170	INDEX 6539 SAMPLE 3412	INDEX 6540 SAMPLE 3309
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	IRON POST	LAFFOON SE	MASON
WELL NAME	WIGINTON NO. 1	WASHINGTON NO. 1	ROSE NO. 1
LOCATION	SEC. 11, T13N, R7E	SEC. 21, T13N, R7E	SEC. 10, T12N, R9E
OWNER	TURLEY OIL CO.	ATLANTIC RICHFIELD CO.	BURKE-GRIES OIL CO.
COMPLETED	08/01/65	11/---/36	12/30/40
SAMPLED	09/26/65	05/13/42	08/24/42
FORMATION	PENN-DUTCHER	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3500	4105	3891
WELLHEAD PRESSURE,PSIG	1250	1245	1200
OPEN FLOW, MCFD	6525	1222	4500
COMPONENT, MOLE PCT			
METHANE	78.4	67.9	44.8
ETHANE	5.2	24.7	49.6
PROPANE	4.4	---	---
N-BUTANE	1.4	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.5	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	8.9	6.6	5.0
OXYGEN	0.0	0.3	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.4	0.1
HELIUM	0.13	0.13	0.13
HEATING VALUE*	1104	1130	1343
SPECIFIC GRAVITY	0.709	0.709	0.823

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6541 SAMPLE 326	INDEX 6542 SAMPLE 15263	INDEX 6543 SAMPLE 932
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	MORGAN	MORGAN	OKEMAH
WELL NAME	BARNETT NO. 1	CHILDERS NO. 2-A	NO. 1 J. C. LOWRY
LOCATION	SEC. 3, T12N, R11E	SEC. 4, T12N, R11E	SEC. 30, T11N, R10E
OWNER	EAGLE PICHER CO.	LOGOS OIL, INC.	SHAFFER OIL & REFINING CO.
COMPLETED	01/--/20	10/10/77	05/01/24
SAMPLED	06/03/20	04/22/78	09/24/24
FORMATION	NOT GIVEN	PENN-DUTCHER	PERM-LYONS
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1840	2666	3156
WELLHEAD PRESSURE,PSIG	420	600	1225
OPEN FLOW, MCFD	5000	3800	13000
COMPONENT, MOLE PCT			
METHANE	88.3	75.0	65.7
ETHANE	10.3	11.7	30.1
PROPANE	---	5.8	---
N-BUTANE	---	1.5	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.3	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.1	---
NITROGEN	0.6	4.5	3.8
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.10	0.08	0.16
HEATING VALUE*	1079	1218	1205
SPECIFIC GRAVITY	0.611	0.735	0.720

	INDEX 6544 SAMPLE 1303	INDEX 6545 SAMPLE 3987	INDEX 6546 SAMPLE 12112
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	OKEMAH	OKEMAH	OKEMAH
WELL NAME	NO. 2	WIND NO. 1	ALEXANDER NO. 1
LOCATION	SEC. 36, T11N, R9E	SEC. 31, T11N, R10E	SEC. 35, T11N, R9E
OWNER	ATLANTIC RICHFIELD CO.	WILCOX OIL CO.	ROY D. MCANINCH
COMPLETED	12/--/25	12/16/44	04/23/69
SAMPLED	09/22/26	03/13/45	11/14/69
FORMATION	DEVO-MISENER	PENN-GILCREASE	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3841	2920	3660
WELLHEAD PRESSURE,PSIG	1450	365	1300
OPEN FLOW, MCFD	14000	8000	7340
COMPONENT, MOLE PCT			
METHANE	53.4	72.5	71.0
ETHANE	42.6	27.0	12.9
PROPANE	---	---	7.0
N-BUTANE	---	---	1.6
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	3.0	0.8	3.6
OXYGEN	0.5	0.0	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.5	0.0
HELIUM	0.07	0.10	0.10
HEATING VALUE*	1304	1218	1260
SPECIFIC GRAVITY	0.787	0.693	0.769

	INDEX 6547 SAMPLE 1819	INDEX 6548 SAMPLE 3303	INDEX 6549 SAMPLE 3302
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	OKEMAH N	OKEMAH N	OKEMAH W
WELL NAME	SPORELEADER NO. 2	MARTIN NO. 1	WESLEY NO. 1
LOCATION	SEC. 29, T12N, R10E	SEC. 7, T11N, R10E	SEC. 21, T11N, R9E
OWNER	MINNEHOMA OIL & GAS CO.	TEXACO INC.	SKELLY OIL CO.
COMPLETED	--/--/00	10/25/40	02/21/41
SAMPLED	07/15/29	04/24/42	04/24/42
FORMATION	NOT GIVEN	PENN-GILCREASE	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3090	2958	4009
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	1100
OPEN FLOW, MCFD	27000	4300	20
COMPONENT, MOLE PCT			
METHANE	66.2	77.0	55.2
ETHANE	29.3	16.1	39.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.1	6.1	4.0
OXYGEN	0.2	0.2	0.7
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	0.4	0.2
HELIUM	0.11	0.18	0.09
HEATING VALUE*	1196	1069	1272
SPECIFIC GRAVITY	0.725	0.663	0.773

	INDEX 6550 SAMPLE 3844	INDEX 6551 SAMPLE 3846	INDEX 6552 SAMPLE 16555
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKFUSKEE	OKFUSKEE	OKFUSKEE
FIELD	PETTIQUAH	PETTIQUAH	SCOTT GAS AREA
WELL NAME	JEPSON NO. 1	KLOBZUBU NO. 1	SCOTT NO. 1
LOCATION	SEC. 7, T13N, R7E	SEC. 7, T13N, R7E	SEC. 28, T10N, R10E
OWNER	JOHN B. HAWLEY, JR.	JOHN B. HAWLEY, JR.	CHEROKEE RESOURCES, INC.
COMPLETED	01/15/44	03/15/44	06/15/82
SAMPLED	05/22/44	05/22/44	06/24/82
FORMATION	PENN-FLAT TOP	PENN-FLAT TOP	PENN-GILCREASE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4026	3226	2966
WELLHEAD PRESSURE,PSIG	800	500	1350
OPEN FLOW, MCFD	500	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	67.0	67.0	80.9
ETHANE	24.3	23.0	6.2
PROPANE	---	---	3.8
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	8.2	9.5	6.5
OXYGEN	0.4	0.4	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	TRACE	0.12
HEATING VALUE*	1114	1091	1112
SPECIFIC GRAVITY	0.712	0.711	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6553 SAMPLE 17068		INDEX 6554 SAMPLE 13760		INDEX 6555 SAMPLE 13761	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	OKFUSKEE		OKFUSKEE		OKFUSKEE	
FIELD	SCOTT GAS AREA		WELEETKA DISTRICT E		WELEETKA DISTRICT E	
WELL NAME	MAGNESS NO. 1-10		MAZZARENA NO. 5		HOLT NO. 2	
LOCATION	SEC. 10, T10N, R10E		SEC. 6, T10N, R12E		SEC. 6, T10N, R12E	
OWNER	JORDAN OIL & GAS CO.		OKFUSKEE ENTERPRISES, INC.		OKFUSKEE ENTERPRISES, INC.	
COMPLETED	08/12/82		08/03/73		08/16/73	
SAMPLED	09/--/83		10/16/73		10/16/73	
FORMATION	PENN-BARTLESVILLE		PENN-CROMWELL		MISS-JEFFERSON	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	2050		2940		3090	
WELLHEAD PRESSURE,PSIG	400		825		905	
OPEN FLOW, MCFD	600		3489		1334	
COMPONENT, MOLE PCT						
METHANE	81.1		77.7		75.8	
ETHANE	3.2		12.6		13.4	
PROPANE	2.3		4.1		5.2	
N-BUTANE	0.0		0.7		1.3	
ISOBUTANE	0.6		0.8		0.6	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.0		0.2		0.4	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	11.8		2.9		2.6	
OXYGEN	0.2		---		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.3		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.9		0.2	
HELIUM	0.18		0.10		0.10	
HEATING VALUE*	973		1174		1238	
SPECIFIC GRAVITY	0.658		0.703		0.727	

	INDEX 6556 SAMPLE 13762		INDEX 6557 SAMPLE 349		INDEX 6558 SAMPLE 11321	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	OKFUSKEE		OKFUSKEE		OKLAHOMA	
FIELD	WELEETKA DISTRICT E		YOUNGTOWN		BRITTON	
WELL NAME	RAZZARENA NO. 5		WARDEN NO. 2		GLASS NO. 1	
LOCATION	SEC. 6, T10N, R12E		SEC. 3, T13N, R11E		SEC. 18, T13N, R3W	
OWNER	OKFUSKEE ENTERPRISES, INC.		KINGWOOD OIL CO.		ASHLAND OIL & REFINING CO.	
COMPLETED	08/10/73		06/--/20		01/11/52	
SAMPLED	10/16/73		06/07/20		02/28/68	
FORMATION	PENN-UNION VALLEY		PENN---		PENN-BARTLESVILLE	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	2816		1885		6417	
WELLHEAD PRESSURE,PSIG	788		355		760	
OPEN FLOW, MCFD	1500		11000		1782	
COMPONENT, MOLE PCT						
METHANE	79.7		85.9		83.6	
ETHANE	12.2		10.4		8.5	
PROPANE	4.0		---		3.6	
N-BUTANE	0.6		---		1.1	
ISOBUTANE	0.4		---		0.3	
N-PENTANE	0.1		---		0.3	
ISOPENTANE	0.1		---		0.2	
CYCLOPENTANE	TRACE		---		0.1	
HEXANES PLUS	0.1		---		0.3	
NITROGEN	2.6		3.2		1.9	
OXYGEN	0.0		0.4		0.1	
ARGON	0.0		---		TRACE	
HYDROGEN	TRACE		---		0.1	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.2		0.0		TRACE	
HELIUM	0.10		0.10		0.03	
HEATING VALUE*	1177		1057		1181	
SPECIFIC GRAVITY	0.688		0.621		0.681	

	INDEX 6559 SAMPLE 17175		INDEX 6560 SAMPLE 17877		INDEX 6561 SAMPLE 15048	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	OKLAHOMA		OKLAHOMA		OKLAHOMA	
FIELD	BRITTON S		CAPTAIN CREEK W		CHOCTAW	
WELL NAME	WOOD NO. 1-3		STOVER NO. 12-1		DARRON "A" NO. 1	
LOCATION	SEC. 3, T12N, R3W		SEC. 12, T13N, R1E		SEC. 11, T12N, R1W	
OWNER	PITCO CO.		101 ENERGY CORP.		BEARD OIL CO.	
COMPLETED	11/19/82		03/02/85		--/--/00	
SAMPLED	02/15/84		10/25/85		06/29/77	
FORMATION	PENN-BASAL UNCONF. SAND		PENN-OSWEGO		PENN-OSWEGO	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	6900		4848		5570	
WELLHEAD PRESSURE,PSIG	2150		1750		1450	
OPEN FLOW, MCFD	475		600		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	82.3		82.1		84.7	
ETHANE	5.8		8.1		8.2	
PROPANE	2.9		3.5		3.5	
N-BUTANE	1.0		1.3		1.0	
ISOBUTANE	0.4		0.4		0.3	
N-PENTANE	0.4		0.5		0.3	
ISOPENTANE	0.2		0.1		0.2	
CYCLOPENTANE	0.1		0.3		0.1	
HEXANES PLUS	0.3		0.5		0.2	
NITROGEN	4.4		2.3		1.5	
OXYGEN	0.9		0.2		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.4		0.2	
HELIUM	0.04		0.05		0.05	
HEATING VALUE*	1123		1133		1170	
SPECIFIC GRAVITY	0.684		0.701		0.672	

	INDEX 6562 SAMPLE 17641		INDEX 6563 SAMPLE 4300		INDEX 6564 SAMPLE 17809	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	OKLAHOMA		OKLAHOMA		OKLAHOMA	
FIELD	COON CREEK W		EDMOND NE		EDMOND NE	
WELL NAME	WOOD NO. 1-5		PAULINE NO. 1		BRODYLES NO. 2-A	
LOCATION	SEC. 5, T14N, R1W		SEC. 23, T14N, R2W		SEC. 28, T14N, R2W	
OWNER	SCOUT ENERGY CORP.		GULF OIL CORP.		MARPER OIL CO.	
COMPLETED	09/01/84		02/19/47		02/11/85	
SAMPLED	04/08/85		04/18/47		08/16/85	
FORMATION	PENN-CHECKERBOARD		PENN---		MIDE-UNCONFORMITY	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	4730		5632		6159	
WELLHEAD PRESSURE,PSIG	1160		2080		1287	
OPEN FLOW, MCFD	1000		1920		1500	
COMPONENT, MOLE PCT						
METHANE	82.8		71.4		82.5	
ETHANE	9.2		25.3		8.4	
PROPANE	4.0		---		3.8	
N-BUTANE	1.3		---		1.3	
ISOBUTANE	0.4		---		0.4	
N-PENTANE	0.5		---		0.4	
ISOPENTANE	TRACE		---		0.3	
CYCLOPENTANE	0.1		---		0.2	
HEXANES PLUS	0.2		---		0.4	
NITROGEN	1.3		2.0		2.1	
OXYGEN	TRACE		0.4		TRACE	
ARGON	0.0		---		0.0	
HYDROGEN	0.0		---		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.2		0.9		0.2	
HELIUM	TRACE		0.04		0.10	
HEATING VALUE*	1200		1117		1200	
SPECIFIC GRAVITY	0.690		0.599		0.698	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6565 SAMPLE 17825	INDEX 6566 SAMPLE 3952	INDEX 6567 SAMPLE 15062
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	EDMOND NE	EDMOND W	EDMOND W
WELL NAME	LOCF BOURROW NO. 2	GAFFNEY NO. 1	SNYDER NO. 1
LOCATION	SEC. 1, T14N, R2W	SEC. 28, T14N, R4W	SEC. 2, T14N, R4W
OWNER	CLIFFORD RESOURCES	CITIES SERVICE OIL CO.	CALVERT DRILLING CO.
COMPLETED	06/04/85	10/14/44	12/--/76
SAMPLED	09/04/85	11/--/44	07/28/77
FORMATION	PENN-CHECKERBOARD	PENN-BARTLESVILLE	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4995	6424	6180
WELLHEAD PRESSURE,PSIG	1100	2922	1500
OPEN FLOW, MCFD	1850	12800	9275
COMPONENT, MOLE PCT			
METHANE	81.9	82.3	83.5
ETHANE	8.2	17.3	8.8
PROPANE	3.8	---	3.9
N-BUTANE	1.5	---	1.1
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.4	---	0.3
ISOPENTANE	0.3	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.3	---	0.2
NITROGEN	3.1	0.0	1.4
OXYGEN	0.0	0.2	0.0
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.05	0.05	0.04
HEATING VALUE*	1182	1144	1191
SPECIFIC GRAVITY	0.695	0.643	0.683

	INDEX 6568 SAMPLE 15063	INDEX 6569 SAMPLE 16648	INDEX 6570 SAMPLE 3702
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	EDMOND W	MARSAH S	LUTHER S
WELL NAME	SNYDER NO. 1	KUSEK NO. 3	HUNTER L. JOHNSON NO. 1
LOCATION	SEC. 2, T14N, R4W	SEC. 2, T11N, T1E	SEC. 9, T13N, R1E
OWNER	CALVERT DRILLING CO.	AMSTAR OIL, INC.	AMOCO PRODUCTION CO.
COMPLETED	12/--/76	07/26/81	--/--/00
SAMPLED	07/28/77	08/--/82	11/19/43
FORMATION	DEVO-HUNTON	PENN-SKINNER	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6400	5280	5550
WELLHEAD PRESSURE,PSIG	307	NOT GIVEN	1850
OPEN FLOW, MCFD	1027	3788	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.8	70.7	77.8
ETHANE	9.6	6.9	16.7
PROPANE	4.4	4.4	---
N-BUTANE	1.5	1.2	---
ISOBUTANE	0.5	0.6	---
N-PENTANE	0.5	0.3	---
ISOPENTANE	0.3	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	0.9	14.5	4.8
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.03	0.13	0.12
HEATING VALUE*	1256	1062	1087
SPECIFIC GRAVITY	0.707	0.740	0.661

	INDEX 6571 SAMPLE 1721	INDEX 6572 SAMPLE 1775	INDEX 6573 SAMPLE 1776
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	OKLAHOMA CITY	OKLAHOMA CITY	OKLAHOMA CITY
WELL NAME	TROSPER NO. 1	E. PORTSON NO. 1	RODINE NO. 1
LOCATION	SEC. 13, T11N, R3W	SEC. 24, T11N, R3W	SEC. 24, T11N, R3W
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	02/21/29	--/--/29	--/--/29
SAMPLED	02/27/29	09/13/29	05/14/29
FORMATION	PENN-OSWEGO	PENN-HOOVER	PENN-LAYTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3986	3900	4850
WELLHEAD PRESSURE,PSIG	1500	1350	1750
OPEN FLOW, MCFD	6000	38000	70000
COMPONENT, MOLE PCT			
METHANE	66.3	66.4	70.1
ETHANE	20.0	15.2	23.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.9	18.1	5.1
OXYGEN	0.3	0.2	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.5
HELIUM	0.11	0.11	0.07
HEATING VALUE*	1030	945	1138
SPECIFIC GRAVITY	0.713	0.708	0.702

	INDEX 6574 SAMPLE 1792	INDEX 6575 SAMPLE 1808	INDEX 6576 SAMPLE 1929
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	OKLAHOMA CITY	OKLAHOMA CITY	OKLAHOMA CITY
WELL NAME	A. BODINE NO. 2	TROSPER NO. 1	UNSELL-KRAGER NO. 3
LOCATION	SEC. 24, T11N, R3W	SEC. 13, T11N, R3W	SEC. 23, T11W, R3W
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	--/--/29	06/05/29	--/--/00
SAMPLED	06/07/29	07/07/29	01/28/30
FORMATION	PENN-BIG LIME	PENN-BIG LIME	PENN-CHECKERBOARD
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6100	6140	5540
WELLHEAD PRESSURE,PSIG	2200	2300	2000
OPEN FLOW, MCFD	20000	100000	32000
COMPONENT, MOLE PCT			
METHANE	78.2	73.9	75.3
ETHANE	20.3	23.0	24.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.2	2.8	0.5
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.08	0.10	0.07
HEATING VALUE*	1156	1161	1158
SPECIFIC GRAVITY	0.664	0.684	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6577 SAMPLE 2315	INDEX 6578 SAMPLE 2762	INDEX 6579 SAMPLE 11534
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	OKLAHOMA CITY	OKLAHOMA CITY	OKLAHOMA CITY
WELL NAME	FORTSON FARLEY NO. 2	E. FORTSON NO. 1	INLAND FARM NO. 2
LOCATION	SEC. 29, T11N, R3W	SEC. 24, T11N, R3W	SEC. 27, T12N, R3W
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	SUN OIL CO.
COMPLETED	10/25/30	--/--/00	07/20/65
SAMPLED	04/20/31	08/05/37	06/07/68
FORMATION	PENN-PRUE	PENN-PAWHUSKA	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5385	3840	5722
WELLHEAD PRESSURE,PSIG	1650	NOT GIVEN	508
OPEN FLOW, MCFD	10500	17000	1207
COMPONENT, MOLE PCT			
METHANE	55.5	16.8	83.5
ETHANE	40.7	8.9	7.5
PROPANE	---	---	3.7
N-BUTANE	---	---	1.3
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.6
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	2.8	73.3	2.2
OXYGEN	0.9	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.05	0.28	0.05
HEATING VALUE*	1292	330	1187
SPECIFIC GRAVITY	0.773	0.907	0.689

	INDEX 6580 SAMPLE 17892	INDEX 6581 SAMPLE 17893	INDEX 6582 SAMPLE 11652
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	OKLAHOMA CITY	OKLAHOMA CITY	ORCHARD CITY NE
WELL NAME	MAXEY NO. 1-34	MAXEY NO. 1-34	F. B. WAFFORD NO. 1
LOCATION	SEC. 34, T11N, R3W	SEC. 34, T11N, R3W	SEC. 5, T1S, R1E
OWNER	OEXCO, INC.	OEXCO, INC.	UNION OIL CO. OF CALIF.
COMPLETED	12/12/84	12/12/84	11/14/57
SAMPLED	11/06/85	11/06/85	09/23/68
FORMATION	PENN-PRUE	ORDO-VIOLA	PENN-UNCONFORMITY SAND
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	6664	6828	5802
WELLHEAD PRESSURE,PSIG	1061	1061	1116
OPEN FLOW, MCFD	1140	1140	307
COMPONENT, MOLE PCT			
METHANE	85.0	77.3	66.5
ETHANE	6.9	6.3	5.8
PROPANE	3.0	2.8	5.7
N-BUTANE	1.3	1.2	1.3
ISOBUTANE	0.3	0.2	0.9
N-PENTANE	0.7	0.8	0.5
ISOPENTANE	0.2	0.2	0.8
CYCLOPENTANE	0.2	0.2	TRACE
HEXANES PLUS	0.6	0.7	0.1
NITROGEN	1.4	8.0	15.2
OXYGEN	0.0	1.8	1.2
ARGON	0.0	0.1	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.1
HELIUM	0.04	0.04	0.07
HEATING VALUE*	1193	1102	1071
SPECIFIC GRAVITY	0.688	0.721	0.767

	INDEX 6583 SAMPLE 17465	INDEX 6584 SAMPLE 17554	INDEX 6585 SAMPLE 17213
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	PEAVINE	PRAIRIE BELL NW	WHEATLAND
WELL NAME	JULIUS NO. 3-A	SHANBOUR NO. 1	PEERY NO. 20-1
LOCATION	SEC. 4, T14N, R2W	SEC. 8, T14N, R3W	SEC. 20, T11N, R4W
OWNER	HARPER OIL CO.	XAE CORP.	RATLIFF EXPLORATION CO.
COMPLETED	07/03/84	08/24/84	08/18/83
SAMPLED	10/03/84	12/31/84	03/20/84
FORMATION	PENN-BARTLESVILLE & CHKRBORD	PENN-PRUE	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5010	5957	8414
WELLHEAD PRESSURE,PSIG	1700	2100	2324
OPEN FLOW, MCFD	920	770	1320
COMPONENT, MOLE PCT			
METHANE	80.6	83.9	88.1
ETHANE	10.0	7.4	5.7
PROPANE	4.4	3.4	2.6
N-BUTANE	1.5	1.0	0.9
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.5	0.2	0.4
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	1.3	2.6	1.0
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.04	0.06	0.03
HEATING VALUE*	1234	1156	1154
SPECIFIC GRAVITY	0.712	0.678	0.659

	INDEX 6586 SAMPLE 17214	INDEX 6587 SAMPLE 17215	INDEX 6588 SAMPLE 17282
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	WHEATLAND	WHEATLAND	WHEATLAND
WELL NAME	PURCELL NO. 29-1	HARDY NO. 21-1	HOOD NO. 31-1
LOCATION	SEC. 29, T11N, R4W	SEC. 21, T11N, R4W	SEC. 31, T11N, R4W
OWNER	RATLIFF EXPLORATION CO.	RATLIFF EXPLORATION CO.	RATLIFF EXPLORATION CO.
COMPLETED	11/11/83	09/19/83	08/04/83
SAMPLED	03/20/84	03/20/84	05/07/84
FORMATION	ORDO-WILCOX	PENN-BARTLESVILLE	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	8666	7602	8034
WELLHEAD PRESSURE,PSIG	2042	2492	2367
OPEN FLOW, MCFD	2100	1800	11576
COMPONENT, MOLE PCT			
METHANE	83.1	80.3	89.1
ETHANE	6.4	9.1	5.4
PROPANE	3.3	4.6	2.2
N-BUTANE	1.2	1.6	0.6
ISOBUTANE	0.6	0.7	0.3
N-PENTANE	0.5	0.6	0.2
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.2	0.4	0.2
HEXANES PLUS	0.4	0.7	0.3
NITROGEN	3.5	1.1	1.1
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.05	0.03	0.05
HEATING VALUE*	1165	1267	1127
SPECIFIC GRAVITY	0.693	0.733	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6589 SAMPLE 4929	INDEX 6590 SAMPLE 4761	INDEX 6591 SAMPLE 16734
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKLAHOMA	OKLAHOMA	OKLAHOMA
FIELD	WITCHER	WITCHER E	WITCHER-MUNGER
WELL NAME	LEHMER	MAGGIE PERKINS NO. 1	HOBBS NO. 1
LOCATION	SEC. 13, T12N, R2W	SEC. 34, T13N, R2W	SEC. 26, T12N, R2W
OWNER	ANDERSON-PRICHARD OIL CORP.	GULF OIL CO.- U.S.	PHILIP BOYLE, INC.
COMPLETED	05/27/50	05/31/49	08/--/82
SAMPLED	08/10/50	10/20/49	12/13/82
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	DEVO-MISENER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	5453	5539	6372
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1984	850
OPEN FLOW, MCFD	675	3176	6316
COMPONENT, MOLE PCT			
METHANE	80.0	79.1	79.9
ETHANE	3.5	4.7	10.8
PROPANE	1.9	2.7	6.5
N-BUTANE	0.6	0.8	1.9
ISOBUTANE	0.2	0.6	0.6
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	TRACE	0.5	0.6
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.0	0.4
NITROGEN	12.9	11.1	3.4
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	---	0.0	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.11	0.10	0.03
HEATING VALUE*	1070	1027	1281
SPECIFIC GRAVITY	0.664	0.688	0.759

	INDEX 6592 SAMPLE 12161	INDEX 6593 SAMPLE 17194	INDEX 6594 SAMPLE 15265
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKMULGEE	OKMULGEE	OKMULGEE
FIELD	BALD HILL	BALD HILL	BRINTON
WELL NAME	FOSTER NO. 1	DILCO NO. 1-27	HALEY NO. 2-A
LOCATION	SEC. 27, T15N, R14E	SEC. 27, T14N, R13E	SEC. 21, T13N, R12E
OWNER	WATSON & ROE	DILCO	BILL WADLEY & SON DRILLING
COMPLETED	11/12/69	09/08/83	06/13/77
SAMPLED	12/28/69	02/23/84	04/27/78
FORMATION	PENN-DUTCHER	PENN-WAPANUCKA	PENN-DUTCHER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1707	1999	2188
WELLHEAD PRESSURE,PSIG	347	600	605
OPEN FLOW, MCFD	2400	1626	28000
COMPONENT, MOLE PCT			
METHANE	88.0	87.8	81.6
ETHANE	7.3	5.9	9.5
PROPANE	0.2	2.0	3.7
N-BUTANE	0.1	0.6	0.8
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.9	2.5	3.2
OXYGEN	0.5	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.02	0.09	0.09
HEATING VALUE*	1062	1188	1148
SPECIFIC GRAVITY	0.622	0.643	0.674

	INDEX 6595 SAMPLE 331	INDEX 6596 SAMPLE 17671	INDEX 6597 SAMPLE 17691
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKMULGEE	OKMULGEE	OKMULGEE
FIELD	BRYANT	HAMILTON SWITCH	HAMILTON SWITCH
WELL NAME	TISMIC BEAM NO. 1	DOUGLAS NO. 1-9	HULL NO. 9
LOCATION	SEC. 33, T11N, R12E	SEC. 9, T14N, R13E	SEC. 29, T15N, R13E
OWNER	KINGWOOD OIL CO.	DILCO OIL & GAS PROPERTIES	J. J. HULL, JR.
COMPLETED	01/--/20	04/06/83	04/28/84
SAMPLED	06/08/20	05/16/85	05/29/85
FORMATION	PENN---	PENN-BOOCH	PENN-DUTCHER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	940	1558	1945
WELLHEAD PRESSURE,PSIG	250	400	300
OPEN FLOW, MCFD	829	118	425
COMPONENT, MOLE PCT			
METHANE	93.3	89.6	70.8
ETHANE	4.5	3.9	12.2
PROPANE	---	1.3	7.4
N-BUTANE	---	0.3	2.6
ISOBUTANE	---	0.1	0.9
N-PENTANE	---	0.1	0.6
ISOPENTANE	---	TRACE	0.8
CYCLOPENTANE	---	TRACE	0.4
HEXANES PLUS	---	0.1	0.7
NITROGEN	1.8	4.4	3.2
OXYGEN	0.2	0.1	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.02	0.07
HEATING VALUE*	1026	1032	1357
SPECIFIC GRAVITY	0.587	0.617	0.808

	INDEX 6598 SAMPLE 17694	INDEX 6599 SAMPLE 17289	INDEX 6600 SAMPLE 348
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKMULGEE	OKMULGEE	OKMULGEE
FIELD	HAMILTON SWITCH	MASKELL	MENETTA DISTRICT
WELL NAME	HENTHORNE NO. 2	ELIZABETH NO. 2	PINE NO. 2
LOCATION	SEC. 33, T15N, R13E	SEC. 23, T16N, R14E	SEC. 33, T12N, R12E
OWNER	J. J. HULL, JR.	U.T.C. ENERGY RESOURCES, INC	W. B. PINE
COMPLETED	--/--/00	03/17/83	05/--/20
SAMPLED	05/29/85	05/10/84	06/07/20
FORMATION	PENN-DUTCHER	PENN-DUTCHER	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1940	1815	2210
WELLHEAD PRESSURE,PSIG	275	520	600
OPEN FLOW, MCFD	330	3500	900
COMPONENT, MOLE PCT			
METHANE	58.6	70.4	78.1
ETHANE	12.5	12.5	16.4
PROPANE	10.4	7.6	---
N-BUTANE	5.4	1.9	---
ISOBUTANE	2.2	0.5	---
N-PENTANE	1.0	0.4	---
ISOPENTANE	1.9	0.3	---
CYCLOPENTANE	0.5	0.8	---
HEXANES PLUS	1.2	0.4	---
NITROGEN	2.0	5.5	2.6
OXYGEN	0.0	0.1	0.6
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.03	0.10	0.14
HEATING VALUE*	1652	1275	1121
SPECIFIC GRAVITY	0.980	0.783	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6601 SAMPLE 330	INDEX 6602 SAMPLE 17209	INDEX 6603 SAMPLE 1034
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKMULGEE	OKMULGEE	OKMULGEE
FIELD	HENRYETTA S	HOFFMAN	MARTIN
WELL NAME	RHODA BEAM NO. 1	GREEN NO. 1	WEBSTER NO. 2
LOCATION	SEC. 34, T11N, R12E	SEC. 20, T12N, R14E	SEC. 33, T13N, R12E
OWNER	KINGWOOD OIL CO.	BAILEY PETROLEUM CORP.	EAGLE PICHER LEAD CO.
COMPLETED	01/--/20	08/15/83	03/12/25
SAMPLED	06/08/20	03/--/84	04/23/25
FORMATION	PENN---	PENN-CROMWELL	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	900	2162	745
WELLHEAD PRESSURE,PSIG	395	167	250
OPEN FLOW, MCFD	106	572	2000
COMPONENT, MOLE PCT			
METHANE	79.8	83.7	90.7
ETHANE	16.7	8.9	2.4
PROPANE	---	3.3	---
N-BUTANE	---	0.9	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	3.3	1.8	6.5
OXYGEN	0.0	TRACE	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	0.11	0.09	0.10
HEATING VALUE*	1108	1168	962
SPECIFIC GRAVITY	0.650	0.676	0.599

	INDEX 6604 SAMPLE 327	INDEX 6605 SAMPLE 16443	INDEX 6606 SAMPLE 14861
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OKMULGEE	OKMULGEE	OKMULGEE
FIELD	OKMULGEE DISTRICT	OKMULGEE DISTRICT	POLLYANNA
WELL NAME	DWYER NO. 1	DETHEROW NO. 1-10	LEE ESTATE NO. 3
LOCATION	SEC. 32, T13N, R13E	SEC. 10, T13N, R13E	SEC. 11, T15N, R11E
OWNER	LVO CORP.	GMG OIL & GAS CORP.	MCADAMS PIPE AND SUPPLY CO.
COMPLETED	10/--/14	10/--/81	08/12/76
SAMPLED	06/05/20	02/23/82	11/22/76
FORMATION	PENN-1430 FT SAND	PENN-DUTCHER	PENN-DUTCHER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1428	1918	2320
WELLHEAD PRESSURE,PSIG	120	800	750
OPEN FLOW, MCFD	1532	3200	12500
COMPONENT, MOLE PCT			
METHANE	74.2	84.0	78.1
ETHANE	22.1	6.7	6.3
PROPANE	---	3.3	2.9
N-BUTANE	---	1.1	0.3
ISOBUTANE	---	0.4	0.4
N-PENTANE	---	0.4	TRACE
ISOPENTANE	---	0.3	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.1
NITROGEN	1.9	3.3	9.8
OXYGEN	0.5	TRACE	1.1
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	0.0	0.8
HELIUM	0.10	0.10	0.09
HEATING VALUE*	1148	1156	1028
SPECIFIC GRAVITY	0.686	0.679	0.690

	INDEX 6607 SAMPLE 9747	INDEX 6608 SAMPLE 11270	INDEX 6609 SAMPLE 13590
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	ATLANTIC	AVANT	AVANT W
WELL NAME	A. C. OLIPHANT NO. 8 WS	OSAGE 11569 NO. 3	STUART ESTATE NO. 10-A
LOCATION	SEC. 19, T25N, R8E	SEC. 2, T23N, R11E	SEC. 7, T23N, R11E
OWNER	TEXACO INC.	W. C. MCBRIDE, INC.	DYCO PETROLEUM CORP.
COMPLETED	02/14/56	02/06/68	01/18/73
SAMPLED	02/19/65	02/06/68	04/25/73
FORMATION	PENN-PERU & BIG LIME	PENN-CLEVELAND	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1938	936	2084
WELLHEAD PRESSURE,PSIG	100	315	680
OPEN FLOW, MCFD	1508	229	1700
COMPONENT, MOLE PCT			
METHANE	82.0	93.4	88.3
ETHANE	4.3	0.4	0.5
PROPANE	0.6	0.9	TRACE
N-BUTANE	TRACE	0.6	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	9.9	3.6	8.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	0.3	1.9
HELIUM	0.19	0.06	0.31
HEATING VALUE*	947	1022	904
SPECIFIC GRAVITY	0.654	0.603	0.611

	INDEX 6610 SAMPLE 13592	INDEX 6611 SAMPLE 13593	INDEX 6612 SAMPLE 28
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	AVANT W	AVANT W	BARNSDALL
WELL NAME	OSAGE NO. 1-B	OSAGE NO. 1-B	NOT GIVEN
LOCATION	SEC. 36, T23N, R11E	SEC. 36, T23N, R11E	SEC. 35, T22N, R10E
OWNER	DYCO PETROLEUM CORP.	DYCO PETROLEUM CORP.	NOT GIVEN
COMPLETED	02/18/73	02/18/73	--/--/00
SAMPLED	05/03/73	05/03/73	--/--/00
FORMATION	PENN-BURGESS	ORDO-SIMPSON	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1868	2132	NOT GIVEN
WELLHEAD PRESSURE,PSIG	620	720	NOT GIVEN
OPEN FLOW, MCFD	1600	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	84.9	77.2
ETHANE	2.8	1.9	9.3
PROPANE	1.6	0.2	---
N-BUTANE	0.2	TRACE	---
ISOBUTANE	0.5	0.2	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	5.2	12.0	12.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.3	0.8
HELIUM	0.13	0.29	0.22
HEATING VALUE*	1028	910	949
SPECIFIC GRAVITY	0.627	0.621	0.661

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6613 SAMPLE 7718	INDEX 6614 SAMPLE 3325	INDEX 6615 SAMPLE 103
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	BIG BEND N	BIRCH CREEK S	BOULANGER
WELL NAME	DAVIS NO. 2	OSAGE WELL 459	NO. 60
LOCATION	SEC. 8, T25N, R3E	SEC. **, T23N, R10E	SEC. 5, T27N, R10E
OWNER	CHARLES W. CLIPMANT	CITIES SERVICE OIL CO.	AMERICAN PIPELINE CO.
COMPLETED	10/10/60	12/27/39	10/--/19
SAMPLED	10/01/60	--/--/00	02/11/20
FORMATION	MISS-CHAT	MISS-	MISS-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3776	2098	1700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	396	600
OPEN FLOW, MCFD	NOT GIVEN	2310	4000
COMPONENT, MOLE PCT			
METHANE	75.2	60.5	86.0
ETHANE	9.1	22.3	7.3
PROPANE	3.6	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	9.6	16.0	5.9
OXYGEN	0.2	0.5	0.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.3	0.5
HELIUM	0.10	0.27	0.19
HEATING VALUE*	1083	1014	1002
SPECIFIC GRAVITY	0.709	0.735	0.619

	INDEX 6616 SAMPLE 3793	INDEX 6617 SAMPLE 96	INDEX 6618 SAMPLE 14821
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	BULLDOG DISTRICT N	BURBANK	CANDY CREEK
WELL NAME	OSAGE GAS LEASE NO. 485	NO. 1	OAKLAND NO. 1A-4
LOCATION	SEC. 16, T24N, R9E	SEC. 36, T27N, R5E	SEC. 4, T24N, R12E
OWNER	CITIES SERVICE OIL CO.	KAY COUNTY GAS CO.	HELMERICH & PAYNE, INC.
COMPLETED	11/21/42	08/--/19	03/18/76
SAMPLED	04/14/44	02/07/20	10/28/76
FORMATION	PENN-BURGESS	PENN-OSWEGO	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2256	1800	1720
WELLHEAD PRESSURE,PSIG	350	550	625
OPEN FLOW, MCFD	5000	3121	423
COMPONENT, MOLE PCT			
METHANE	41.3	52.7	94.5
ETHANE	43.6	26.6	1.5
PROPANE	---	---	0.7
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	13.9	20.2	1.8
OXYGEN	0.4	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.6	0.0	0.4
HELIUM	0.15	0.45	0.03
HEATING VALUE*	1200	1011	1037
SPECIFIC GRAVITY	0.835	0.769	0.595

	INDEX 6619 SAMPLE 15005	INDEX 6620 SAMPLE 111	INDEX 6621 SAMPLE 112
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	DOSA	DOMES-POND CREEK	DOMES-POND CREEK
WELL NAME	TATE NO. 2120	NO. 186	NO. 193
LOCATION	SEC. 17, T24N, R4E	SEC. 15, T29N, R10E	SEC. 15, T29N, R10E
OWNER	CJA CORP.	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.
COMPLETED	--/--/00	--/--/16	--/--/16
SAMPLED	05/12/77	02/16/20	02/16/20
FORMATION	MISS-CHAT	PENN---	PENN---
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3415	1758	1834
WELLHEAD PRESSURE,PSIG	1300	290	375
OPEN FLOW, MCFD	NOT GIVEN	7000	787
COMPONENT, MOLE PCT			
METHANE	66.3	95.1	92.7
ETHANE	8.3	0.6	1.8
PROPANE	3.9	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	18.4	2.5	3.6
OXYGEN	0.2	0.6	0.6
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.9	0.6
HELIUM	0.33	0.33	0.67
HEATING VALUE*	1007	974	971
SPECIFIC GRAVITY	0.751	0.579	0.584

	INDEX 6622 SAMPLE 1273	INDEX 6623 SAMPLE 1299	INDEX 6624 SAMPLE 3331
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	DOMES-POND CREEK	DOMES-POND CREEK	DOMES-POND CREEK
WELL NAME	NO. 284	DALLAS - NO. 250	OSAGE NO. 73
LOCATION	SEC. 5, T26N, R12E	SEC. 18, T27N, R11E	SEC. 5, T27N, R10E
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	--/--/00	--/--/00	11/10/23
SAMPLED	05/31/26	09/17/26	04/24/42
FORMATION	NOT GIVEN	NOT GIVEN	MISS-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1730
WELLHEAD PRESSURE,PSIG	607	800	242
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	470
COMPONENT, MOLE PCT			
METHANE	94.2	74.8	80.6
ETHANE	1.2	2.4	13.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.3	18.8	4.7
OXYGEN	0.5	2.0	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.8	1.3	1.0
HELIUM	0.03	0.70	0.28
HEATING VALUE*	976	801	1049
SPECIFIC GRAVITY	0.596	0.665	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6625 SAMPLE 3403	INDEX 6626 SAMPLE 11902	INDEX 6627 SAMPLE 14159
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	DOMES-PONO CREEK	DOMES-POND CREEK	DOMES-POND CREEK
WELL NAME	OSAGE NO. 89	KEITH NO. 1-C	FRIEND NO. E-2
LOCATION	SEC. 30, T28N, R10E	SEC. 33, T26N, R11E	SEC. 17, T27N, R11E
OWNER	CITIES SERVICE OIL CO.	BBR OIL CORP.	PRODUCERS OIL CO.
COMPLETED	12/18/25	04/22/69	05/28/74
SAMPLED	04/28/42	06/02/69	09/30/74
FORMATION	MISS-	MISS-CHAT	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1959	1840	1980
WELLHEAD PRESSURE,PSIG	275	630	280
OPEN FLOW, MCFD	161	2400	50000
COMPONENT, MOLE PCT			
METHANE	91.1	96.3	85.6
ETHANE	1.7	0.4	4.6
PROPANE	---	TRACE	1.5
N-BUTANE	---	0.0	0.6
ISOBUTANE	---	0.0	0.4
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.1
NITROGEN	5.0	1.0	2.0
OXYGEN	0.6	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	2.1	4.6
HELIUM	0.37	0.03	0.04
HEATING VALUE*	953	983	1052
SPECIFIC GRAVITY	0.597	0.580	0.674

	INDEX 6628 SAMPLE 14862	INDEX 6629 SAMPLE 14396	INDEX 6630 SAMPLE 17230
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	DRUM CREEK	KEYSTONE E	LABADIE LEASE
WELL NAME	MADDEN NO. 2	REVCO-M NO. 1	LABADIE NO. 1
LOCATION	SEC. 15, T25N, R4E	SEC. 28, T20N, R10E	SEC. 31, T27N, R11E
OWNER	INTERMOUNTAIN PETROLEUM CO.	KEWANEE OIL CO.	T.P.E.X. EXPLORATION, INC.
COMPLETED	11/--/76	04/29/75	01/09/81
SAMPLED	11/--/76	06/20/75	03/29/84
FORMATION	MISS-CHAT	PENN-TUCKER	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3433	2324	1866
WELLHEAD PRESSURE,PSIG	1140	830	200
OPEN FLOW, MCFD	260000	12500	100
COMPONENT, MOLE PCT			
METHANE	66.9	76.1	86.5
ETHANE	8.4	6.7	0.7
PROPANE	3.4	3.6	TRACE
N-BUTANE	1.0	0.8	TRACE
ISOBUTANE	0.5	0.4	TRACE
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	18.3	11.9	7.0
OXYGEN	0.0	0.2	1.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	4.0
HELIUM	0.31	0.08	0.09
HEATING VALUE*	1002	1038	902
SPECIFIC GRAVITY	0.747	0.698	0.637

	INDEX 6631 SAMPLE 1705	INDEX 6632 SAMPLE 1706	INDEX 6633 SAMPLE 17231
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	MANION	MANION	MISSION CREEK LEASE
WELL NAME	NO. 393	NO. 393-BRADEN HEAD	MISSION CREEK NO. 1
LOCATION	SEC. 29, T23N, R9E	SEC. 29, T23N, R9E	SEC. 26, T28N, R11E
OWNER	INDIAN TERR. ILLUM. OIL CO.	INDIAN TERR. ILLUM. OIL CO.	T.P.E.X. EXPLORATION, INC.
COMPLETED	--/--/28	--/--/28	11/18/83
SAMPLED	11/13/28	11/14/28	03/29/84
FORMATION	NOT GIVEN	NOT GIVEN	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1000	600	1880
WELLHEAD PRESSURE,PSIG	300	115	600
OPEN FLOW, MCFD	1000	800	600
COMPONENT, MOLE PCT			
METHANE	94.6	88.6	91.5
ETHANE	2.6	3.3	1.3
PROPANE	---	---	0.1
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	2.0	7.2	4.6
OXYGEN	0.3	0.5	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.2	1.5
HELIUM	0.15	0.27	0.11
HEATING VALUE*	1005	957	977
SPECIFIC GRAVITY	0.581	0.604	0.606

	INDEX 6634 SAMPLE 127	INDEX 6635 SAMPLE 14307	INDEX 6636 SAMPLE 126
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	MYERS	MYERS	MYERS NE
WELL NAME	NO. 2	LESSACK NO. 1-G	NO. 50
LOCATION	SEC. 12, T26N, R8E	SEC. 11, T26N, R8E	SEC. 31, T27N, R9E
OWNER	AMERICAN PIPELINE CO.	SERVICE DRILLING CO.	AMERICAN PIPELINE CO.
COMPLETED	06/--/16	11/15/74	05/--/18
SAMPLED	03/03/20	03/--/75	03/03/20
FORMATION	PENN-	PENN-BURGESS	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	560	2500	1228
WELLHEAD PRESSURE,PSIG	70	780	185
OPEN FLOW, MCFD	15	4000	330
COMPONENT, MOLE PCT			
METHANE	84.1	78.9	86.3
ETHANE	0.0	6.5	0.0
PROPANE	---	3.3	---
N-BUTANE	---	0.8	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.3	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	15.4	8.7	12.7
OXYGEN	0.0	0.0	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	0.43	0.36	0.46
HEATING VALUE*	852	1067	874
SPECIFIC GRAVITY	0.616	0.686	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6637 SAMPLE 1566	INDEX 6638 SAMPLE 3399	INDEX 6639 SAMPLE 3401
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	NAVAL RESERVE	NAVAL RESERVE	NAVAL RESERVE
WELL NAME	KAY CO. NO. 2	NO. 10 C	NO. 11-D
LOCATION	SEC. 22, T24N, R7E	SEC. 22, T24N, R7E	SEC. 23, T24N, R7E
OWNER	KAY COUNTY GAS CO.	KAY COUNTY GAS CO.	KAY COUNTY GAS CO.
COMPLETED	--/--/00	04/13/40	02/20/42
SAMPLED	01/11/28	04/30/42	04/30/42
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1140	2585	2568
WELLHEAD PRESSURE, PSIG	387	940	900
OPEN FLOW, MCFD	21000	1500	2250
COMPONENT, MOLE PCT			
METHANE	49.8	57.6	57.1
ETHANE	2.9	17.3	19.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	47.0	24.1	22.4
OXYGEN	0.3	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.42	0.35	0.39
HEATING VALUE*	546	894	926
SPECIFIC GRAVITY	0.762	0.742	0.746

	INDEX 6640 SAMPLE 11788	INDEX 6641 SAMPLE 1309	INDEX 6642 SAMPLE 105
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	OSAGE CITY DISTRICT E	OSAGE-HOMINY DISTRICT	PAWHUSKA
WELL NAME	DTTO HAMILTON NO. 4	NOT GIVEN	NO. 51
LOCATION	SEC. 4, T21N, R9E	SEC. 32, T24N, R8E	SEC. 23, T26N, R9E
OWNER	JOHN T. SANFORD	INDIAN TERR. ILLUM. OIL CO.	AMERICAN PIPELINE CO.
COMPLETED	12/18/69	--/--/24	08/--/19
SAMPLED	02/27/69	09/24/26	02/11/20
FORMATION	PENN-BARTLESVILLE	NOT GIVEN	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2220	756	2100
WELLHEAD PRESSURE, PSIG	600	195	740
OPEN FLOW, MCFD	1050	300	5250
COMPONENT, MOLE PCT			
METHANE	65.4	55.5	12.1
ETHANE	8.5	4.7	81.1
PROPANE	5.2	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.5	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	17.5	38.7	5.1
OXYGEN	0.0	0.5	1.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.16	0.36	0.09
HEATING VALUE*	1066	646	1576
SPECIFIC GRAVITY	0.775	0.748	0.984

	INDEX 6643 SAMPLE 107	INDEX 6644 SAMPLE 4442	INDEX 6645 SAMPLE 13600
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	PAWHUSKA	PAWHUSKA NE	PAWHUSKA NE
WELL NAME	NO. 25	OSAGE NO. 509	LOOKOUT 443A
LOCATION	SEC. 15, T24N, R8E	SEC. 36, T26N, R9E	SEC. 36, T26N, R9E
OWNER	PAWHUSKA OIL & GAS CO.	CITIES SERVICE OIL CO.	WACHTMAN-SCHROEDER, ET AL.
COMPLETED	--/--/18	11/20/47	--/--/00
SAMPLED	02/13/20	01/12/48	05/21/73
FORMATION	PENN-OSWEGO	PENN-LAYTON	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1933	1074	1991
WELLHEAD PRESSURE, PSIG	790	395	705
OPEN FLOW, MCFD	12500	1900	2738
COMPONENT, MOLE PCT			
METHANE	87.0	85.5	88.9
ETHANE	6.5	2.4	3.7
PROPANE	---	---	1.6
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	5.1	11.5	2.5
OXYGEN	0.8	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.2	2.1
HELIUM	0.09	0.22	0.08
HEATING VALUE*	998	909	1049
SPECIFIC GRAVITY	0.616	0.616	0.638

	INDEX 6646 SAMPLE 3875	INDEX 6647 SAMPLE 81	INDEX 6648 SAMPLE 128
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	PAXTON SE	PEARSONIA	PEARSONIA
WELL NAME	JOSEPHINE KIPP NO. 146	NO. 6	NO. 46
LOCATION	SEC. 17, T22N, R8E	SEC. 20, T27N, R8E	SEC. 20, T27N, R8E
OWNER	OKLAHOMA POWER & WATER CO.	AMERICAN PIPELINE CO.	AMERICAN PIPELINE CO.
COMPLETED	12/--/43	--/--/17	01/--/18
SAMPLED	08/24/44	02/06/20	03/05/20
FORMATION	PENN-SKINNER	PENN-	PENN-
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2304	806	951
WELLHEAD PRESSURE, PSIG	NOT GIVEN	195	200
OPEN FLOW, MCFD	450	200	171
COMPONENT, MOLE PCT			
METHANE	72.8	58.1	78.5
ETHANE	20.7	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.8	39.0	19.3
OXYGEN	0.1	2.0	1.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.08	0.62	0.50
HEATING VALUE*	1108	589	795
SPECIFIC GRAVITY	0.686	0.725	0.641

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6649 SAMPLE 131	INDEX 6650 SAMPLE 136	INDEX 6651 SAMPLE 13625
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	PEARSONIA	PEARSONIA E	WHITETAIL
WELL NAME	NO. 26	NO. 53	BIGHEART NO. 1 A
LOCATION	SEC. 17, T27N, R8E	SEC. 22, T27N, R8E	SEC. 4, T27N, R10E
OWNER	AMERICAN PIPELINE CO.	AMERICAN PIPELINE CO.	WACHTMAN-SCHROEDER
COMPLETED	03/--/17	06/--/18	--/--/00
SAMPLED	03/05/20	03/06/20	06/10/73
FORMATION	PENN-	PENN-	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	915	1444	1648
WELLHEAD PRESSURE,PSIG	220	150	NOT GIVEN
OPEN FLOW, MCFD	375	720	1700
COMPONENT, MOLE PCT			
METHANE	61.8	71.9	82.6
ETHANE	0.0	0.0	4.1
PROPANE	---	---	2.0
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	36.3	27.2	8.2
OXYGEN	1.2	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.0	1.0
HELIUM	0.62	0.55	0.38
HEATING VALUE*	626	728	1023
SPECIFIC GRAVITY	0.708	0.665	0.654

	INDEX 6652 SAMPLE 108	INDEX 6653 SAMPLE 3783	INDEX 6654 SAMPLE 1084
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	PAWNEE
FIELD	WYNONA	WYNONA	HALLETT
WELL NAME	NO. 244	OSAGE GAS LEASE NO. 482	GILLESPIE NO. 1
LOCATION	SEC. 32, T24N, R9E	SEC. 15, T24N, R9E	SEC. 9, T20N, R7E
OWNER	INDIAN TERR. ILLUM. OIL CO.	CITIES SERVICE OIL CO.	SUPERIOR OIL CO.
COMPLETED	--/--/19	12/16/41	03/--/25
SAMPLED	02/13/20	04/14/44	06/30/25
FORMATION	PENN-BARTLESVILLE	MISS-LIME	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2153	2224	2580
WELLHEAD PRESSURE,PSIG	840	770	NOT GIVEN
OPEN FLOW, MCFD	12500	630	7500
COMPONENT, MOLE PCT			
METHANE	68.3	55.4	58.2
ETHANE	9.2	17.6	25.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	17.7	25.7	15.3
OXYGEN	4.0	0.6	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.2	0.2
HELIUM	0.08	0.45	0.11
HEATING VALUE*	857	877	1052
SPECIFIC GRAVITY	0.701	0.751	0.750

	INDEX 6655 SAMPLE 964	INDEX 6656 SAMPLE 17027	INDEX 6657 SAMPLE 1004
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	MARAMEC	MARAMEC	MASHAM
WELL NAME	DONOHOE NO. 3	OKLAHOMA STATE "H" NO. 1	NO. 7
LOCATION	SEC. 15, T20N, R6E	SEC. 13, T20N, R6E	SEC. 22, T23N, R5E
OWNER	PRAIRIE OIL & GAS CO.	BARUCH-FOSTER CORP.	J. L. DONAHOE
COMPLETED	06/--/23	09/24/52	--/--/00
SAMPLED	01/14/25	08/29/83	02/23/25
FORMATION	PENN---	PENN-RED FORK	ORDO-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3032	3023	3917
WELLHEAD PRESSURE,PSIG	65	600	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	420	2000
COMPONENT, MOLE PCT			
METHANE	65.8	67.5	3.8
ETHANE	23.7	6.9	8.5
PROPANE	---	4.6	---
N-BUTANE	---	1.3	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.1	---
NITROGEN	9.8	17.4	86.2
OXYGEN	0.3	0.0	0.6
ARGON	---	TRACE	---
HYDROGEN	---	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.07	0.18	0.81
HEATING VALUE*	1091	1027	191
SPECIFIC GRAVITY	0.716	0.752	0.953

	INDEX 6658 SAMPLE 3476	INDEX 6659 SAMPLE 3772	INDEX 6660 SAMPLE 4003
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	OSAGE CITY DISTRICT SE	RALSTON DISTRICT	WATCHORN E
WELL NAME	FINLEY NO. 1	CAMPBELL NO. 1	COHN NO. 1
LOCATION	SEC. 5, T20N, R9E	SEC. 2, T23N, R5E	SEC. 36, T23N, R3E
OWNER	WOOD OIL CO.	ALADDIN PETROLEUM CORP.	KAY COUNTY GAS CO.
COMPLETED	05/21/40	11/28/42	06/04/44
SAMPLED	06/04/42	04/13/44	04/09/45
FORMATION	PENN-GAS SAND	PENN-OSWEGO	PENN-STALNAKER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1794	2685	1807
WELLHEAD PRESSURE,PSIG	265	900	710
OPEN FLOW, MCFD	855	3000	4750
COMPONENT, MOLE PCT			
METHANE	86.4	60.0	44.1
ETHANE	8.2	23.9	19.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.2	15.4	36.2
OXYGEN	0.8	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.1	0.0
HELIUM	0.10	0.18	0.33
HEATING VALUE*	1022	1036	787
SPECIFIC GRAVITY	0.620	0.739	0.799

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6661 SAMPLE 14919	INDEX 6662 SAMPLE 1038	INDEX 6663 SAMPLE 3312
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAWNEE	PAWNEE	PAYNE
FIELD	WATCHORN E	YALE	AVERY
WELL NAME	DOYLE NO. 4	NO. 5	A. R. MEYERS NO. 2
LOCATION	SEC. 36, T23N, R 3E	SEC. 22, T20N, R6E	SEC. 17, T17N, R6E
OWNER	JAY PETROLEUM, INC.	WESTERLY OIL CO.	CAMAIL OIL CO. & E. I. MURRY
COMPLETED	05/13/76	01/--/25	11/01/41
SAMPLED	02/25/77	04/21/25	04/21/42
FORMATION	PENN-OSWEGO	PENN-BARTLESVILLE	PENN-PERU
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3200	3040	2626
WELLHEAD PRESSURE,PSIG	1380	570	NOT GIVEN
OPEN FLOW, MCFD	1559	4125	2724
COMPONENT, MOLE PCT			
METHANE	68.6	63.7	79.2
ETHANE	7.3	24.5	17.8
PROPANE	3.3	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	18.4	10.5	2.5
OXYGEN	0.0	0.6	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.7	0.1
HELIUM	0.20	0.07	0.09
HEATING VALUE*	987	1084	1121
SPECIFIC GRAVITY	0.735	0.729	0.655

	INDEX 6664 SAMPLE 3321	INDEX 6665 SAMPLE 17162	INDEX 6666 SAMPLE 17268
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	BROYLES	BROYLES	BROYLES
WELL NAME	BOYLES NO. 9	HOLDERREAD NO. 1	CIRCLE "T" RANCH NO. 2
LOCATION	SEC. 26, T18N, R4E	SEC. 26, T18N, R4E	SEC. 26, T18N, R4E
OWNER	MUL-BERRY OIL CO.	SUN EXPLORATION & PRODUCTION	EL DORADO DRILLING, INC.
COMPLETED	11/10/41	03/16/82	08/06/83
SAMPLED	04/21/42	01/25/84	04/20/84
FORMATION	PENN-SKINNER	PENN-RED FORK	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3480	3537	3682
WELLHEAD PRESSURE,PSIG	1260	700	180
OPEN FLOW, MCFD	5343	1046	623
COMPONENT, MOLE PCT			
METHANE	73.0	75.6	77.2
ETHANE	18.5	8.0	10.3
PROPANE	---	4.5	4.8
N-BUTANE	---	1.5	1.5
ISOBUTANE	---	0.7	0.6
N-PENTANE	---	0.5	0.5
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.2	0.2
HEXANES PLUS	---	0.3	0.4
NITROGEN	7.8	8.1	4.3
OXYGEN	0.5	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.13	0.09	0.07
HEATING VALUE*	1071	1153	1216
SPECIFIC GRAVITY	0.682	0.733	0.729

	INDEX 6667 SAMPLE 4139	INDEX 6668 SAMPLE 16236	INDEX 6669 SAMPLE 4177
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	GEORGIA	GOODNIGHT NE	HARMONY
WELL NAME	STATE NO. 1	SCOTT NO. 1	NAUMANN NO. 1
LOCATION	SEC. 36, T18N, R4E	SEC. 17, T17N, R2E	SEC. 2, T17N, R5E
OWNER	MOHR GAS CO.	SANTA FE ENERGY CO.	MUL-BERRY OIL CO.
COMPLETED	11/16/45	--/--/00	10/08/46
SAMPLED	09/30/46	04/16/81	12/12/46
FORMATION	PENN-BARTLESVILLE	ORDO-VIOLA	PENN-PRUE
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3689	4762	3050
WELLHEAD PRESSURE,PSIG	1050	1600	NOT GIVEN
OPEN FLOW, MCFD	6000	2743	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.6	77.6	71.9
ETHANE	22.1	8.3	12.0
PROPANE	---	4.1	---
N-BUTANE	---	1.2	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.4	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.4	---
NITROGEN	4.7	6.8	15.5
OXYGEN	0.2	0.0	0.2
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.0	0.2
HELIUM	0.13	0.16	0.16
HEATING VALUE*	1131	1160	943
SPECIFIC GRAVITY	0.687	0.719	0.680

	INDEX 6670 SAMPLE 596	INDEX 6671 SAMPLE 598	INDEX 6672 SAMPLE 3729
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	INGALLS	INGALLS	INGALLS
WELL NAME	MAGNOLIA PET. CO., NO. 4	NOT GIVEN	MYATT NO. 1
LOCATION	SEC. 34, T19N, R4E	SEC. 27, T19N, R4E	SEC. 25, T19N, R4E
OWNER	MOBIL OIL CORP.	OKLAHOMA NATURAL GAS CO.	J. E. CROSBIE, INC.
COMPLETED	--/--/00	--/--/00	11/16/43
SAMPLED	05/--/21	07/--/21	03/23/44
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	647	3732
WELLHEAD PRESSURE,PSIG	500	180	NOT GIVEN
OPEN FLOW, MCFD	13765	7500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	45.4	49.3	24.0
ETHANE	16.8	8.3	67.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	37.1	42.5	7.1
OXYGEN	0.2	2.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	3.3	0.2
HELIUM	0.30	0.15	0.70
HEATING VALUE*	761	572	1465
SPECIFIC GRAVITY	0.791	0.806	0.918

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6673 SAMPLE 3733	INDEX 6674 SAMPLE 16458	INDEX 6675 SAMPLE 963
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	INGALLS N	MEHAN	NORFOLK
WELL NAME	STATE OF OKLA. TR. 15 NO. 1	MCKENZIE NO. 8	BALLARD-SKELLY
LOCATION	SEC. 16, T19N, R4E	SEC. 13, T18N, R3E	SEC. 32, T18N, R5E
OWNER	STANOLIND OIL & GAS CO.	EARTH ENERGY RESOURCES, INC.	MUL-BERRY OIL CO.
COMPLETED	03/08/44	11/20/80	09/--/24
SAMPLED	03/25/44	03/--/82	01/06/25
FORMATION	ORDO-SIMPSON	PENN-PERU	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4006	3212	1325
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1075	800
OPEN FLOW, MCFD	250	3000	12000
COMPONENT, MOLE PCT			
METHANE	73.8	62.8	14.0
ETHANE	18.9	5.7	16.5
PROPANE	---	3.1	---
N-BUTANE	---	0.9	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.3	---
ISOPENTANE	---	TRACE	---
CYCLOPENTANE	---	0.3	---
HEXANES PLUS	---	0.5	---
NITROGEN	6.7	22.9	68.2
OXYGEN	0.4	2.9	0.6
ARGON	---	0.1	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.11	0.10	0.49
HEATING VALUE*	1086	911	438
SPECIFIC GRAVITY	0.678	0.767	0.921

	INDEX 6676 SAMPLE 1933	INDEX 6677 SAMPLE 1943	INDEX 6678 SAMPLE 7195
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	NORFOLK W	NORFOLK W	ORLANDO E
WELL NAME	DAWES NO. 1	ECHO HAWK HEIRS NO. 1	BARNES NO. 1-A
LOCATION	SEC. 4, T18N, R5E	SEC. 4, T18N, R5E	SEC. 13, T19N, R1W
OWNER	TRANSCONTINENTAL OIL CO.	SHAFER OIL & REFINING CO.	WOLFE DRILLING CO.
COMPLETED	11/05/29	11/30/29	12/11/57
SAMPLED	02/03/30	03/06/30	08/31/59
FORMATION	PENN-PRUE	PENN-PRUE	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2745	2670	4513
WELLHEAD PRESSURE,PSIG	800	900	1750
OPEN FLOW, MCFD	7770	5857	3300
COMPONENT, MOLE PCT			
METHANE	66.4	71.5	71.6
ETHANE	24.1	20.8	7.9
PROPANE	---	---	4.4
N-BUTANE	---	---	1.2
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.8
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	9.1	7.4	12.8
OXYGEN	0.3	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.1
CARBON DIOXIDE	0.2	0.2	0.20
HELIUM	0.14	0.14	0.05
HEATING VALUE*	1105	1097	1095
SPECIFIC GRAVITY	0.716	0.692	0.744

	INDEX 6679 SAMPLE 4617	INDEX 6680 SAMPLE 4668	INDEX 6681 SAMPLE 3725
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PAYNE
FIELD	RIPLEY SE	RIPLEY SE	STILLWATER
WELL NAME	BOYD NO. 1	BUCKLES NO. 1	HARRIET V. BERRY NO. 1
LOCATION	SEC. 28, T18N, R4E	SEC. 28, T18N, R4E	SEC. 26, T19N, R2E
OWNER	JERGINS OIL CO.	JERGINS OIL CO.	T. N. BERRY
COMPLETED	09/06/48	11/19/48	03/--/43
SAMPLED	11/09/48	02/17/49	03/15/44
FORMATION	PENN-	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3475	3914	4060
WELLHEAD PRESSURE,PSIG	1425	1600	900
OPEN FLOW, MCFD	2500	1500	3200
COMPONENT, MOLE PCT			
METHANE	70.1	76.6	63.6
ETHANE	20.3	6.2	19.4
PROPANE	---	3.1	---
N-BUTANE	---	0.9	---
ISOBUTANE	---	0.2	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.4	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.0	---
NITROGEN	9.0	12.1	16.5
OXYGEN	0.3	TRACE	0.4
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.12	0.12	0.16
HEATING VALUE*	1074	1031	993
SPECIFIC GRAVITY	0.695	0.694	0.722

	INDEX 6682 SAMPLE 3782	INDEX 6683 SAMPLE 3770	INDEX 6684 SAMPLE 3424
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PAYNE	PAYNE	PITTSBURG
FIELD	YALE W	YALE-QUAY	ASHLAND S
WELL NAME	MORGAN NO. 1	FRANK SIMPSON NO. 1	CAMPBELL & CUNNINGHAM NO. 1
LOCATION	SEC. 10, T19N, R5E	SEC. 30, T19N, R5E	SEC. 20, T3N, R12E
OWNER	SUN OIL CO.	SKELLY OIL CO.	S. D. CAMPBELL
COMPLETED	02/06/44	10/04/43	12/04/40
SAMPLED	04/13/44	04/06/44	05/28/42
FORMATION	DEVO-MISENER	DEVO-MISENER	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	355	355	345
DEPTH, FEET	3658	3633	1493
WELLHEAD PRESSURE,PSIG	1050	1250	185
OPEN FLOW, MCFD	NOT GIVEN	38450	1500
COMPONENT, MOLE PCT			
METHANE	67.0	76.5	83.8
ETHANE	24.8	22.8	15.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.4	0.3	0.1
OXYGEN	0.5	0.0	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	TRACE	0.12	0.09
HEATING VALUE*	1123	1184	1123
SPECIFIC GRAVITY	0.713	0.671	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6685 SAMPLE 3425	INDEX 6686 SAMPLE 3433	INDEX 6687 SAMPLE 12105
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	ASHLAND S	ASHLAND S	ASHLAND S
WELL NAME	CAMPBELL & CUNNINGHAM	VAUGHN NO. 1	INVESTOR ROYALTY NO. 1
LOCATION	SEC. 20, T3N, R12E	SEC. 30, T3N, R12E	SEC. 29, T3N, R12E
OWNER	S. O. CAMPBELL	S. J. CAMPBELL	ARKLA EXPLORATION CO.
COMPLETED	12/04/40	04/10/41	10/25/69
SAMPLED	05/28/42	05/28/42	11/07/69
FORMATION	-BROGG	PENN-HARTSHORNE	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	555	1551	8300
WELLHEAD PRESSURE, PSIG	115	185	2350
OPEN FLOW, MCFD	500	1500	8000
COMPONENT, MOLE PCT			
METHANE	87.4	88.9	84.0
ETHANE	10.1	9.1	0.8
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	1.7	1.7	10.6
OXYGEN	0.4	0.4	2.6
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.2	0.2	1.8
HELIUM	0.15	0.16	0.04
HEATING VALUE*	1066	1059	868
SPECIFIC GRAVITY	0.615	0.610	0.636

	INDEX 6688 SAMPLE 12186	INDEX 6689 SAMPLE 14868	INDEX 6690 SAMPLE 17399
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	ASHLAND S	ASHLAND S	BLANCO S
WELL NAME	INVESTORS-ROYALTY NO. 1	LANE NO. 1-28	KINNIKIN NO. 1
LOCATION	SEC. 29, T3N, R12E	SEC. 28, T4N, R12E	SEC. 26, T3N, R14E
OWNER	ARKLA EXPLORATION CO.	CONTINENTAL OIL CO.	SAMSON RESOURCES CO.
COMPLETED	10/25/69	09/02/76	12/13/85
SAMPLED	02/05/70	12/11/76	09/01/89
FORMATION	PENN-CROMWELL	PENN-HARTSHORNE	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	8300	3401	4941
WELLHEAD PRESSURE, PSIG	2350	495	1950
OPEN FLOW, MCFD	3800	4200	19265
COMPONENT, MOLE PCT			
METHANE	95.8	91.2	94.0
ETHANE	0.8	3.6	3.8
PROPANE	0.1	1.7	0.9
N-BUTANE	0.0	0.4	0.2
ISOBUTANE	0.0	0.3	0.1
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.9	2.1	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.4	0.5
HELIUM	0.05	0.13	0.05
HEATING VALUE*	987	1060	1063
SPECIFIC GRAVITY	0.583	0.613	0.597

	INDEX 6691 SAMPLE 9814	INDEX 6692 SAMPLE 12952	INDEX 6693 SAMPLE 15879
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	BLOCKER S	BLOCKER S	BREWER S
WELL NAME	DAVIS NO. 1	U.S.A. NO. 1	TURNEY NO. 31-2
LOCATION	SEC. 12, T6N, R16E	SEC. 12, T6N, R16E	SEC. 21, T4N, R14E
OWNER	SNEE & EBERLY	SNEE & EBERLY	SUPRON ENERGY CORP.
COMPLETED	01/20/65	01/15/71	--/--/00
SAMPLED	03/20/65	08/12/71	01/11/80
FORMATION	PENN-HARTSHORNE	PENN-RED OAK	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2281	6999	7360
WELLHEAD PRESSURE, PSIG	365	2485	2500
OPEN FLOW, MCFD	1392	66132	2000
COMPONENT, MOLE PCT			
METHANE	94.1	86.0	95.6
ETHANE	4.2	1.3	1.4
PROPANE	0.9	0.3	0.2
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.5	9.2	1.1
OXYGEN	TRACE	2.0	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	1.1	0.4
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1059	902	999
SPECIFIC GRAVITY	0.589	0.624	0.582

	INDEX 6694 SAMPLE 15937	INDEX 6695 SAMPLE 1982	INDEX 6696 SAMPLE 15245
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	BREWER S	CARNEY	CARNEY
WELL NAME	TURNEY A NO.1	CARNEY NO. 1	LASH NO. 1
LOCATION	SEC. 32, T4N, R14E	SEC. 9, T7N, R18E	SEC. 10, T7N, R18E
OWNER	TEXAS OIL & GAS CORP.	UTILITIES PRODUCTION CORP.	SAMSON RESOURCES CO.
COMPLETED	09/14/79	09/21/26	--/--/00
SAMPLED	05/02/80	04/03/30	03/22/78
FORMATION	PENN-ATOKA	PENN-HARTSHORNE	PENN-SPIRO & CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6496	1752	6606
WELLHEAD PRESSURE, PSIG	1800	500	1040
OPEN FLOW, MCFD	2000	28000	14480
COMPONENT, MOLE PCT			
METHANE	96.4	95.0	95.1
ETHANE	1.5	4.1	1.0
PROPANE	0	---	0.1
N-BUTANE	TRACE	---	0.0
ISOBUTANE	TRACE	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	TRACE	---	0.0
NITROGEN	0.5	0.3	1.7
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.3
HYDROGEN SULFIDE	0.0	---	0.1
CARBON DIOXIDE	1.2	0.3	1.6
HELIUM	0.04	0.04	0.06
HEATING VALUE*	1011	1036	985
SPECIFIC GRAVITY	0.578	0.581	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6697 SAMPLE 3985	INDEX 6698 SAMPLE 10714	INDEX 6699 SAMPLE 15070
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	CHOATE PRAIRIE	FEATHERSTON	FEATHERSTONE TOWNSITE NO. 1
WELL NAME	VAN HOOZER NO. 1-A	BROWNE NO. 1	
LOCATION	SEC. 20, T8N, R14E	SEC. 21, T7N, R17E	SEC. 15, T7N, R17E
OWNER	PUBLIC SERVICE CO. OF OKLA.	CHOCTAW GAS CO.	OKLET PETROLEUM CO.
COMPLETED	12/18/44	09/09/65	05/06/77
SAMPLED	03/09/45	09/08/66	07/27/77
FORMATION	PENN-GILCREASE	PENN-HARTSHORNE	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3458	2670	2372
WELLHEAD PRESSURE,PSIG	350	260	230
OPEN FLOW, MCFD	2500	1500	1639
COMPONENT, MOLE PCT			
METHANE	92.5	95.7	95.4
ETHANE	7.2	2.9	2.6
PROPANE	---	0.4	0.3
N-BUTANE	---	0.0	0.2
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	0.7	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.6
HELIUM	0.12	TRACE	0.04
HEATING VALUE*	1066	1032	1041
SPECIFIC GRAVITY	0.601	0.580	0.587

	INDEX 6700 SAMPLE 14808	INDEX 6701 SAMPLE 16218	INDEX 6702 SAMPLE 11330
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	FEATHERSTON NW	FEATHERSTON NW	HARTSHORNE
WELL NAME	ROBERTS NO. 1	MCGEORGE NO. 2	SMALLWOOD UNIT NO. 1
LOCATION	SEC. 3, T7N, R17E	SEC. 31, T8N, R18E	SEC. 10, T4N, R16E
OWNER	POTTS-STEPHENSON EXPL. CO.	POTTS-STEPHENSON EXPL. CO.	AMOCO PRODUCTION CO.
COMPLETED	05/26/76	06/-/80	01/01/64
SAMPLED	10/12/76	03/28/81	03/01/68
FORMATION	PENN-HARTSHORNE	PENN-HARTSHORNE	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2502	2800	5535
WELLHEAD PRESSURE,PSIG	585	500	1376
OPEN FLOW, MCFD	3900	2000	2021
COMPONENT, MOLE PCT			
METHANE	94.6	94.9	96.0
ETHANE	3.8	3.4	2.2
PROPANE	0.7	0.7	0.6
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	0.6	0.5	0.6
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.5
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1052	1044	1028
SPECIFIC GRAVITY	0.586	0.584	0.579

	INDEX 6703 SAMPLE 10420	INDEX 6704 SAMPLE 11257	INDEX 6705 SAMPLE 14664
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	KINTA	KINTA	KIOWA NW
WELL NAME	WILLIAM FLOYD NO. 1	WHITE P NO. 1	CANNENGA NO. 1
LOCATION	SEC. 28, T7N, R18E	SEC. 30, T7N, R18E	SEC. 8, T3N, R13E
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SOUTHERN UNION PRODUCTION CO
COMPLETED	02/28/66	11/13/67	05/20/75
SAMPLED	02/28/66	~~/~~/33	04/23/76
FORMATION	PENN-RED OAK	PENN-ATOKA	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7825	6402	9422
WELLHEAD PRESSURE,PSIG	2484	2394	2407
OPEN FLOW, MCFD	5374	14869	13931
COMPONENT, MOLE PCT			
METHANE	96.3	88.3	95.6
ETHANE	1.6	1.6	0.7
PROPANE	0.6	0.3	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.4	6.9	0.4
OXYGEN	0.0	1.7	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.1	3.1
HELIUM	0.05	0.02	0.05
HEATING VALUE*	1020	931	984
SPECIFIC GRAVITY	0.581	0.615	0.590

	INDEX 6706 SAMPLE 16134	INDEX 6707 SAMPLE 17658	INDEX 6708 SAMPLE 11260
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	KIOWA NW	KIOWA S	MCALISTER
WELL NAME	HALL NO. 1	SISCO NO. 1	W. M. STANTON NO. 1
LOCATION	SEC. 19, T3N, R13E	SEC. 31, T3N, R14E	SEC. 22, T5N, R14E
OWNER	CITIES SERVICE CO.	SAMSON RESOURCES CO.	SKELLY OIL CO.
COMPLETED	05/06/80	07/28/84	11/14/67
SAMPLED	11/19/80	05/01/85	01/25/68
FORMATION	PENN-ATOKA	PENN-WAPANUCKA	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	7052	10371	4395
WELLHEAD PRESSURE,PSIG	2015	2200	677
OPEN FLOW, MCFD	NOT GIVEN	4000	1133
COMPONENT, MOLE PCT			
METHANE	89.1	96.3	90.2
ETHANE	6.4	1.0	5.8
PROPANE	2.0	0.1	1.7
N-BUTANE	0.4	0.0	0.6
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.9	0.5	1.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	2.1	0.5
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1110	996	1082
SPECIFIC GRAVITY	0.636	0.583	0.619

* CALCULATED GROSS BTU PER CU.FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6709 SAMPLE 11320	INDEX 6710 SAMPLE 10884	INDEX 6711 SAMPLE 17648
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	MCALISTER S	MCALISTER SE	PATRICK
WELL NAME	CORONADO A NO. 1	GERMAN UNIT NO. 1	FISHER NO. 1
LOCATION	SEC. 29, T3N, R13E	SEC. 33, T5N, R15E	SEC. 1, 68N, R16E
OWNER	SKELLY OIL CO.	APACHE CORP.	BILL O. ANDRESS
COMPLETED	12/05/67	11/11/65	06/25/84
SAMPLED	02/29/68	--/--/00	08/19/85
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	8390	10328	5461
WELLHEAD PRESSURE,PSIG	3630	3500	784
OPEN FLOW, MCFD	6635	4300	2503
COMPONENT, MOLE PCT			
METHANE	90.4	98.1	94.8
ETHANE	3.1	0.7	0.0
PROPANE	0.2	0.1	0.0
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	1.0	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.6	0.0	0.0
NITROGEN	2.3	0.6	2.5
OXYGEN	0.4	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.5	2.6
HELIUM	0.04	0.02	0.06
HEATING VALUE*	1080	1009	960
SPECIFIC GRAVITY	0.640	0.566	0.590

	INDEX 6712 SAMPLE 10092	INDEX 6713 SAMPLE 10272	INDEX 6714 SAMPLE 10505
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	PINE HOLLOW S	PINE HOLLOW S	PINE HOLLOW S
WELL NAME	DAVIS UNIT NO. 1	SUSAN MCDONALD UNIT NO. 1	TENNECO NO. 36-1
LOCATION	SEC. 26, T5N, R12E	SEC. 35, T5N, R12E	SEC. 36, T5N, R12E
OWNER	EXXON CO., U.S.A.	EXXON CO., U.S.A.	TENNECO OIL CO.
COMPLETED	07/13/65	04/29/64	--/--/00
SAMPLED	08/31/65	11/02/65	03/29/66
FORMATION	PENN-HARTSHORNE	PENN-HARTSHORNE	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	3522	3675	3446
WELLHEAD PRESSURE,PSIG	600	490	NOT GIVEN
OPEN FLOW, MCFD	4066	3161	3363
COMPONENT, MOLE PCT			
METHANE	91.4	90.5	89.4
ETHANE	4.1	4.3	5.1
PROPANE	1.7	1.9	2.3
N-BUTANE	0.4	0.4	0.5
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.6	1.8	1.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	0.4
HELIUM	0.10	0.11	0.11
HEATING VALUE*	1073	1080	1104
SPECIFIC GRAVITY	0.613	0.623	0.634

	INDEX 6715 SAMPLE 14999	INDEX 6716 SAMPLE 15885	INDEX 6717 SAMPLE 15886
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	PINE HOLLOW S	PITTSBURG	PITTSBURG
WELL NAME	MCKAY NO. 1-1	CHITTY SCOTT NO. 1	CHITTY SCOTT NO. 1
LOCATION	SEC. 1, T4N, R13E	SEC. 30, T3N, R14E	SEC. 30, T3N, R14E
OWNER	ARKLA EXPLORATION CO.	HAMILTON BROTHERS OIL CO.	HAMILTON BROTHERS OIL CO.
COMPLETED	08/08/75	--/--/00	--/--/00
SAMPLED	05/13/77	01/15/80	01/15/80
FORMATION	PENN-CROMWELL	PENN-WAPANUCKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	5721	9381	10279
WELLHEAD PRESSURE,PSIG	1800	1300	675
OPEN FLOW, MCFD	4053	470000	2200
COMPONENT, MOLE PCT			
METHANE	95.0	95.9	96.1
ETHANE	0.8	1.1	0.8
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.9	0.5	0.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	2.3	2.4
HELIUM	0.06	0.04	0.03
HEATING VALUE*	984	994	990
SPECIFIC GRAVITY	0.592	0.585	0.584

	INDEX 6718 SAMPLE 16538	INDEX 6719 SAMPLE 16539	INDEX 6720 SAMPLE 13131
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	PITTSBURG	PITTSBURG	REAMS NW
WELL NAME	HODGENS NO. 1	HODGENS NO. 1	MURRIN NO. 1-23
LOCATION	SEC. 16, T3N, R14E	SEC. 16, T3N, R14E	SEC. 23, T7N, R14E
OWNER	COTTON PETROLEUM CORP.	COTTON PETROLEUM CORP.	WILSHIRE OIL OF TEXAS
COMPLETED	07/--/81	07/--/81	11/15/71
SAMPLED	06/01/82	06/01/82	01/03/72
FORMATION	PENN-WAPANUCKA	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	10114	10522	7096
WELLHEAD PRESSURE,PSIG	2050	2050	1550
OPEN FLOW, MCFD	2072	2072	3502
COMPONENT, MOLE PCT			
METHANE	95.0	95.6	94.9
ETHANE	0.6	0.8	0.6
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.3	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.8	3.0	3.5
HELIUM	0.04	0.04	0.06
HEATING VALUE*	976	986	975
SPECIFIC GRAVITY	0.597	0.589	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6721 SAMPLE 14540	INDEX 6722 SAMPLE 14541	INDEX 6723 SAMPLE 16630
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	REAMS SE	REAMS SE	SAVANNA NE
WELL NAME	LAKE NO. 1-32	LAKE NO. 1-32	BOARDWALK NO. 1
LOCATION	SEC. 32, T7N, R16E	SEC. 32, T7N, R16E	SEC. 7, T4N, R15E
OWNER	SNEE & EBERLY	SNEE & EBERLY	SAMSON RESOURCES CO.
COMPLETED	06/28/75	06/28/75	02/16/82
SAMPLED	12/03/75	12/03/75	08/30/82
FORMATION	PENN-HARTSHORNE	PENN-BOOCH	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	8362
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6500
COMPONENT, MOLE PCT			
METHANE	91.0	91.0	95.3
ETHANE	5.5	5.4	2.8
PROPANE	1.6	1.6	0.5
N-BUTANE	0.2	0.3	0.1
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	0.7	0.6	0.6
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	1.4
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1080	1086	1013
SPECIFIC GRAVITY	0.615	0.618	0.584

	INDEX 6724 SAMPLE 3994	INDEX 6725 SAMPLE 4468	INDEX 6726 SAMPLE 4094
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	SCIPIO NW	SCIPIO NW	ULAN E
WELL NAME	C. E. HORTON NO. 1	KLEENKE NO. 1	TRAVIS NO. 1
LOCATION	SEC. 19, T7N, R13E	SEC. 15, T7N, R12E	SEC. 5, T7N, R14E
OWNER	PUBLIC SERVICE CO. OF OKLA.	OTHA M. GRIMES	PUBLIC SERVICE CO. OF OKLA.
COMPLETED	07/10/44	02/07/48	12/31/46
SAMPLED	03/09/45	04/15/48	06/14/48
FORMATION	PENN-NOT GIVEN	PENN-CROMWELL	PENN-BOOCH
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	2369	4265	1867
WELLHEAD PRESSURE,PSIG	350	1700	450
OPEN FLOW, MCFD	500	17000	4
COMPONENT, MOLE PCT			
METHANE	95.2	86.3	93.3
ETHANE	1.7	12.3	6.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.3	0.9	0.0
OXYGEN	0.3	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.3
HELIUM	TRACE	0.07	0.07
HEATING VALUE*	995	1095	1060
SPECIFIC GRAVITY	0.579	0.622	0.589

	INDEX 6727 SAMPLE 16584	INDEX 6728 SAMPLE 14325	INDEX 6729 SAMPLE 14326
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	ULAN E	ULAN S	ULAN S
WELL NAME	REEVES NO. 1-30	FINAMORE NO. 1	FINAMORE NO. 1
LOCATION	SEC. 30, T8N, R14E	SEC. 32, T7N, R14E	SEC. 32, T7N, R14E
OWNER	LUSELL OIL CO.	KWB OIL PROPERTY MGMT., INC.	KWB OIL PROPERTY MGMT., INC.
COMPLETED	07/21/82	--/--/00	--/--/00
SAMPLED	07/21/82	04/20/75	04/20/75
FORMATION	PENN-SAVANNA	PENN-WAPANUCKA	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1343	5692	7065
WELLHEAD PRESSURE,PSIG	NOT GIVEN	17	1715
OPEN FLOW, MCFD	250	1600	2600
COMPONENT, MOLE PCT			
METHANE	95.0	93.6	95.2
ETHANE	2.6	0.6	0.8
PROPANE	0.5	0.1	0.1
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.0	2.2	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.4	3.2
HELIUM	0.05	0.07	0.05
HEATING VALUE*	1046	962	981
SPECIFIC GRAVITY	0.589	0.600	0.594

	INDEX 6730 SAMPLE 12828	INDEX 6731 SAMPLE 12829	INDEX 6732 SAMPLE 16313
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PITTSBURG
FIELD	WILBURTON	WILBURTON	WILBURTON
WELL NAME	R. A. KING UNIT NO. 1	R. C. KING UNIT NO. 1	THORNTON-RAILEY NO. 1-20
LOCATION	SEC. 26, T5N, R16E	SEC. 26, T5N, R16E	SEC. 20, T4N, R16E
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	HAMILTON BROTHERS OIL CO.
COMPLETED	04/08/71	04/08/71	--/--/00
SAMPLED	05/20/71	05/20/71	08/--/81
FORMATION	PENN-RED OAK	PENN-SPIRO	PENN-ATOKA
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	6678	9348	7390
WELLHEAD PRESSURE,PSIG	1550	3750	3000
OPEN FLOW, MCFD	5900	24000	1338
COMPONENT, MOLE PCT			
METHANE	96.5	99.1	96.4
ETHANE	1.5	0.0	1.8
PROPANE	0.3	0.2	0.3
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.5	0.6	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.0	0.9
HELIUM	0.03	0.07	0.03
HEATING VALUE*	1012	1009	1025
SPECIFIC GRAVITY	0.579	0.559	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6733 SAMPLE 16314	INDEX 6734 SAMPLE 6905	INDEX 6735 SAMPLE 1821
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PITTSBURG	PITTSBURG	PONTOTOC
FIELD	WILBURTON	WIRTH	ALLEN DISTRICT
WELL NAME	THORNTON-RAILEY NO. 1-20	BAUMAN NO. 1	CRABTREE NO. 1
LOCATION	SEC. 20, T4N, R16E	SEC. 29, T5N, R16E	SEC. 32, T5N, R7E
OWNER	HAMILTON BROTHERS OIL CO.	UNION OIL CO.	SOUTHWEST GAS UTILITIES CORP
COMPLETED	--/--/00	01/13/59	05/31/29
SAMPLED	08/--/81	12/01/58	07/22/29
FORMATION	PENN-WAPANUCKA	PENN-CROMWELL	PENN-
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	12766	4368	1476
WELLHEAD PRESSURE,PSIG	2500	225	650
OPEN FLOW, MCFD	1938	3283	10000
COMPONENT, MOLE PCT			
METHANE	96.4	95.6	96.7
ETHANE	1.7	0.7	0.8
PROPANE	0.3	0.3	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.4	1.4	2.2
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	1.1	1.9	0.2
HELIUM	0.03	0.10	0.08
HEATING VALUE*	1015	989	994
SPECIFIC GRAVITY	0.578	0.586	0.571

	INDEX 6736 SAMPLE 4888	INDEX 6737 SAMPLE 3462	INDEX 6738 SAMPLE 3474
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PONTOTOC	PONTOTOC	PONTOTOC
FIELD	ALLEN DISTRICT	BEBEE-KONAWA SW	BEBEE-KONAWA SW
WELL NAME	SINCLAIR NO. 1	JOHN NEAL NO. 1	NEWBERN NO. 1
LOCATION	SEC. 31, T5N, R8E	SEC. 25, T5N, R4E	SEC. 31, T5N, R4E
OWNER	JONES SMELSURNE, INC.	LAKE OIL CO.	LONG, YINGLING & LAUCK
COMPLETED	04/18/50	05/07/38	03/26/40
SAMPLED	05/19/50	05/25/42	05/25/42
FORMATION	PENN-EARLSBORO	ORDO-VIOLA	ORDO-WILCOX 2ND
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	1610	2475	2205
WELLHEAD PRESSURE,PSIG	600	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	5500	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	92.3	92.7	95.0
ETHANE	1.6	0.0	1.3
PROPANE	1.0	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	4.0	6.5	2.3
OXYGEN	0.2	0.5	0.4
ARGON	TRACE	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.3	0.9
HELIUM	0.05	0.04	0.05
HEATING VALUE*	1016	939	986
SPECIFIC GRAVITY	0.604	0.587	0.581

	INDEX 6739 SAMPLE 4760	INDEX 6740 SAMPLE 2619	INDEX 6741 SAMPLE 10831
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	PONTOTOC	PONTOTOC	POTTAWATOMIE
FIELD	BEBEE-KONAWA SW	FITTS	PRAGUE S
WELL NAME	WILBURN HEIRS NO. 1	HARDEN NO. 1	SCHOOL LAND NO. 1
LOCATION	SEC. 4, T4N, R5E	SEC. 30, T2N, R7E	SEC. 16, T11N, R6E
OWNER	W. A. DELANEY, JR.	KING & DELANEY	LITTLE NICK OIL CO.
COMPLETED	09/10/49	--/--/33	08/17/66
SAMPLED	01/15/49	01/01/33	01/03/67
FORMATION	PENN----	NOT GIVEN	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	345	345	355
DEPTH, FEET	1468	NOT GIVEN	4260
WELLHEAD PRESSURE,PSIG	570	775	1250
OPEN FLOW, MCFD	6000	NOT GIVEN	1200
COMPONENT, MOLE PCT			
METHANE	83.0	86.4	71.6
ETHANE	6.4	9.5	8.6
PROPANE	3.2	---	5.1
N-BUTANE	0.7	---	1.4
ISOBUTANE	0.3	---	0.5
N-PENTANE	0.2	---	0.2
ISOPENTANE	0.0	---	0.3
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	5.6	2.6	12.0
OXYGEN	0.1	0.9	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.06	0.09	0.11
HEATING VALUE*	1090	1045	1104
SPECIFIC GRAVITY	0.669	0.622	0.740

	INDEX 6742 SAMPLE 10113	INDEX 6743 SAMPLE 4073	INDEX 6744 SAMPLE 9793
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	POTTAWATOMIE	POTTAWATOMIE	PUSHMATAHA
FIELD	RED HILL W	ROVER W	MOYERS SW
WELL NAME	D. K. NEAL NO. 1	WESTAL NO. 1	BRAME NO. 1
LOCATION	SEC. 21, T11N, R4E	SEC. 28, T6N, R3E	SEC. 19, T3S, R15E
OWNER	CONTINENTAL OIL CO.	TEXACO INC.	J. F. STEPHENSON
COMPLETED	08/07/65	12/20/44	09/15/60
SAMPLED	--/--/00	06/22/45	03/10/65
FORMATION	PENN-SKINNER	PENN-LAYTON	MISS-STANLEY
GEOLOGIC PROVINCE CODE	355	355	400
DEPTH, FEET	4301	2864	3062
WELLHEAD PRESSURE,PSIG	1700	1140	1500
OPEN FLOW, MCFD	10800	15000	750
COMPONENT, MOLE PCT			
METHANE	64.6	67.5	92.6
ETHANE	5.4	18.6	4.1
PROPANE	3.2	---	1.4
N-BUTANE	0.9	---	0.3
ISOBUTANE	0.4	---	0.3
N-PENTANE	0.3	---	0.1
ISOPENTANE	0.3	---	TRACE
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	21.2	13.7	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.2	0.0	TRACE
HELIUM	0.15	0.18	0.05
HEATING VALUE*	918	1017	1091
SPECIFIC GRAVITY	0.752	0.702	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6745 SAMPLE 17739	INDEX 6746 SAMPLE 10514	INDEX 6747 SAMPLE 10515
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	BERLIN N	BISHOP	BISHOP
WELL NAME	KENNER NO. 1-30	APPEL NO. 1	BULLARD NO. 1
LOCATION	SEC. 30, T12N, R23W	SEC. 8, T17N, R25W	SEC. 14, T17N, R25W
OWNER	BRACKEN EXPLORATION CO.	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	04/12/85	--/--/00	--/--/00
SAMPLED	--/--/00	04/12/66	04/12/66
FORMATION	PENN-MORROW	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	18421	NOT GIVEN	7900
WELLHEAD PRESSURE,PSIG	13030	2000	2150
OPEN FLOW, MCFD	2700	750	900
COMPONENT, MOLE PCT			
METHANE	96.3	81.3	83.1
ETHANE	0.4	7.0	8.2
PROPANE	TRACE	4.2	3.8
N-BUTANE	0.0	1.5	1.2
ISOBUTANE	0.0	0.5	0.5
N-PENTANE	0.0	0.3	0.3
ISOPENTANE	0.0	0.4	0.4
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.0	0.3	0.4
NITROGEN	0.6	3.8	1.4
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.4	0.4
HELIUM	0.01	0.12	0.13
HEATING VALUE*	983	1168	1203
SPECIFIC GRAVITY	0.584	0.702	0.695

	INDEX 6748 SAMPLE 15608	INDEX 6749 SAMPLE 17836	INDEX 6750 SAMPLE 17622
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	CARPENTER W	CARPENTER W	CHEYENNE W
WELL NAME	SIMMONS NO. 1A	JOY TAYLOR NO. 1	WILLIAMS NO. 1
LOCATION	SEC. 17, T12N, R22W	SEC. 25, T12N, R13W	SEC. 26, T12N, R23W
OWNER	NATOMAS NORTH AMERICA, INC.	EL PASO EXPLORATION CO.	EL PASO EXPLORATION CO.
COMPLETED	--/--/00	11/01/84	03/08/84
SAMPLED	04/26/79	10/07/85	03/19/85
FORMATION	PENN-TONKAWA	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9314	17378	17256
WELLHEAD PRESSURE,PSIG	NOT GIVEN	12500	11576
OPEN FLOW, MCFD	75	6146	2096
COMPONENT, MOLE PCT			
METHANE	97.1	97.3	97.2
ETHANE	0.4	0.5	0.5
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.2	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	2.0	1.9
HELIUM	0.02	0.02	0.01
HEATING VALUE*	993	995	994
SPECIFIC GRAVITY	0.579	0.577	0.576

	INDEX 6751 SAMPLE 14514	INDEX 6752 SAMPLE 14806	INDEX 6753 SAMPLE 14974
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	CHEYENNE W	CHEYENNE W	CHEYENNE W
WELL NAME	HUNT CROSS NO. 1	LESTER UNIT NO. 1	ROARK NO. 1
LOCATION	SEC. 22, T13N, R24W	SEC. 9, T13N, R24W	SEC. 17, T13N, R24W
OWNER	EL PASO NATURAL GAS CO.	HELMERICH & PAYNE, INC.	HOOVER & BRACKEN, INC.
COMPLETED	06/11/75	08/06/76	10/08/76
SAMPLED	10/31/75	10/12/76	04/20/77
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15530	15086	15835
WELLHEAD PRESSURE,PSIG	12220	12000	5910
OPEN FLOW, MCFD	19742	10400	20721
COMPONENT, MOLE PCT			
METHANE	97.1	97.1	97.3
ETHANE	0.5	0.7	0.6
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.5	0.3	0.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	1.7	1.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	995	999	999
SPECIFIC GRAVITY	0.577	0.576	0.577

	INDEX 6754 SAMPLE 14996	INDEX 6755 SAMPLE 15222	INDEX 6756 SAMPLE 16124
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	CHEYENNE W	CHEYENNE W	CHEYENNE W
WELL NAME	L. L. ROARK UNIT NO. 1	STATE NO. 1-10	STATE NO. 1-28
LOCATION	SEC. 16, T13N, R24W	SEC. 10, T13N, R24W	SEC. 28, T13N, R24W
OWNER	SUN PRODUCTION CO.	HELMERICH & PAYNE, INC.	LADD PETROLEUM CORP.
COMPLETED	12/23/76	09/--/76	09/24/80
SAMPLED	05/11/77	03/--/78	10/28/80
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15174	NOT GIVEN	15660
WELLHEAD PRESSURE,PSIG	10800	NOT GIVEN	4900
OPEN FLOW, MCFD	16700	NOT GIVEN	5200
COMPONENT, MOLE PCT			
METHANE	97.1	97.1	97.3
ETHANE	0.6	0.6	0.5
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.2	0.2	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	1.8	1.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	997	1001	997
SPECIFIC GRAVITY	0.579	0.578	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6757 SAMPLE 10902		INDEX 6758 SAMPLE 11264		INDEX 6759 SAMPLE 11423	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ROGER MILLS		ROGER MILLS		ROGER MILLS	
FIELD	CRAWFORD NW		CRAWFORD NW		CRAWFORD NW	
WELL NAME	W. B. THOMAS NO. 1		M. E. STRICKLAND NO. 1		W. H. YORK NO. 1	
LOCATION	SEC. 15, T16N, R26W		SEC. 28, T16N, R26W		SEC. 20, T16N, R25W	
OWNER	SUN OIL CO.		MIDWEST OIL CORP.		LONE STAR PRODUCING CO.	
COMPLETED	11/16/66		09/21/65		--/--/00	
SAMPLED	03/09/67		01/31/68		03/29/68	
FORMATION	PENN-TONKAWA		PENN-TONKAWA		PENN-TONKAWA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	8294		8458		8506	
WELLHEAD PRESSURE,PSIG	2400		2250		2500	
OPEN FLOW, MCFD	12000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	87.5		82.1		83.7	
ETHANE	6.1		8.3		8.2	
PROPANE	2.3		3.7		3.8	
N-BUTANE	0.7		1.0		1.0	
ISOBUTANE	0.2		0.6		0.4	
N-PENTANE	0.3		0.4		0.3	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	0.3		0.2		0.1	
HEXANES PLUS	0.6		0.5		0.2	
NITROGEN	1.2		1.7		1.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.8		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.4		1.1	
HELIUM	0.09		0.02		0.08	
HEATING VALUE*	1149		1195		1176	
SPECIFIC GRAVITY	0.659		0.693		0.686	

	INDEX 6760 SAMPLE 16422		INDEX 6761 SAMPLE 16381		INDEX 6762 SAMPLE 15972	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ROGER MILLS		ROGER MILLS		ROGER MILLS	
FIELD	CRAWFORD NW		DEMPSEY		DEMPSEY SE	
WELL NAME	CECIL NO. 1-4		PENNINGTON THOMPSON NO. 1		BRADY-1-20	
LOCATION	SEC. 4, T16N, R26W		SEC. 1, T12N, R25W		SEC. 20, T12N, R24W	
OWNER	HOOVER & BRACKEN ENERGIES, I		AMAREX, INC.		AMAREX, INC.	
COMPLETED	01/26/82		09/17/81		01/01/80	
SAMPLED	01/26/82		11/18/81		06/04/80	
FORMATION	PENN-MORROW		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14870		14857		17280	
WELLHEAD PRESSURE,PSIG	3025		14000		11870	
OPEN FLOW, MCFD	6188		37750		12390	
COMPONENT, MOLE PCT						
METHANE	96.0		97.6		97.5	
ETHANE	0.4		0.5		0.5	
PROPANE	0.1		0.1		TRACE	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.2		0.2		0.3	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.3		1.6		1.7	
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	982		1000		997	
SPECIFIC GRAVITY	0.590		0.574		0.575	

	INDEX 6763 SAMPLE 17828		INDEX 6764 SAMPLE 15167		INDEX 6765 SAMPLE 15564	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ROGER MILLS		ROGER MILLS		ROGER MILLS	
FIELD	DEMPSEY SE		HAMBURG W		HAMBURG W	
WELL NAME	ARMSTRONG NO. 1-14		MICKEY NO. 1-32		SELBY MOOPER NO. 1	
LOCATION	SEC. 14, T12N, R24W		SEC. 32, T15N, R26W		SEC. 5, T14N, R26W	
OWNER	SOHIO PETROLEUM CO.		ARKLA EXPLORATION CO.		ARKLA EXPLORATION CO.	
COMPLETED	10/05/84		09/03/77		--/--/00	
SAMPLED	09/10/85		12/13/77		02/09/79	
FORMATION	PENN-MORROW U		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	17200		14404		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	13800		10100		NOT GIVEN	
OPEN FLOW, MCFD	11970		3897		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	97.4		97.1		96.6	
ETHANE	0.3		0.7		0.6	
PROPANE	TRACE		0.1		0.1	
N-BUTANE	0.0		0.0		TRACE	
ISOBUTANE	0.0		0.0		TRACE	
N-PENTANE	0.0		0.0		TRACE	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.1	
NITROGEN	0.3		0.2		0.5	
OXYGEN	0.1		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8		1.8		1.9	
HELIUM	0.01		0.02		0.02	
HEATING VALUE*	992		999		997	
SPECIFIC GRAVITY	0.575		0.577		0.580	

	INDEX 6766 SAMPLE 15715		INDEX 6767 SAMPLE 16509		INDEX 6768 SAMPLE 16725	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	ROGER MILLS		ROGER MILLS		ROGER MILLS	
FIELD	HAMBURG W		HAMMON NW		HAMMON NW	
WELL NAME	E. T. GAMBLE		WOODHOUSE NO. 1-34		RANCH NO. 1	
LOCATION	SEC. 33, T15N, R26W		SEC. 34, T14N, R21W		SEC. 8, T13N, R21W	
OWNER	TEXACO INC.		VIERSEN & COCHRAN		COTTON PETROLEUM CORP.	
COMPLETED	01/31/79		01/06/82		06/--/82	
SAMPLED	07/26/79		05/01/82		12/08/82	
FORMATION	PENN-MORROW		PENN-RED FORK		PENN-RED FORK	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14356		12566		13000	
WELLHEAD PRESSURE,PSIG	9400		7600		9000	
OPEN FLOW, MCFD	NOT GIVEN		3000		1200	
COMPONENT, MOLE PCT						
METHANE	96.8		86.9		90.9	
ETHANE	0.7		7.3		5.2	
PROPANE	0.1		2.4		1.9	
N-BUTANE	0.1		0.4		0.3	
ISOBUTANE	0.0		0.4		0.2	
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	TRACE		0.2		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	0.3		0.9		0.3	
OXYGEN	0.0		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8		1.0		1.3	
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1004		1123		1086	
SPECIFIC GRAVITY	0.581		0.651		0.624	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6769 SAMPLE 16127	INDEX 6770 SAMPLE 16186	INDEX 6771 SAMPLE 16187
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	LEEDEY SW	LEEDEY SW	LEEDEY SW
WELL NAME	TAYLOR FARMS NO. 2	SWITZER "C" NO. 5-1	SWITZER NO. 1-G
LOCATION	SEC. 25, T16N, R22W	SEC. 5, T15N, R21W	SEC. 32, T16N, R21W
OWNER	SUNMARK EXPLORATION	WOODS PETROLEUM CORP.	WOODS PETROLEUM CORP.
COMPLETED	04/02/80	03/31/80	02/20/79
SAMPLED	11/06/80	02/18/81	02/18/81
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11140	11450	11363
WELLHEAD PRESSURE,PSIG	4800	6784	6440
OPEN FLOW, MCFD	9825	40398	10525
COMPONENT, MOLE PCT			
METHANE	84.7	77.2	82.8
ETHANE	8.1	8.2	8.5
PROPANE	3.6	4.7	4.3
N-BUTANE	0.8	2.4	0.9
ISOBUTANE	0.6	1.5	0.8
N-PENTANE	0.2	1.6	0.3
ISOPENTANE	0.4	1.8	0.5
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.3	1.0	0.5
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1188	1386	1227
SPECIFIC GRAVITY	0.681	0.804	0.706

	INDEX 6772 SAMPLE 16356	INDEX 6773 SAMPLE 16534	INDEX 6774 SAMPLE 16853
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	LEEDEY SW	LEEDEY SW	LEEDEY SW
WELL NAME	LARRY SWITZER NO. 1	R&R, CARLTON NO. 34-2	PETERSON NO. 10-1
LOCATION	SEC. 35, T16N, R21W	SEC. 34, T16N, R21W	SEC. 10, T15N, R21W
OWNER	DIAMOND SHAMROCK CORP.	CHAMPLIN PETROLEUM CO.	WOODS PETROLEUM CORP.
COMPLETED	03/09/81	10/16/81	04/23/82
SAMPLED	10/20/81	06/01/82	04/01/83
FORMATION	PENN-RED FORK	PENN-PRUE	PENN-PRUE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11347	10320	11022
WELLHEAD PRESSURE,PSIG	6500	6300	5100
OPEN FLOW, MCFD	NOT GIVEN	2829	3000
COMPONENT, MOLE PCT			
METHANE	83.5	84.2	82.8
ETHANE	9.2	9.2	8.7
PROPANE	3.9	3.5	3.1
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.6
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.2	0.1	0.8
NITROGEN	0.6	0.4	0.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	1.1
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1191	1174	1222
SPECIFIC GRAVITY	0.686	0.674	0.708

	INDEX 6775 SAMPLE 16514	INDEX 6776 SAMPLE 16513	INDEX 6777 SAMPLE 16351
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	MOOREWOOD	MOOREWOOD W	NEW LIBERTY
WELL NAME	W.L. VAN HOOK ET AL. NO.1-34	ROY C. SMITH, ET AL. NO. 1	MCLEAN NO. 1
LOCATION	SEC. 34, T15N, R21W	SEC. 29, T15N, R21W	SEC. 5, T11N, R24W
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	EL PASO EXPLORATION CO.
COMPLETED	03/03/82	02/23/82	05/11/81
SAMPLED	05/07/82	05/07/82	10/13/81
FORMATION	PENN-CHEROKEE L	PENN-CHEROKEE L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12700	12512	18853
WELLHEAD PRESSURE,PSIG	5100	5650	13608
OPEN FLOW, MCFD	1800	5000	9314
COMPONENT, MOLE PCT			
METHANE	83.7	80.5	96.6
ETHANE	9.5	7.9	0.5
PROPANE	3.6	2.3	TRACE
N-BUTANE	0.6	0.4	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	1.0	6.1	0.2
OXYGEN	0.2	1.2	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	2.6
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1169	1072	988
SPECIFIC GRAVITY	0.671	0.681	0.582

	INDEX 6778 SAMPLE 17477	INDEX 6779 SAMPLE 15221	INDEX 6780 SAMPLE 15300
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	NOT GIVEN	PECK S	RANKIN SE
WELL NAME	PARR NO. 1-36	PENRY NO. 1	PURVIS NO. 1
LOCATION	SEC. 36, T13N, R26W	SEC. 18, T17N, R21W	SEC. 30, T13N, R25W
OWNER	PIONEER PRODUCTION CORP.	INEXCO OIL CO.	NATOMAS NORTH AMERICA, INC.
COMPLETED	--/-/82	02/03/77	01/19/77
SAMPLED	10/11/84	03/--/78	06/07/78
FORMATION	PENN-MORROW U	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16340	10256	15944
WELLHEAD PRESSURE,PSIG	13922	2015	8945
OPEN FLOW, MCFD	9000	743	2716
COMPONENT, MOLE PCT			
METHANE	96.6	80.1	97.1
ETHANE	0.5	10.3	0.5
PROPANE	0.1	5.0	TRACE
N-BUTANE	0.0	1.3	0.1
ISOBUTANE	0.0	0.7	0.0
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.0	0.5	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	1.3	0.8	0.5
OXYGEN	0.3	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.5	1.3
HELIUM	0.02	0.04	0.02
HEATING VALUE*	990	1246	1006
SPECIFIC GRAVITY	0.577	0.718	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6781 SAMPLE 17157	INDEX 6782 SAMPLE 14123	INDEX 6783 SAMPLE 13173
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	RED FORK	REYDON SE	REYDON W
WELL NAME	MARGARET DEAN ET AL NO. 1-31	PIERCE NO. 1	BETTY HOLLIS NO. 1-29
LOCATION	SEC. 31, T15N, R21W	SEC. 9, T13N, R25W	SEC. 29, T14N, R26W
OWNER	DIAMOND SHAMROCK EXPL. CO.	EL PASO NATURAL GAS CO.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	03/19/83	05/21/74	12/07/71
SAMPLED	01/24/84	08/07/74	03/31/72
FORMATION	PENN-CLEVELAND	DEVO-HUNTON	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10873	22566	15076
WELLHEAD PRESSURE,PSIG	5864	6110	9990
OPEN FLOW, MCFD	2000	12081	8781
COMPONENT, MOLE PCT			
METHANE	83.1	91.6	97.1
ETHANE	9.4	0.1	0.6
PROPANE	3.6	TRACE	0.1
N-BUTANE	0.8	0.0	TRACE
ISOBUTANE	0.6	0.0	TRACE
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.3	3.5	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	4.7	1.5
HELIUM	0.03	0.06	0.02
HEATING VALUE*	1191	930	1019
SPECIFIC GRAVITY	0.685	0.615	0.580

	INDEX 6784 SAMPLE 13784	INDEX 6785 SAMPLE 13972	INDEX 6786 SAMPLE 14309
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	REYDON W	REYDON W	REYDON W
WELL NAME	NELLIE "B" LIBBY NO. 1-33	SCRIVNER NO. 1	ROBERTSON NO. 1-4
LOCATION	SEC. 33, T14N, R26W	SEC. 35, T14N, R26W	SEC. 1, T13N, R26W
OWNER	TEXAS PACIFIC OIL CO., INC.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	--/--/00	11/25/73	01/25/75
SAMPLED	10/25/73	04/03/74	03/31/75
FORMATION	PENN-MORROW U	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14884	14986	15136
WELLHEAD PRESSURE,PSIG	NOT GIVEN	10467	9413
OPEN FLOW, MCFD	174446	4846	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.6	97.1	96.6
ETHANE	0.7	0.6	0.6
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	0.5	0.3	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.9	1.8
HELIUM	0.02	0.02	0.02
HEATING VALUE*	999	997	995
SPECIFIC GRAVITY	0.578	0.578	0.580

	INDEX 6787 SAMPLE 15229	INDEX 6788 SAMPLE 13513	INDEX 6789 SAMPLE 17472
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	REYDON W	ROLL SW	ROLL NE
WELL NAME	KING NO. 1	VIERSEN UNIT NO. 1	MARTIN NO. 1
LOCATION	SEC. 9, T13N, R26W	SEC. 8, T15N, R22W	SEC. 1, T15N, R24W
OWNER	DYCO PETROLEUM CORP.	GENERAL AMERICAN OIL CO.	ANDERMAN SMITH OPERATING CO.
COMPLETED	01/06/78	12/20/72	05/03/84
SAMPLED	03/13/78	01/19/73	10/09/84
FORMATION	PENN-MORROW	PENN-MORROW	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15330	14576	12071
WELLHEAD PRESSURE,PSIG	9260	6935	3400
OPEN FLOW, MCFD	7053	5844	175
COMPONENT, MOLE PCT			
METHANE	95.4	96.6	82.1
ETHANE	0.6	0.8	7.6
PROPANE	0.1	0.1	2.4
N-BUTANE	0.0	0.0	0.4
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.6	0.4	TRACE
OXYGEN	0.4	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	2.1	6.5
HELIUM	0.02	0.03	0.02
HEATING VALUE*	980	995	1082
SPECIFIC GRAVITY	0.584	0.581	0.703

	INDEX 6790 SAMPLE 17261	INDEX 6791 SAMPLE 16240	INDEX 6792 SAMPLE 16751
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	ROLL SE	STRONG CITY	STRONG CITY
WELL NAME	LOVETT "A" NO. 1	SUMNERS NO. 1	K. H. GWARTNEY NO. 1-30
LOCATION	SEC. 12, T15N, R23W	SEC. 13, T14N, R23W	SEC. 30, T14N, R22W
OWNER	TEXAS OIL & GAS CORP.	WOODS PETROLEUM CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	06/18/82	01/23/80	07/20/82
SAMPLED	04/18/84	04/21/81	01/14/83
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11982	12587	12554
WELLHEAD PRESSURE,PSIG	3264	4222	6210
OPEN FLOW, MCFD	1375	2020	10567
COMPONENT, MOLE PCT			
METHANE	87.7	91.0	89.8
ETHANE	7.4	4.9	6.0
PROPANE	2.3	0.9	1.2
N-BUTANE	0.4	0.1	0.2
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.2	0.9	0.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.5	1.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1134	1056	1076
SPECIFIC GRAVITY	0.649	0.617	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6793 SAMPLE 15811	INDEX 6794 SAMPLE 16322	INDEX 6795 SAMPLE 16459
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD	STRONG CITY N	STRONG CITY NE	STRONG CITY NE
WELL NAME	WICKHAM NO. 1	THOMAS NO. 1	STRANAHAN NO. 1-29
LOCATION	SEC. 26, T15N, R23W	SEC. 28, T15N, R22W	SEC. 29, T15N, R22W
OWNER	HARPER OIL CO.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	04/10/79	--/--/00	12/16/81
SAMPLED	10/18/79	08/28/81	03/22/82
FORMATION	PENN-CHEROKEE	PENN-RED FORK	PENN-CHEROKEE L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11205	12044	12600
WELLHEAD PRESSURE,PSIG	6900	7700	6820
OPEN FLOW, MCFD	NOT GIVEN	9600	6600
COMPONENT, MOLE PCT			
METHANE	86.5	87.6	88.8
ETHANE	7.9	7.3	6.6
PROPANE	2.7	2.2	2.0
N-BUTANE	0.6	0.4	0.4
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.4	0.45	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.2	0.9
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1144	1129	1114
SPECIFIC GRAVITY	0.656	0.652	0.638

	INDEX 6796 SAMPLE 16526	INDEX 6797 SAMPLE 16601	INDEX 6798 SAMPLE 245
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGER MILLS	ROGER MILLS	ROGERS
FIELD	STRONG CITY SE	STRONG CITY W	CLAREMORE
WELL NAME	BLAIR PAIN NO. 1-8	BAILEY NO. 1	RITCHSON NO. 1
LOCATION	SEC. 8, T13N, R22W	SEC. 17, T14N, R23W	SEC. 21, T21N, R16E
OWNER	TENNECO OIL EXPL. & PROD. CO	EL PASO EXPLORATION CO.	OKLAHOMA NATURAL GAS CO.
COMPLETED	11/01/81	05/04/82	--/--/19
SAMPLED	05/26/82	08/04/82	05/06/20
FORMATION	PENN-RED FORK	PENN-CHEROKEE U	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	360	360	355
DEPTH, FEET	12738	11590	700
WELLHEAD PRESSURE,PSIG	8700	4460	130
OPEN FLOW, MCFD	3290	2559	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.5	85.0	96.8
ETHANE	5.6	9.6	2.2
PROPANE	1.3	3.0	---
N-BUTANE	0.3	0.6	---
ISOBUTANE	0.3	0.5	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.5	0.5	0.4
OXYGEN	0.0	0.1	0.5
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.2	1.0	0.0
HELIUM	0.02	0.03	TRACE
HEATING VALUE*	1094	1157	1020
SPECIFIC GRAVITY	0.628	0.668	0.569

	INDEX 6799 SAMPLE 3332	INDEX 6800 SAMPLE 1952	INDEX 6801 SAMPLE 3448
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	ROGERS	SEMINOLE	SEMINOLE
FIELD	COLLINSVILLE	ALLEN DISTRICT	BETHEL
WELL NAME	T. C. WALLACE NO. 1	LUCY NO. 1	MELLER NO. 1
LOCATION	SEC. 10, T21N, R14E	SEC. 12, T5N, R7E	SEC. 14, T9N, R7E
OWNER	T. C. COLPITT, ET AL.	PRODUCERS & REFINERS CORP.	MCINTYRE, SHERMAN & CUMMINGS
COMPLETED	--/--/13	01/15/30	08/29/41
SAMPLED	04/23/42	03/10/30	05/26/42
FORMATION	PENN-BURGESS	PENN-	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1150	2877	3403
WELLHEAD PRESSURE,PSIG	16	1050	940
OPEN FLOW, MCFD	10	39000	23400
COMPONENT, MOLE PCT			
METHANE	95.4	94.9	66.8
ETHANE	0.3	1.7	25.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.1	2.3	7.5
OXYGEN	0.4	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.7	1.1	0.2
HELIUM	0.07	0.05	0.10
HEATING VALUE*	972	992	1125
SPECIFIC GRAVITY	0.583	0.584	0.713

	INDEX 6802 SAMPLE 3456	INDEX 6803 SAMPLE 16951	INDEX 6804 SAMPLE 4556
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	BETHEL	BETHEL	BOWLEGS
WELL NAME	HADKINS NO. 1	GARDNER NO. 1	LIVINGSTON NO. 2
LOCATION	SEC. 13, T9N, R7E	SEC. 1, T9N, R7E	SEC. 15, T8N, R6E
OWNER	MCINTYRE, SHERMAN & CUMMINGS	PAWNEE PETROLEUM CO.	CITIES SERVICE OIL CO.
COMPLETED	09/15/41	03/07/83	02/25/47
SAMPLED	05/26/42	05/23/83	09/13/48
FORMATION	PENN-CROMWELL	PENN-GILCREASE	PENN-CALVIN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3355	3602	2200
WELLHEAD PRESSURE,PSIG	940	1240	NOT GIVEN
OPEN FLOW, MCFD	24300	1676	1000
COMPONENT, MOLE PCT			
METHANE	50.6	73.0	38.8
ETHANE	41.1	9.0	43.1
PROPANE	---	4.9	---
N-BUTANE	---	1.4	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.6	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	7.8	9.6	17.3
OXYGEN	0.2	0.0	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.12	0.15	0.11
HEATING VALUE*	1249	1137	1165
SPECIFIC GRAVITY	0.793	0.736	0.844

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6805 SAMPLE 926	INDEX 6806 SAMPLE 7419	INDEX 6807 SAMPLE 3452
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	CROMWELL	CROMWELL S	HOLDENVILLE
WELL NAME	BRUNER NO. 1	R. ARHALOKOCHE NO. 1-A	FISH NO. 2
LOCATION	SEC. 9, T10N, R8E	SEC. 28, T10N, R8E	SEC. 19, T7N, R8E
OWNER	PURE OIL CO.	EXXON CO., U.S.A.	CITIES SERVICE OIL CO.
COMPLETED	--/--/30	10/28/59	08/13/39
SAMPLED	09/15/30	02/26/60	05/25/42
FORMATION	NOT GIVEN	PENN-WEWOKA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3452	1093	4095
WELLHEAD PRESSURE,PSIG	20	414	650
OPEN FLOW, MCFD	NOT GIVEN	13	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.1	93.5	63.6
ETHANE	35.2	0.4	9.4
PROPANE	---	0.5	---
N-BUTANE	---	0.2	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	TRACE	---
NITROGEN	7.8	5.0	26.0
OXYGEN	0.3	0.2	0.2
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.2	0.7
HELIUM	0.09	0.10	0.09
HEATING VALUE*	1199	977	813
SPECIFIC GRAVITY	0.765	0.590	0.716

	INDEX 6808 SAMPLE 3453	INDEX 6809 SAMPLE 4012	INDEX 6810 SAMPLE 14702
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	HOLDENVILLE	HOLDENVILLE	HOLDENVILLE
WELL NAME	MEYERS NO. 1	A. M. PALMER NO. 2	WALLACE NO. 1
LOCATION	SEC. 31, T7N, R8E	SEC. 36, T6N, R7E	SEC. 30, T6N, R8E
OWNER	CITIES SERVICE OIL CO.	STANOLIND OIL & GAS CO.	FRANK W. COLE
COMPLETED	08/26/39	04/25/45	12/02/75
SAMPLED	05/25/42	05/02/45	06/10/76
FORMATION	ORDO-WILCOX	PENN-WAPANUCKA	MISS-JEFFERSON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	4105	1751	3171
WELLHEAD PRESSURE,PSIG	NOT GIVEN	934	100
OPEN FLOW, MCFD	NOT GIVEN	50000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.6	86.5	89.2
ETHANE	14.8	10.8	3.5
PROPANE	---	---	1.4
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	11.0	2.5	4.6
OXYGEN	0.5	0.8	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	1.3	0.2
HELIUM	0.08	0.11	0.12
HEATING VALUE*	1004	1050	1045
SPECIFIC GRAVITY	0.677	0.635	0.626

	INDEX 6811 SAMPLE 17675	INDEX 6812 SAMPLE 1954	INDEX 6813 SAMPLE 1996
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	KONAWA-DORA	LITTLE RIVER E	LITTLE RIVER E
WELL NAME	DOSAR NO. 1	YAHOLA NO. 3	A. C. WALKER NO. 4
LOCATION	SEC. 19, T6N, R5E	SEC. 8, T7N, R7E	SEC. 5, T7N, R7E
OWNER	JAY PETROLEUM, INC.	MID-CONTINENT PETROLEUM CORP	GYPSY OIL CO.
COMPLETED	12/04/84	02/28/30	04/01/30
SAMPLED	05/14/85	03/11/30	04/18/30
FORMATION	PENN-EARLSBORO	PENN-CROMWELL	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	2780	NOT GIVEN	3218
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	1200
OPEN FLOW, MCFD	2100	3000	100000
COMPONENT, MOLE PCT			
METHANE	66.5	74.1	81.9
ETHANE	4.6	16.6	12.6
PROPANE	3.4	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	23.0	8.0	4.8
OXYGEN	0.1	0.6	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.8	0.5
HELIUM	0.19	0.07	0.07
HEATING VALUE*	927	1049	1055
SPECIFIC GRAVITY	0.745	0.681	0.644

	INDEX 6814 SAMPLE 14547	INDEX 6815 SAMPLE 1932	INDEX 6816 SAMPLE 3681
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	LITTLE RIVER E	MISSION	SEMINOLE
WELL NAME	JOHNNY WOLF NO. 3	DAVIS NO. 6	N. BUCK NO. 1
LOCATION	SEC. 30, T8N, R6E	SEC. 7, T8N, R6E	SEC. 24, T10N, R7E
OWNER	WILKINS PETROLEUM CO.	ATLANTIC RICHFIELD CO.	SHELL OIL CO.
COMPLETED	05/05/75	12/12/29	08/--/43
SAMPLED	12/10/75	02/03/30	10/13/43
FORMATION	PENN-CROMWELL	PENN-GILCREASE	PENN-CROMWELL
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	3312	2886	3710
WELLHEAD PRESSURE,PSIG	470	755	1100
OPEN FLOW, MCFD	6903	3000	2000
COMPONENT, MOLE PCT			
METHANE	83.9	75.1	51.5
ETHANE	9.4	22.2	39.0
PROPANE	2.9	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.3	2.4	8.8
OXYGEN	0.0	0.2	0.3
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	0.4
HELIUM	0.08	0.07	0.20
HEATING VALUE*	1064	1159	1221
SPECIFIC GRAVITY	0.658	0.678	0.790

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6817 SAMPLE 4126		INDEX 6818 SAMPLE 13447		INDEX 6819 SAMPLE 17890	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	SEMINOLE		SEMINOLE		SEMINOLE	
FIELD	SEMINOLE		WEWOKA NE		WOFFORD S	
WELL NAME	J. D. CAMBELL NO. 1		WORK B NO. 1		GAINES NO. 2	
LOCATION	SEC. 21, T9N, R7E		SEC. 20, T8N, R8E		SEC. 20, T6N, R7E	
OWNER	PORTABLE DRILLING CORP.		GENERAL AMERICAN OIL CO.		TNT ROYALTY CO.	
COMPLETED	04/02/46		11/19/71		03/15/85	
SAMPLED	10/25/46		10/13/72		11/02/85	
FORMATION	PENN-		PENN-CROMWELL		PENN-SEMORA U	
GEOLOGIC PROVINCE CODE	355		355		355	
DEPTH, FEET	1932		3266		1850	
WELLHEAD PRESSURE,PSIG	740		500		100	
OPEN FLOW, MCFD	6000		5286		150	
COMPONENT, MOLE PCT						
METHANE	79.5		77.2		62.8	
ETHANE	2.5		9.7		7.6	
PROPANE	---		5.2		7.4	
N-BUTANE	---		1.1		4.3	
ISOBUTANE	---		0.6		1.0	
N-PENTANE	---		0.3		2.0	
ISOPENTANE	---		0.2		0.9	
CYCLOPENTANE	---		0.1		0.4	
HEXANES PLUS	---		0.1		1.2	
NITROGEN	17.6		4.7		12.0	
OXYGEN	0.0		0.2		TRACE	
ARGON	---		TRACE		0.0	
HYDROGEN	---		0.0		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.3		0.5		0.3	
HELIUM	0.14		0.07		0.08	
HEATING VALUE*	850		1178		1344	
SPECIFIC GRAVITY	0.642		0.719		0.892	

	INDEX 6820 SAMPLE 7727		INDEX 6821 SAMPLE 7729		INDEX 6822 SAMPLE 10634	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	SEQUOYAH		SEQUOYAH		SEQUOYAH	
FIELD	KINTA		KINTA		KINTA	
WELL NAME	REDLAND RANCH NO. 2		REDLAND RANCH NO. 3		M. J. RINEHART NO. 1	
LOCATION	SEC. 23, T10N, R25E		SEC. 34, T10N, R25E		SEC. 10, T10N, R26E	
OWNER	STEPHENS PRODUCTION CO.		STEPHENS PRODUCTION CO.		CONTINENTAL OIL CO.	
COMPLETED	01/06/60		08/05/60		03/16/66	
SAMPLED	10/11/60		10/11/60		06/29/66	
FORMATION	PENN-ATOKA		PENN-SPIRO		PENN-SPIRO	
GEOLOGIC PROVINCE CODE	345		345		345	
DEPTH, FEET	1645		5966		5626	
WELLHEAD PRESSURE,PSIG	405		1091		1200	
OPEN FLOW, MCFD	350		7500		5397	
COMPONENT, MOLE PCT						
METHANE	97.8		94.1		95.6	
ETHANE	1.1		2.1		1.6	
PROPANE	0.1		0.2		0.2	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	TRACE		TRACE		0.0	
N-PENTANE	0.0		0.0		0.0	
ISOPENTANE	TRACE		TRACE		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.5		1.1		1.2	
OXYGEN	0.0		TRACE		0.2	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.2		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		2.1		1.2	
HELIUM	0.10		0.10		0.09	
HEATING VALUE*	1014		996		1002	
SPECIFIC GRAVITY	0.560		0.590		0.580	

	INDEX 6823 SAMPLE 10897		INDEX 6824 SAMPLE 10919		INDEX 6825 SAMPLE 4674	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	SEQUOYAH		SEQUOYAH		STEPHENS	
FIELD	PAW PAW NE		PAW PAW NE		COMANCHE LAKE	
WELL NAME	IRENE DICKENS NO. 1		IRENE DICKENS NO. 1		PHILLIPS JENNETT NO. 1	
LOCATION	SEC. 25, T11N, R27E		SEC. 29, T11N, R27E		SEC. 25, T2S, R7W	
OWNER	SUN OIL CO.		SUN OIL CO.		PHILLIPS PET. CO. & KERR-MCG	
COMPLETED	--/--/00		11/15/66		11/18/48	
SAMPLED	03/02/67		04/05/67		03/25/49	
FORMATION	PENN-CROMWELL		PENN-CROMWELL		PENN-NOT GIVEN	
GEOLOGIC PROVINCE CODE	345		345		350	
DEPTH, FEET	5325		5325		2643	
WELLHEAD PRESSURE,PSIG	940		940		1104	
OPEN FLOW, MCFD	11300		11300		71185	
COMPONENT, MOLE PCT						
METHANE	96.6		96.8		69.4	
ETHANE	1.2		1.1		5.3	
PROPANE	0.1		0.1		3.2	
N-BUTANE	0.0		0.0		1.0	
ISOBUTANE	0.0		0.0		0.7	
N-PENTANE	0.0		0.0		0.2	
ISOPENTANE	0.0		0.0		0.6	
CYCLOPENTANE	0.0		0.0		0.1	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	0.7		0.6		19.2	
OXYGEN	TRACE		0.0		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	1.3		1.3		0.2	
HELIUM	0.05		0.05		0.18	
HEATING VALUE*	1003		1003		973	
SPECIFIC GRAVITY	0.576		0.575		0.738	

	INDEX 6826 SAMPLE 10322		INDEX 6827 SAMPLE 13171		INDEX 6828 SAMPLE 635	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	STEPHENS		STEPHENS		STEPHENS	
FIELD	CRUCE N		DUNCAN NE		DUNCAN W	
WELL NAME	RUTH FUGUA NO. 1		JACKSON NO. 1		CLARKSTON NO. 1	
LOCATION	SEC. 1, T1N, R6W		SEC. 19, T1N, R7W		SEC. 30, T1N, R8W	
OWNER	ATLANTIC RICHFIELD CO.		MCCULLOCH OIL CORP.		LONE STAR GAS CO.	
COMPLETED	11/03/65		03/10/72		09/--/20	
SAMPLED	12/10/65		03/26/72		08/07/21	
FORMATION	PENN-SPRINGER		PENN-DEESE		-SAND	
GEOLOGIC PROVINCE CODE	350		350		350	
DEPTH, FEET	2846		9138		2117	
WELLHEAD PRESSURE,PSIG	588		2603		260	
OPEN FLOW, MCFD	6400		4774		2170	
COMPONENT, MOLE PCT						
METHANE	95.4		72.0		78.5	
ETHANE	1.7		5.9		16.9	
PROPANE	0.3		3.6		---	
N-BUTANE	0.0		1.2		---	
ISOBUTANE	0.0		0.7		---	
N-PENTANE	0.0		0.3		---	
ISOPENTANE	0.0		0.4		---	
CYCLOPENTANE	0.0		0.3		---	
HEXANES PLUS	0.0		0.6		---	
NITROGEN	2.5		12.1		3.9	
OXYGEN	0.0		2.4		0.5	
ARGON	TRACE		0.1		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	TRACE		0.4		0.2	
HELIUM	0.09		0.04		0.01	
HEATING VALUE*	1005		1064		1098	
SPECIFIC GRAVITY	0.576		0.750		0.659	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6829 SAMPLE 636	INDEX 6830 SAMPLE 638	INDEX 6831 SAMPLE 1285
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	DUNCAN W	DUNCAN W	DUNCAN W
WELL NAME	CARTER-HARDING NO. 2	CLARKSTON NO. 2	CLARK NO. 1
LOCATION	SEC. 30, T1N, R8W	SEC. 30, T1N, R8W	SEC. 25, T1S, R9W
OWNER	CARTER OIL CO.	LONE STAR GAS CO.	CARTER OIL CO.
COMPLETED	07/--/21	07/--/20	04/03/26
SAMPLED	08/01/21	08/07/21	07/19/26
FORMATION	-SAND	-SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1822	1740	2022
WELLHEAD PRESSURE,PSIG	700	250	600
OPEN FLOW, MCFD	27240	15375	36000
COMPONENT, MOLE PCT			
METHANE	89.8	86.8	38.1
ETHANE	10.0	10.1	13.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	2.9	47.2
OXYGEN	0.0	0.4	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.5
HELIUM	0.04	0.03	0.20
HEATING VALUE*	1089	1060	633
SPECIFIC GRAVITY	0.604	0.618	0.826

	INDEX 6832 SAMPLE 1744	INDEX 6833 SAMPLE 3787	INDEX 6834 SAMPLE 5631
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	DUNCAN W	DUNCAN W	DUNCAN W
WELL NAME	C. C. MORRELL NO. 5	HARRY BAKER NO. 1	JOHNSON E NO. 2
LOCATION	SEC. 19, T1S, R8W	SEC. 25, T1S, R9W	SEC. 7, T1S, R8W
OWNER	MOBIL OIL CORP.	T. H. MCCASLAND	WM. H. ATKINSON
COMPLETED	01/06/29	03/03/44	05/19/54
SAMPLED	04/13/29	04/15/44	05/29/54
FORMATION	NOT GIVEN	PENN-	PENN-HOXBAR
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1490	2461	3028
WELLHEAD PRESSURE,PSIG	325	984	1250
OPEN FLOW, MCFD	12839	22340	2000
COMPONENT, MOLE PCT			
METHANE	70.1	81.2	89.2
ETHANE	18.9	6.5	3.7
PROPANE	---	---	0.3
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	TRACE
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	10.7	11.5	6.2
OXYGEN	0.2	0.4	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.12	0.15	0.14
HEATING VALUE*	1049	939	987
SPECIFIC GRAVITY	0.696	0.637	0.604

	INDEX 6835 SAMPLE 12245	INDEX 6836 SAMPLE 12246	INDEX 6837 SAMPLE 2474
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	DUNCAN W	DUNCAN W	EMPIRE-COMANCHE
WELL NAME	HARMAN NO. 1	HARMAN NO. 1	MATTIE DARE NO. 1
LOCATION	SEC. 25, T1N, R8W	SEC. 25, T1N, R8W	SEC. 2, T2S, R8W
OWNER	L. E. JONES PRODUCTION CO.	L. E. JONES PRODUCTION CO.	CONTINENTAL OIL CO.
COMPLETED	02/04/70	02/04/70	01/29/32
SAMPLED	04/27/70	04/27/70	--/--/00
FORMATION	PENN-NICHOLAS U	PENN-NICHOLAS L	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	NOT GIVEN	NOT GIVEN	1433
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	495
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6282
COMPONENT, MOLE PCT			
METHANE	87.1	86.8	89.5
ETHANE	5.6	5.2	7.2
PROPANE	3.0	3.2	---
N-BUTANE	0.8	0.7	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.4	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	2.3	2.8	2.8
OXYGEN	TRACE	0.1	0.4
ARGON	0.0	0.0	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.04	0.04	0.09
HEATING VALUE*	1124	1123	1036
SPECIFIC GRAVITY	0.650	0.654	0.605

	INDEX 6838 SAMPLE 12331	INDEX 6839 SAMPLE 13178	INDEX 6840 SAMPLE 13797
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	HOPE SW	HOPE SW	HOPE SW
WELL NAME	WATTS NO. 1	MAYBERRY NO. 1	JACKSON NO. 1-26
LOCATION	SEC. 23, T1N, R7W	SEC. 23, T1N, R7W	SEC. 26, T1N, R7W
OWNER	PETROLEUM, INC.	MCCULLOCH OIL CORP.	MCCULLOCH OIL CORP.
COMPLETED	02/21/70	01/02/72	12/26/72
SAMPLED	07/22/70	03/26/72	10/31/73
FORMATION	PENN-WADE U & L	PENN-SPRINGER	PENN-DORNICK HILLS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	7300	12137	12844
WELLHEAD PRESSURE,PSIG	1175	5953	900
OPEN FLOW, MCFD	4000	50302	100
COMPONENT, MOLE PCT			
METHANE	89.5	82.9	84.9
ETHANE	4.6	7.0	8.1
PROPANE	2.5	4.1	3.5
N-BUTANE	0.7	1.4	1.1
ISOBUTANE	0.4	0.9	0.5
N-PENTANE	0.2	0.5	0.3
ISOPENTANE	TRACE	0.8	0.3
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.2	1.0	0.2
NITROGEN	1.5	0.8	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.06	0.03	0.05
HEATING VALUE*	1114	1271	1186
SPECIFIC GRAVITY	0.634	0.727	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6841 SAMPLE 14888	INDEX 6842 SAMPLE 14987	INDEX 6843 SAMPLE 648
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	HOPE SW	HOPE SW	LOCO DISTRICT
WELL NAME	HINES NO. 1	CLARK NO. 1-15	CULVER NO. 1
LOCATION	SEC. 16, T1N, R7W	SEC. 15, T1N, R7W	NOT GIVEN
OWNER	MACK OIL CO.	TESORO PETROLEUM CORP.	LONE STAR GAS CO.
COMPLETED	08/07/76	03/04/77	07/--/20
SAMPLED	01/21/77	04/05/77	08/12/21
FORMATION	PENN-BEGGS	PENN-HOXBAR	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	9442	9062	1680
WELLHEAD PRESSURE,PSIG	3225	2762	190
OPEN FLOW, MCFD	3292	14347	7400
COMPONENT, MOLE PCT			
METHANE	87.9	90.4	88.1
ETHANE	5.3	4.4	8.7
PROPANE	3.8	2.2	---
N-BUTANE	0.9	0.7	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	1.6	1.1	3.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.06	0.07	0.03
HEATING VALUE*	1139	1113	1048
SPECIFIC GRAVITY	0.654	0.632	0.612

	INDEX 6844 SAMPLE 649	INDEX 6845 SAMPLE 650	INDEX 6846 SAMPLE 1981
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	LOCO DISTRICT	LOCO DISTRICT	LOCO DISTRICT
WELL NAME	MULLEN & ROBBISON	ALLEN & GILBERT NO. 3	PAUL ANDREA NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 8, T2S, R6W
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	MOBIL OIL CORP.
COMPLETED	--/--/15	--/--/14	11/15/29
SAMPLED	08/12/21	08/12/21	04/03/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	800	745	3008
WELLHEAD PRESSURE,PSIG	210	170	1080
OPEN FLOW, MCFD	11272	9527	40000
COMPONENT, MOLE PCT			
METHANE	90.3	80.6	77.9
ETHANE	2.5	13.0	16.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.9	6.0	4.9
OXYGEN	0.0	0.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.21	0.17	0.13
HEATING VALUE*	960	1049	1088
SPECIFIC GRAVITY	0.594	0.645	0.661

	INDEX 6847 SAMPLE 3898	INDEX 6848 SAMPLE 12125	INDEX 6849 SAMPLE 14612
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	LOCO DISTRICT	LOCO DISTRICT	LOCO DISTRICT
WELL NAME	P. H. PECK NO. 1-8	VIRGIL MCPHAIL NO. 1	HARLEY NO. 1
LOCATION	SEC. 1, T3S, R6W	SEC. 7, T2S, R6W	SEC. 9, T2S, R6W
OWNER	FAIR & BRIGHT	ANADARKO PRODUCTION CO.	WOODS PETROLEUM CORP.
COMPLETED	07/30/44	10/11/68	10/21/75
SAMPLED	08/17/44	11/--/69	03/10/76
FORMATION	PENN-	PERM-NICHOLAS	PENN-HOXBAR
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1164	3565	2745
WELLHEAD PRESSURE,PSIG	370	1185	936
OPEN FLOW, MCFD	8000	3671	8156
COMPONENT, MOLE PCT			
METHANE	78.0	80.8	83.4
ETHANE	15.0	5.1	6.3
PROPANE	---	2.7	3.0
N-BUTANE	---	0.7	0.9
ISOBUTANE	---	0.4	0.7
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	TRACE	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	6.4	9.4	5.8
OXYGEN	0.4	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.07	0.16	0.07
HEATING VALUE*	1059	1049	1112
SPECIFIC GRAVITY	0.658	0.613	0.671

	INDEX 6850 SAMPLE 11285	INDEX 6851 SAMPLE 12114	INDEX 6852 SAMPLE 11145
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	MARLOW	MARLOW SE	MARLOW W
WELL NAME	MARLOW DISTRICT	EDWARDS NO. 1	MESSALL NO. 2
LOCATION	SEC. 16, T2N, R7W	SEC. 34, T2N, R7W	SEC. 2, T2N, R8W
OWNER	GETTY OIL CO.	MACDONALD OIL CORP.	BLACKWOOD & NICHOLS CO.
COMPLETED	03/27/58	05/--/69	--/--/00
SAMPLED	02/13/68	11/13/69	10/03/67
FORMATION	PENN-WADE	PENN-BRISCOE	PENN-HOXBAR
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	8676	9300	8582
WELLHEAD PRESSURE,PSIG	800	3000	NOT GIVEN
OPEN FLOW, MCFD	1500	NOT GIVEN	12500
COMPONENT, MOLE PCT			
METHANE	83.1	92.4	86.8
ETHANE	6.6	3.6	6.3
PROPANE	3.1	1.7	2.9
N-BUTANE	1.1	0.5	1.0
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	4.1	0.8	1.5
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	0.05	0.03	0.04
HEATING VALUE*	1123	1088	1147
SPECIFIC GRAVITY	0.678	0.612	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6853 SAMPLE 11439	INDEX 6854 SAMPLE 11440	INDEX 6855 SAMPLE 11441
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	MARLOW W	MARLOW W	MARLOW W
WELL NAME	BRISCOE ESTATE NO. 1	SADLER NO. 2	BRISCOE WILDER NO. 2
LOCATION	SEC. 36, T2N, R8W	SEC. 36, T2N, R8W	SEC. 25, T2N, R8W
OWNER	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.
COMPLETED	--/--/00	11/29/66	12/09/60
SAMPLED	03/27/68	03/26/68	03/27/68
FORMATION	PENN-BRISCOE	PENN-CISCO U	PENN-CISCO M
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	7732	5116	6310
WELLHEAD PRESSURE,PSIG	367	1367	1674
OPEN FLOW, MCFD	3888	10000	3430
COMPONENT, MOLE PCT			
METHANE	90.1	89.7	88.4
ETHANE	4.8	4.8	4.2
PROPANE	2.2	1.9	2.2
N-BUTANE	0.5	0.6	0.8
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.8	2.7	3.0
OXYGEN	0.0	0.1	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.05	0.05
HEATING VALUE*	1128	1091	1096
SPECIFIC GRAVITY	0.636	0.635	0.642

	INDEX 6856 SAMPLE 11442	INDEX 6857 SAMPLE 16766	INDEX 6858 SAMPLE 16767
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	MARLOW W	MARLOW W	MARLOW W
WELL NAME	SADLER NO. 1	MAMIE NO. 1-36	M. W. PAYNE NO. 1
LOCATION	SEC. 36, T2N, R8W	SEC. 36, T2N, R8W	SEC. 35, T2N, R8W
OWNER	GULF OIL CO.- U.S.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	12/01/59	10/12/82	12/28/81
SAMPLED	03/27/68	02/08/83	02/08/83
FORMATION	PENN-CISCO L	PENN-HOXBAR L	PENN-BLAKE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	7128	9542	4440
WELLHEAD PRESSURE,PSIG	1329	1435	1435
OPEN FLOW, MCFD	5700	15000	6000
COMPONENT, MOLE PCT			
METHANE	82.7	86.7	76.1
ETHANE	4.0	6.0	4.1
PROPANE	2.3	2.8	2.4
N-BUTANE	0.9	0.7	0.8
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.6	0.4
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.3	0.7	0.2
NITROGEN	7.1	1.3	13.4
OXYGEN	1.4	0.2	1.5
ARGON	0.1	0.0	0.1
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.01	0.01	0.04
HEATING VALUE*	1056	1174	984
SPECIFIC GRAVITY	0.674	0.674	0.698

	INDEX 6859 SAMPLE 3547	INDEX 6860 SAMPLE 3548	INDEX 6861 SAMPLE 9911
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	NELLIE DISTRICT N	NELLIE DISTRICT N	NELLIE DISTRICT N
WELL NAME	BALL NO. 1	RICHARDS NO. 1	J. T. NUNLEY NO. 1
LOCATION	SEC. 1, T1N, R9W	SEC. 26, T2N, R9W	SEC. 27, T2N, R9W
OWNER	CONTINENTAL OIL CO.	LONE STAR GAS CO.	SUN OIL CO.
COMPLETED	03/11/27	11/28/25	03/31/65
SAMPLED	05/20/42	05/20/42	06/02/65
FORMATION	-GAS SAND	PENN-CISCO	PENN-NELLIE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1863	1843	1840
WELLHEAD PRESSURE,PSIG	525	428	650
OPEN FLOW, MCFD	8309	1700	600
COMPONENT, MOLE PCT			
METHANE	79.8	81.3	88.3
ETHANE	15.1	14.8	4.0
PROPANE	---	---	1.8
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	4.2	3.1	4.5
OXYGEN	0.4	0.5	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	0.07	0.09	0.10
HEATING VALUE*	1079	1089	1058
SPECIFIC GRAVITY	0.652	0.645	0.632

	INDEX 6862 SAMPLE 10531	INDEX 6863 SAMPLE 1743	INDEX 6864 SAMPLE 3428
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	NELLIE DISTRICT N	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	ELIZIA NUNLEY UNIT NO. 1	M. GREEN NO. 1	T. PARKER NO. 1
LOCATION	SEC. 25, T2N, R9W	SEC. 13, T1S, R4W	SEC. 16, T1S, R5W
OWNER	ATLANTIC RICHFIELD CO.	MOBIL OIL CORP.	SKELLY OIL CO.
COMPLETED	06/07/65	02/19/29	12/10/41
SAMPLED	04/22/66	04/13/29	05/21/42
FORMATION	PENN-BRISCOE	PENN-DEESE	-700 FT. SAND
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	6211	2515	736
WELLHEAD PRESSURE,PSIG	2220	600	100
OPEN FLOW, MCFD	6050	7381	3000
COMPONENT, MOLE PCT			
METHANE	87.3	72.2	93.8
ETHANE	6.3	16.6	4.3
PROPANE	2.6	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	1.5	10.8	1.0
OXYGEN	0.1	0.2	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.04	0.12	0.07
HEATING VALUE*	1138	1029	1027
SPECIFIC GRAVITY	0.655	0.686	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6865 SAMPLE 3549	INDEX 6866 SAMPLE 3550	INDEX 6867 SAMPLE 3551
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	SIMPSON NO. 10	WADE NO. 1A	HEFNER NO. 18
LOCATION	SEC. 11, T1N, R5W	SEC. 12, T1N, R5W	SEC. 12, T1N, R5W
OWNER	CLARK AND CORADEN DRILLING C	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.
COMPLETED	01/18/38	10/21/37	05/07/42
SAMPLED	05/20/42	05/20/42	05/20/42
FORMATION	PENN-DEESE	PENN-DEESE	PENN-DEESE L
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3678	3600	5356
WELLHEAD PRESSURE,PSIG	750	600	1860
OPEN FLOW, MCFD	12500	7200	13120
COMPONENT, MOLE PCT			
METHANE	72.5	68.4	68.8
ETHANE	20.0	25.3	28.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.9	5.6	2.5
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.11	0.09	0.10
HEATING VALUE*	1093	1146	1200
SPECIFIC GRAVITY	0.685	0.706	0.707

	INDEX 6868 SAMPLE 3552	INDEX 6869 SAMPLE 3553	INDEX 6870 SAMPLE 3556
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	HEFNER NO. 2	ROBBERSON NO. 4	FRENSLEY NO. 3
LOCATION	SEC. 12, T1N, R5W	SEC. 35, T1S, R5W	SEC. 36, T1S, R5W
OWNER	HELMERICH & PAYNE, INC.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	12/21/40	06/08/42	01/18/42
SAMPLED	05/20/42	05/21/42	05/21/42
FORMATION	PENN-DEESE	ORDO-ARBUCKLE	~1200 FT. SAND
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	5506	7060	1268
WELLHEAD PRESSURE,PSIG	1250	920	345
OPEN FLOW, MCFD	4507	1597	2500
COMPONENT, MOLE PCT			
METHANE	72.8	76.1	95.2
ETHANE	24.1	19.9	1.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.5	3.8	2.1
OXYGEN	0.4	0.5	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.08	0.09	0.11
HEATING VALUE*	1169	1119	998
SPECIFIC GRAVITY	0.687	0.669	0.578

	INDEX 6871 SAMPLE 3774	INDEX 6872 SAMPLE 4417	INDEX 6873 SAMPLE 4421
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	EGGLESON NO. 1	HATTIE HARRELL NO. 1-A	DRAM CREEK NO. 1
LOCATION	SEC. 10, T1N, R5W	SEC. 3, T1N, R5W	SEC. 5, T1S, R5W
OWNER	T. H. MCCASLAND	TEXACO INC.	W. L. HERNSTADT
COMPLETED	09/15/43	09/09/47	09/19/47
SAMPLED	04/17/44	01/06/48	01/05/48
FORMATION	PENN-	-CULBERSON	PENN-DORNICK HILLS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	1691	5325	6265
WELLHEAD PRESSURE,PSIG	550	NOT GIVEN	1350
OPEN FLOW, MCFD	11000	10000	10908
COMPONENT, MOLE PCT			
METHANE	96.2	8.3	89.1
ETHANE	2.4	89.5	9.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	1.1	0.8
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	TRACE	0.04	0.05
HEATING VALUE*	1018	1668	1069
SPECIFIC GRAVITY	0.574	1.011	0.608

	INDEX 6874 SAMPLE 4731	INDEX 6875 SAMPLE 5415	INDEX 6876 SAMPLE 9768
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	L. G. VOORHEES NO. 2	IRENE RIVIERE NO. 1	DENNIS NO. 3
LOCATION	SEC. 4, T1S, R5W	SEC. 9, T1S, R5W	SEC. 32, T2N, R5W
OWNER	CARTER OIL CO.	AMERADA HESS CORP.	COASTAL STATES GAS PROD. CO.
COMPLETED	10/03/48	12/01/52	12/01/64
SAMPLED	05/10/49	03/13/53	02/25/65
FORMATION	PENN-SPRINGER	NOT GIVEN	PENN-DORNICK HILLS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	6604	5220	7346
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1208	1850
OPEN FLOW, MCFD	5717	7117	1802
COMPONENT, MOLE PCT			
METHANE	88.6	92.3	90.5
ETHANE	5.5	4.1	5.2
PROPANE	2.2	1.2	1.9
N-BUTANE	0.6	0.4	0.6
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.5	TRACE	0.1
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.1	1.1	0.7
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.05	0.07	0.04
HEATING VALUE*	1109	1074	1113
SPECIFIC GRAVITY	0.639	0.607	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6877 SAMPLE 9769	INDEX 6878 SAMPLE 9770	INDEX 6879 SAMPLE 9771
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	DENNIS NO. 3	DENNIS NO. 3	DENNIS NO. 3
LOCATION	SEC. 32, T2N, R5W	SEC. 32, T2N, R5W	SEC. 32, T2N, R5W
OWNER	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	12/01/65	12/01/64	12/01/64
SAMPLED	02/25/65	02/25/65	02/25/65
FORMATION	MISS-MARKHAM	PENN-SIMS	PENN-HUMPHREYS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	8660	9616	9298
WELLHEAD PRESSURE,PSIG	1750	950	1850
OPEN FLOW, MCFD	7913	3692	789
COMPONENT, MOLE PCT			
METHANE	87.1	89.3	89.3
ETHANE	5.1	4.7	4.9
PROPANE	2.8	2.1	2.4
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	1.1	1.3	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.04	0.07	0.07
HEATING VALUE*	1169	1131	1131
SPECIFIC GRAVITY	0.666	0.646	0.642

	INDEX 6880 SAMPLE 10295	INDEX 6881 SAMPLE 11084	INDEX 6882 SAMPLE 11085
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	CROSBIE MUDGE UNIT NO. 4	BUCK A NO. 1	BUCK A NO. 1
LOCATION	SEC. 23, T1S, R5W	SEC. 27, T1S, R5W	SEC. 27, T1S, R5W
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	08/23/65	04/31/67	04/23/67
SAMPLED	11/29/65	08/31/67	08/31/67
FORMATION	MISS-SYCAMORE	PENN-SIMS	PENN-SIMS
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	3924	3242	3650
WELLHEAD PRESSURE,PSIG	1582	1400	1480
OPEN FLOW, MCFD	1000	11602	6186
COMPONENT, MOLE PCT			
METHANE	87.4	94.0	88.1
ETHANE	6.3	3.2	5.9
PROPANE	2.3	0.5	2.7
N-BUTANE	0.8	0.1	0.7
ISOBUTANE	TRACE	0.1	0.4
N-PENTANE	0.5	0.2	0.1
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.2	1.4	1.5
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	TRACE
HELIUM	0.03	0.04	0.05
HEATING VALUE*	1120	1052	1132
SPECIFIC GRAVITY	0.654	0.596	0.646

	INDEX 6883 SAMPLE 14231	INDEX 6884 SAMPLE 14232	INDEX 6885 SAMPLE 15243
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	SHO-VEL-TUM	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME	DENVER NEWMAN NO. 1	DENVER NEWMAN NO. 1	FRENSLEY-MARTIN NO. 1
LOCATION	SEC. 22, T1N, R4W	SEC. 22, T1N, R4W	SEC. 36, T1S, R5W
OWNER	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.	GETTY OIL CO.
COMPLETED	10/02/74	10/02/74	12/22/77
SAMPLED	11/21/74	11/21/74	03/21/78
FORMATION	MISS-GOODWIN	MISS-SYCAMORE	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	6514	8522	4290
WELLHEAD PRESSURE,PSIG	1714	1454	772
OPEN FLOW, MCFD	2129	NOT GIVEN	5202
COMPONENT, MOLE PCT			
METHANE	90.2	77.0	84.5
ETHANE	5.2	10.3	7.1
PROPANE	2.0	5.6	3.1
N-BUTANE	0.5	1.5	0.8
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.4	3.4	2.5
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	1.2
HELIUM	0.09	0.07	0.04
HEATING VALUE*	1107	1213	1120
SPECIFIC GRAVITY	0.628	0.728	0.669

	INDEX 6886 SAMPLE 11299	INDEX 6887 SAMPLE 11300	INDEX 6888 SAMPLE 11375
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	STAGE STAND NE	STAGE STAND NE	STAGE STAND SE
WELL NAME	J. K. CALLOWAY UNIT NO. 1	W. J. CARSON NO. 1	NORRIS TRUST NO. 1
LOCATION	SEC. 9, T1N, R8W	SEC. 9, T1N, R8W	SEC. 30, T1N, R7W
OWNER	AMERADA HESS CORP.	AMERADA HESS CORP.	TEXACO INC.
COMPLETED	09/08/56	01/17/56	03/01/65
SAMPLED	02/19/68	02/19/68	03/15/68
FORMATION	PENN-CISCO & PONTOTOC	PENN-ROME	PENN-MEDRANO
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7312
WELLHEAD PRESSURE,PSIG	255	225	2305
OPEN FLOW, MCFD	270	337	869
COMPONENT, MOLE PCT			
METHANE	82.8	79.8	87.2
ETHANE	5.5	9.5	5.3
PROPANE	2.9	3.5	3.0
N-BUTANE	1.1	1.1	0.9
ISOBUTANE	0.5	1.0	0.4
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	6.3	3.2	2.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.09	0.08	0.05
HEATING VALUE*	1102	1099	1127
SPECIFIC GRAVITY	0.679	0.707	0.654

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6889 SAMPLE 11408	INDEX 6890 SAMPLE 11409	INDEX 6891 SAMPLE 11432
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	STAGE STAND SE	STAGE STAND SE	STAGE STAND SE
WELL NAME	DEVINE NO. 1	DEVINE NO. 1	S. J. PINSON NO. 1
LOCATION	SEC. 22, T1N, R8W	SEC. 22, T1N, R8W	SEC. 30, T1N, R7W
OWNER	HERMAN GEORGE KAISER	HERMAN GEORGE KAISER	EASON OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/25/68	03/25/68	04/05/68
FORMATION	PENN-DES MOINES	PENN-MISSOURI	PENN-DEESE
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	920	825	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.2	87.4	87.5
ETHANE	7.6	6.4	4.9
PROPANE	3.2	3.0	2.8
N-BUTANE	1.0	0.7	0.9
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.5	1.2	2.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.03	0.05
HEATING VALUE*	1164	1142	1123
SPECIFIC GRAVITY	0.661	0.650	0.652

	INDEX 6892 SAMPLE 4006	INDEX 6893 SAMPLE 13594	INDEX 6894 SAMPLE 5564
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	STEPHENS	STEPHENS	TEXAS
FIELD	WELMA W	WILDCAT	CAMRICK GAS AREA
WELL NAME	FRENSLEY C-114 NO. 1	PRICE NO. 2	J. M. COOK NO. 1
LOCATION	SEC. 12, T1N, R6W	SEC. 25, T2N, R6W	SEC. 27, T1N, R19ECM
OWNER	CARTER OIL CO.	WHITE SHIELD OIL & GAS CORP.	TEXACO, INC.
COMPLETED	02/23/49	08/29/72	10/16/53
SAMPLED	04/21/49	04/10/73	11/20/53
FORMATION	NOT GIVEN	PENN-& MISS COMMINGLED	PENN-MORROW
GEOLOGIC PROVINCE CODE	350	350	360
DEPTH, FEET	913	7944	6812
WELLHEAD PRESSURE,PSIG	150	1125	1917
OPEN FLOW, MCFD	2800	500	22250
COMPONENT, MOLE PCT			
METHANE	86.5	87.8	86.4
ETHANE	8.3	5.7	5.9
PROPANE	---	3.0	3.5
N-BUTANE	---	0.8	0.9
ISOBUTANE	---	0.5	0.2
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.2	0.1
NITROGEN	4.3	1.1	2.4
OXYGEN	0.5	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.06	0.04	0.19
HEATING VALUE*	1025	1149	1127
SPECIFIC GRAVITY	0.618	0.656	0.655

	INDEX 6895 SAMPLE 5973	INDEX 6896 SAMPLE 6128	INDEX 6897 SAMPLE 6134
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	WESTMORELAND NO. C-1	FLETCHER NO. 2-25	F. B. REUSZER
LOCATION	SEC. 26, T1N, R18ECM	SEC. 25, T3N, R18ECM	SEC. 3, T1N, R19ECM
OWNER	KANSAS-NEBRASKA NATURAL GAS	PANHANDLE EASTERN PIPELINE C	CARTER OIL CO.
COMPLETED	11/01/55	05/14/56	09/22/56
SAMPLED	11/29/55	08/15/56	10/24/56
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6632	6172	6666
WELLHEAD PRESSURE,PSIG	1014	1389	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	235913	76000
COMPONENT, MOLE PCT			
METHANE	92.9	84.9	83.4
ETHANE	2.0	5.6	5.9
PROPANE	0.9	3.8	3.9
N-BUTANE	0.1	1.1	1.1
ISOBUTANE	0.1	0.6	0.7
N-PENTANE	0.0	0.4	0.5
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	TRACE	0.4	1.0
NITROGEN	3.4	2.4	2.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.27	0.18	0.17
HEATING VALUE*	1008	1170	1209
SPECIFIC GRAVITY	0.589	0.684	0.706

	INDEX 6898 SAMPLE 6351	INDEX 6899 SAMPLE 6427	INDEX 6900 SAMPLE 6504
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	JOLLIFFE ESTATE NO. 1	BEASLEY NO. 2-23	JOLLIFFE UNIT NO. 1
LOCATION	SEC. 9, T2N, R18ECM	SEC. 23, T3N, R17ECM	SEC. 27, T3N, R18ECM
OWNER	CARTER OIL CO.	PANHANDLE EASTERN PIPELINE C	CARTER OIL CO.
COMPLETED	01/07/57	08/08/57	11/25/57
SAMPLED	03/08/57	10/31/57	02/17/58
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6246	6205	6330
WELLHEAD PRESSURE,PSIG	1490	1235	1310
OPEN FLOW, MCFD	80000	63000	70000
COMPONENT, MOLE PCT			
METHANE	94.2	84.9	86.1
ETHANE	0.5	6.1	5.8
PROPANE	0.6	3.8	3.6
N-BUTANE	0.3	1.9	0.9
ISOBUTANE	0.2	0.6	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.3	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	2.7	2.6	2.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.29	0.10	0.20
HEATING VALUE*	1042	1148	1132
SPECIFIC GRAVITY	0.604	0.672	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES -

	INDEX 6901 SAMPLE 6766	INDEX 6902 SAMPLE 7408	INDEX 6903 SAMPLE 7430
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	LANASTER NO. 1-31	LITTAU NO. 1-25	O. C. FLOWERS NO. 1-34
LOCATION	SEC. 31, T1N, R19ECM	SEC. 25, T1N, R19ECM	SEC. 34, T1N, R19ECM
OWNER	HORIZON OIL & GAS CO.	HORIZON OIL & GAS CO.	MAYFLO OIL CO.
COMPLETED	05/10/58	05/19/59	01/--/60
SAMPLED	07/18/58	02/18/60	03/09/60
FORMATION	MISS---	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7411	7202	6887
WELLHEAD PRESSURE, PSIG	1816	1987	1245
OPEN FLOW, MCFD	8100	1500	28500
COMPONENT, MOLE PCT			
METHANE	95.4	88.9	85.8
ETHANE	2.3	4.9	6.0
PROPANE	0.7	2.9	3.6
N-BUTANE	0.2	0.8	1.0
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.6	1.1	2.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.04	0.10	0.10
HEATING VALUE*	1053	1139	1148
SPECIFIC GRAVITY	0.589	0.649	0.666

	INDEX 6904 SAMPLE 12177	INDEX 6905 SAMPLE 12372	INDEX 6906 SAMPLE 12373
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	VOTH A NO. 1	FLETCHER NO. 2	BEASLEY NO. 1-8
LOCATION	SEC. 20, T3N, R18ECM	SEC. 25, T3N, R17ECM	SEC. 23, T3N, R17ECM
OWNER	ANADARKO PRODUCTION CO.	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	09/12/69	05/14/57	08/08/57
SAMPLED	01/27/70	08/21/70	08/21/70
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6328	6200	6253
WELLHEAD PRESSURE, PSIG	682	726	507
OPEN FLOW, MCFD	10853	25515	14587
COMPONENT, MOLE PCT			
METHANE	83.8	83.7	83.7
ETHANE	6.0	6.0	6.1
PROPANE	4.5	4.5	4.5
N-BUTANE	1.3	1.2	1.2
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	TRACE	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.1	2.5	2.9
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.16	0.16	0.15
HEATING VALUE*	1159	1177	1172
SPECIFIC GRAVITY	0.681	0.689	0.689

	INDEX 6907 SAMPLE 12412	INDEX 6908 SAMPLE 12908	INDEX 6909 SAMPLE 15502
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAMRICK GAS AREA	CAMRICK GAS AREA
WELL NAME	BEASLEY NO. 1	GRAHAM NO. A-3	NEFF "D" NO. 2X
LOCATION	SEC. 35, T3N, R17ECM	SEC. 31, T3N, R18ECM	SEC. 6, T2N, R18ECM
OWNER	PETROLEUM, INC.	ANADARKO PRODUCTION CO.	KANSAS-NEBRASKA NATURAL GAS
COMPLETED	06/30/66	--/--/00	09/16/78
SAMPLED	07/06/70	07/23/71	04/23/79
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6442	NOT GIVEN	6373
WELLHEAD PRESSURE, PSIG	728	574	360
OPEN FLOW, MCFD	4289	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	81.9	85.7	83.4
ETHANE	5.6	5.5	6.2
PROPANE	3.2	4.0	4.5
N-BUTANE	1.5	0.9	1.9
ISOBUTANE	1.1	0.6	0.5
N-PENTANE	0.6	0.3	0.9
ISOPENTANE	0.3	0.0	0.4
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.7	0.2	0.3
NITROGEN	2.7	2.5	2.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.16	0.17	0.17
HEATING VALUE*	1235	1144	1190
SPECIFIC GRAVITY	0.722	0.666	0.696

	INDEX 6910 SAMPLE 17020	INDEX 6911 SAMPLE 15825	INDEX 6912 SAMPLE 16662
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAMRICK GAS AREA	CAPLE N	CAPLE N
WELL NAME	ETTER NO. B-2	DAISY NO. 1	DORSEY NO. 2-5
LOCATION	SEC. 34, T2N, R18ECM	SEC. 31, T2N, R17ECM	SEC. 5, T1N, R17ECM
OWNER	KN ENERGY, INC.	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.
COMPLETED	08/20/82	05/12/79	12/15/81
SAMPLED	08/24/83	10/11/79	09/--/82
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6634	6711	6312
WELLHEAD PRESSURE, PSIG	1314	1250	875
OPEN FLOW, MCFD	2370	800	4230
COMPONENT, MOLE PCT			
METHANE	88.7	91.7	80.3
ETHANE	3.8	3.2	5.9
PROPANE	2.0	1.6	4.7
N-BUTANE	0.9	0.4	1.5
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	2.2	1.8	5.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.15	0.14	0.27
HEATING VALUE*	1118	1078	1149
SPECIFIC GRAVITY	0.649	0.618	0.703

*CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
**DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6913 SAMPLE 16663	INDEX 6914 SAMPLE 6420	INDEX 6915 SAMPLE 6532
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CAPLE N	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	DORSEY NO. 2-5	MCCLANAHAN NO. 2-32	REISS NO. 1
LOCATION	SEC. 5, T1N, R17ECM	SEC. 32, T6N, R12ECM	SEC. 11, T5N, R10ECM
OWNER	SOUTHLAND ROYALTY CO.	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	12/15/81	07/27/57	12/16/57
SAMPLED	09/--/82	10/16/57	03/24/58
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-PURDY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6938	5689	4455
WELLHEAD PRESSURE,PSIG	300	1359	1115
OPEN FLOW, MCFD	461	150567	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.6	80.9	71.3
ETHANE	3.6	7.1	9.2
PROPANE	1.9	4.6	3.3
N-BUTANE	0.6	1.1	0.8
ISOBUTANE	0.2	0.9	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.5	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.1	4.6	12.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.14	0.20	0.80
HEATING VALUE*	1090	1147	959
SPECIFIC GRAVITY	0.628	0.691	0.710

	INDEX 6916 SAMPLE 6845	INDEX 6917 SAMPLE 6870	INDEX 6918 SAMPLE 7228
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	FINCHEM NO. 1	MILLER NO. 1	DENNING NO. 1
LOCATION	SEC. 27, T6N, R10ECM	SEC. 18, T6N, R10ECM	SEC. 35, T6N, R11ECM
OWNER	GRAHAM-MICHAELIS DRILLING CO	SIERRA PETROLEUM CO., INC.	PETROLEUM, INC.
COMPLETED	09/11/58	09/29/58	05/28/58
SAMPLED	10/25/58	11/11/58	10/01/59
FORMATION	PENN-PURDY	PENN-PURDY	PENN-PURDY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4442	4310	4503
WELLHEAD PRESSURE,PSIG	1117	1050	1108
OPEN FLOW, MCFD	50	23	8000
COMPONENT, MOLE PCT			
METHANE	70.5	78.2	72.5
ETHANE	5.7	6.9	6.2
PROPANE	4.7	3.6	4.7
N-BUTANE	1.8	0.6	1.1
ISOBUTANE	1.1	0.6	0.6
N-PENTANE	0.5	0.1	0.1
ISOPENTANE	0.8	0.1	0.4
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.8	0.1	0.1
NITROGEN	13.1	9.5	13.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.60	0.40	0.70
HEATING VALUE*	1140	1058	1051
SPECIFIC GRAVITY	0.774	0.686	0.722

	INDEX 6919 SAMPLE 7353	INDEX 6920 SAMPLE 7643	INDEX 6921 SAMPLE 7711
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	GOALDIN	GLODEN NO. 1	ROOFNER NO. A-1
LOCATION	SEC. 17, T6N, R10ECM	SEC. 20, T6N, R11ECM	SEC. 29, T6N, R11ECM
OWNER	PANHANDLE EASTERN PIPELINE C	EDWIN L. COX	CITIES SERVICE OIL CO.
COMPLETED	12/10/58	10/--/59	07/26/60
SAMPLED	01/19/60	08/12/60	10/17/60
FORMATION	PENN-KEYES	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4580	3000	3018
WELLHEAD PRESSURE,PSIG	834	450	414
OPEN FLOW, MCFD	37120	2900	11000
COMPONENT, MOLE PCT			
METHANE	76.4	66.3	63.0
ETHANE	3.9	6.7	6.0
PROPANE	3.2	4.1	3.3
N-BUTANE	0.9	1.1	1.0
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	12.5	20.0	23.7
OXYGEN	TRACE	TRACE	0.9
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	1.70	0.70	0.70
HEATING VALUE*	1007	968	909
SPECIFIC GRAVITY	0.689	0.743	0.752

	INDEX 6922 SAMPLE 7756	INDEX 6923 SAMPLE 7774	INDEX 6924 SAMPLE 7856
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	BESSIE SHRAUNER UNIT NO. 1	TUCKER NO. 1-18	QUIGLEY NO. 1
LOCATION	SEC. 13, T6N, R10ECM	SEC. 18, T6N, R11ECM	SEC. 25, T6N, R10ECM
OWNER	TEXACO INC.	GRAHAM-MICHAELIS DRILLING CO	PETROLEUM, INC.
COMPLETED	06/02/60	04/25/60	12/31/60
SAMPLED	11/03/60	11/15/60	02/13/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2958	2980	3042
WELLHEAD PRESSURE,PSIG	420	420	435
OPEN FLOW, MCFD	2930	12422	6500
COMPONENT, MOLE PCT			
METHANE	65.9	65.1	66.6
ETHANE	6.3	6.9	6.9
PROPANE	3.6	3.7	3.5
N-BUTANE	0.8	1.1	1.1
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	22.1	21.6	19.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.70	0.70	0.70
HEATING VALUE*	923	955	978
SPECIFIC GRAVITY	0.736	0.748	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6925 SAMPLE 7893	INDEX 6926 SAMPLE 7894	INDEX 6927 SAMPLE 8042
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE GAS AREA
WELL NAME	REISS A	DENNEY	WELSH B NO. 1
LOCATION	SEC. 27, T6N, R11ECM	SEC. 21, T6N, R11ECM	SEC. 21, T6N, R10ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	ANADARKO PRODUCTION CO.
COMPLETED	01/07/61	01/10/61	07/27/60
SAMPLED	05/01/61	05/01/61	06/28/61
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3101	3008	2922
WELLHEAD PRESSURE,PSIG	422	423	430
OPEN FLOW, MCFD	7000	5800	2181
COMPONENT, MOLE PCT			
METHANE	60.8	65.8	63.0
ETHANE	6.0	6.3	6.4
PROPANE	3.2	3.4	3.6
N-BUTANE	0.9	1.0	1.1
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	27.3	21.1	23.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.2
HELIUM	0.70	0.70	0.70
HEATING VALUE*	877	940	935
SPECIFIC GRAVITY	0.759	0.742	0.758

	INDEX 6928 SAMPLE 8560	INDEX 6929 SAMPLE 8904	INDEX 6930 SAMPLE 14420
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	CARTHAGE GAS AREA	CARTHAGE GAS AREA	CARTHAGE NW
WELL NAME	BOALDIN NO. 1-20	ORVILLA HIGGINS NO. 2-25	ETTA NILES NO. 4
LOCATION	SEC. 20, T6N, R10ECM	SEC. 25, T6N, R11ECM	SEC. 32, T6N, R10ECM
OWNER	ANADARKO PRODUCTION CO.	HAMILTON BROS., INC.	MAURICE L. BROWN CO.
COMPLETED	05/02/62	--/-/00	11/09/74
SAMPLED	05/17/62	03/22/63	07/26/75
FORMATION	PENN-KEYES	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4572	NOT GIVEN	4605
WELLHEAD PRESSURE,PSIG	778	NOT GIVEN	427
OPEN FLOW, MCFD	6879	NOT GIVEN	5568
COMPONENT, MOLE PCT			
METHANE	75.9	78.6	76.7
ETHANE	4.1	6.1	4.1
PROPANE	2.8	4.4	0.7
N-BUTANE	0.9	1.5	0.1
ISOBUTANE	0.4	0.4	0.1
N-PENTANE	0.3	0.4	0.1
ISOPENTANE	0.3	TRACE	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	TRACE
NITROGEN	12.7	7.5	12.2
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.6	5.1
HELIUM	1.69	0.40	0.92
HEATING VALUE*	998	1106	880
SPECIFIC GRAVITY	0.695	0.704	0.683

	INDEX 6931 SAMPLE 5917	INDEX 6932 SAMPLE 11166	INDEX 6933 SAMPLE 9897
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	DAGUE	DAGUE SE	DOMBEY NW
WELL NAME	BURDGE NO. 2	MATTER NO. 1-9	TEAGARDEN NO. 1
LOCATION	SEC. 20, T6N, R16ECM	SEC. 9, T5N, R16ECM	SEC. 33, T5N, R19ECM
OWNER	REPUBLIC NATURAL GAS CO.	CABOT CORP.	AMARILLO NATURAL GAS CO.
COMPLETED	--/--/00	--/--/00	03/08/65
SAMPLED	08/18/65	10/12/67	05/19/65
FORMATION	PENN-MORROW	PENN-KEYES	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6484	6477	6814
WELLHEAD PRESSURE,PSIG	1685	1320	1620
OPEN FLOW, MCFD	21000	2000	4621
COMPONENT, MOLE PCT			
METHANE	89.6	87.0	74.3
ETHANE	3.3	3.9	3.4
PROPANE	1.6	1.9	4.7
N-BUTANE	0.5	0.5	0.8
ISOBUTANE	0.3	0.4	TRACE
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	3.4	5.0	1.5
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	14.6
HELIUM	0.19	0.20	0.17
HEATING VALUE*	1067	1063	989
SPECIFIC GRAVITY	0.629	0.645	0.789

	INDEX 6934 SAMPLE 16614	INDEX 6935 SAMPLE 16681	INDEX 6936 SAMPLE 17724
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	DOMBEY W	DOMBEY W	DOMBEY W
WELL NAME	MIKES NO. 1-30	PHILLIPS NO. 1	RICHARDS NO. 1-14
LOCATION	SEC. 30, T4N, R19ECM	SEC. 25, T4N, R19ECM	SEC.14, T3N, R19ECM
OWNER	SENECA OIL CO.	FUNK EXPLORATION CO.	SENECO OIL CO.
COMPLETED	04/24/82	12/28/81	11/03/84
SAMPLED	08/10/82	10/05/82	06/27/85
FORMATION	PENN-MORROW	MISS-CHESTER U	PENN-MORROW L & MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6579	6708	6864
WELLHEAD PRESSURE,PSIG	1510	1587	1290
OPEN FLOW, MCFD	1570	750000	4712
COMPONENT, MOLE PCT			
METHANE	82.6	86.4	83.6
ETHANE	5.5	5.0	5.5
PROPANE	4.7	3.3	3.7
N-BUTANE	1.9	1.1	1.2
ISOBUTANE	0.7	0.5	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.5	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	3.2	2.1	2.1
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	1.6
HELIUM	0.16	0.13	0.03
HEATING VALUE*	1176	1153	1162
SPECIFIC GRAVITY	0.698	0.669	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6937 SAMPLE 15171	INDEX 6938 SAMPLE 5686	INDEX 6939 SAMPLE 6428
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA N	EVA NW	EVA NW
WELL NAME	ADDINGTON NO. 1	KELLEY NO. 9	KELLEY NO. 1
LOCATION	SEC. 6, T4N, R11ECM	SEC. 2, T4N, R10ECM	SEC. 2, T4N, R10ECM
OWNER	KENNEDY & MITCHELL, INC.	UNITED PRODUCING CO., INC.	ASHLAND OIL, INC.
COMPLETED	11/22/76	02/12/54	09/02/53
SAMPLED	12/20/77	09/08/54	11/06/57
FORMATION	PENN-MARMATON	PENN-TOPEKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3837	2933	4430
WELLHEAD PRESSURE,PSIG	515	500	NOT GIVEN
OPEN FLOW, MCFD	2237	5200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.1	45.5	46.2
ETHANE	7.7	4.8	4.9
PROPANE	4.0	3.2	2.7
N-BUTANE	1.2	0.8	0.7
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.5	43.4	43.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.27	0.91	0.90
HEATING VALUE*	1095	695	686
SPECIFIC GRAVITY	0.709	0.815	0.811

	INDEX 6940 SAMPLE 6429	INDEX 6941 SAMPLE 6430	INDEX 6942 SAMPLE 6431
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA NW	EVA NW	EVA NW
WELL NAME	KELLEY NO. 4	KELLEY NO. 9	KELLEY NO. 5
LOCATION	SEC. 2, T4N, R10ECM	SEC. 2, T4N, R10ECM	SEC. 11, T4N, R10ECM
OWNER	ASHLAND OIL, INC.	ASHLAND OIL, INC.	ASHLAND OIL, INC.
COMPLETED	12/17/53	02/16/54	01/05/54
SAMPLED	11/06/57	11/06/57	11/05/57
FORMATION	PENN-MORROW	PENN-TOPEKA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4425	2933	4424
WELLHEAD PRESSURE,PSIG	NOT GIVEN	520	403
OPEN FLOW, MCFD	NOT GIVEN	5200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	53.6	45.0	74.9
ETHANE	14.2	5.4	4.9
PROPANE	19.5	3.5	2.9
N-BUTANE	4.5	1.0	0.7
ISOBUTANE	2.9	0.4	0.4
N-PENTANE	1.0	0.3	0.1
ISOPENTANE	0.6	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.2	TRACE
NITROGEN	2.8	42.8	15.5
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.06	0.90	0.69
HEATING VALUE*	1651	726	963
SPECIFIC GRAVITY	0.989	0.829	0.690

	INDEX 6943 SAMPLE 6432	INDEX 6944 SAMPLE 6433	INDEX 6945 SAMPLE 6434
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA NW	EVA NW	EVA NW
WELL NAME	KELLEY NO. 6	KELLEY NO. 6	KELLEY NO. 8
LOCATION	SEC. 11, T4N, R10ECM	SEC. 11, T4N, R10ECM	SEC. 2, T4N, R10ECM
OWNER	ASHLAND OIL, INC.	ASHLAND OIL, INC.	ASHLAND OIL, INC.
COMPLETED	01/19/54	02/23/54	--/--/10
SAMPLED	11/05/57	11/06/57	11/06/57
FORMATION	PENN-CHEROKEE	PENN-KETES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4020	4668	NOT GIVEN
WELLHEAD PRESSURE,PSIG	704	900	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.6	64.9	51.1
ETHANE	7.9	4.3	15.1
PROPANE	4.5	2.0	20.2
N-BUTANE	1.1	0.7	6.6
ISOBUTANE	0.5	0.4	3.8
N-PENTANE	0.3	0.1	1.2
ISOPENTANE	0.1	0.2	1.4
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	23.0	24.5	1.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.1
HELIUM	0.60	1.50	0.01
HEATING VALUE*	967	862	1778
SPECIFIC GRAVITY	0.772	0.730	1.054

	INDEX 6946 SAMPLE 6435	INDEX 6947 SAMPLE 7155	INDEX 6948 SAMPLE 7569
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA NW	EVA NW	EVA NW
WELL NAME	KELLEY NO. 10	BURNS NO. 1	J. C. WHITE NO. 1
LOCATION	SEC. 11, T4N, R10ECM	SEC. 15, T4N, R10ECM	SEC. 15, T4N, R10ECM
OWNER	ASHLAND OIL, INC.	PARKER PETROLEUM CO., INC.	W. C. MCBRIDE, INC.
COMPLETED	12/08/54	05/15/56	02/29/60
SAMPLED	11/06/57	08/--/59	05/18/60
FORMATION	PENN-TOPEKA	PENN-KELLY	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2930	4425	4250
WELLHEAD PRESSURE,PSIG	489	727	960
OPEN FLOW, MCFD	3360	11500	4130
COMPONENT, MOLE PCT			
METHANE	52.1	73.7	77.4
ETHANE	5.2	3.9	5.7
PROPANE	3.1	2.6	2.5
N-BUTANE	0.9	0.6	0.6
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.5	TRACE	0.1
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	31.6	17.3	11.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.80	0.60	0.70
HEATING VALUE*	939	944	1014
SPECIFIC GRAVITY	0.848	0.696	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6949 SAMPLE 9969	INDEX 6950 SAMPLE 10050	INDEX 6951 SAMPLE 10051
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA S	EVA SE	EVA SE
WELL NAME	EGGERS NO. 1	COON A NO. 1	COON A NO. 1
LOCATION	SEC. 5, T3N, R11ECM	SEC. 17, T3N, R12ECM	SEC. 17, T3N, R12ECM
OWNER	GULF OIL CO.- U.S.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/29/64	12/29/64	12/28/64
SAMPLED	07/09/65	08/06/65	08/16/65
FORMATION	PENN-MARMATON	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4618	5313	6316
WELLHEAD PRESSURE,PSIG	420	1257	1187
OPEN FLOW, MCFD	6390	5800	2600
COMPONENT, MOLE PCT			
METHANE	77.0	78.3	75.5
ETHANE	5.8	7.9	6.5
PROPANE	3.2	4.2	3.5
N-BUTANE	0.8	1.8	1.3
ISOBUTANE	0.4	0.6	0.7
N-PENTANE	0.3	0.9	0.5
ISOPENTANE	TRACE	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	11.8	7.2	10.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.27	0.35	0.20
HEATING VALUE*	1034	1129	1121
SPECIFIC GRAVITY	0.694	0.703	0.734

	INDEX 6952 SAMPLE 14228	INDEX 6953 SAMPLE 14229	INDEX 6954 SAMPLE 14230
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	EVA SE	EVA SE	EVA SE
WELL NAME	STONEBRAKER AG NO. 2	STONEBRAKER AG NO. 2	STONEBRAKER AG NO. 2
LOCATION	SEC. 20, T3N, R12ECM	SEC. 20, T3N, R12ECM	SEC. 20, T3N, R12ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	09/13/74	09/18/74	09/18/74
SAMPLED	11/21/74	11/21/74	11/21/74
FORMATION	PENN-CHEROKEE	PENN-KEYES	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5303	6242	4428
WELLHEAD PRESSURE,PSIG	1098	1020	947
OPEN FLOW, MCFD	1414	1550	8000
COMPONENT, MOLE PCT			
METHANE	78.4	78.5	77.0
ETHANE	8.4	6.6	5.9
PROPANE	4.6	3.9	3.3
N-BUTANE	1.1	1.1	1.0
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	6.2	7.8	11.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.15	0.19	0.22
HEATING VALUE*	1137	1123	1045
SPECIFIC GRAVITY	0.699	0.706	0.695

	INDEX 6955 SAMPLE 8710	INDEX 6956 SAMPLE 15393	INDEX 6957 SAMPLE 15394
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	FLATS NW	GOFF CREEK	GOFF CREEK
WELL NAME	BESSIE HARBT NO. 1	HAWKINS NO. B-1	HAWKINS NO. B-1
LOCATION	SEC. 14, T6N, R11ECM	SEC. 9, T4N, R14ECM	SEC. 9, T4N, R14ECM
OWNER	HUMBLE OIL & REFINING CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	09/02/62	12/09/77	12/09/77
SAMPLED	10/10/62	09/27/78	09/27/78
FORMATION	PENN-MORROW U	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4504	5668	6163
WELLHEAD PRESSURE,PSIG	1175	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3050	1176	838
COMPONENT, MOLE PCT			
METHANE	60.4	72.9	78.1
ETHANE	4.9	7.8	6.3
PROPANE	5.1	5.8	5.2
N-BUTANE	0.7	1.6	1.4
ISOBUTANE	0.4	0.6	0.7
N-PENTANE	0.1	0.9	0.3
ISOPENTANE	0.2	0.9	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	TRACE	0.4	0.2
NITROGEN	24.5	9.6	6.9
OXYGEN	4.9	TRACE	0.0
ARGON	0.2	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.31	0.18	0.17
HEATING VALUE*	830	1165	1150
SPECIFIC GRAVITY	0.761	0.753	0.717

	INDEX 6958 SAMPLE 16160	INDEX 6959 SAMPLE 6970	INDEX 6960 SAMPLE 7190
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON NE	GUYMON S	GUYMON S
WELL NAME	HURLIMAN "A" NO. 4	WANIA NO. 2-LT	PEARL NO. 2
LOCATION	SEC. 16, T3N, R15ECM	SEC. 17, T1N, R15ECM	SEC. 16, T1N, R15ECM
OWNER	GETTY OIL CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	07/24/80	01/21/59	09/05/58
SAMPLED	01/08/81	02/09/59	08/27/59
FORMATION	PENN-TORONTO	PENN-OSWEGO	PENN-MARMATON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4164	5756	5740
WELLHEAD PRESSURE,PSIG	950	1439	1621
OPEN FLOW, MCFD	2222	11992	20933
COMPONENT, MOLE PCT			
METHANE	70.7	83.0	84.0
ETHANE	7.6	8.1	7.7
PROPANE	4.4	3.7	2.9
N-BUTANE	1.4	1.1	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.4	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	14.8	2.5	3.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.27	0.10	0.10
HEATING VALUE*	1062	1169	1146
SPECIFIC GRAVITY	0.738	0.681	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6961 SAMPLE 7420	INDEX 6962 SAMPLE 7758	INDEX 6963 SAMPLE 7766
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON S	GUYMON S	GUYMON S
WELL NAME	REUST NO. 2	OBIN NO. 2	REES A NO. 1
LOCATION	SEC. 20, T1N, R15ECM	SEC. 26, T1N, R15ECM	SEC. 25, T2N, R14ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/21/59	10/04/60	07/26/60
SAMPLED	12/25/60	11/04/60	11/09/60
FORMATION	PERM-COUNCIL GROVE	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3126	6694	6737
WELLHEAD PRESSURE,PSIG	582	1595	1636
OPEN FLOW, MCFD	10230	1814	3227
COMPONENT, MOLE PCT			
METHANE	61.4	84.3	81.4
ETHANE	5.0	5.0	6.2
PROPANE	2.9	3.7	5.4
N-BUTANE	0.8	1.4	1.5
ISOBUTANE	0.4	0.7	0.7
N-PENTANE	0.2	0.4	0.4
ISOPENTANE	0.1	0.5	0.3
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	28.5	3.2	5.7
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.50	0.10	0.20
HEATING VALUE*	845	1177	1132
SPECIFIC GRAVITY	0.753	0.693	0.693

	INDEX 6964 SAMPLE 8740	INDEX 6965 SAMPLE 8741	INDEX 6966 SAMPLE 9062
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON S	GUYMON S	GUYMON S
WELL NAME	WIGGINS NO. 1	WIGGINS NO. 1	KATE JACKSON NO. 1
LOCATION	SEC. 10, T2N, R15ECM	SEC. 10, T2N, R15ECM	SEC. 17, T2N, R15ECM
OWNER	YINGLING OIL, INC.	YINGLING OIL, INC.	YINGLING OIL, INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/01/62	11/01/62	08/12/63
FORMATION	PENN-MORROW	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6331	6690	6726
WELLHEAD PRESSURE,PSIG	1660	1780	1706
OPEN FLOW, MCFD	10000	4450	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.0	83.9	82.7
ETHANE	4.9	4.9	5.1
PROPANE	1.8	2.4	3.2
N-BUTANE	0.6	0.7	1.1
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.3	0.2	0.6
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	1.8	6.3	5.5
OXYGEN	0.1	0.3	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.11	0.18	0.20
HEATING VALUE*	1103	1052	1129
SPECIFIC GRAVITY	0.630	0.656	0.690

	INDEX 6967 SAMPLE 10288	INDEX 6968 SAMPLE 14647	INDEX 6969 SAMPLE 14649
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON S	GUYMON S	GUYMON S
WELL NAME	HALL C NO. 1	MITCH NO. B-2	LES NO. 2
LOCATION	SEC. 16, T2N, R14ECM	SEC. 34, T1N, R15ECM	SEC. 35, T1N, R15ECM
OWNER	CITIES SERVICE OIL CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	10/14/65	05/17/60	08/18/59
SAMPLED	11/15/65	04/26/76	04/26/76
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6748	6783	6752
WELLHEAD PRESSURE,PSIG	1715	520	728
OPEN FLOW, MCFD	27000	409	465
COMPONENT, MOLE PCT			
METHANE	83.4	82.5	82.3
ETHANE	6.2	5.8	4.8
PROPANE	3.2	4.6	4.3
N-BUTANE	1.0	1.9	1.8
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.1	0.7	0.8
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.3
NITROGEN	4.5	1.7	4.2
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.17	0.17	0.16
HEATING VALUE*	1132	1196	1163
SPECIFIC GRAVITY	0.678	0.712	0.711

	INDEX 6970 SAMPLE 1277	INDEX 6971 SAMPLE 1716	INDEX 6972 SAMPLE 1717
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	MOVEY NO. 1	BACON NO. 1	MOVEY NO. 1
LOCATION	SEC. 21, T4N, R14ECM	SEC. 17, T3N, R15ECM	SEC. 21, T4N, R14ECM
OWNER	M. F. WILCOX OIL & GAS CO.	CIMARRON UTILITIES CO.	CIMARRON UTILITIES CO.
COMPLETED	--/--/00	04/--/28	--/--/00
SAMPLED	07/06/26	02/23/29	02/26/29
FORMATION	NOT GIVEN	PERM-MONOGAHELA	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2692	2605	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.8	52.8	63.4
ETHANE	21.4	29.3	22.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.8	17.8	13.2
OXYGEN	0.5	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.36	0.37	0.38
HEATING VALUE*	1050	1060	1040
SPECIFIC GRAVITY	0.713	0.771	0.723

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6973 SAMPLE 3257	INDEX 6974 SAMPLE 3765	INDEX 6975 SAMPLE 4014
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	ANNA CALVERT	MCGRATH NO. 1	NINA NO. 1
LOCATION	SEC. 14, T3N, R16ECM	SEC. 35, T3N, R15ECM	SEC. 36, T1N, R13ECM
OWNER	CABOT CORP.	REPUBLIC NATURAL GAS CO.	PHILLIPS PETROLEUM CO.
COMPLETED	05/--/37	04/15/43	07/12/44
SAMPLED	04/03/42	04/14/44	04/29/45
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2585	2784	2795
WELLHEAD PRESSURE, PSIG	440	427	400
OPEN FLOW, MCFD	5200	24624	5000
COMPONENT, MOLE PCT			
METHANE	67.9	66.7	68.9
ETHANE	20.2	20.0	18.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.2	12.4	11.5
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.39	0.37	0.41
HEATING VALUE*	1050	1034	1035
SPECIFIC GRAVITY	0.701	0.706	0.695

	INDEX 6976 SAMPLE 4905	INDEX 6977 SAMPLE 5079	INDEX 6978 SAMPLE 5381
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	PARKES NO. 1	PHILLIPS-MITCH R NO. 1	STONEBRAKER AB NO. 1
LOCATION	SEC. 27, T4N, R18ECM	SEC. 35, T1N, R16ECM	SEC. 29, T3N, R12ECM
OWNER	PANHANDLE EASTERN PIPELINE C	PHILLIPS PETROLEUM CO.	AMERICAN GAS PRODUCTION CO.
COMPLETED	09/25/50	--/--/00	12/29/52
SAMPLED	08/29/50	08/09/51	01/29/53
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2697	NOT GIVEN	2652
WELLHEAD PRESSURE, PSIG	408	NOT GIVEN	400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4940
COMPONENT, MOLE PCT			
METHANE	58.5	74.9	69.1
ETHANE	7.7	6.0	5.7
PROPANE	---	3.2	1.9
N-BUTANE	---	0.8	1.2
ISOBUTANE	---	0.3	0.4
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.0	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	28.1	13.4	23.0
OXYGEN	3.5	0.3	TRACE
ARGON	---	0.1	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.1	0.1	0.1
HELIUM	0.07	0.43	0.82
HEATING VALUE*	731	1009	933
SPECIFIC GRAVITY	0.748	0.701	0.751

	INDEX 6979 SAMPLE 5395	INDEX 6980 SAMPLE 5418	INDEX 6981 SAMPLE 5419
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	SHORES A NO. 1	STONEBRAKER Y-1	MORSE A-1
LOCATION	SEC. 36, T3N, R11ECM	SEC. 9, T2N, R12ECM	SEC. 24, T5N, R12ECM
OWNER	AMERICAN GAS PRODUCTION CO.	AMERICAN GAS PRODUCTION CO.	AMERICAN GAS PRODUCTION CO.
COMPLETED	12/18/52	01/22/53	01/08/53
SAMPLED	02/13/53	03/17/53	03/17/53
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2638	2656	2590
WELLHEAD PRESSURE, PSIG	409	429	400
OPEN FLOW, MCFD	10700	26000	13300
COMPONENT, MOLE PCT			
METHANE	59.1	70.0	71.9
ETHANE	5.0	5.6	5.8
PROPANE	3.7	3.6	3.6
N-BUTANE	1.2	1.1	1.0
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	28.5	17.9	15.6
OXYGEN	0.1	0.1	0.5
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	1.16	0.51	0.39
HEATING VALUE*	856	985	994
SPECIFIC GRAVITY	0.763	0.730	0.717

	INDEX 6982 SAMPLE 6127	INDEX 6983 SAMPLE 6776	INDEX 6984 SAMPLE 7063
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	DROSSELMYER NO. 1-33	SCHOONOVER NO. A-1	ASMER
LOCATION	SEC. 27, T3N, R18ECM	SEC. 13, T5N, R11ECM	SEC. 13, T5N, R18ECM
OWNER	PANHANDLE EASTERN PIPELINE C	CITIES SERVICE OIL CO.	KANSAS-NEBRASKA NATURAL GAS
COMPLETED	05/06/53	06/17/58	02/26/53
SAMPLED	08/15/56	08/06/58	05/05/59
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2467	2398	2658
WELLHEAD PRESSURE, PSIG	327	558	395
OPEN FLOW, MCFD	1159	7650	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.0	71.1	73.1
ETHANE	6.2	5.8	3.4
PROPANE	3.4	3.3	1.3
N-BUTANE	1.0	0.9	0.5
ISOBUTANE	0.5	0.5	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	14.6	17.1	20.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.40	0.50	0.60
HEATING VALUE*	1025	988	866
SPECIFIC GRAVITY	0.719	0.723	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6985 SAMPLE 7064	INDEX 6986 SAMPLE 7070	INDEX 6987 SAMPLE 7138
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	FARMER NO. 1	MAKKE NO. 1	CURRAN NO. 1
LOCATION	SEC. 20, T6N, R19ECM	SEC. 30, T4N, R18ECM	SEC. 1, T3N, R12ECM
OWNER	KANSAS-NEBRASKA NATURAL GAS	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	04/07/58	--/--/53	08/01/57
SAMPLED	05/05/59	05/18/59	07/07/59
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2654	2654	2638
WELLHEAD PRESSURE,PSIG	358	313	283
OPEN FLOW, MCFD	NOT GIVEN	487	1171
COMPONENT, MOLE PCT			
METHANE	72.8	73.5	69.4
ETHANE	1.9	4.7	6.5
PROPANE	0.5	2.2	3.5
N-BUTANE	0.1	0.6	1.0
ISOBUTANE	TRACE	0.4	1.5
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	23.6	17.6	17.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.40	0.50	0.40
HEATING VALUE*	792	933	977
SPECIFIC GRAVITY	0.668	0.692	0.726

	INDEX 6988 SAMPLE 7253	INDEX 6989 SAMPLE 7254	INDEX 6990 SAMPLE 7255
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	GUSTIN NO. 2	LUNDGAIN NO. 3	WRIGHT NO. 5
LOCATION	SEC. 18, T4N, R17ECM	SEC. 21, T4N, R16ECM	SEC. 9, T3N, R16ECM
OWNER	DORCHESTER CORP.	DORCHESTER CORP.	DORCHESTER CORP.
COMPLETED	12/31/47	09/14/47	07/10/47
SAMPLED	10/15/59	10/15/59	10/15/59
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2690	2628	2650
WELLHEAD PRESSURE,PSIG	271	270	276
OPEN FLOW, MCFD	1750	1049	846
COMPONENT, MOLE PCT			
METHANE	75.9	75.6	75.2
ETHANE	6.0	6.5	6.3
PROPANE	3.2	3.5	3.7
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.6	0.5	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	12.3	11.7	12.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.40	0.30	0.40
HEATING VALUE*	1034	1051	1053
SPECIFIC GRAVITY	0.699	0.704	0.709

	INDEX 6991 SAMPLE 7256	INDEX 6992 SAMPLE 7257	INDEX 6993 SAMPLE 7389
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	BALZER NO. 2	LORING NO. 1	GRAHAM NO. 2-31
LOCATION	SEC. 36, T6N, R17ECM	SEC. 13, T3N, R16ECM	SEC. 31, T3N, R18ECM
OWNER	DORCHESTER CORP.	DORCHESTER CORP.	PANHANDLE EASTERN PIPELINE C
COMPLETED	04/28/49	08/09/48	11/--/59
SAMPLED	10/15/59	10/15/59	02/10/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2675	2731	2522
WELLHEAD PRESSURE,PSIG	293	280	350
OPEN FLOW, MCFD	NOT GIVEN	845	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.3	75.6	73.2
ETHANE	5.4	6.2	4.0
PROPANE	2.2	3.3	1.7
N-BUTANE	0.5	0.8	0.3
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.6	0.4	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	14.0	12.5	19.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.1
HELIUM	0.30	0.40	0.60
HEATING VALUE*	930	1028	878
SPECIFIC GRAVITY	0.683	0.697	0.681

	INDEX 6994 SAMPLE 8207	INDEX 6995 SAMPLE 9463	INDEX 6996 SAMPLE 11437
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	METCALF NO. 1	DICK RIDER NO. 1	A. W. BALZER NO. 1
LOCATION	SEC. 2, T4N, R18ECM	SEC. 33, T1N, R18ECM	SEC. 26, T4N, R17ECM
OWNER	PHILIP BOYLE, INC.	AMARILLO OIL CO.	SOHIO PETROLEUM CO.
COMPLETED	08/06/61	--/--/00	02/04/68
SAMPLED	11/01/61	08/20/64	04/07/68
FORMATION	PERM-CHASE GROUP	PENN-COLLIER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2653	4613	6270
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1172	1388
OPEN FLOW, MCFD	265	3872	4700
COMPONENT, MOLE PCT			
METHANE	69.5	67.1	84.0
ETHANE	1.7	4.7	5.6
PROPANE	0.3	4.0	4.0
N-BUTANE	0.1	1.4	1.5
ISOBUTANE	TRACE	0.8	0.4
N-PENTANE	TRACE	0.5	0.4
ISOPENTANE	TRACE	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.3	0.4
NITROGEN	28.5	20.4	2.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.3
HELIUM	0.62	0.42	0.16
HEATING VALUE*	736	995	1178
SPECIFIC GRAVITY	0.687	0.758	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 6997 SAMPLE 11815	INDEX 6998 SAMPLE 11816	INDEX 6999 SAMPLE 12191
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	STONEBRAKER A W NO. 1	STONEBRAKER A W NO. 1	STONEBRAKER AX NO. 1
LOCATION	SEC. 27, T3N, R15ECM	SEC. 27, T3N, R15ECM	SEC. 26, T3N, R15ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	01/20/69	01/20/69	07/22/69
SAMPLED	04/11/69	04/11/69	02/12/70
FORMATION	PENN-TORONTO	PENN-MORROW L	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4272	6240	5138
WELLHEAD PRESSURE,PSIG	1012	1481	1281
OPEN FLOW, MCFD	5800	7200	3500
COMPONENT, MOLE PCT			
METHANE	78.9	81.2	76.5
ETHANE	8.1	7.4	7.1
PROPANE	3.8	4.3	4.3
N-BUTANE	1.2	1.1	1.0
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	0.4	0.3	0.5
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	6.4	4.2	9.7
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.18	0.18	0.20
HEATING VALUE*	1139	1158	1097
SPECIFIC GRAVITY	0.699	0.695	0.710

	INDEX 7000 SAMPLE 12192	INDEX 7001 SAMPLE 12205	INDEX 7002 SAMPLE 12394
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	STONEBRAKER AX NO. 1	NASM A NO. 1	NEFF NO. 1-36
LOCATION	SEC. 26, T3N, R15ECM	SEC. 15, T3N, R15ECM	SEC. 36, T3N, R17ECM
OWNER	CITIES SERVICE OIL CO.	SKELLY OIL CO.	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	08/19/69	12/20/69	01/05/66
SAMPLED	02/12/70	02/18/70	08/25/70
FORMATION	PENN-TORONTO	PENN-MORROW U	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4284	6074	NOT GIVEN
WELLHEAD PRESSURE,PSIG	918	1200	986
OPEN FLOW, MCFD	14250	4850	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	78.8	91.0
ETHANE	7.8	6.3	3.2
PROPANE	4.2	4.9	1.6
N-BUTANE	1.1	0.9	0.6
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.4	7.5	2.4
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.18	0.25	0.13
HEATING VALUE*	1142	1113	1075
SPECIFIC GRAVITY	0.703	0.697	0.625

	INDEX 7003 SAMPLE 12858	INDEX 7004 SAMPLE 12859	INDEX 7005 SAMPLE 12880
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	STONEBRAKER T	STONEBRAKER AA-1	CASTO NO. 11
LOCATION	SEC. 9, T2N, R12ECM	SEC. 10, T2N, R12ECM	SEC. 24, T3N, R16ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CABOT CORP.
COMPLETED	--/--/00	--/--/00	06/24/71
SAMPLED	06/23/71	06/23/71	06/24/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	185	195	150
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.8	70.2	76.1
ETHANE	5.8	5.6	6.0
PROPANE	4.4	3.7	3.8
N-BUTANE	1.0	1.7	1.0
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.4	18.0	11.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.49	0.56	0.36
HEATING VALUE*	1014	972	1061
SPECIFIC GRAVITY	0.719	0.721	0.706

	INDEX 7006 SAMPLE 12900	INDEX 7007 SAMPLE 12905	INDEX 7008 SAMPLE 12906
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	C. M. REYNOLDS NO. 1	TARVER NO. 1	LONG NO. 1-B
LOCATION	SEC. 31, T1N, R11ECM	SEC. 2, T4N, R15ECM	SEC. 12, T4N, R15ECM
OWNER	SKELLY OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/23/71	07/19/71	07/19/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	195	195
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.5	76.2	75.4
ETHANE	5.2	6.2	6.1
PROPANE	4.0	3.6	3.5
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.7	0.3	0.2
N-PENTANE	0.4	0.4	TRACE
ISOPENTANE	0.0	0.1	0.6
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	23.7	11.7	12.4
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.2
HELIUM	1.20	0.36	0.36
HEATING VALUE*	925	1047	1039
SPECIFIC GRAVITY	0.752	0.700	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7009 SAMPLE 12907	INDEX 7010 SAMPLE 12929	INDEX 7011 SAMPLE 12932
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	LONG NO. 1	EASTERWOOD NO. 1-20	BACON NO. 1-29
LOCATION	SEC. 27, T4N, R14ECM	SEC. 20, T4N, R14ECM	SEC. 29, T4N, R14ECM
OWNER	CONTINENTAL OIL CO.	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
COMPLETED	--/--/00	09/23/48	06/24/50
SAMPLED	07/19/71	07/21/71	07/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2636	2520
WELLHEAD PRESSURE,PSIG	195	195	212
OPEN FLOW, MCFD	NOT GIVEN	201	278
COMPONENT, MOLE PCT			
METHANE	76.5	76.1	76.0
ETHANE	6.1	6.0	5.9
PROPANE	3.5	3.6	3.6
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	11.6	12.0	11.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.37	0.38	0.38
HEATING VALUE*	1040	1042	1051
SPECIFIC GRAVITY	0.695	0.700	0.704

	INDEX 7012 SAMPLE 12975	INDEX 7013 SAMPLE 12976	INDEX 7014 SAMPLE 12977
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	C. M. REYNOLDS NO. 1	ALLEN ESTATE NO. 1	HELLER-ROYSE NO. 1
LOCATION	SEC. 31, T1N, R11ECM	SEC. 26, T6N, R16ECM	SEC. 15, T6N, R16ECM
OWNER	SKELLY OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/27/71	08/26/71	08/26/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.5	77.8	77.5
ETHANE	5.1	5.8	5.8
PROPANE	3.8	3.4	3.4
N-BUTANE	1.0	0.8	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	23.3	11.1	11.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	1.19	0.36	0.36
HEATING VALUE*	916	1037	1036
SPECIFIC GRAVITY	0.743	0.687	0.688

	INDEX 7015 SAMPLE 12991	INDEX 7016 SAMPLE 13013	INDEX 7017 SAMPLE 13014
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	STATE NO. 1-B	CARSON NO. 1	STOCKEY NO. 1
LOCATION	SEC. 34, T1N, R12ECM	SEC. 20, T1N, R14ECM	SEC. 31, T1N, R14ECM
OWNER	AMOCO PRODUCTION CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/27/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	150	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	74.9	75.0
ETHANE	5.4	5.9	5.9
PROPANE	3.5	4.0	4.0
N-BUTANE	0.9	0.8	1.0
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	16.6	12.8	12.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.61	0.41	0.40
HEATING VALUE*	979	1042	1041
SPECIFIC GRAVITY	0.709	0.708	0.705

	INDEX 7018 SAMPLE 13015	INDEX 7019 SAMPLE 13016	INDEX 7020 SAMPLE 13017
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	OLIVE NO. 1	NIELSEN NO. 1	OLLIE NO. 1
LOCATION	SEC. 12, T1N, R14ECM	SEC. 33, T1N, R14ECM	SEC. 34, T1N, R14ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/21/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.2	75.3	75.5
ETHANE	5.9	5.8	5.9
PROPANE	4.0	3.9	3.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.4	12.6	12.5
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.42	0.42	0.41
HEATING VALUE*	1045	1042	1042
SPECIFIC GRAVITY	0.706	0.706	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7021 SAMPLE 13018	INDEX 7022 SAMPLE 13019	INDEX 7023 SAMPLE 13025
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	JEROME NO. 2	REPUBLIC NO. 1	NINA NO. 1
LOCATION	SEC. 35, T1N, R14ECM	SEC. 36, T1N, R14ECM	SEC. 36, T1N, R13ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/21/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	74.7	74.6
ETHANE	6.0	5.8	6.0
PROPANE	3.9	3.9	4.0
N-BUTANE	1.0	0.8	1.1
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.4	13.2	12.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.41	0.41	0.42
HEATING VALUE*	1057	1032	1057
SPECIFIC GRAVITY	0.713	0.706	0.715

	INDEX 7024 SAMPLE 13026	INDEX 7025 SAMPLE 13027	INDEX 7026 SAMPLE 13028
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	HAZE NO. 1	LOIS NO. 1	JAKE NO. 1
LOCATION	SEC. 35, T1N, R13ECM	SEC. 34, T1N, R13ECM	SEC. 33, T1N, R13ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/21/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	74.8	73.9
ETHANE	6.0	6.0	5.8
PROPANE	3.9	4.1	3.9
N-BUTANE	1.1	0.9	0.9
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	13.0	12.7	13.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.42	0.41	0.43
HEATING VALUE*	1047	1049	1027
SPECIFIC GRAVITY	0.714	0.712	0.711

	INDEX 7027 SAMPLE 13029	INDEX 7028 SAMPLE 13030	INDEX 7029 SAMPLE 13031
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	RIFFE NO. 1	WAUGH NO. 1	OTTO NO. 1
LOCATION	SEC. 32, T1N, R13ECM	SEC. 31, T1N, R13ECM	SEC. 35, T1N, R12ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/21/71	09/21/71	09/21/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.8	73.4	69.4
ETHANE	6.0	5.7	5.7
PROPANE	4.0	3.5	4.1
N-BUTANE	1.0	0.7	0.9
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	13.5	15.8	18.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.46	0.48	0.60
HEATING VALUE*	1036	981	988
SPECIFIC GRAVITY	0.715	0.702	0.731

	INDEX 7030 SAMPLE 13032	INDEX 7031 SAMPLE 13033	INDEX 7032 SAMPLE 13034
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	ESTA NO. 1	ORR NO. 1	BERGNER NO. 1
LOCATION	SEC. 3, T1N, R11ECM	SEC. 31, T2N, R12ECM	SEC. 32, T1N, R11ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/21/71	09/21/71	09/20/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	49.9	70.8	63.9
ETHANE	4.3	5.8	5.3
PROPANE	4.5	4.0	3.9
N-BUTANE	1.2	1.2	1.0
ISOBUTANE	0.7	0.6	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	36.5	16.5	23.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.6
HELIUM	2.16	0.53	0.88
HEATING VALUE*	786	1006	929
SPECIFIC GRAVITY	0.802	0.725	0.757

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7033 SAMPLE 13035	INDEX 7034 SAMPLE 13036	INDEX 7035 SAMPLE 13037
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	BERGNER ND- B-1	BARKER NO- A-1	BERRY NO- 1-E
LOCATION	SEC. 33, T1N, R11ECM	SEC- 34, T1N, R11ECM	SEC- 35, T1N, R11ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/20/71	09/20/71	09/20/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.2	68.9	65.3
ETHANE	5.7	5.7	6.0
PROPANE	4.1	4.1	4.6
N-BUTANE	1.1	1.0	1.1
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	18.6	18.5	20.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.5
HELIUM	0.83	0.71	0.35
HEATING VALUE*	997	984	994
SPECIFIC GRAVITY	0.743	0.734	0.772

	INDEX 7036 SAMPLE 13038	INDEX 7037 SAMPLE 13054	INDEX 7038 SAMPLE 13055
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	BERRY NO. 1-F	MITCHLAND NO. 1	ROUGE NO. 1
LOCATION	SEC. 36, T1N, R11ECM	SEC. 31, T1N, R16ECM	SEC. 32, T1N, R16ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/20/71	10/06/71	10/06/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.6	74.6	74.9
ETHANE	5.8	6.0	5.8
PROPANE	4.0	3.9	3.8
N-BUTANE	1.0	1.0	0.8
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.6	12.9	13.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.62	0.41	0.44
HEATING VALUE*	1023	1046	1027
SPECIFIC GRAVITY	0.726	0.712	0.703

	INDEX 7039 SAMPLE 13056	INDEX 7040 SAMPLE 13057	INDEX 7041 SAMPLE 13058
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	CAIRO NO. 1	TIMMONS NO. 1	MITCH NO. A-1
LOCATION	SEC. 33, T1N, R16ECM	SEC. 34, T1N, R16ECM	SEC. 35, T1N, R16ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/06/71	10/06/71	10/06/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	73.6	73.9
ETHANE	5.8	5.7	5.8
PROPANE	3.7	3.7	3.8
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	14.5	14.5	14.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.47	0.48	0.41
HEATING VALUE*	1014	1010	1016
SPECIFIC GRAVITY	0.709	0.707	0.706

	INDEX 7042 SAMPLE 13059	INDEX 7043 SAMPLE 13060	INDEX 7044 SAMPLE 13061
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	STATE NO. 1-D	WINFIELD NO. 1	ATKINS NO. B-1
LOCATION	SEC. 36, T1N, R16ECM	SEC. 31, T1N, R17ECM	SEC. 32, T1N, R17ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/06/71	10/06/71	10/07/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.4	73.9	73.4
ETHANE	5.7	5.7	5.6
PROPANE	3.2	3.7	3.2
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.5	14.4	15.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	TRACE
HELIUM	0.56	0.49	0.50
HEATING VALUE*	987	1012	985
SPECIFIC GRAVITY	0.702	0.707	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7045 SAMPLE 13062	INDEX 7046 SAMPLE 13063	INDEX 7047 SAMPLE 13064
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	ATKINS NO. B-3	ATKINS NO. B-4	ATKINS B NO. 5
LOCATION	SEC. 33, T1N, R17ECM	SEC. 34, T1N, R17ECM	SEC. 35, T1N, R17ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/07/71	10/07/71	10/07/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	79.4	73.9
ETHANE	5.8	5.5	5.4
PROPANE	3.8	3.5	3.1
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	13.7	9.3	15.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.41	0.35	0.57
HEATING VALUE*	1020	1062	975
SPECIFIC GRAVITY	0.705	0.684	0.696

	INDEX 7048 SAMPLE 13065	INDEX 7049 SAMPLE 13067	INDEX 7050 SAMPLE 13068
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	PERCY NO. 2	RUDER NO. 1	MITCH NO. B-2
LOCATION	SEC. 31, T1N, R15ECM	SEC. 33, T1N, R15ECM	SEC. 34, T1N, R15ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/06/71	10/06/71	10/06/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.3	75.0	81.5
ETHANE	5.8	6.0	4.8
PROPANE	3.9	4.0	4.8
N-BUTANE	0.9	0.9	1.9
ISOBUTANE	0.5	0.6	0.8
N-PENTANE	0.3	0.4	0.4
ISOPENTANE	0.0	0.0	1.0
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	0.2	0.7
NITROGEN	13.6	12.4	3.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.42	0.40	0.17
HEATING VALUE*	1028	1053	1234
SPECIFIC GRAVITY	0.708	0.711	0.732

	INDEX 7051 SAMPLE 13069	INDEX 7052 SAMPLE 13070	INDEX 7053 SAMPLE 13071
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	MITCH NO. B-1	LES NO. 1	LES NO. 2
LOCATION	SEC. 34, T1N, R15ECM	SEC. 35, T1N, R15ECM	SEC. 35, T1N, R15ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/06/71	10/06/71	10/06/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.4	74.7	82.0
ETHANE	6.1	6.1	4.6
PROPANE	4.1	4.3	4.7
N-BUTANE	1.0	1.1	2.0
ISOBUTANE	0.6	0.6	0.7
N-PENTANE	0.3	0.3	0.5
ISOPENTANE	0.1	0.3	0.9
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	11.9	12.0	3.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.41	0.42	0.16
HEATING VALUE*	1059	1074	1228
SPECIFIC GRAVITY	0.710	0.720	0.727

	INDEX 7054 SAMPLE 13072	INDEX 7055 SAMPLE 14644	INDEX 7056 SAMPLE 14645
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	SEGAR NO. 1	JAN NO. 1	LES NO. 1
LOCATION	SEC. 36, T1N, R15ECM	SEC. 24, T1N, R15ECM	SEC. 35, T1N, R15ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	03/13/46	08/08/45
SAMPLED	10/06/71	04/26/76	04/26/76
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2535	2665
WELLHEAD PRESSURE,PSIG	NOT GIVEN	153	143
OPEN FLOW, MCFD	NOT GIVEN	169	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.3	75.5	75.6
ETHANE	5.8	6.4	6.4
PROPANE	3.9	3.6	3.6
N-BUTANE	0.9	1.0	1.1
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	12.4	12.0	11.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.42	0.40	0.39
HEATING VALUE*	1046	1047	1048
SPECIFIC GRAVITY	0.708	0.703	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7057 SAMPLE 14646	INDEX 7058 SAMPLE 14648	INDEX 7059 SAMPLE 14665
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
WELL NAME	HITCH NO. B-1	TUNIS NO. 1	SEGAR NO. 1
LOCATION	SEC. 34, T1N, R15ECM	SEC. 23, T1N, R15ECM	SEC. 36, T1N, R15ECM
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/03/45	07/23/47	08/05/45
SAMPLED	04/26/76	04/26/76	04/27/76
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2751	2530	2660
WELLHEAD PRESSURE,PSIG	139	159	171
OPEN FLOW, MCFD	NOT GIVEN	189	449
COMPONENT, MOLE PCT			
METHANE	75.7	75.4	74.9
ETHANE	6.4	6.3	6.3
PROPANE	3.8	3.6	3.7
N-BUTANE	1.1	0.9	1.0
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.5	12.3	12.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.81	0.40	0.43
HEATING VALUE*	1053	1044	1048
SPECIFIC GRAVITY	0.702	0.704	0.705

	INDEX 7060 SAMPLE 12199	INDEX 7061 SAMPLE 15596	INDEX 7062 SAMPLE 16708
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA	GUYMON-HUGOTON GAS AREA
WELL NAME	STAMPER NO. 1	KEEMAN NO. B-1	LOLMAUGH NO. 2
LOCATION	SEC. 21, T4N, R16ECM	SEC. 36, T4N, R13ECM	SEC. 5, T3N, R16ECM
OWNER	CABOT CORP.	ANADARKO PRODUCTION CO.	MOBIL OIL CORP.
COMPLETED	02/27/69	06/20/78	01/03/81
SAMPLED	02/16/70	04/05/79	11/16/82
FORMATION	PENN-MORROW	PENN-MORROW	PERM-COUNCIL GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7100	6203	3033
WELLHEAD PRESSURE,PSIG	1766	NOT GIVEN	274
OPEN FLOW, MCFD	18592	6300	2434
COMPONENT, MOLE PCT			
METHANE	89.1	88.1	73.9
ETHANE	3.4	5.6	5.1
PROPANE	1.5	2.7	2.2
N-BUTANE	0.3	0.8	0.7
ISOBUTANE	0.1	0.3	0.4
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	4.4	1.5	16.1
OXYGEN	0.3	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.12	0.12	0.40
HEATING VALUE*	1034	1122	980
SPECIFIC GRAVITY	0.619	0.643	0.703

	INDEX 7063 SAMPLE 13867	INDEX 7064 SAMPLE 16208	INDEX 7065 SAMPLE 7252
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HITCHLAND N	HOOKER E	HOOKER SW
WELL NAME	HITCH UNIT B NO. 1	METCALF "A" NO. 1	BALZER NO. 1
LOCATION	SEC. 27, T3N, R16ECM	SEC. 2, T4N, R18ECM	SEC. 8, T3N, R17ECM
OWNER	PETROLEUM, INC.	ANADARKO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	06/08/73	02/29/80	09/--/59
SAMPLED	01/18/74	03/17/81	10/16/59
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6450	6524	6360
WELLHEAD PRESSURE,PSIG	1162	585	1700
OPEN FLOW, MCFD	23857	797	19090
COMPONENT, MOLE PCT			
METHANE	89.1	86.2	79.9
ETHANE	5.0	5.0	5.4
PROPANE	2.1	3.4	3.9
N-BUTANE	0.6	1.1	1.0
ISOBUTANE	0.4	0.5	0.9
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.2	0.4	0.9
CYCLOPENTANE	0.2	0.1	0.5
HEXANES PLUS	0.5	0.2	2.0
NITROGEN	1.2	2.5	4.9
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.11	0.15	0.20
HEATING VALUE*	1135	1149	1235
SPECIFIC GRAVITY	0.647	0.671	0.751

	INDEX 7066 SAMPLE 7714	INDEX 7067 SAMPLE 7826	INDEX 7068 SAMPLE 7829
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	BALZER NO. 1-9	LUNDGRIN NO. 1-19	FINFROCK NO. 1-13
LOCATION	SEC. 9, T3N, R17ECM	SEC. 19, T4N, R17ECM	SEC. 13, T4N, R16ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/09/60	06/03/60	10/21/60
SAMPLED	10/08/60	01/23/61	01/28/61
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6453	6197	6196
WELLHEAD PRESSURE,PSIG	1800	1450	1525
OPEN FLOW, MCFD	15000	20000	14500
COMPONENT, MOLE PCT			
METHANE	94.7	83.9	83.6
ETHANE	2.5	6.1	6.2
PROPANE	0.9	3.6	4.0
N-BUTANE	0.2	1.0	1.1
ISOBUTANE	0.2	0.7	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	3.3	3.3
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1063	1146	1150
SPECIFIC GRAVITY	0.598	0.680	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7069 SAMPLE 7880	INDEX 7070 SAMPLE 7881	INDEX 7071 SAMPLE 7882
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	SCHAEFFLER NO. 1-23	SCHAEFFLER NO. 1-23	FINFROCK NO. 1-18
LOCATION	SEC. 23, T5N, R16ECM	SEC. 23, T5N, R16ECM	SEC. 18, T4N, R17ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	08/28/60	08/28/60	08/27/60
SAMPLED	02/22/61	02/22/61	02/22/61
FORMATION	PENN-MORROW U	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6116	6452	6190
WELLHEAD PRESSURE,PSIG	1424	1327	1409
OPEN FLOW, MCFD	14700	2724	20600
COMPONENT, MOLE PCT			
METHANE	83.7	92.0	84.0
ETHANE	6.4	3.5	6.2
PROPANE	4.1	1.3	3.9
N-BUTANE	1.1	0.5	1.2
ISOBUTANE	0.7	0.3	0.6
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	3.0	1.6	3.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.10	0.10	0.20
HEATING VALUE*	1157	1059	1164
SPECIFIC GRAVITY	0.682	0.612	0.685

	INDEX 7072 SAMPLE 8406	INDEX 7073 SAMPLE 8446	INDEX 7074 SAMPLE 8448
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	MATTER NO. 1-14	AVA M. BLACKWELDER NO. 1-30	AVA M. BLACKWELDER NO. 1-30
LOCATION	SEC. 14, T5N, R16ECM	SEC. 30, T5N, R17ECM	SEC. 30, T5N, R17ECM
OWNER	SHELL OIL CO.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	03/25/61	02/09/62	02/09/62
SAMPLED	02/08/62	03/03/62	03/03/62
FORMATION	PENN-MORROW	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6102	6482	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1579	1429
OPEN FLOW, MCFD	136200	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.2	88.0	83.9
ETHANE	6.0	4.8	5.9
PROPANE	3.9	2.2	3.9
N-BUTANE	1.0	0.5	1.1
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	3.2	3.0	3.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.15	0.11	0.15
HEATING VALUE*	1139	1083	1156
SPECIFIC GRAVITY	0.673	0.640	0.684

	INDEX 7075 SAMPLE 8614	INDEX 7076 SAMPLE 8621	INDEX 7077 SAMPLE 8698
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	AVA M. BLACKWELDER NO. 1-30	AVA M. BLACKWELDER	MAXINE B. GROUNDS
LOCATION	SEC. 30, T5N, R17ECM	SEC. 30, T5N, R17ECM	SEC. 19, T5N, R17ECM
OWNER	HAMILTON BROS., INC.	HAMILTON BROS., INC.	HAMILTON BROS., INC.
COMPLETED	02/10/62	02/10/62	07/19/62
SAMPLED	07/25/62	07/25/62	10/08/62
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6468	6163	6214
WELLHEAD PRESSURE,PSIG	1425	1400	1465
OPEN FLOW, MCFD	2000	3000	21299
COMPONENT, MOLE PCT			
METHANE	88.2	84.5	83.6
ETHANE	4.7	6.0	6.0
PROPANE	3.2	3.8	4.1
N-BUTANE	0.6	1.0	1.2
ISOBUTANE	0.1	0.5	0.5
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.7	3.2	3.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.3
HELIUM	0.12	0.14	0.14
HEATING VALUE*	1098	1139	1149
SPECIFIC GRAVITY	0.637	0.673	0.681

	INDEX 7078 SAMPLE 9723	INDEX 7079 SAMPLE 11164	INDEX 7080 SAMPLE 11165
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	SHELL UNIT 1-21	OKLAHOMA STATE K NO. 1	OKLAHOMA STATE K NO. 1
LOCATION	SEC. 21, T3N, R17ECM	SEC. 21, T3N, R17ECM	SEC. 21, T3N, R17ECM
OWNER	SHELL OIL CO.	CABOT CORP.	CABOT CORP.
COMPLETED	12/07/64	07/07/66	07/07/66
SAMPLED	02/09/65	10/12/67	10/12/67
FORMATION	PENN-KEYES	PENN-TORONTO	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6448	4253	6469
WELLHEAD PRESSURE,PSIG	1725	1086	1409
OPEN FLOW, MCFD	2510	10000	1500
COMPONENT, MOLE PCT			
METHANE	94.3	94.4	66.1
ETHANE	2.4	2.4	5.3
PROPANE	0.9	0.8	3.1
N-BUTANE	0.3	0.4	1.1
ISOBUTANE	0.2	0.1	0.5
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.2	1.1	22.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.09	0.09	0.38
HEATING VALUE*	1057	1065	939
SPECIFIC GRAVITY	0.598	0.602	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7081 SAMPLE 12382	INDEX 7082 SAMPLE 12384	INDEX 7083 SAMPLE 12385
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	HOOKER SW
WELL NAME	SYLVESTER NO. 1-32	BALZER NO. 1-9	MAYER NO. 1-16
LOCATION	SEC. 32, T4N, R17ECM	SEC. 9, T3N, R17ECM	SEC. 16, T3N, R17ECM
OWNER	GRAHAM-MICHAELIS DRILLING CO	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	12/18/64	06/--/60	10/--/62
SAMPLED	08/21/70	08/25/70	08/25/70
FORMATION	PENN-MORROW	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6424	6419	6416
WELLHEAD PRESSURE,PSIG	1066	1347	1350
OPEN FLOW, MCFD	17886	2500	3225
COMPONENT, MOLE PCT			
METHANE	88.4	94.8	94.4
ETHANE	5.4	2.3	2.2
PROPANE	4.2	0.9	0.9
N-BUTANE	1.2	0.3	0.2
ISOBUTANE	0.5	0.1	0.2
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	3.0	0.9	1.4
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.15	0.09	0.09
HEATING VALUE*	1154	1053	1041
SPECIFIC GRAVITY	0.680	0.592	0.592

	INDEX 7084 SAMPLE 12426	INDEX 7085 SAMPLE 15612	INDEX 7086 SAMPLE 5602
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	HOOKER SW	HOOKER SW	KEYES GAS AREA
WELL NAME	FRICK UNIT NO. 1	FISCHER NO. 1	CLLA HAMILTON NO. 1
LOCATION	SEC. 5, T3N, R17ECM	SEC. 27, T5N, R16ECM	SEC. 6, T5N, R10ECM
OWNER	SAMEDAN OIL CORP.	CABOT CORP.	UNITED PRODUCING CO., INC.
COMPLETED	12/18/64	08/15/18	12/10/53
SAMPLED	09/28/70	04/30/19	03/22/54
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6420	6484	4617
WELLHEAD PRESSURE,PSIG	1525	1338	875
OPEN FLOW, MCFD	13360	9855	14100
COMPONENT, MOLE PCT			
METHANE	94.9	94.2	73.1
ETHANE	2.2	2.5	3.8
PROPANE	0.9	0.9	2.4
N-BUTANE	0.2	0.3	0.7
ISOBUTANE	0.2	0.1	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.0	1.1	16.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.8
HELIUM	0.09	0.09	1.80
HEATING VALUE*	1056	1058	925
SPECIFIC GRAVITY	0.595	0.598	0.688

	INDEX 7087 SAMPLE 5826	INDEX 7088 SAMPLE 5831	INDEX 7089 SAMPLE 5844
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	W. A. SPARKMAN NO. 1	HERB NO. 1	MANARY NO. A-1
LOCATION	SEC. 7, T5N, R10ECM	SEC. 18, T5N, R10ECM	SEC. 31, T6N, R10ECM
OWNER	SHELL OIL CO.	SHELL OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	06/--/54	06/--/54	09/18/53
SAMPLED	09/26/55	09/26/55	05/02/55
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4528	4589	4582
WELLHEAD PRESSURE,PSIG	836	833	840
OPEN FLOW, MCFD	1900	22500	5573
COMPONENT, MOLE PCT			
METHANE	71.2	64.1	76.6
ETHANE	3.5	3.1	3.5
PROPANE	2.1	1.9	1.7
N-BUTANE	0.7	0.7	0.8
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.2	0.2	0.7
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.8
NITROGEN	18.7	25.8	12.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.5
HELIUM	1.87	2.14	1.44
HEATING VALUE*	907	822	1022
SPECIFIC GRAVITY	0.701	0.728	0.706

	INDEX 7090 SAMPLE 5990	INDEX 7091 SAMPLE 6123	INDEX 7092 SAMPLE 6126
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	DELIER	STATE OF OKLAHOMA NO. 2-C	GODDARD NO. 1-19
LOCATION	SEC. 32, T3N, R10ECM	SEC. 30, T5N, R10ECM	SEC. 19, T5N, R10ECM
OWNER	PHILLIPS PETROLEUM CO.	CABOT CORP.	PANHANDLE EASTERN PIPELINE C
COMPLETED	11/29/55	06/30/55	12/01/54
SAMPLED	01/05/56	08/09/56	08/15/56
FORMATION	PENN-CHEROKEE	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4928	4580	4590
WELLHEAD PRESSURE,PSIG	795	750	816
OPEN FLOW, MCFD	671	1500	23183
COMPONENT, MOLE PCT			
METHANE	71.8	53.0	55.0
ETHANE	7.3	3.1	2.6
PROPANE	3.6	2.0	1.5
N-BUTANE	0.9	0.7	0.7
ISOBUTANE	0.1	0.4	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.2	26.5	34.0
OXYGEN	0.0	0.0	2.3
ARGON	TRACE	0.1	0.2
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.1	1.2
HELIUM	0.40	2.26	1.58
HEATING VALUE*	1005	814	707
SPECIFIC GRAVITY	0.715	0.732	0.772

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7093 SAMPLE 6388	INDEX 7094 SAMPLE 6406	INDEX 7095 SAMPLE 6436
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	PIKE NO. 1	STATE WILLIAMS NO. 1	OKLAHOMA STATE NO. C-2
LOCATION	SEC. 5, T5N, R10ECM	SEC. 30, T5N, R10ECM	SEC. 30, T5N, R10ECM
OWNER	M. F. SAUNDERS	CABOT CARBON CO.	CABOT CARBON CO.
COMPLETED	--/--/00	06/27/54	06/30/55
SAMPLED	08/20/57	09/27/57	11/06/57
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4554	4550	4580
WELLHEAD PRESSURE,PSIG	894	815	940
OPEN FLOW, MCFD	92000	48500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	62.9	63.0
ETHANE	3.8	3.0	3.1
PROPANE	2.3	1.7	2.3
N-BUTANE	0.7	0.5	0.8
ISOBUTANE	0.4	0.8	0.5
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	16.4	27.0	26.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.3	1.2
HELIUM	1.91	2.20	2.20
HEATING VALUE*	934	792	828
SPECIFIC GRAVITY	0.692	0.727	0.739

	INDEX 7096 SAMPLE 7166	INDEX 7097 SAMPLE 7185	INDEX 7098 SAMPLE 7246
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	OKLAHOMA STATE D-1	W. A. SPARKMAN NO. 1	FINCHAM NO. 1
LOCATION	SEC. 31, T5N, R10ECM	SEC. 7, T5N, R10ECM	SEC. 27, T6N, R10ECM
OWNER	PANHANDLE EASTERN PIPELINE C	SHELL OIL CO.	GRAHAM-MICHAELIS DRILLING CO
COMPLETED	09/16/57	06/--/54	08/11/58
SAMPLED	08/07/59	08/--/59	10/16/59
FORMATION	PENN-KEYES	PENN-KEYES	PENN-PURDY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4526	4528	9442
WELLHEAD PRESSURE,PSIG	745	754	1117
OPEN FLOW, MCFD	2256	1900	50000
COMPONENT, MOLE PCT			
METHANE	54.4	80.5	73.9
ETHANE	2.6	4.1	5.4
PROPANE	2.7	2.8	3.4
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.1	0.3	0.5
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	33.3	8.1	14.6
OXYGEN	2.4	0.0	TRACE
ARGON	0.2	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.1
HELIUM	1.98	1.90	0.70
HEATING VALUE*	739	1037	997
SPECIFIC GRAVITY	0.779	0.669	0.701

	INDEX 7099 SAMPLE 7269	INDEX 7100 SAMPLE 7270	INDEX 7101 SAMPLE 7282
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
WELL NAME	GODDARD NO. 1-19	SAUNDERS PIKE NO. 1	HAMILTON NO. 1
LOCATION	SEC. 19, T5N, R10ECM	SEC. 5, T5N, R10ECM	SEC. 6, T5N, R10ECM
OWNER	PANHANDLE EASTERN PIPELINE C	M. F. SAUNDERS	UNITED PRODUCING CO., INC.
COMPLETED	12/02/54	--/--/00	01/05/54
SAMPLED	11/03/59	11/03/59	11/17/59
FORMATION	PENN-KEYES	PENN-KEYES	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4584	NOT GIVEN	4631
WELLHEAD PRESSURE,PSIG	753	746	749
OPEN FLOW, MCFD	20351	NOT GIVEN	14100
COMPONENT, MOLE PCT			
METHANE	62.8	72.6	71.6
ETHANE	1.9	3.7	3.7
PROPANE	1.6	3.3	3.3
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.5	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	27.2	16.4	17.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.5	0.4
HELIUM	2.10	1.80	1.40
HEATING VALUE*	808	952	930
SPECIFIC GRAVITY	0.739	0.700	0.700

	INDEX 7102 SAMPLE 7285	INDEX 7103 SAMPLE 9765	INDEX 7104 SAMPLE 14500
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	KEYES GAS AREA	LIBERAL SW	LIBERAL SW
WELL NAME	MANARY	DELLA HADSELL	BLASER NO. 1
LOCATION	SEC. 31, T6N, R10ECM	SEC. 13, T6N, R19ECM	SEC. 13, T6N, R19ECM
OWNER	CITIES SERVICE OIL CO.	MOBIL OIL CORP.	BASIN PETROLEUM CORP.
COMPLETED	04/21/53	05/30/64	04/03/75
SAMPLED	11/13/59	02/25/65	10/21/75
FORMATION	PENN-KEYES	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4572	6312	6400
WELLHEAD PRESSURE,PSIG	760	1030	1170
OPEN FLOW, MCFD	3125	1040	10902
COMPONENT, MOLE PCT			
METHANE	75.4	80.6	89.6
ETHANE	3.6	4.1	4.0
PROPANE	3.5	2.9	2.1
N-BUTANE	0.6	0.9	0.6
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	13.6	9.6	2.3
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	1.70	0.24	0.15
HEATING VALUE*	983	1043	1099
SPECIFIC GRAVITY	0.687	0.681	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7105 SAMPLE 6510	INDEX 7106 SAMPLE 6584	INDEX 7107 SAMPLE 7447
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	MOUSER	MOUSER	MOUSER
WELL NAME	MURDOCK A NO. 2	MURDOCK NO. A-1	NORDBERG TRUSTEE NO. 1-M
LOCATION	SEC. 3, T4N, R15ECM	SEC. 10, T4N, R15ECM	SEC. 27, T6N, R15ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	REPUBLIC NATURAL GAS CO.
COMPLETED	10/02/57	04/03/58	03/12/60
SAMPLED	02/17/58	05/14/58	03/16/60
FORMATION	PENN-MORROW	PENN-KEYES	PENN-MORROW BASAL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6032	6380	6568
WELLHEAD PRESSURE,PSIG	1634	1624	1715
OPEN FLOW, MCFD	168000	2255	4587
COMPONENT, MOLE PCT			
METHANE	82.7	81.3	92.7
ETHANE	6.5	5.0	2.7
PROPANE	4.0	3.2	1.2
N-BUTANE	1.1	1.2	0.3
ISOBUTANE	0.4	1.1	0.1
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	4.0	6.9	1.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.9
HELIUM	0.10	0.20	0.10
HEATING VALUE*	1153	1100	1041
SPECIFIC GRAVITY	0.690	0.688	0.605

	INDEX 7108 SAMPLE 7590	INDEX 7109 SAMPLE 8659	INDEX 7110 SAMPLE 13726
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	MOUSER	MOUSER	MOUSER
WELL NAME	HIER NO. A-1	WILSON E NO. 4	MURDOCK A-12
LOCATION	SEC. 21, T5N, R15ECM	SEC. 23, T5N, R15ECM	SEC. 15, T4N, R15ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	04/29/60	07/16/62	06/04/73
SAMPLED	06/23/60	08/30/62	08/16/73
FORMATION	PENN-MORROW U	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6128	6526	6083
WELLHEAD PRESSURE,PSIG	1434	1688	643
OPEN FLOW, MCFD	52000	12200	11000
COMPONENT, MOLE PCT			
METHANE	63.6	93.1	79.9
ETHANE	6.1	2.9	6.7
PROPANE	6.9	1.1	5.1
N-BUTANE	6.5	0.2	1.1
ISOBUTANE	TRACE	0.2	0.6
N-PENTANE	6.5	0.1	0.2
ISOPENTANE	3.2	0.1	0.2
CYCLOPENTANE	1.0	0.1	TRACE
HEXANES PLUS	4.2	0.1	0.1
NITROGEN	1.5	1.8	5.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.10	0.12	0.17
HEATING VALUE*	1819	1054	1141
SPECIFIC GRAVITY	1.069	0.603	0.700

	INDEX 7111 SAMPLE 6509	INDEX 7112 SAMPLE 14863	INDEX 7113 SAMPLE 6466
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	MOUSER SW	MOUSER W	ONA NW
WELL NAME	STELZER	HAMPY A NO. 2	DENECKER NO. A-1
LOCATION	SEC. 11, T4N, R14ECM	SEC. 23, T5N, R17ECM	SEC. 8, T4N, R10ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	EXCELSIOR OIL CORP.
COMPLETED	12/24/57	09/10/76	12/20/57
SAMPLED	02/17/58	11/30/76	12/31/57
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6160	6120	3134
WELLHEAD PRESSURE,PSIG	1422	1191	437
OPEN FLOW, MCFD	32000	89625	5400
COMPONENT, MOLE PCT			
METHANE	77.8	82.7	76.8
ETHANE	7.3	6.4	5.7
PROPANE	5.4	4.3	3.4
N-BUTANE	2.7	1.1	1.1
ISOBUTANE	1.0	0.4	0.5
N-PENTANE	0.7	0.2	0.3
ISOPENTANE	0.9	0.3	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.7	0.2	0.2
NITROGEN	0.9	4.0	10.9
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.20	0.17	0.60
HEATING VALUE*	1296	1150	1054
SPECIFIC GRAVITY	0.767	0.688	0.701

	INDEX 7114 SAMPLE 6977	INDEX 7115 SAMPLE 7110	INDEX 7116 SAMPLE 7139
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	ONA NW	ONA NW	ONA NW
WELL NAME	ADDIE WOILES UNIT NO. 1	E. BRUMLEY NO. 1	DENCKER NO. 1
LOCATION	SEC. 18, T4N, R10ECM	SEC. 7, T4N, R10ECM	SEC. 8, T4N, R10ECM
OWNER	TEXACO INC.	PICO DRILLING CO.	EXCELSIOR OIL CORP.
COMPLETED	12/08/58	--/--/00	12/07/57
SAMPLED	02/17/59	06/22/59	07/10/59
FORMATION	PENN-TOPEKA	PENN-TOPEKA	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3141	3110	3134
WELLHEAD PRESSURE,PSIG	386	430	435
OPEN FLOW, MCFD	1884	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	76.9	77.7	75.8
ETHANE	5.0	5.1	6.1
PROPANE	3.4	3.2	5.5
N-BUTANE	1.2	1.0	1.2
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	10.7	10.9	11.7
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.20	0.80	0.60
HEATING VALUE*	1067	1030	1046
SPECIFIC GRAVITY	0.708	0.685	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES -

	INDEX 7117 SAMPLE 7141	INDEX 7118 SAMPLE 7149	INDEX 7119 SAMPLE 7713
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	ONA NW	ONA NW	ONA W
WELL NAME	E. BRUMLEY NO. 1	E. BRUMLEY NO. 1	NO. 1
LOCATION	SEC. 7, T4N, R10ECM	SEC. 7, T4N, R10ECM	SEC. 19, T4N, R10ECM
OWNER	PICO DRILLING CO.	PICO DRILLING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	--/--/00	07/25/59	08/12/60
SAMPLED	07/14/59	07/25/59	10/06/62
FORMATION	PENN-PURDY L	PENN-PURDY M	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4470	4425	3156
WELLHEAD PRESSURE, PSIG	950	866	329
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.1	69.0	75.0
ETHANE	3.2	3.7	6.3
PROPANE	1.1	1.3	4.0
N-BUTANE	0.3	0.0	1.2
ISOBUTANE	0.3	0.7	0.6
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	31.8	23.7	11.6
OXYGEN	2.7	TRACE	TRACE
ARGON	0.2	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	1.00	1.20	0.70
HEATING VALUE*	716	831	1055
SPECIFIC GRAVITY	0.739	0.693	0.910

	INDEX 7120 SAMPLE 6703	INDEX 7121 SAMPLE 6918	INDEX 7122 SAMPLE 6982
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	POSTLE	POSTLE	POSTLE
WELL NAME	EASTERWOOD NO. 2	BEATY NO. 2-33	WELCH NO. 2
LOCATION	SEC. 11, T4N, R13ECM	SEC. 33, T6N, R13ECM	SEC. 13, T5N, R13ECM
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	REPUBLIC NATURAL GAS CO.
COMPLETED	12/23/57	11/13/58	02/22/59
SAMPLED	07/10/58	01/06/59	02/22/59
FORMATION	PENN-MORROW BASAL	PENN-MORROW G	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6400	6447	6171
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	1670
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.1	71.5	77.5
ETHANE	8.7	9.7	6.3
PROPANE	8.9	8.9	5.7
N-BUTANE	4.6	2.6	1.7
ISOBUTANE	2.1	1.5	0.9
N-PENTANE	1.4	0.6	0.4
ISOPENTANE	1.3	0.8	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.9	0.5	0.4
NITROGEN	6.9	3.2	6.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.04	0.02	0.10
HEATING VALUE*	1428	1357	1188
SPECIFIC GRAVITY	0.892	0.810	0.738

	INDEX 7123 SAMPLE 7331	INDEX 7124 SAMPLE 8005	INDEX 7125 SAMPLE 8139
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	POSTLE	POSTLE	POSTLE
WELL NAME	G. W. FERGUSON NO. 1-M	JULIAN NO. 8	MAAR NO. 2
LOCATION	SEC. 13, T5N, R13ECM	SEC. 31, T5N, R13ECM	SEC. 32, T6N, R13ECM
OWNER	REPUBLIC NATURAL GAS CO.	REPUBLIC NATURAL GAS CO.	ANADARKO PRODUCTION CO.
COMPLETED	--/--/00	--/--/00	10/03/60
SAMPLED	01/05/60	06/01/61	09/11/61
FORMATION	PENN-KEYES	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6560	5980	6067
WELLHEAD PRESSURE, PSIG	1985	NOT GIVEN	1353
OPEN FLOW, MCFD	6640	1670	50946
COMPONENT, MOLE PCT			
METHANE	80.0	80.8	81.2
ETHANE	4.1	6.3	7.0
PROPANE	2.8	4.4	4.3
N-BUTANE	0.8	1.2	1.1
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	10.4	5.8	4.3
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.20	0.10	0.13
HEATING VALUE*	1049	1128	1156
SPECIFIC GRAVITY	0.689	0.692	0.697

	INDEX 7126 SAMPLE 8750	INDEX 7127 SAMPLE 15580	INDEX 7128 SAMPLE 7974
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	POSTLE	RICE SW	RICHLAND CENTER N
WELL NAME	M. C. ROESLER B 1-29	C. N. TREECE "B" NO. 2	WOODWARD B 01
LOCATION	SEC. 19, T6N, R13ECM	SEC. 7, T2N, R10ECM	SEC. 9, T5N, R12ECM
OWNER	HAMILTON BROS., INC.	TEXACO INC.	ANADARKO PRODUCTION CO.
COMPLETED	--/--/00	10/17/77	01/22/60
SAMPLED	11/01/62	03/14/79	05/19/61
FORMATION	PENN-KEYES	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6511	4556	5742
WELLHEAD PRESSURE, PSIG	1442	937	487
OPEN FLOW, MCFD	10172	6376	4074
COMPONENT, MOLE PCT			
METHANE	79.9	85.5	59.4
ETHANE	4.5	6.0	9.4
PROPANE	2.8	3.0	3.3
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	10.0	3.0	29.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.17	0.19	0.20
HEATING VALUE*	1050	1137	850
SPECIFIC GRAVITY	0.689	0.666	0.766

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7129 SAMPLE 14426	INDEX 7130 SAMPLE 14427	INDEX 7131 SAMPLE 14567
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	RICHLAND CENTER S	RICHLAND CENTER S	TEXHOMA N
WELL NAME	ECKSTEIN A-2	ECKSTEIN A-2	HERMIT NO. 2
LOCATION	SEC. 27, T5N, R12ECM	SEC. 27, T5N, R12ECM	SEC. 29, T2N, R12ECM
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	07/08/75	07/08/75	10/30/75
SAMPLED	08/06/75	08/06/75	01/23/76
FORMATION	PENN-CHEROKEE	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5078	5870	6080
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	572
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4190
COMPONENT, MOLE PCT			
METHANE	80.5	75.0	89.0
ETHANE	8.1	5.8	5.3
PROPANE	4.8	3.6	2.3
N-BUTANE	1.0	0.9	0.6
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	5.2	13.5	1.6
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.15	0.32	0.10
HEATING VALUE*	1134	1030	1104
SPECIFIC GRAVITY	0.687	0.708	0.633

	INDEX 7132 SAMPLE 9849	INDEX 7133 SAMPLE 12269	INDEX 7134 SAMPLE 14495
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	TRACY SE	TRACY SE	TRACY SE
WELL NAME	STAMBAUGH A -1	WEBB A NO. 2	STONEBRAKER P NO. 2
LOCATION	SEC. 1, T3N, R12ECM	SEC. 35, T4N, R12ECM	SEC. 2, T3N, R12ECM
OWNER	ANADARKO PRODUCTION CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	12/31/64	04/11/70	09/05/75
SAMPLED	04/21/65	05/22/70	10/17/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6417	6026	5993
WELLHEAD PRESSURE,PSIG	1288	1354	1340
OPEN FLOW, MCFD	1020	2200	4844
COMPONENT, MOLE PCT			
METHANE	80.4	82.7	87.4
ETHANE	6.7	7.1	5.9
PROPANE	3.5	4.7	2.9
N-BUTANE	1.0	1.0	0.7
ISOBUTANE	0.6	0.4	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	6.5	3.0	2.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.2
HELIUM	0.32	0.12	0.13
HEATING VALUE*	1111	1174	1122
SPECIFIC GRAVITY	0.690	0.688	0.648

	INDEX 7135 SAMPLE 7229	INDEX 7136 SAMPLE 12703	INDEX 7137 SAMPLE 11685
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	TRIUMPH S	TRIUMPH SW	TYRONE
WELL NAME	STEINKUEHLER NO. 1	INTERSTATE CATTLELOAN NO. 1	RUBY HARRISON NO. 1
LOCATION	SEC. 12, T5N, R11ECM	SEC. 29, T5N, R11ECM	SEC. 8, T5N, R19ECM
OWNER	PETROLEUM, INC.	SHENANDOAH OIL CORP.	TEXACO INC. & SUN OIL CO.
COMPLETED	10/31/58	07/04/69	03/30/68
SAMPLED	10/01/59	03/04/71	11/26/68
FORMATION	PENN-CHEROKEE	PENN-KEYES	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4548	4753	6417
WELLHEAD PRESSURE,PSIG	1013	873	1463
OPEN FLOW, MCFD	8000	1187	14600
COMPONENT, MOLE PCT			
METHANE	77.7	69.6	88.4
ETHANE	7.0	9.4	4.3
PROPANE	3.8	3.2	2.2
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	TRACE	0.3	0.4
ISOPENTANE	0.5	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	9.4	20.0	2.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.30	0.70	0.16
HEATING VALUE*	1073	922	1109
SPECIFIC GRAVITY	0.694	0.725	0.645

	INDEX 7138 SAMPLE 16680	INDEX 7139 SAMPLE 17131	INDEX 7140 SAMPLE 17132
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	TYRONE	TYRONE	TYRONE
WELL NAME	HOOD NO. 1	HOOD NO. B-1	APSLEY NO. B1
LOCATION	SEC. 2, T5N, R19ECM	SEC. 25, T6N, R19ECM	SEC. 24, T6N, R19ECM
OWNER	FUNK EXPLORATION CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	06/29/82	08/28/82	--/--/00
SAMPLED	10/05/82	11/02/83	11/02/83
FORMATION	PENN-MORROW & MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6413	6680	6694
WELLHEAD PRESSURE,PSIG	1600	1816	1809
OPEN FLOW, MCFD	4000	9349	7109
COMPONENT, MOLE PCT			
METHANE	59.1	81.0	80.7
ETHANE	3.9	6.8	6.8
PROPANE	2.6	3.3	3.3
N-BUTANE	0.8	1.5	1.3
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.2	0.4	0.4
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	32.0	5.4	5.7
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.11	0.09	0.10
HEATING VALUE*	825	1148	1133
SPECIFIC GRAVITY	0.775	0.698	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7141 SAMPLE 10569	INDEX 7142 SAMPLE 11051	INDEX 7143 SAMPLE 12424
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	TYRONE NE	TYRONE NW	UNITY
WELL NAME	PEDIGO NO. 1-16	RIFFE NO. 1-26	OKLAHOMA STATE H NO. 1
LOCATION	SEC. 16, T6N, R18ECM	SEC. 26, T6N, R18ECM	SEC. 1, T3N, R13ECM
OWNER	MESA PETROLEUM CO.	HUMBLE OIL & REFINING CO.	ANADARKO PRODUCTION CO.
COMPLETED	03/27/66	--/--/00	07/28/69
SAMPLED	05/20/66	08/06/67	09/25/70
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6306	6380	6212
WELLHEAD PRESSURE,PSIG	1635	1778	1398
OPEN FLOW, MCFD	22400	4261	1133
COMPONENT, MOLE PCT			
METHANE	84.8	88.9	87.1
ETHANE	4.5	4.5	5.7
PROPANE	2.2	2.2	3.1
N-BUTANE	0.1	0.7	0.8
ISOBUTANE	1.4	0.4	0.4
N-PENTANE	0.8	0.1	0.2
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	1.4	0.2	0.1
NITROGEN	3.7	2.2	2.0
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.16	0.16	0.14
HEATING VALUE*	1168	1106	1128
SPECIFIC GRAVITY	0.696	0.642	0.650

	INDEX 7144 SAMPLE 6329	INDEX 7145 SAMPLE 6330	INDEX 7146 SAMPLE 3324
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TULSA
FIELD	UNITY N	UNITY N	OWASSO
WELL NAME	WILSON NO. 01	WILSON NO. 01	MARTHA SIKKILLER
LOCATION	SEC. 23, T4N, R13ECM	SEC. 23, T4N, R13ECM	SEC. 29, T21N, R14E
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	C. R. COLPITT & OTHERS
COMPLETED	02/12/57	02/12/57	--/--/26
SAMPLED	05/22/57	05/22/57	04/23/42
FORMATION	PENN-KEYES	PENN-TORONTO	PENN-BARTLESVILLE
GEOLOGIC PROVINCE CODE	360	360	355
DEPTH, FEET	6441	6248	860
WELLHEAD PRESSURE,PSIG	1600	936	210
OPEN FLOW, MCFD	NOT GIVEN	11008	350
COMPONENT, MOLE PCT			
METHANE	73.3	72.2	93.4
ETHANE	3.7	5.2	5.0
PROPANE	2.6	3.4	---
N-BUTANE	1.0	1.3	---
ISOBUTANE	0.6	0.7	---
N-PENTANE	0.3	0.5	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	17.6	15.9	1.0
OXYGEN	TRACE	TRACE	0.5
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.31	0.31	TRACE
HEATING VALUE*	961	1021	1036
SPECIFIC GRAVITY	0.712	0.729	0.588

	INDEX 7147 SAMPLE 3315	INDEX 7148 SAMPLE 17883	INDEX 7149 SAMPLE 16093
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TULSA	WAGONER	WASHINGTON
FIELD	TULSA DISTRICT	BROKEN ARROW DIST.	HOGSHOOTER
WELL NAME	A. B. PERRYMAN NO. 1	PETERSON NO. 2	REYNOLDS NO. 1
LOCATION	SEC. 36, T19N, R12E	SEC. 4, T17N, R15E	SEC. 20, T25N, R14E
OWNER	A. C. RAMSEY	SHIELDS, COOPER	ECC OIL CO.
COMPLETED	11/15/41	10/01/83	08/17/78
SAMPLED	04/22/42	--/--/00	10/08/80
FORMATION	NOT GIVEN	PENN-DUTCHER	PENN-SKINNER
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	1123	1180	780
WELLHEAD PRESSURE,PSIG	230	NOT GIVEN	325
OPEN FLOW, MCFD	228	400	2000
COMPONENT, MOLE PCT			
METHANE	65.4	67.9	86.3
ETHANE	23.1	10.7	2.3
PROPANE	---	8.0	2.6
N-BUTANE	---	3.0	0.9
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	1.1	0.2
ISOPENTANE	---	0.6	0.2
CYCLOPENTANE	---	0.4	0.1
HEXANES PLUS	---	0.5	0.8
NITROGEN	10.2	6.7	6.0
OXYGEN	1.0	TRACE	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.07	0.11	0.07
HEATING VALUE*	1076	1337	1070
SPECIFIC GRAVITY	0.718	0.832	0.659

	INDEX 7150 SAMPLE 17247	INDEX 7151 SAMPLE 17078	INDEX 7152 SAMPLE 17079
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHINGTON	WASHITA	WASHITA
FIELD	OCHELATA N	BESSIE N	BESSIE N
WELL NAME	ANTHIS NO. 6	STEHR NO. 1	HOFFNER NO. 1
LOCATION	SEC. 25, T25N, R12E	SEC. 16, T11N, R17W	SEC. 31, T11N, R17W
OWNER	DEVER EXPLORATION, INC.	ROBINSON BROS. DRLG. CO.	ROBINSON BROS. DRLG. CO.
COMPLETED	07/--/83	11/--/82	11/--/82
SAMPLED	04/10/84	08/22/83	08/27/83
FORMATION	PENN-OSWEGO	PENN-MORROW	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	355	360	360
DEPTH, FEET	905	16432	12630
WELLHEAD PRESSURE,PSIG	NOT GIVEN	9500	5700
OPEN FLOW, MCFD	283	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.4	96.4	75.9
ETHANE	1.1	1.3	9.5
PROPANE	0.7	0.2	5.5
N-BUTANE	0.3	0.0	2.2
ISOBUTANE	0.3	0.0	1.0
N-PENTANE	0.2	0.0	0.4
ISOPENTANE	TRACE	0.0	1.8
CYCLOPENTANE	0.4	0.0	0.3
HEXANES PLUS	0.4	0.0	0.7
NITROGEN	5.0	0.5	1.7
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	1.3	0.3
HELIUM	0.04	0.02	0.04
HEATING VALUE*	1028	1036	1334
SPECIFIC GRAVITY	0.629	0.576	0.779

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7153 SAMPLE 17674	INDEX 7154 SAMPLE 16970	INDEX 7155 SAMPLE 17562
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	BRAITHWAITE	BRAITHWAITE NW	BURNS FLAT
WELL NAME	MURRAY NO. 1-19	WALTON NO. 1-10	JUANITA NO. 1-34
LOCATION	SEC. 19, T11N, R18W	SEC. 10, T11N, R18W	SEC. 34, T10N, R18W
OWNER	AN-SON CORP.	AN-SON CORP.	AN-SON CORP.
COMPLETED	02/08/85	06/20/82	05/09/84
SAMPLED	05/17/85	06/02/83	01/08/85
FORMATION	PENN-GRANITE WASH	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12454	16455	15485
WELLHEAD PRESSURE,PSIG	5800	9329	5300
OPEN FLOW, MCFD	2360	4465	2170
COMPONENT, MOLE PCT			
METHANE	81.5	96.8	96.1
ETHANE	9.9	0.9	2.8
PROPANE	4.5	0.1	0.4
N-BUTANE	1.3	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	0.9	0.3	0.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.5	0.9
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1226	1000	1023
SPECIFIC GRAVITY	0.705	0.574	0.579

	INDEX 7156 SAMPLE 16415	INDEX 7157 SAMPLE 16658	INDEX 7158 SAMPLE 8655
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	BURNS FLAT E	BURNS FLAT SW	CANUTE N
WELL NAME	OGLE NO. 1-15	MAUDE G. BIRCKETT NO. 2	A. M. SPIEKER NO. 1
LOCATION	SEC. 15, T11N, R18W	SEC. 26, T10N, R19W	SEC. 12, T11N, R20W
OWNER	AN-SON CORP.	ENSERCH EXPLORATION, INC.	UNION OIL CO. OF CALIF.
COMPLETED	06/22/81	09/--/81	08/24/62
SAMPLED	01/24/82	09/22/82	08/24/62
FORMATION	PENN-MORROW	PERM-GRANITE WASH	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16593	12000	14932
WELLHEAD PRESSURE,PSIG	12400	5000	10300
OPEN FLOW, MCFD	3820	1500	4500
COMPONENT, MOLE PCT			
METHANE	97.3	89.7	94.1
ETHANE	0.9	5.0	3.3
PROPANE	0.1	2.5	0.8
N-BUTANE	TRACE	0.8	0.1
ISOBUTANE	0.0	0.4	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.4	0.5	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.4	1.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1004	1139	1057
SPECIFIC GRAVITY	0.573	0.645	0.600

	INDEX 7159 SAMPLE 10527	INDEX 7160 SAMPLE 16393	INDEX 7161 SAMPLE 16596
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	CANUTE N	CANUTE N	COLONY NW
WELL NAME	MARIK NO. 1-11	ALLISON NO. 1-3	VOGT NO. 1-10
LOCATION	SEC. 11, T11N, R20W	SEC. 3, T11N, R20W	SEC. 10, T11N, R15W
OWNER	GLOVER MEFNER KENNEDY OIL CO	GHK GAS CORP.	HELMERICH & PAYNE, INC.
COMPLETED	--/--/00	12/09/81	01/26/82
SAMPLED	04/19/66	12/09/81	06/15/82
FORMATION	PENN-DES MOINES	PENN-ATOKA	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13650	14955	15300
WELLHEAD PRESSURE,PSIG	8700	9000	8200
OPEN FLOW, MCFD	6400	6300	17218
COMPONENT, MOLE PCT			
METHANE	85.9	96.0	96.9
ETHANE	7.9	2.0	1.1
PROPANE	2.9	0.3	0.2
N-BUTANE	0.6	0.1	0.0
ISOBUTANE	0.4	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.3	TRACE	0.0
HEXANES PLUS	0.5	0.1	0.0
NITROGEN	0.4	0.4	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	1.5
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1166	1025	1007
SPECIFIC GRAVITY	0.670	0.582	0.577

	INDEX 7162 SAMPLE 16385	INDEX 7163 SAMPLE 16216	INDEX 7164 SAMPLE 16266
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	CORN & COLONY	CORN N	CORN NE
WELL NAME	FLAMING NO. 1-20	BROWN FOUNDATION NO. 1	KATIE NO. 1
LOCATION	SEC. 20, T11N, R14W	SEC. 14, T11N, R15W	SEC. 11, T11N, R15W
OWNER	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.	AMERICAN QUASAR PET. CO.
COMPLETED	05/01/81	03/15/80	12/31/80
SAMPLED	11/17/81	03/15/81	05/18/81
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16002	15966	15348
WELLHEAD PRESSURE,PSIG	11400	10900	11200
OPEN FLOW, MCFD	8196	NOT GIVEN	7000
COMPONENT, MOLE PCT			
METHANE	96.9	97.1	96.6
ETHANE	0.6	0.6	1.1
PROPANE	0.1	0.1	0.2
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	0.5	0.5
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	1.6	1.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	995	997	1009
SPECIFIC GRAVITY	0.579	0.577	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7165 SAMPLE 16633	INDEX 7166 SAMPLE 4783	INDEX 7167 SAMPLE 10570
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	DILL CITY W	ELK CITY	ELK CITY
WELL NAME	HICKLIN NO.1-9	LAMBERT NO. 1	FINNELL NO. 1-34
LOCATION	SEC. 9, T9N, R19W	SEC. 18, T10N, R20W	SEC. 34, T10N, R20W
OWNER	PIONEER PRODUCTION CORP.	E. CONSTANTIN, JR.	GLOVER MEFNER KENNEDY OIL CO
COMPLETED	04/20/82	07/--/49	05/01/66
SAMPLED	08/30/82	09/22/49	05/19/66
FORMATION	PERM-GRANITE WASH	NOT GIVEN	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11112	9849	12628
WELLHEAD PRESSURE,PSIG	5840	1500	7300
OPEN FLOW, MCFD	22326	NOT GIVEN	1750
COMPONENT, MOLE PCT			
METHANE	90.4	70.5	90.1
ETHANE	4.8	12.1	5.8
PROPANE	1.8	8.9	1.9
N-BUTANE	0.4	2.5	0.6
ISOBUTANE	0.4	1.2	0.3
N-PENTANE	0.2	0.6	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.3	0.5	0.4
NITROGEN	0.2	3.4	0.6
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.4	0.1	0.5
HELIUM	0.03	0.04	0.02
HEATING VALUE*	1140	1340	1123
SPECIFIC GRAVITY	0.642	0.803	0.639

	INDEX 7168 SAMPLE 14303	INDEX 7169 SAMPLE 14884	INDEX 7170 SAMPLE 15644
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	ELK CITY	ELK CITY	ELK CITY
WELL NAME	SPRADLIN NO. 1	WILLIE PIERCE NO. 1-A	FLOYD NIECE NO. 1
LOCATION	SEC. 35, T10N, R20W	SEC. 36, T10N, R20W	SEC. 27, T10N, R20W
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	11/11/74	06/15/75	05/02/77
SAMPLED	03/19/75	01/12/77	06/15/79
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13458	14824	19178
WELLHEAD PRESSURE,PSIG	7600	11568	NOT GIVEN
OPEN FLOW, MCFD	11514	11149	20000
COMPONENT, MOLE PCT			
METHANE	96.6	95.4	95.9
ETHANE	1.9	2.2	1.8
PROPANE	0.4	0.4	0.4
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.4	0.8	0.5
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	1.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1023	1020	1022
SPECIFIC GRAVITY	0.576	0.581	0.584

	INDEX 7171 SAMPLE 5417	INDEX 7172 SAMPLE 9614	INDEX 7173 SAMPLE 16908
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	ELK CITY SE	NOT GIVEN	RAINEY NE
WELL NAME	G. ADAMS NO. 1	KNIE A NO. 1	BACCUS NO. 1-8
LOCATION	SEC. 6, T9N, R19W	SEC. 26, T9N, R17W	SEC. 8, T8N, R16W
OWNER	SHELL OIL CO.	CITIES SERVICE OIL CO.	HELMERICH & PAYNE, INC.
COMPLETED	12/14/52	--/--/00	10/04/82
SAMPLED	03/18/53	10/25/64	04/28/83
FORMATION	PENN-DES MOINES U	PERM-DUNCAN A	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11066	1342	12380
WELLHEAD PRESSURE,PSIG	4385	500	1793
OPEN FLOW, MCFD	2000	40	2268
COMPONENT, MOLE PCT			
METHANE	91.5	95.3	87.2
ETHANE	4.4	2.0	5.7
PROPANE	1.8	0.5	1.6
N-BUTANE	0.5	0.1	1.0
ISOBUTANE	0.2	TRACE	0.4
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.6	1.3	0.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.9
HELIUM	0.03	0.06	0.03
HEATING VALUE*	1103	1023	1166
SPECIFIC GRAVITY	0.623	0.582	0.665

	INDEX 7174 SAMPLE 6704	INDEX 7175 SAMPLE 6705	INDEX 7176 SAMPLE 4196
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WASHITA	WASHITA	WASHITA
FIELD	RAINEY S	RAINEY S	ROCKY
WELL NAME	SCHOOL TRACT 34 NO. 1	ANNIE SCHMIDT NO. 1	HILL NO. 1
LOCATION	SEC. 36, T8N, R17W	SEC. 35, T8N, R17W	SEC. 25, T8N, R16W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	ATLANTIC RICHFIELD CO.
COMPLETED	03/21/58	04/14/57	03/13/46
SAMPLED	07/03/58	07/03/58	11/13/46
FORMATION	PENN-SPRINGER	PENN-SPRINGER	PENN-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6500	6500	6150
WELLHEAD PRESSURE,PSIG	2112	1862	2930
OPEN FLOW, MCFD	19600	17759	17500
COMPONENT, MOLE PCT			
METHANE	93.4	94.1	96.1
ETHANE	3.8	3.3	3.6
PROPANE	1.1	1.1	---
N-BUTANE	0.4	0.3	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.4	0.4	0.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.10	0.10	0.05
HEATING VALUE*	1085	1071	1036
SPECIFIC GRAVITY	0.607	0.599	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7177 SAMPLE 16290		INDEX 7178 SAMPLE 17379		INDEX 7179 SAMPLE 9550	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WASHITA		WASHITA		WASHITA	
FIELD	SEGER		SENTINEL		WILDCAT	
WELL NAME	SEGER INDIAN SCHOOL NO. 1		KING NO. 9-1		KNIE NO. 1	
LOCATION	SEC. 23, T10N, R14E		SEC. 9, T8N, R19W		SEC. 26, T9N, R17W	
OWNER	HAMILTON BROTHERS OIL CO.		CONOCO, INC.		CITIES SERVICE OIL CO.	
COMPLETED	--/--/00		12/28/83		--/--/00	
SAMPLED	07/07/81		08/08/84		08/21/64	
FORMATION	PENN-RED FORK		PENN-SPRINGER		PERM-GRANITE WASH	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	NOT GIVEN		12516		6400	
WELLHEAD PRESSURE,PSIG	8400		5700		NOT GIVEN	
OPEN FLOW, MCFD	6000		4000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	88.8		95.9		98.1	
ETHANE	6.5		2.4		0.9	
PROPANE	2.2		0.3		0.2	
N-BUTANE	0.3		0.1		TRACE	
ISOBUTANE	0.3		0.0		TRACE	
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	0.2		0.1		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		TRACE		0.1	
NITROGEN	0.7		0.3		0.4	
OXYGEN	0.1		0.1		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.7		0.2	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1107		1030		1020	
SPECIFIC GRAVITY	0.631		0.581		0.566	

	INDEX 7180 SAMPLE 9560		INDEX 7181 SAMPLE 9630		INDEX 7182 SAMPLE 16223	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WASHITA		WASHITA		WASHITA	
FIELD	WILDCAT		WILDCAT		IRA JOHNSON NO. 1	
WELL NAME	KNIE A NO. 1		KNIE A NO. 1		SEC. 10, T9N, R19W	
LOCATION	SEC. 26, T9N, R17W		SEC. 26, T9N, R17W		EL PASO NATURAL GAS CO.	
OWNER	CITIES SERVICE OIL CO.		CITIES SERVICE OIL CO.		10/16/80	
COMPLETED	--/--/00		--/--/00		04/06/81	
SAMPLED	09/09/64		11/11/64		PENN-MORROW	
FORMATION	PENN-DES MOINES		PERM-WICHITA-ALBANY		360	
GEOLOGIC PROVINCE CODE	360		360		16798	
DEPTH, FEET	7889		1164		9522	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		490		6180	
OPEN FLOW, MCFD	NOT GIVEN		10			
COMPONENT, MOLE PCT						
METHANE	98.0		95.8		96.8	
ETHANE	1.0		1.9		1.4	
PROPANE	0.2		0.6		0.2	
N-BUTANE	TRACE		0.2		TRACE	
ISOBUTANE	TRACE		TRACE		TRACE	
N-PENTANE	TRACE		0.1		0.0	
ISOPENTANE	TRACE		TRACE		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	TRACE		0.1		TRACE	
NITROGEN	0.5		1.2		0.4	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		1.0	
HELIUM	0.03		0.05		0.02	
HEATING VALUE*	1016		1036		1011	
SPECIFIC GRAVITY	0.562		0.582		0.574	

	INDEX 7183 SAMPLE 16696		INDEX 7184 SAMPLE 10358		INDEX 7185 SAMPLE 10364	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WASHITA		WOODS		WOODS	
FIELD	WILDCAT		ALVA SE		ALVA SE	
WELL NAME	TERRY FARRIS NO. 1-17		BROWN NO. 1		SCHMITT HEIRS NO. 1	
LOCATION	SEC. 17, T8N, R19W		SEC. 27, T26N, R13W		SEC. 26, T26N, R13W	
OWNER	GULF OIL EXPL. & PROD. CO.		CALVERT EXPLORATION CO.		SUN OIL CO.	
COMPLETED	07/25/81		05/06/65		10/25/65	
SAMPLED	01/21/82		01/11/66		01/19/66	
FORMATION	PERM-PONTOTOC		DEVO-HUNTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4480		6416		6432	
WELLHEAD PRESSURE,PSIG	1725		2278		2142	
OPEN FLOW, MCFD	33000		70000		2500	
COMPONENT, MOLE PCT						
METHANE	84.2		85.3		85.4	
ETHANE	3.7		7.0		7.0	
PROPANE	1.9		2.6		2.5	
N-BUTANE	0.7		1.0		1.0	
ISOBUTANE	0.5		0.4		0.3	
N-PENTANE	0.3		0.4		0.7	
ISOPENTANE	0.6		0.1		TRACE	
CYCLOPENTANE	0.2		0.3		0.3	
HEXANES PLUS	0.1		0.7		0.7	
NITROGEN	6.7		2.1		1.9	
OXYGEN	0.1		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.1	
HELIUM	0.16		0.02		0.07	
HEATING VALUE*	1091		1173		1176	
SPECIFIC GRAVITY	0.674		0.678		0.678	

	INDEX 7186 SAMPLE 6447		INDEX 7187 SAMPLE 7332		INDEX 7188 SAMPLE 9409	
STATE	OKLAHOMA		OKLAHOMA		OKLAHOMA	
COUNTY	WOODS		WOODS		WOODS	
FIELD	AVARD NW		AVARD NW		AVARD NW	
WELL NAME	AVARD NO. 1		ROMJUE		GARDNER NO. 1	
LOCATION	SEC. 9, T26N, R15W		SEC. 31, T27N, R15W		SEC. 35, T27N, R16W	
OWNER	PHILLIPS PETROLEUM CO., ET A		CALVERT PETROLEUM CO.		SHELL OIL CO.	
COMPLETED	10/--/56		--/--/00		04/10/64	
SAMPLED	12/26/57		01/07/60		06/18/64	
FORMATION	PERM-NEVA		PENN-TONKAWA		PENN-TONKAWA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	4785		4883		4917	
WELLHEAD PRESSURE,PSIG	1195		1800		1574	
OPEN FLOW, MCFD	3280		14000		5100	
COMPONENT, MOLE PCT						
METHANE	88.0		88.1		87.3	
ETHANE	3.0		3.8		3.6	
PROPANE	2.1		2.1		2.2	
N-BUTANE	0.6		0.7		0.9	
ISOBUTANE	0.3		0.5		0.3	
N-PENTANE	0.2		0.2		0.3	
ISOPENTANE	0.2		0.3		0.3	
CYCLOPENTANE	0.1		0.2		0.2	
HEXANES PLUS	0.2		0.3		0.3	
NITROGEN	5.2		3.4		4.1	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.1	
HELIUM	0.20		0.20		0.18	
HEATING VALUE*	1061		1100		1095	
SPECIFIC GRAVITY	0.640		0.648		0.653	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7189 SAMPLE 11207	INDEX 7190 SAMPLE 11819	INDEX 7191 SAMPLE 11968
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	AVARD NW	AVARD NW	AVARD NW
WELL NAME	PORTER NO. 1	WAOKINS NO. 1-30	FULTON NO. 1-A
LOCATION	SEC. 22, T27N, R15W	SEC. 30, T27N, R16W	SEC. 27, T27N, R17W
OWNER	CALVERT EXPLORATION CO.	CLEARY PETROLEUM CORP.	FLAG OIL CORP.
COMPLETED	11/05/67	12/03/68	05/31/68
SAMPLED	11/05/67	04/07/69	--/--/00
FORMATION	DEVO-HUNTON	PENN-OSWEGO	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6225	5568	5544
WELLHEAD PRESSURE,PSIG	1932	1934	NOT GIVEN
OPEN FLOW, MCFD	32869	5400	4057
COMPONENT, MOLE PCT			
METHANE	81.9	89.0	89.5
ETHANE	4.0	4.6	4.4
PROPANE	1.5	2.5	2.5
N-BUTANE	0.7	0.9	0.8
ISOBUTANE	0.2	0.5	0.2
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.4	0.4	0.2
NITROGEN	8.7	1.2	1.6
OXYGEN	1.7	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.06	0.05	0.05
HEATING VALUE*	1015	1146	1120
SPECIFIC GRAVITY	0.671	0.652	0.639

	INDEX 7192 SAMPLE 12103	INDEX 7193 SAMPLE 12504	INDEX 7194 SAMPLE 14324
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	AVARD NW	AVARD NW	AVARD NW
WELL NAME	GENE ERNEST NO. 1	SMOODY NO. 1-21	BOLAND NO. 1
LOCATION	SEC. 1, T26N, R17W	SEC. 21, T27N, R16W	SEC. 29, T26N, R16W
OWNER	AUBREY C. BLACK	GRAHAM-MICHAELIS DRILLING CO	TUTHILL & BARBEE
COMPLETED	--/--/00	04/17/70	09/16/74
SAMPLED	11/06/69	11/05/70	05/06/75
FORMATION	PENN-TONKAWA	DEVO-HUNTON	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	6568	5903
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2045	1890
OPEN FLOW, MCFD	NOT GIVEN	35000	6878
COMPONENT, MOLE PCT			
METHANE	86.0	87.8	90.7
ETHANE	3.0	5.6	3.9
PROPANE	1.8	2.3	1.7
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.1	0.4	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	7.2	2.3	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.26	0.07	0.09
HEATING VALUE*	1027	1119	1094
SPECIFIC GRAVITY	0.641	0.647	0.628

	INDEX 7195 SAMPLE 14848	INDEX 7196 SAMPLE 15211	INDEX 7197 SAMPLE 16695
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	AVARD NW	AVARD NW	CAMP HOUSTON
WELL NAME	MCGILL NO. 1-16	SNAPP "A" NO. 1	KAMAS RANCH NO. 1
LOCATION	SEC. 16, T26N, R17W	SEC. 12, T26N, R18W	SEC. 6, T28N, R17W
OWNER	TUTHILL & BARBEE	AMOCO PRODUCTION CO.	JACK CO.
COMPLETED	--/--/00	12/15/77	07/16/82
SAMPLED	11/04/76	03/22/78	10/15/82
FORMATION	PENN-RED FORK	MISS-ST. GENEVIEVE	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5654	5434
WELLHEAD PRESSURE,PSIG	2000	1948	1668
OPEN FLOW, MCFD	4000	5955	5000
COMPONENT, MOLE PCT			
METHANE	90.0	94.0	92.5
ETHANE	3.1	3.1	3.4
PROPANE	1.1	1.1	1.3
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	3.8	0.4	0.9
OXYGEN	0.7	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	TRACE
HELIUM	0.05	0.05	0.06
HEATING VALUE*	1017	1088	1091
SPECIFIC GRAVITY	0.615	0.608	0.614

	INDEX 7198 SAMPLE 15332	INDEX 7199 SAMPLE 14523	INDEX 7200 SAMPLE 14524
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	CHEYENNE VALLEY	DACOMA NE	DACOMA NW
WELL NAME	HEPNER NO. 3	SCHICK NO. 25A	WHITE NO. 3A
LOCATION	SEC. 34, T23N, R14W	SEC. 25, T26N, R13W	SEC. 3, T25N, R13W
OWNER	KIRKPATRICK OIL CO.	RAN RICKS, JR.	RAN RICKS, JR.
COMPLETED	04/06/78	--/--/00	--/--/00
SAMPLED	07/28/78	10/99/75	10/99/75
FORMATION	PENN-RED FORK	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6454	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1976	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	87.2	89.4
ETHANE	5.1	5.4	3.3
PROPANE	2.7	2.4	2.4
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.6	1.0	1.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.08	0.04	0.04
HEATING VALUE*	1125	1125	1118
SPECIFIC GRAVITY	0.646	0.638	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7201 SAMPLE 11364	INDEX 7202 SAMPLE 17666	INDEX 7203 SAMPLE 10381
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	DACOMA S	FREEDOM N	FREEDOM NW
WELL NAME	L. J. MORSE UNIT NO. 1	GEARLOFF NO. 2	CLIFTON UNIT NO.1
LOCATION	SEC. 29, T25N, R13W	SEC. 13, T27N, R18W	SEC. 35, T27N, R18W
OWNER	MESS CORP.	TXO PRODUCTION CORP.	APACHE CORP.
COMPLETED	11/17/57	01/28/85	12/22/65
SAMPLED	03/08/68	05/12/85	02/04/66
FORMATION	PENN-LAYTON	PENN-& MISS COMMINGLED	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5313	4786	4780
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1645	2035
OPEN FLOW, MCFD	NOT GIVEN	3580	10800
COMPONENT, MOLE PCT			
METHANE	90.1	85.8	90.7
ETHANE	4.7	4.6	3.1
PROPANE	2.0	3.1	1.2
N-BUTANE	0.8	1.3	0.8
ISOBUTANE	0.1	0.5	0.2
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	0.1	0.3	0.7
HEXANES PLUS	0.3	0.5	1.0
NITROGEN	1.9	0.9	1.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.06	0.11	0.07
HEATING VALUE*	1120	1160	1155
SPECIFIC GRAVITY	0.636	0.681	0.656

	INDEX 7204 SAMPLE 15876	INDEX 7205 SAMPLE 13095	INDEX 7206 SAMPLE 15200
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	FREEDOM NW	GALENA S	GREENSBURG SW
WELL NAME	DEVINE NO. 1	HEPNER NO. 1-34	MCCRAY NO. 1
LOCATION	SEC. 34, T27N, R18W	SEC. 34, T23N, R14W	SEC. 16, T24N, R14W
OWNER	TEXAS OIL & GAS CORP.	KIRKPATRICK OIL CO.	TEXAS OIL & GAS CORP.
COMPLETED	--/--/80	06/21/71	09/26/77
SAMPLED	01/15/80	10/19/71	01/25/78
FORMATION	NOT GIVEN	DEVO-HUNTON	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7016	6325
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2300	2060
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3200
COMPONENT, MOLE PCT			
METHANE	93.7	88.7	89.3
ETHANE	3.2	5.4	5.7
PROPANE	1.1	2.3	1.9
N-BUTANE	0.3	0.8	0.9
ISOBUTANE	0.2	0.4	0.1
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.8	1.2	1.6
OXYGEN	0.1	0.3	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.05	0.04	0.09
HEATING VALUE*	1066	1118	1100
SPECIFIC GRAVITY	0.599	0.642	0.631

	INDEX 7207 SAMPLE 11297	INDEX 7208 SAMPLE 11301	INDEX 7209 SAMPLE 15959
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	HOPETON N	HOPETON N	LOOKOUT NE
WELL NAME	MCGILL NO. 1-23	TOWNSEND NO. 1-15	PARKER NO. 1-24
LOCATION	SEC. 23, T26N, R14W	SEC. 15, T26N, R14W	SEC. 24, T29N, R19W
OWNER	CLEART PETROLEUM, INC.	CLEART PETROLEUM, INC.	BOSWELL ENERGY CORP.
COMPLETED	01/03/67	--/--/00	03/14/80
SAMPLED	02/19/68	02/15/67	05/08/80
FORMATION	DEVO-HUNTON	DEVO-HUNTON	MISS---
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6495	6454	5709
WELLHEAD PRESSURE,PSIG	2293	2135	1820
OPEN FLOW, MCFD	20430	340721	1009
COMPONENT, MOLE PCT			
METHANE	86.4	86.9	91.5
ETHANE	6.7	5.6	3.6
PROPANE	2.3	2.2	1.3
N-BUTANE	0.8	1.0	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.5	2.1	2.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.07	0.07	0.10
HEATING VALUE*	1124	1127	1068
SPECIFIC GRAVITY	0.655	0.652	0.615

	INDEX 7210 SAMPLE 10769	INDEX 7211 SAMPLE 9685	INDEX 7212 SAMPLE 15520
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	LOVEDALE NE	LOVEDALE NW	NOEL SW
WELL NAME	WILSON NO. 2-10	GLEN NO. 1	MALLORY NO. 1
LOCATION	SEC. 10, T28N, R20W	SEC. 31, T29N, R20W	SEC. 6, T26N, R14W
OWNER	PUBLISHERS PETROLEUM	GULF OIL CO.- U.S.	SOUTHLAND ROYALTY CO.
COMPLETED	12/27/65	10/27/64	04/06/78
SAMPLED	11/06/66	01/06/65	11/13/78
FORMATION	MISS-CHESTER	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5674	5386	6352
WELLHEAD PRESSURE,PSIG	1800	1770	2200
OPEN FLOW, MCFD	10000	17300	3048
COMPONENT, MOLE PCT			
METHANE	93.4	94.6	87.9
ETHANE	2.7	2.0	1.7
PROPANE	0.9	0.6	1.7
N-BUTANE	0.2	0.3	0.9
ISOBUTANE	0.3	0.1	0.6
N-PENTANE	0.3	0.1	0.7
ISOPENTANE	0.1	0.1	0.7
CYCLOPENTANE	0.1	TRACE	0.4
HEXANES PLUS	0.2	0.2	1.1
NITROGEN	1.8	1.7	2.2
OXYGEN	0.0	0.10	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.09	0.09	0.06
HEATING VALUE*	1053	1042	1183
SPECIFIC GRAVITY	0.696	0.594	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7213 SAMPLE 2665	INDEX 7214 SAMPLE 5920	INDEX 7215 SAMPLE 7861
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	NOT GIVEN	OAKDALE	OAKDALE
WELL NAME	SALT SPRING	W. M. FARRIS NO. 1	SWALLOW NO. 1
LOCATION	EDITH, OKLA.	SEC. 21, T24N, R13W	SEC. 6, T24N, R13W
OWNER	SANTA FE SALT CO.	AMERADA HESS CORP.	ASHLAND OIL & REFINING CO.
COMPLETED	--/--/00	08/18/55	10/29/60
SAMPLED	02/17/34	08/19/55	02/16/61
FORMATION	NOT GIVEN	ORDO-SIMPSON	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7390	6053
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2200	2300
OPEN FLOW, MCFD	NOT GIVEN	2000	9600
COMPONENT, MOLE PCT			
METHANE	0.0	68.1	89.3
ETHANE	3.8	9.9	5.3
PROPANE	---	7.9	2.1
N-BUTANE	---	2.8	0.8
ISOBUTANE	---	1.1	0.5
N-PENTANE	---	0.4	0.3
ISOPENTANE	---	0.8	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	95.7	8.6	0.8
OXYGEN	0.0	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.21	0.09	0.20
HEATING VALUE*	68	1260	1138
SPECIFIC GRAVITY	0.970	0.808	0.644

	INDEX 7216 SAMPLE 9894	INDEX 7217 SAMPLE 9895	INDEX 7218 SAMPLE 9941
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	OAKDALE	OAKDALE	OAKDALE
WELL NAME	TED GOODNO UNIT NO. 1	TED GOODNO UNIT NO. 1	WILT A-1
LOCATION	SEC. 9, T23N, R13W	SEC. 9, T23N, R13W	SEC. 19, T25N, R13W
OWNER	TEXACO INC.	TEXACO INC.	CITIES SERVICE OIL CO.
COMPLETED	02/07/65	02/07/65	01/09/65
SAMPLED	05/13/65	05/13/65	06/19/65
FORMATION	MISS-CHESTER	PENN-RED FORK	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6508	5422	5948
WELLHEAD PRESSURE,PSIG	1875	1925	2051
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1320
COMPONENT, MOLE PCT			
METHANE	87.3	88.2	87.9
ETHANE	4.0	5.8	5.5
PROPANE	2.7	2.3	2.4
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.5
NITROGEN	1.2	1.2	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.2
HELIUM	0.07	0.06	0.07
HEATING VALUE*	1137	1145	1146
SPECIFIC GRAVITY	0.657	0.655	0.657

	INDEX 7219 SAMPLE 9942	INDEX 7220 SAMPLE 9943	INDEX 7221 SAMPLE 10761
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	OAKDALE	OAKDALE	OAKDALE
WELL NAME	TRUEBLOOD A-1	VAN METER A-1	MOREN NO. 1
LOCATION	SEC. 18, T25N, R13W	SEC. 20, T25N, R13W	SEC. 12, T25N, R14W
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	EARLSBORO OIL & GAS CO., INC
COMPLETED	05/26/65	06/22/65	08/29/65
SAMPLED	06/19/65	06/19/65	10/26/66
FORMATION	PENN-RED FORK	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5880	5914	5600
WELLHEAD PRESSURE,PSIG	2130	2078	1950
OPEN FLOW, MCFD	7330	513	1750
COMPONENT, MOLE PCT			
METHANE	88.5	88.5	87.4
ETHANE	5.2	5.1	5.5
PROPANE	2.0	2.2	2.7
N-BUTANE	0.6	0.8	0.9
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.4	0.3
NITROGEN	2.0	1.5	2.1
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	0.08	0.05	0.02
HEATING VALUE*	1117	1128	1131
SPECIFIC GRAVITY	0.646	0.651	0.658

	INDEX 7222 SAMPLE 17927	INDEX 7223 SAMPLE 6294	INDEX 7224 SAMPLE 6561
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	ROSCOE	WAYNOKA NE	WAYNOKA NE
WELL NAME	FARMERS ROYALTY NO. A-1	SHADE NO. 1	H. BARKER GAS UNIT NO. 1
LOCATION	SEC. 10, T22N, R13W	SEC. 31, T25N, R14W	SEC. 29, T25N, R15W
OWNER	ANADARKO PETROLEUM CORP.	GULF OIL CORP.	TEXACO INC.
COMPLETED	08/15/85	01/14/57	10/30/57
SAMPLED	12/09/85	03/28/57	04/17/58
FORMATION	MISS-MERAMEC	DEVO-HISENER & HUNTON	PENN-COTTAGE GROVE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7160	7118	5557
WELLHEAD PRESSURE,PSIG	2050	1660	600
OPEN FLOW, MCFD	1250	154	5370
COMPONENT, MOLE PCT			
METHANE	83.5	92.1	86.1
ETHANE	6.9	3.5	3.4
PROPANE	3.3	1.2	1.4
N-BUTANE	1.4	0.5	0.6
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.6	0.1	TRACE
HEXANES PLUS	1.4	0.2	0.1
NITROGEN	1.1	1.8	6.2
OXYGEN	0.1	0.0	1.2
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.04	0.06	0.10
HEATING VALUE*	1261	1092	1022
SPECIFIC GRAVITY	0.725	0.619	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7225 SAMPLE 7496	INDEX 7226 SAMPLE 12118	INDEX 7227 SAMPLE 13677
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	WAYNOKA NE	WAYNOKA NE	WAYNOKA NE
WELL NAME	WHIPPLE G.U. NO. 1	RAUCH NO. 1-11	ABATA-BOLAND NO. 1
LOCATION	SEC. 31, T25N, R15W	SEC. 11, T25N, R16W	SEC. 30, T25N, R16W
OWNER	TEXOMA PRODUCTION CO.	KING RESOURCES CO.	CARL E. GUNGOLL
COMPLETED	01/17/60	01/27/69	--/--/00
SAMPLED	04/11/60	11/23/69	08/14/73
FORMATION	PENN-COTTAGE GROVE	PENN-TONKAWA	PENN-OSWEGO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5586	4992	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1842	1701	1651
OPEN FLOW, MCFD	5400	3463	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.8	86.3	90.9
ETHANE	4.9	3.2	3.2
PROPANE	1.9	2.0	1.6
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	0.1	0.3	0.2
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	2.1	5.9	2.0
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.16	0.09
HEATING VALUE*	1100	1077	1098
SPECIFIC GRAVITY	0.635	0.658	0.632

	INDEX 7228 SAMPLE 17567	INDEX 7229 SAMPLE 8260	INDEX 7230 SAMPLE 11994
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODS
FIELD	WAYNOKA SE	WINCHESTER NE	WOLGAMOTT
WELL NAME	WOMN MULL NO. 2	CLINE NO. 1	BOND-HOFER NO. 1
LOCATION	SEC. 35, T24N, R15W	SEC. 19, T29N, R14W	SEC. 22, T29N, R15W
OWNER	MAGIC CIRCLE ENERGY CORP.	YOUNGBLOOD & YOUNGBLOOD	CHAMPLIN PETROLEUM CO.
COMPLETED	08/05/83	--/--/00	07/21/69
SAMPLED	01/25/85	10/24/61	08/19/69
FORMATION	PENN-& MISS	MISS-	PENN-CHEROKEE & MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6670	4956	4839
WELLHEAD PRESSURE,PSIG	1610	NOT GIVEN	1635
OPEN FLOW, MCFD	7400	2310	8744
COMPONENT, MOLE PCT			
METHANE	92.3	91.7	91.9
ETHANE	3.3	3.9	3.6
PROPANE	1.3	1.4	1.5
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	1.5	1.7	1.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.1
HELIUM	0.05	0.08	0.06
HEATING VALUE*	1088	1080	1086
SPECIFIC GRAVITY	0.621	0.615	0.618

	INDEX 7231 SAMPLE 11367	INDEX 7232 SAMPLE 11414	INDEX 7233 SAMPLE 11965
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODS	WOODS	WOODWARD
FIELD	YELLOWSTONE	YELLOWSTONE	BOILING SPRINGS N
WELL NAME	H. DIAMOND NO. 1	MURDOCK NO. 2	LEHMAN NO. 1
LOCATION	SEC. 17, T29N, R17W	SEC. 16, T29N, R17W	SEC. 13, T24N, R20W
OWNER	CHAMPLIN PETROLEUM CO.	JAMES F. SMITH	MIDWEST OIL CORP.
COMPLETED	07/21/63	--/--/00	06/08/69
SAMPLED	03/11/68	03/27/68	07/15/69
FORMATION	PENN-MARMATON	ORDO-SIMPSON	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4921	5812	7320
WELLHEAD PRESSURE,PSIG	755	1803	2770
OPEN FLOW, MCFD	1022	9234	1650
COMPONENT, MOLE PCT			
METHANE	89.5	84.4	91.9
ETHANE	4.6	6.1	3.9
PROPANE	2.2	2.7	1.6
N-BUTANE	1.0	1.0	0.3
ISOBUTANE	0.1	0.3	0.1
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.6	4.3	1.0
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.08	0.17	0.08
HEATING VALUE*	1114	1119	1083
SPECIFIC GRAVITY	0.637	0.668	0.613

	INDEX 7234 SAMPLE 6459	INDEX 7235 SAMPLE 6616	INDEX 7236 SAMPLE 6626
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	L. GARVIE NO. 1-B	STATE NO. 1-24	L. E. DERR NO. 1-25
LOCATION	SEC. 23, T22N, R17W	SEC. 24, T22N, R17W	SEC. 25, T22N, R17W
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	10/05/57	01/28/58	04/24/58
SAMPLED	12/15/57	05/26/58	06/10/58
FORMATION	MISS-CHESTER	PENN-MUSSELEM	PENN-MUSSELEM
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7137	6310	6410
WELLHEAD PRESSURE,PSIG	1922	2196	2067
OPEN FLOW, MCFD	13000	9200	1378
COMPONENT, MOLE PCT			
METHANE	94.6	95.3	91.2
ETHANE	2.7	2.6	3.8
PROPANE	0.7	0.7	1.5
N-BUTANE	0.1	0.2	0.6
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.2	0.2	1.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.2
HELIUM	0.10	0.04	0.10
HEATING VALUE*	1058	1054	1091
SPECIFIC GRAVITY	0.598	0.590	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7237 SAMPLE 8636	INDEX 7238 SAMPLE 8637	INDEX 7239 SAMPLE 9926
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	KATHRYN KEE NO. 1	KATHRYN KEE NO. 1	BARANSY NO. 1
LOCATION	SEC. 13, T23N, R18W	SEC. 13, T23N, R18W	SEC. 1, T24N, R19W
OWNER	GENE GOFF	GENE GOFF	SAMEDAN OIL CORP.
COMPLETED	03/25/62	03/25/62	12/20/64
SAMPLED	07/10/62	07/10/62	06/17/65
FORMATION	PENN-COTTAGE GROVE	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6143	6837	6650
WELLHEAD PRESSURE,PSIG	2275	2425	2183
OPEN FLOW, MCFD	705	98000	4500
COMPONENT, MOLE PCT			
METHANE	94.8	93.6	93.6
ETHANE	2.6	2.6	3.5
PROPANE	0.8	1.6	1.1
N-BUTANE	0.2	0.3	0.4
ISOBUTANE	0.2	0.1	TRACE
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.3	0.0	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.2
HELIUM	TRACE	0.05	0.06
HEATING VALUE*	1059	1102	1071
SPECIFIC GRAVITY	0.595	0.618	0.601

	INDEX 7240 SAMPLE 9928	INDEX 7241 SAMPLE 11296	INDEX 7242 SAMPLE 11743
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	BINGHAM UNIT	BUTLER NO. 1-20	MCFADDEN NO. 1
LOCATION	SEC. 11, T24N, R18W	SEC. 20, T22N, R16W	SEC. 11, T22N, R17W
OWNER	OKLAHOMA NATURAL GAS CO.	SHELL OIL CO.	MIDWEST OIL CORP.
COMPLETED	05/07/65	04/28/59	11/21/68
SAMPLED	06/17/65	02/16/68	01/28/69
FORMATION	PENN-CHEROKEE	PENN-MUSSELEM	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6308	6217	7002
WELLHEAD PRESSURE,PSIG	2708	1517	2571
OPEN FLOW, MCFD	22815	3799	4200
COMPONENT, MOLE PCT			
METHANE	93.7	92.6	93.6
ETHANE	3.6	3.5	2.6
PROPANE	0.6	1.3	0.8
N-BUTANE	0.1	0.4	0.5
ISOBUTANE	TRACE	0.3	TRACE
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.4
NITROGEN	1.4	1.0	0.8
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.05	0.06	0.05
HEATING VALUE*	1033	1081	1079
SPECIFIC GRAVITY	0.588	0.611	0.610

	INDEX 7243 SAMPLE 12625	INDEX 7244 SAMPLE 12689	INDEX 7245 SAMPLE 13107
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NE	CEDARDALE NE	CEDARDALE NE
WELL NAME	BLAKSLEY NO. 1-9	JOHNS NO. 1-16	BLAKSLEY NO. 1
LOCATION	SEC. 9, T22N, R17W	SEC. 16, T22N, R17W	SEC. 9, T22N, R17W
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	11/30/70	02/10/71	11/30/70
SAMPLED	01/12/71	02/17/71	11/30/71
FORMATION	PENN-COTTAGE GROVE	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6281	7180	7085
WELLHEAD PRESSURE,PSIG	2115	2035	2289
OPEN FLOW, MCFD	3000	1300	7400
COMPONENT, MOLE PCT			
METHANE	93.4	93.2	94.0
ETHANE	3.1	2.5	2.5
PROPANE	1.3	1.0	1.0
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	0.6	1.3	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.4
HELIUM	0.05	0.07	0.08
HEATING VALUE*	1087	1063	1053
SPECIFIC GRAVITY	0.610	0.612	0.598

	INDEX 7246 SAMPLE 14254	INDEX 7247 SAMPLE 9567	INDEX 7248 SAMPLE 10710
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CEDARDALE NE	CEDARDALE NW	CEDARDALE NW
WELL NAME	COPELAND NO. 24-1	RIDENOUR NO. 1	OTTO ROBERTS NO. 1
LOCATION	SEC. 24, T24N, R18W	SEC. 24, T22N, R18W	SEC. 26, T22N, R18W
OWNER	JONES & PELLOW OIL CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	11/19/74	04/28/64	07/12/66
SAMPLED	01/19/75	09/24/64	09/08/66
FORMATION	MISS-CHESTER	PENN-COTTAGE GROVE	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6510	6534	7632
WELLHEAD PRESSURE,PSIG	2775	2075	2774
OPEN FLOW, MCFD	3084	550	48462
COMPONENT, MOLE PCT			
METHANE	92.7	92.0	94.0
ETHANE	3.5	3.5	2.2
PROPANE	1.5	1.5	0.8
N-BUTANE	0.4	0.6	0.3
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.2	0.2
HEXANES PLUS	0.1	0.3	0.5
NITROGEN	0.5	0.8	1.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.04	0.08	0.06
HEATING VALUE*	1086	1106	1061
SPECIFIC GRAVITY	0.610	0.624	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7249 SAMPLE 7860	INDEX 7250 SAMPLE 10771	INDEX 7251 SAMPLE 11981
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CHESTER W	CHESTER W	CHESTER W
WELL NAME	EZELL NO. 1	WHETSTONE UNIT NO. 2	BUTTEL NO. 1
LOCATION	SEC. 35, T21N, R17W	SEC. 36, T21N, R17W	SEC. 21, T21N, R17W
OWNER	ASHLAND OIL & REFINING CO.	AMOCO PRODUCTION CO.	JOHN M. MILL
COMPLETED	08/23/60	09/02/66	--/--/00
SAMPLED	02/17/61	11/11/65	07/22/69
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7922	7868	7835
WELLHEAD PRESSURE,PSIG	2900	2555	2600
OPEN FLOW, MCFD	24751	NOT GIVEN	6400
COMPONENT, MOLE PCT			
METHANE	95.4	95.3	94.1
ETHANE	2.4	2.3	2.3
PROPANE	0.5	0.7	0.8
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	0.3	0.3	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.5	0.6
HELIUM	0.02	0.04	0.04
HEATING VALUE*	1038	1041	1080
SPECIFIC GRAVITY	0.588	0.588	0.612

	INDEX 7252 SAMPLE 12345	INDEX 7253 SAMPLE 7638	INDEX 7254 SAMPLE 13100
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	CHESTER W	EDITH S	EDITH S
WELL NAME	DUER NO. 1-18	SELMAN-MORRIS UNIT NO. 1	GILBERT WALKER UNIT NO. 1
LOCATION	SEC. 18, T21N, R17W	SEC. 2, T26N, R19W	SEC. 8, T26N, R19W
OWNER	GRAHAM-MICHAELIS DRILLING CO	UNION OIL CO. OF CALIF.	SUN OIL CO.
COMPLETED	--/--/00	11/--/59	09/22/71
SAMPLED	--/--/00	08/08/60	11/03/71
FORMATION	NOT GIVEN	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5044	5962
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1730	2705
OPEN FLOW, MCFD	NOT GIVEN	1300	20600
COMPONENT, MOLE PCT			
METHANE	90.2	82.7	94.6
ETHANE	4.7	5.6	1.5
PROPANE	2.1	3.5	0.3
N-BUTANE	0.5	1.2	0.1
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.2	0.3	TRACE
ISOPENTANE	TRACE	0.4	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	0.5	4.9	2.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.3
HELIUM	0.02	0.20	0.07
HEATING VALUE*	1116	1129	1055
SPECIFIC GRAVITY	0.636	0.689	0.585

	INDEX 7255 SAMPLE 11992	INDEX 7256 SAMPLE 15804	INDEX 7257 SAMPLE 11587
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	FORT SUPPLY SE	FREEDOM NW	HARMON
WELL NAME	M. C. TUNE NO. 1	OKLAHOMA NO. 1-32	CHANCE-SHAHAN NO. 1
LOCATION	SEC. 34, T24N, R22W	SEC. 32, T23N, R18W	SEC. 27, T20N, R22W
OWNER	ASHLAND OIL & REFINING CO.	SOUTHLAND ROYALTY CO.	AMOCO PRODUCTION CO.
COMPLETED	04/20/69	01/17/79	11/21/63
SAMPLED	08/13/69	10/03/79	07/16/68
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7853	5600	10404
WELLHEAD PRESSURE,PSIG	2250	1900	1456
OPEN FLOW, MCFD	2988	4100	827
COMPONENT, MOLE PCT			
METHANE	86.6	92.6	77.6
ETHANE	5.3	3.3	8.5
PROPANE	3.3	1.2	4.3
N-BUTANE	1.0	0.3	1.3
ISOBUTANE	0.6	0.2	0.8
N-PENTANE	0.9	0.1	0.6
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.5
NITROGEN	1.2	1.4	4.3
OXYGEN	0.1	0.0	0.9
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	1.1
HELIUM	0.06	0.06	0.05
HEATING VALUE*	1166	1064	1180
SPECIFIC GRAVITY	0.674	0.609	0.733

	INDEX 7258 SAMPLE 11585	INDEX 7259 SAMPLE 15681	INDEX 7260 SAMPLE 11593
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	HARMON E	HARMON E	KEENAN E
WELL NAME	KARNES NO. 1	STATE OF OKLAHOMA NO. 1	FRITZLER NO. 1
LOCATION	SEC. 35, T20N, R22W	SEC. 16, T20N, R22W	SEC. 27, T21N, R22W
OWNER	AMOCO PRODUCTION CO.	ALAMO PETROLEUM CO.	J. M. HUBER CORP.
COMPLETED	04/11/67	10/18/78	04/27/68
SAMPLED	07/16/68	06/26/79	07/23/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10571	10064	9630
WELLHEAD PRESSURE,PSIG	1686	3100	3257
OPEN FLOW, MCFD	421	37000	15000
COMPONENT, MOLE PCT			
METHANE	85.3	83.6	83.1
ETHANE	7.4	8.4	9.1
PROPANE	3.0	3.8	3.4
N-BUTANE	0.9	0.9	0.6
ISOBUTANE	0.6	0.8	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.6	0.5	1.7
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.1	0.9
HELIUM	0.04	0.04	0.06
HEATING VALUE*	1165	1193	1152
SPECIFIC GRAVITY	0.676	0.691	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7261 SAMPLE 12390	INDEX 7262 SAMPLE 7039	INDEX 7263 SAMPLE 13097
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	KEENAN SE	LOVEDALE	LOVEDALE
WELL NAME	MCCASLIN NO. 1	G. O. DOTTER NO. 1	LUCAS NO. 1
LOCATION	SEC. 24, T21N, R22W	SEC. 31, T26N, R19W	SEC. 7, T26N, R19W
OWNER	SONID PETROLEUM CO.	ATLANTIC RICHFIELD CO.	SUN OIL CO.
COMPLETED	05/--/70	03/09/59	02/09/71
SAMPLED	08/18/70	04/25/59	10/28/71
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9500	6388	5950
WELLHEAD PRESSURE,PSIG	3250	2726	2673
OPEN FLOW, MCFD	3200	16500	17376
COMPONENT, MOLE PCT			
METHANE	86.0	92.2	94.4
ETHANE	7.9	3.4	3.1
PROPANE	3.2	1.0	1.0
N-BUTANE	0.6	0.6	0.2
ISOBUTANE	0.5	0.0	0.2
N-PENTANE	0.1	1.2	TRACE
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	0.5	0.4	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.5
HELIUM	0.06	0.10	0.07
HEATING VALUE*	1147	1134	1061
SPECIFIC GRAVITY	0.657	0.638	0.596

	INDEX 7264 SAMPLE 13098	INDEX 7265 SAMPLE 13295	INDEX 7266 SAMPLE 16863
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	LOVEDALE	LOVEDALE	MOORELAND
WELL NAME	WALKER NO. 1	DOTTER NO. 1	MINES NO. 1-29
LOCATION	SEC. 8, T26N, R19W	SEC. 30, T26N, R19W	SEC. 29, T23N, R19W
OWNER	SUN OIL CO.	PETROLEUM, INC.	OLD DOMINION OIL CORP.
COMPLETED	09/22/71	05/--/72	08/12/82
SAMPLED	10/28/71	06/28/72	04/05/83
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5960	6320	7609
WELLHEAD PRESSURE,PSIG	2705	2405	2876
OPEN FLOW, MCFD	16224	8963	2620
COMPONENT, MOLE PCT			
METHANE	94.4	93.8	90.8
ETHANE	3.3	3.3	4.1
PROPANE	0.9	1.2	1.8
N-BUTANE	0.3	0.2	0.6
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.3
NITROGEN	0.4	0.5	0.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.06	0.07	0.08
HEATING VALUE*	1061	1071	1111
SPECIFIC GRAVITY	0.594	0.602	0.632

	INDEX 7267 SAMPLE 11273	INDEX 7268 SAMPLE 16373	INDEX 7269 SAMPLE 16374
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	MUTUAL SE	MUTUAL W	MUTUAL W
WELL NAME	BARNEY NO. 1	MATHEWS NO. 1	BORDEN NO. 1
LOCATION	SEC. 29, T20N, R18W	SEC. 21, T20N, R19W	SEC. 16, T20N, R19W
OWNER	ASHLAND OIL & REFINING CO.	ANR PRODUCTION CO.	ANR PRODUCTION CO.
COMPLETED	06/20/63	09/08/80	04/28/80
SAMPLED	02/07/68	11/04/81	11/04/81
FORMATION	PENN-MORROW	PENN-MORROW	MISS-MERAMEC
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9165	9082	10287
WELLHEAD PRESSURE,PSIG	715	3150	3050
OPEN FLOW, MCFD	500	10000	1000
COMPONENT, MOLE PCT			
METHANE	94.3	92.9	94.2
ETHANE	2.1	3.2	2.3
PROPANE	0.7	1.3	1.1
N-BUTANE	0.1	0.4	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.7	0.6	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.3
HELIUM	0.07	0.07	0.05
HEATING VALUE*	1039	1083	1079
SPECIFIC GRAVITY	0.599	0.615	0.607

	INDEX 7270 SAMPLE 14387	INDEX 7271 SAMPLE 17584	INDEX 7272 SAMPLE 9719
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	QUINLAN	QUINLAN	QUINLAN NW
WELL NAME	BURKHART NO. 1	MADDUX NO. 1-10	HOLLOWAY NO. 1
LOCATION	SEC. 31, T25N, R17W	SEC. 10, T24N, R18W	SEC. 1, T24N, R18W
OWNER	WALTER DUNCAN	SHAKLEE OIL CO.	OKLAHOMA NATURAL GAS CO.
COMPLETED	09/24/74	05/30/84	10/22/64
SAMPLED	06/17/75	02/05/85	02/26/65
FORMATION	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4178	6694	6268
WELLHEAD PRESSURE,PSIG	1750	1150	2200
OPEN FLOW, MCFD	900	100	700
COMPONENT, MOLE PCT			
METHANE	92.8	92.3	93.8
ETHANE	4.0	2.9	3.2
PROPANE	1.3	1.0	1.0
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.8	2.1	0.6
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.5
HELIUM	0.05	0.05	0.05
HEATING VALUE*	1079	1045	1073
SPECIFIC GRAVITY	0.608	0.610	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7273 SAMPLE 11268	INDEX 7274 SAMPLE 16149	INDEX 7275 SAMPLE 9892
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	RICHMOND	RICHMOND NW	SEILING NE
WELL NAME	L. LAMM A NO. 1	WYMAN "A" NO. 1-33	GADEN NO. 1-A
LOCATION	SEC. 22, T20N, R18W	SEC. 33, T21N, R18W	SEC. 35, T20N, R17W
OWNER	CONTINENTAL OIL CO.	ANADARKO PRODUCTION CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/07/66	08/21/80	01/30/65
SAMPLED	02/01/68	12/11/80	05/12/65
FORMATION	MISS-CHESTER	PENN-MORROW & MISS-CHESTER	PENN-LAYTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8802	8242	7079
WELLHEAD PRESSURE,PSIG	3222	2905	2100
OPEN FLOW, MCFD	2980	29643	8659
COMPONENT, MOLE PCT			
METHANE	95.0	88.5	78.7
ETHANE	2.4	2.7	5.3
PROPANE	0.6	1.6	4.9
N-BUTANE	0.2	0.7	1.6
ISOBUTANE	TRACE	0.9	0.7
N-PENTANE	0.2	0.8	0.4
ISOPENTANE	0.0	1.2	0.6
CYCLOPENTANE	TRACE	0.3	0.3
HEXANES PLUS	0.1	1.3	0.7
NITROGEN	0.3	1.3	2.1
OXYGEN	TRACE	0.2	0.1
ARGON	0.2	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.4	0.5
HELIUM	0.04	0.07	0.12
HEATING VALUE*	1062	1203	1258
SPECIFIC GRAVITY	0.591	0.694	0.740

	INDEX 7276 SAMPLE 10004	INDEX 7277 SAMPLE 13112	INDEX 7278 SAMPLE 14680
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	SEILING NE	SEILING NE	SHARON N
WELL NAME	JAQUITH NO. 1	JOHN F. GADEN NO. 1-26	CLARK NO. 1
LOCATION	SEC. 34, T20N, R17W	SEC. 26, T20N, R17W	SEC. 15, T21N, R20W
OWNER	AMOCO PRODUCTION CO.	MAY PETROLEUM, INC.	PAN EASTERN EXPLORATION CO.
COMPLETED	06/30/64	05/18/69	05/21/75
SAMPLED	07/22/65	12/--/71	05/27/76
FORMATION	MISS-CHESTER	PENN-COTTAGE GROVE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8950	7042	9042
WELLHEAD PRESSURE,PSIG	3285	1843	3218
OPEN FLOW, MCFD	7000	28594	4813
COMPONENT, MOLE PCT			
METHANE	92.5	79.7	85.3
ETHANE	3.9	9.7	3.1
PROPANE	1.5	5.7	1.1
N-BUTANE	0.5	1.4	0.3
ISOBUTANE	0.2	0.9	0.2
N-PENTANE	0.1	0.5	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	0.1	1.3	7.3
OXYGEN	0.0	0.0	1.8
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.7
HELIUM	0.04	0.13	0.05
HEATING VALUE*	1098	1251	974
SPECIFIC GRAVITY	0.620	0.721	0.641

	INDEX 7279 SAMPLE 15011	INDEX 7280 SAMPLE 13715	INDEX 7281 SAMPLE 13915
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	SHARON N	SHARON SW	SHARON SW
WELL NAME	WEBER NO. 1	AUSTIN NO. 1	WREATH NO. 1
LOCATION	SEC. 24, T21N, R20W	SEC. 8, T20N, R21W	SEC. 17, T20N, R21W
OWNER	TOM BROWN, INC.	ODESSA NATURAL CORP.	ODESSA NATURAL CORP.
COMPLETED	12/09/76	07/26/73	12/14/73
SAMPLED	05/27/77	08/15/73	02/12/74
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9200	9978	10020
WELLHEAD PRESSURE,PSIG	2941	3270	2190
OPEN FLOW, MCFD	1299	1984	2287
COMPONENT, MOLE PCT			
METHANE	91.4	85.6	88.0
ETHANE	4.0	7.1	6.3
PROPANE	1.9	2.8	2.5
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.2	0.6	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.8	0.7	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.9
HELIUM	0.07	0.05	0.05
HEATING VALUE*	1105	1146	1130
SPECIFIC GRAVITY	0.629	0.660	0.648

	INDEX 7282 SAMPLE 12290	INDEX 7283 SAMPLE 12896	INDEX 7284 SAMPLE 14035
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	SHARON W	SHARON W	SHARON W
WELL NAME	KEHL NO. 1	PHILLIPS NO. 7-1	STATE NO. 1-36
LOCATION	SEC. 1, T21N, R21W	SEC. 7, T21N, R20W	SEC. 36, T22N, R22W
OWNER	EASON OIL CO.	LEBEN OIL CORP.	MAY PETROLEUM, INC.
COMPLETED	04/01/70	11/24/69	09/20/73
SAMPLED	06/12/70	07/12/71	06/30/74
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8900	8990	9257
WELLHEAD PRESSURE,PSIG	3200	1300	2963
OPEN FLOW, MCFD	7500	1850	7750
COMPONENT, MOLE PCT			
METHANE	84.3	84.7	90.4
ETHANE	6.3	6.9	5.2
PROPANE	3.9	3.7	1.7
N-BUTANE	0.7	0.8	0.4
ISOBUTANE	0.8	0.8	0.3
N-PENTANE	TRACE	0.4	TRACE
ISOPENTANE	0.9	0.0	0.3
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	1.0	0.1	0.1
NITROGEN	1.0	1.9	0.5
OXYGEN	TRACE	0.2	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.9
HELIUM	0.06	0.04	0.06
HEATING VALUE*	1219	1154	1095
SPECIFIC GRAVITY	0.702	0.671	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7285 SAMPLE 8422	INDEX 7286 SAMPLE 11295	INDEX 7287 SAMPLE 11444
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	TANGIER	TANGIER	TANGIER
WELL NAME	WEIDNER	BIESEL NO. 1-7	EZRA MOHWEILER NO. 1
LOCATION	SEC. 22, T22N, R22W	SEC. 7, T22N, R22W	SEC. 18, T22N, R22W
OWNER	AMOCO PRODUCTION CO.	SHELL OIL CO.	SUN OIL CO.
COMPLETED	01/02/62	03/07/66	06/08/68
SAMPLED	03/03/62	02/16/68	04/09/68
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8820	8406	8584
WELLHEAD PRESSURE,PSIG	3075	2408	2725
OPEN FLOW, MCFD	1060	23966	66194
COMPONENT, MOLE PCT			
METHANE	90.9	89.4	84.9
ETHANE	4.9	5.0	3.5
PROPANE	2.1	1.8	1.4
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	0.3	1.2	6.5
OXYGEN	TRACE	0.0	1.4
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.7
HELIUM	0.07	0.11	0.09
HEATING VALUE*	1105	1108	1020
SPECIFIC GRAVITY	0.627	0.641	0.656

	INDEX 7288 SAMPLE 12847	INDEX 7289 SAMPLE 12184	INDEX 7290 SAMPLE 13141
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	TANGIER	VICI	VICI
WELL NAME	MOREHART NO. 1	GRIFFITH NO. 1	GRIFFITH NO. 1
LOCATION	SEC. 31, T23N, R22W	SEC. 34, T20N, R20W	SEC. 34, T20N, R20W
OWNER	SIDWELL D&G AND TEXSTAR EXP.	VIERSEN & COCHRAN	VIERSEN & COCHRAN
COMPLETED	04/25/71	07/19/68	--/--/00
SAMPLED	06/09/71	01/31/70	01/27/72
FORMATION	PENN-MORROW L	DEVO-HUNTON	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8232	12590	11990
WELLHEAD PRESSURE,PSIG	2500	3800	4052
OPEN FLOW, MCFD	14000	36817	31930
COMPONENT, MOLE PCT			
METHANE	93.0	96.4	96.8
ETHANE	3.5	0.8	1.2
PROPANE	1.0	0.2	0.4
N-BUTANE	0.2	0.1	0.3
ISOBUTANE	0.2	0.0	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	1.0	0.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.1	0.2
HELIUM	0.05	0.03	0.03
HEATING VALUE*	1058	1009	1043
SPECIFIC GRAVITY	0.606	0.581	0.581

	INDEX 7291 SAMPLE 9745	INDEX 7292 SAMPLE 10412	INDEX 7293 SAMPLE 7011
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	MAYNOKA NE	MAYNOKA NE	WOODWARD
WELL NAME	CURTIS UNIT NO. 1	KELSET NO. 1	WALSH NO. 1
LOCATION	SEC. 35, T25N, R17W	SEC. 1, T24N, R17W	SEC. 2, T22N, R21W
OWNER	AMOCO PRODUCTION CO.	ASHLAND OIL & REFINING CO.	ATLANTIC RICHFIELD CO.
COMPLETED	12/08/64	05/03/65	11/23/58
SAMPLED	02/18/65	02/23/66	05/23/59
FORMATION	PENN-COTTAGE GROVE	PENN-OSWEGO	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5550	5750	8310
WELLHEAD PRESSURE,PSIG	1824	1925	2950
OPEN FLOW, MCFD	4250	1942	8174
COMPONENT, MOLE PCT			
METHANE	89.1	92.3	86.2
ETHANE	3.9	3.2	6.4
PROPANE	2.3	1.2	2.9
N-BUTANE	0.7	0.5	1.0
ISOBUTANE	0.3	0.2	0.8
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	0.2	0.2
HEXANES PLUS	0.2	0.4	0.7
NITROGEN	2.9	1.5	0.3
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.7
HELIUM	0.11	0.07	TRACE
HEATING VALUE*	1089	1084	1193
SPECIFIC GRAVITY	0.636	0.617	0.682

	INDEX 7294 SAMPLE 11262	INDEX 7295 SAMPLE 11539	INDEX 7296 SAMPLE 14927
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	WOODWARD	WOODWARD N	WOODWARD N
WELL NAME	CANFIELD NO. 1	BAKER UNIT NO. 1	PHILLIPS-DUNCAN NO. 1
LOCATION	SEC. 6, T22N, R20W	SEC. 13, T23N, R21W	SEC. 29, T23N, R21W
OWNER	UNION OIL CO. OF CALIF.	APACHE CORP.	MILLIARD OIL & GAS, INC.
COMPLETED	--/--/59	11/07/66	12/18/75
SAMPLED	01/29/68	06/--/68	02/28/77
FORMATION	PENN-MORROW	PENN-MORROW	ARDO-BROMIDE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8185	7711	10868
WELLHEAD PRESSURE,PSIG	321	2143	3523
OPEN FLOW, MCFD	NOT GIVEN	524	14091
COMPONENT, MOLE PCT			
METHANE	89.7	90.9	90.2
ETHANE	5.2	4.0	3.1
PROPANE	2.0	1.8	1.2
N-BUTANE	0.6	0.7	0.4
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.8	1.1	0.2
OXYGEN	0.0	0.2	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.7
HELIUM	0.07	0.05	0.09
HEATING VALUE*	1115	1100	1055
SPECIFIC GRAVITY	0.635	0.630	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7297 SAMPLE 15991	INDEX 7298 SAMPLE 11261	INDEX 7299 SAMPLE 11365
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	WOODWARD N	WOODWARD NE	WOODWARD NE
WELL NAME	PHILLIPS-DUNCAN NO.1	MCCORMICK NO. 1	C. W. WITHGOTT NO. 1
LOCATION	SEC. 29, T23N, R21W	SEC. 19, T22N, R20W	SEC. 2, T23N, R20W
OWNER	MILLIARD OIL & GAS, INC.	UNION OIL CO. OF CALIF.	ATLANTIC RICHFIELD CO.
COMPLETED	12/12/75	09/01/61	01/02/58
SAMPLED	06/18/80	01/29/68	03/13/68
FORMATION	DEVO-HUNTON	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10336	8234	7595
WELLHEAD PRESSURE,PSIG	3055	1838	304
OPEN FLOW, MCFD	2067	NOT GIVEN	754
COMPONENT, MOLE PCT			
METHANE	92.8	93.6	86.0
ETHANE	2.7	3.3	4.6
PROPANE	0.8	1.0	1.4
N-BUTANE	0.3	0.3	1.2
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.3	0.7	4.1
OXYGEN	0.0	0.0	1.0
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	0.08	0.07	0.06
HEATING VALUE*	1045	1059	1067
SPECIFIC GRAVITY	0.607	0.605	0.655

	INDEX 7300 SAMPLE 11413	INDEX 7301 SAMPLE 16496	INDEX 7302 SAMPLE 10580
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	WOODWARD	WOODWARD	WOODWARD
FIELD	WOODWARD NE	WOODWARD NE	WOODWARD S
WELL NAME	FRANK HARRISON NO. 1	RUTLEDGE NO. 1	COLLIER NO. 1
LOCATION	SEC. 5, T23N, R20W	SEC. 25, T24N, R20W	SEC. 27, T22N, R21W
OWNER	DIAMOND SHAMROCK CORP.	H & L OPERATING CO.	J. N. CHAMPLIN
COMPLETED	05/16/68	05/28/81	03/01/66
SAMPLED	03/28/68	04/15/82	06/02/66
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7642	7966	8788
WELLHEAD PRESSURE,PSIG	3080	3200	3000
OPEN FLOW, MCFD	1000	2056	1500
COMPONENT, MOLE PCT			
METHANE	91.7	93.7	77.5
ETHANE	4.0	3.1	5.3
PROPANE	1.7	1.1	2.2
N-BUTANE	0.4	0.3	0.6
ISOBUTANE	0.3	0.2	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.8	0.8	6.2
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.0	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.08	0.08	0.12
HEATING VALUE*	1095	1068	1032
SPECIFIC GRAVITY	0.620	0.603	0.631

	INDEX 7303 SAMPLE 16347	INDEX 7304 SAMPLE 16348	INDEX 7305 SAMPLE 16349
STATE	OREGON	OREGON	OREGON
COUNTY	COLUMBIA	COLUMBIA	COLUMBIA
FIELD	MIST	MIST	MIST
WELL NAME	COLUMBIA CO. NO. 1, RD NO. 1	COLUMBIA CO. NO. 3, RD NO. 1	COLUMBIA CO. NO. 4
LOCATION	SEC. 11, T6N, R5W	SEC. 10, T6N, R5W	SEC. 15, T6N, R5W
OWNER	REICHHOLD ENERGY CORP.	REICHHOLD ENERGY CORP.	REICHHOLD ENERGY CORP.
COMPLETED	06/12/80	06/12/80	06/12/80
SAMPLED	--/--/81	--/--/81	--/--/81
FORMATION	EOCE-CLARK & WILSON	EOCE-CLARK & WILSON	EOCE-CLARK & WILSON
GEOLOGIC PROVINCE CODE	710	710	710
DEPTH, FEET	2445	2267	2315
WELLHEAD PRESSURE,PSIG	971	966	978
OPEN FLOW, MCFD	9250	32000	1600
COMPONENT, MOLE PCT			
METHANE	89.0	88.7	89.2
ETHANE	0.1	0.1	0.0
PROPANE	0.1	TRACE	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	10.5	10.8	10.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	906	900	904
SPECIFIC GRAVITY	0.602	0.602	0.599

	INDEX 7306 SAMPLE 1729	INDEX 7307 SAMPLE 79	INDEX 7308 SAMPLE 810
STATE	OREGON	OREGON	OREGON
COUNTY	JACKSON	TILLAMOOK	TILLAMOOK
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	GAS SEEP	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	SEC. 10, T2S, R9W	SEC. 10, T2S, R9W
OWNER	MRS. C. W. MCGREW	HANANKRAFT	HARNSENKRAT & AUSTIN
COMPLETED	--/--/00	--/--/16	--/--/00
SAMPLED	03/20/29	09/09/19	--/--/00
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	715	710	710
DEPTH, FEET	NOT GIVEN	700	3000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.4	2.4	0.0
ETHANE	0.0	0.0	4.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.0	97.4	95.1
OXYGEN	1.1	0.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	87.5	0.0	0.0
HELIUM	0.00	0.24	0.12
HEATING VALUE*	9	24	79
SPECIFIC GRAVITY	1.459	0.956	0.968

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7309 SAMPLE 10273	INDEX 7310 SAMPLE 10437	INDEX 7311 SAMPLE 10440
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ALLEGHENY	ALLEGHENY
FIELD	ELIZABETH	FORWARD	FORWARD
WELL NAME	BICKERTON NO. 124	B-38-WALL	3544-FINLEY
LOCATION	JEFFERSON BORO	BROWN TWP.	BROWN TWP.
OWNER	CARNEGIE NATURAL GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	10/17/36	12/20/48	01/01/28
SAMPLED	11/04/65	01/21/66	01/21/66
FORMATION	DEVO-ELIZABETH	DEVO-BAYARD	DEVO-GANTZ
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2637	2843	2260
WELLHEAD PRESSURE,PSIG	52	80	230
OPEN FLOW, MCFD	25830	3	18
COMPONENT, MOLE PCT			
METHANE	88.3	93.8	93.0
ETHANE	6.2	5.5	4.5
PROPANE	1.9	0.5	0.8
N-BUTANE	0.8	0.1	0.3
ISOBUTANE	0.5	0.1	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.3	0.1	0.0
NITROGEN	1.4	1.4	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.09	0.07	0.12
HEATING VALUE*	1131	1045	1054
SPECIFIC GRAVITY	0.645	0.592	0.594

	INDEX 7312 SAMPLE 10444	INDEX 7313 SAMPLE 10450	INDEX 7314 SAMPLE 10451
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ALLEGHENY	ALLEGHENY
FIELD	FORWARD	FORWARD	FORWARD
WELL NAME	B-31-MANOWN	F-48-CICCI, S.	F-48-CICCI, S.
LOCATION	BROWN TWP.	BROWN TWP.	BROWN TWP.
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	01/01/42	05/29/28	05/29/28
SAMPLED	01/21/66	01/21/66	01/21/66
FORMATION	DEVO-FIFTY FOOT SAND	MISS-BIG INJUN	DEVO-SPEECHLEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2258	1547	3548
WELLHEAD PRESSURE,PSIG	20	5	80
OPEN FLOW, MCFD	61	10	11
COMPONENT, MOLE PCT			
METHANE	91.9	92.7	92.8
ETHANE	4.0	4.7	3.0
PROPANE	1.0	0.9	0.9
N-BUTANE	0.4	0.2	0.2
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	1.4	0.8	2.2
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.11	0.10	0.12
HEATING VALUE*	1085	1074	1049
SPECIFIC GRAVITY	0.617	0.603	0.601

	INDEX 7315 SAMPLE 10592	INDEX 7316 SAMPLE 10603	INDEX 7317 SAMPLE 9730
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ALLEGHENY	ALLEGHENY
FIELD	MIFFLIN	MIFFLIN	MONROEVILLE
WELL NAME	O.W.10085-R.W.&B.S.PAUL NO.2	O.W.10075-R.W.PAUL NO. 1	R.T. BURKE, PNG NO. 4424
LOCATION	PITTSBURGH SW	PITTSBURGH SW	MONROEVILLE BOROUGH
OWNER	SUMMERLEA INC.	SUMMERLEA INC.	PEOPLES NATURAL GAS CO.
COMPLETED	02/04/55	09/09/54	11/25/64
SAMPLED	03/01/66	03/01/66	--/--/00
FORMATION	DEVO-ELIZABETH	DEVO-SPEECHLEY	DEVO-THIRTY FOOT & SPEECHLEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2307	3250	2052
WELLHEAD PRESSURE,PSIG	290	300	650
OPEN FLOW, MCFD	297	42	59
COMPONENT, MOLE PCT			
METHANE	93.1	92.7	94.0
ETHANE	3.5	3.1	3.7
PROPANE	0.8	0.9	0.8
N-BUTANE	0.2	0.4	0.2
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.6	2.0	0.8
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.03	0.13	0.09
HEATING VALUE*	1062	1056	1058
SPECIFIC GRAVITY	0.604	0.606	0.592

	INDEX 7318 SAMPLE 10608	INDEX 7319 SAMPLE 10443	INDEX 7320 SAMPLE 10597
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ALLEGHENY	ALLEGHENY	ARMSTRONG
FIELD	RENNERDALE	RODFIELD	ATWOOD
WELL NAME	SMITH NO. 3324	I. &UCAR - F-77	1096 EARHART
LOCATION	CARNEGIE NW	PITTSBURGH TWP.	R. V. SE
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	04/18/13	09/22/45	03/25/09
SAMPLED	05/24/66	01/21/66	05/25/66
FORMATION	DEVO-GORDON	DEVO-BAYARD & SPEECHLEY	-SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2077	2440	1380
WELLHEAD PRESSURE,PSIG	NOT GIVEN	260	220
OPEN FLOW, MCFD	NOT GIVEN	10	25
COMPONENT, MOLE PCT			
METHANE	80.1	93.3	94.3
ETHANE	10.9	4.3	3.0
PROPANE	3.9	0.8	0.5
N-BUTANE	1.3	0.2	0.2
ISOBUTANE	1.0	0.2	0.1
N-PENTANE	0.8	TRACE	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.8	0.1	0.1
NITROGEN	0.8	0.8	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.05
HEATING VALUE*	1269	1066	1042
SPECIFIC GRAVITY	0.725	0.598	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7321 SAMPLE 9777	INDEX 7322 SAMPLE 9773	INDEX 7323 SAMPLE 10282
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	BAUM STATION	ELDERTON	GOHEENVILLE
WELL NAME	N. D. MOORE NO. 1	JOHN N. RALSTON NO. 1	JOHN HOUSER NO. 104
LOCATION	BOGGE TWP.	PLUMCREEK TWP.	LEECHBURG
OWNER	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	APOLLO GAS CO.
COMPLETED	10/09/64	11/04/64	04/24/29
SAMPLED	--/--/00	--/--/00	11/03/65
FORMATION	DEVO-BALLTOWN	DEVO-BALLTOWN	PENN-KANE & MISS-MURRYSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2830	2887	1140
WELLHEAD PRESSURE,PSIG	855	690	13
OPEN FLOW, MCFD	354	623	915
COMPONENT, MOLE PCT			
METHANE	93.3	94.6	91.8
ETHANE	4.4	3.3	5.6
PROPANE	0.6	0.6	1.2
N-BUTANE	0.1	0.2	0.3
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.1	0.8	0.4
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.00	0.00	0.00
HEATING VALUE	1051	1053	1089
SPECIFIC GRAVITY	0.591	0.588	0.609

	INDEX 7324 SAMPLE 10600	INDEX 7325 SAMPLE 10606	INDEX 7326 SAMPLE 6930
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	JOHNETTA	JOHNETTA	NOT GIVEN
WELL NAME	PA. E. SIDE LAND CO.-NO.3309	MATHEWS-NO. 3314	MARGARET RUPERT NO. 1
LOCATION	FREEPORT NE	FREEPORT NE	NOT GIVEN
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	COLUMBIAN CARBON CO.
COMPLETED	03/03/48	02/14/65	--/--/00
SAMPLED	03/02/66	03/02/66	11/23/59
FORMATION	MISS-MURRYSVILLE	-SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1084	1094	NOT GIVEN
WELLHEAD PRESSURE,PSIG	31	142	NOT GIVEN
OPEN FLOW, MCFD	2	4	
COMPONENT, MOLE PCT			
METHANE	95.3	94.0	96.6
ETHANE	2.4	3.5	2.7
PROPANE	0.4	0.7	0.2
N-BUTANE	0.0	0.5	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.6	1.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.12	0.17
HEATING VALUE	1019	1043	1032
SPECIFIC GRAVITY	0.577	0.589	0.573

	INDEX 7327 SAMPLE 10591	INDEX 7328 SAMPLE 10593	INDEX 7329 SAMPLE 10594
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	PLUMVILLE	PLUMVILLE	PLUMVILLE
WELL NAME	NO. 3144-WILSON	NO. 3226-RUMMEL	NO. 3239-ALLSHOUSE
LOCATION	SMICK SW	SMICK SW	SMICK SW
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	12/06/17	08/09/29	10/16/38
SAMPLED	03/02/66	03/02/66	03/02/66
FORMATION	MISS-MURRYSVILLE	DEVO-TIONA	DEVO-SPEECHLEY & BRADFORD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1280	2952	2773
WELLHEAD PRESSURE,PSIG	60	285	160
OPEN FLOW, MCFD	10	17	8
COMPONENT, MOLE PCT			
METHANE	94.5	94.9	95.4
ETHANE	3.2	3.4	3.1
PROPANE	0.7	0.9	0.7
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.10	0.03	0.03
HEATING VALUE	1043	1056	1050
SPECIFIC GRAVITY	0.586	0.587	0.583

	INDEX 7330 SAMPLE 10601	INDEX 7331 SAMPLE 13358	INDEX 7332 SAMPLE 13359
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ARMSTRONG
FIELD	PLUMVILLE	ROARING RUN	ROARING RUN
WELL NAME	NO. 3236-MCCLAIN	CANTERBURY COAL NO. RR-1	ASCS UNIT 25200540 NO. 1
LOCATION	SMICK SW	SEC. D, ELDERS RIDGE QUAD.	SEC. A, KISKIMINITAS QUAD.
OWNER	EQUITABLE GAS CO.	PENNZOIL UNITED, INC.	PENNZOIL UNITED, INC.
COMPLETED	07/23/38	12/14/70	09/11/71
SAMPLED	03/02/66	08/16/72	08/16/72
FORMATION	DEVO-BRADFORD	DEVO-ORISKANY	DEVO-CHERT & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3239	7194	7300
WELLHEAD PRESSURE,PSIG	95	3980	3950
OPEN FLOW, MCFD	8	2170	2600
COMPONENT, MOLE PCT			
METHANE	95.6	96.2	95.1
ETHANE	3.3	3.0	2.8
PROPANE	0.4	0.2	0.2
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.5	0.4	1.4
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.11	0.02	0.02
HEATING VALUE	1038	1033	1021
SPECIFIC GRAVITY	0.577	0.573	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7333 SAMPLE 10294	INDEX 7334 SAMPLE 9775	INDEX 7335 SAMPLE 9215
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	BEDFORD
FIELD	SLATE LICK	VALLEY	ARTEMUS
WELL NAME	M. W. FRANTZ NO. 793	W. J. SMAIL NO. 1	MARSHALL DIEHL NO. 2
LOCATION	LEECHBURG	COWANSHANNOCK TWP.	NOT GIVEN
OWNER	APOLLO GAS CO.	PEOPLES NATURAL GAS CO.	NEW YORK STATE NAT. GAS CORP
COMPLETED	10/18/06	12/04/64	09/22/63
SAMPLED	11/03/65	--/--/00	01/06/54
FORMATION	DEVO-SPEECHLEY	DEVO-BRADFORD	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2728	3308	4772
WELLHEAD PRESSURE,PSIG	NOT GIVEN	772	1778
OPEN FLOW, MCFD	NOT GIVEN	1516	24915
COMPONENT, MOLE PCT			
METHANE	88.0	95.0	98.4
ETHANE	6.9	3.5	0.4
PROPANE	2.4	0.4	TRACE
N-BUTANE	0.6	0.1	0.0
ISOBUTANE	0.5	0.1	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.8	0.6	1.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.08	0.08	0.10
HEATING VALUE*	1142	1047	1004
SPECIFIC GRAVITY	0.646	0.583	0.560

	INDEX 7336 SAMPLE 9726	INDEX 7337 SAMPLE 8661	INDEX 7338 SAMPLE 5036
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	BEDFORD	BEDFORD	BEDFORD
FIELD	BIG MOUNTAIN	FIVE FORKS	NOT GIVEN
WELL NAME	ALDEN T. SMITH NO. 1	W. C. DAVIS N-845	JESSE MILLER NO. 1
LOCATION	MANN TWP.	NOT GIVEN	NAPIER TWP.
OWNER	FELMONT OIL CORP.	NEW YORK STATE NAT. GAS CORP	SOUTH PENN OIL CO.
COMPLETED	12/07/64	06/16/62	--/--/00
SAMPLED	02/08/65	08/30/62	02/05/51
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	ORDC-L
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5397	5697	8872
WELLHEAD PRESSURE,PSIG	1822	2078	NOT GIVEN
OPEN FLOW, MCFD	12000	10504	50
COMPONENT, MOLE PCT			
METHANE	98.5	98.5	60.1
ETHANE	0.4	0.6	0.1
PROPANE	0.0	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	TRACE	---
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	0.7	38.5
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	TRACE	0.2
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.6
HELIUM	0.11	0.10	0.29
HEATING VALUE*	1005	1009	611
SPECIFIC GRAVITY	0.560	0.559	0.721

	INDEX 7339 SAMPLE 10373	INDEX 7340 SAMPLE 10374	INDEX 7341 SAMPLE 7938
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	BEDFORD	BEDFORD	BLAIR
FIELD	PENNLAND POOL	PURSELL	BLUE KNOB
WELL NAME	LAMASTER, ET UX. NO. N-944	HERBERT P. AKERS,ET AL. NO.1	PENN-TR-26-A NO. 1
LOCATION	MANN TWP.	MONROE TWP.	GREENFIELD
OWNER	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP	PHILLIPS PETROLEUM CO.
COMPLETED	08/27/64	09/05/62	--/--/00
SAMPLED	01/26/66	01/26/66	04/21/61
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4631	4732	6859
WELLHEAD PRESSURE,PSIG	1400	1757	3185
OPEN FLOW, MCFD	4050	605	1440
COMPONENT, MOLE PCT			
METHANE	98.4	96.1	97.3
ETHANE	0.3	0.4	1.7
PROPANE	0.0	0.1	0.0
N-BUTANE	0.0	1.3	TRACE
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.7	TRACE
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	1.2	0.9	0.7
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.10	0.18	0.04
HEATING VALUE*	1002	1067	1017
SPECIFIC GRAVITY	0.560	0.597	0.566

	INDEX 7342 SAMPLE 4787	INDEX 7343 SAMPLE 11784	INDEX 7344 SAMPLE 12002
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CAMBRIA	CAMBRIA	CAMBRIA
FIELD	NOT GIVEN	PATTON	PINDLION
WELL NAME	CLEARFIELD COAL CO. NO. 1	BURLEY NO. 1	ALBERT KUBAT NO. 1
LOCATION	NOT GIVEN	WEST CARROLL TWP.	BLACKLICK TWP.
OWNER	PEOPLES NATURAL GAS CO.	KEWANEE OIL CO.	PEOPLES NATURAL GAS CO.
COMPLETED	03/31/49	01/16/69	07/02/69
SAMPLED	06/09/49	02/25/69	08/11/69
FORMATION	DEVO-U	DEVO-ORISKANY	DEVO-ONONDAGA & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3201	8496	8494
WELLHEAD PRESSURE,PSIG	1360	4130	3854
OPEN FLOW, MCFD	33	2100	4750
COMPONENT, MOLE PCT			
METHANE	96.0	97.3	97.2
ETHANE	2.4	1.5	1.6
PROPANE	0.2	0.1	0.2
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.8	0.6	0.7
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.09	0.02	0.02
HEATING VALUE*	1032	1015	1019
SPECIFIC GRAVITY	0.580	0.570	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7345 SAMPLE 17650	INDEX 7346 SAMPLE 10470	INDEX 7347 SAMPLE 10124
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CAMBRIA	CAMBRIA	CAMERON
FIELD	ROY RIDGE PROSPECT	RAGER MOUNTAIN	DRIFTWOOD
WELL NAME	CAMBRIA MINING NO. 1	GEORGE L. READE NO. 1	WELL NO. 357
LOCATION	OGLETON QUAD ADAMS TWP.	SEC. D, JACKSON TWP.	GIBSON TWP.
OWNER	DAMSON OIL CO.	PEOPLES NATURAL GAS CO.	SYLVANIA CORP.
COMPLETED	--/--/00	--/--/00	10/03/51
SAMPLED	04/21/85	03/08/66	09/17/65
FORMATION	DEVO-ORISKANY	DEVO-CHERT & ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	9000	7699	5922
WELLHEAD PRESSURE,PSIG	3300	3196	166
OPEN FLOW, MCFD	2300	8245	13
COMPONENT, MOLE PCT			
METHANE	97.8	98.0	97.1
ETHANE	1.2	1.2	2.0
PROPANE	0.1	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.6	0.6
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1015	1014	1022
SPECIFIC GRAVITY	0.564	0.565	0.569

	INDEX 7348 SAMPLE 10371	INDEX 7349 SAMPLE 13275	INDEX 7350 SAMPLE 8224
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CAMERON	CAMERON	CAMERON
FIELD	DRIFTWOOD	EMPORIUM E	WHIPPORWILL TWP.
WELL NAME	SAMUEL C. EATON, JR. NO. 6	WN NO. 1185	N-813 PARDEE ESTATE NO. 3
LOCATION	GIBSON TWP.	SEC. M, PORTAGE QUAD.	NOT GIVEN
OWNER	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP	NEW YORK STATE NAT. GAS CORP
COMPLETED	10/13/52	10/21/71	--/--/00
SAMPLED	01/21/66	06/20/72	10/06/61
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5983	6654	6771
WELLHEAD PRESSURE,PSIG	3340	3715	3800
OPEN FLOW, MCFD	3449	15138	6039
COMPONENT, MOLE PCT			
METHANE	96.9	96.1	97.1
ETHANE	2.1	2.1	2.0
PROPANE	0.2	0.1	0.1
N-BUTANE	TRACE	0.0	TRACE
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.4	1.6	0.5
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1014	1014	1023
SPECIFIC GRAVITY	0.573	0.574	0.567

	INDEX 7351 SAMPLE 17173	INDEX 7352 SAMPLE 16477	INDEX 7353 SAMPLE 9672
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CENTRE	CENTRE	CLARION
FIELD	COUNCIL RUN	WILDCAT	APPALACHIAN
WELL NAME	COMM. OF PA. NO.1 TRACT 231	REUBEN GRIFFITH NO. 1A	FINNEFROCK NO. 3784
LOCATION	BOGGS TWP.	BELLEFONTE QUAD., BOGGS TWP.	MONROE TWP.
OWNER	EASTERN STATES EXPL. CO.	AMOCO PRODUCTION CO.	PEOPLES NATURAL GAS CO.
COMPLETED	07/26/82	06/27/80	05/11/48
SAMPLED	02/08/84	03/31/82	02/08/49
FORMATION	DEVO-ELK	SILU-TUSCARORA	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4650	8136	2611
WELLHEAD PRESSURE,PSIG	1740	3200	810
OPEN FLOW, MCFD	1958	1250	57
COMPONENT, MOLE PCT			
METHANE	95.1	85.8	88.0
ETHANE	2.9	2.3	6.4
PROPANE	0.3	0.2	2.3
N-BUTANE	0.1	0.0	0.8
ISOBUTANE	TRACE	0.0	0.4
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.0	0.0	0.8
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.2	11.4	1.1
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.15	0.22	0.11
HEATING VALUE*	1038	916	1127
SPECIFIC GRAVITY	0.589	0.615	0.642

	INDEX 7354 SAMPLE 10151	INDEX 7355 SAMPLE 10152	INDEX 7356 SAMPLE 10133
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	CLARION	CLARION	CLARION
FIELD	CLARION	CLARION	CLARION
WELL NAME	NO. 3953	NO. 3660	NO. 3852
LOCATION	HIGHLAND TWP.	MILLCREEK TWP.	HIGHLAND TWP.
OWNER	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.
COMPLETED	10/17/30	10/31/24	04/9/28
SAMPLED	09/20/65	09/20/65	09/20/65
FORMATION	DEVO-SPEECHLEY	DEVO-TIONA	DEVO-SHEFFIELD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2109	2160	2342
WELLHEAD PRESSURE,PSIG	80	148	225
OPEN FLOW, MCFD	4	4	7
COMPONENT, MOLE PCT			
METHANE	87.0	89.0	84.4
ETHANE	7.8	6.4	11.2
PROPANE	2.5	1.7	2.6
N-BUTANE	0.7	0.5	0.4
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.0	1.5	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.08	0.12	0.08
HEATING VALUE*	1138	1105	1158
SPECIFIC GRAVITY	0.646	0.630	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7357 SAMPLE 10396		INDEX 7358 SAMPLE 14234		INDEX 7359 SAMPLE 16855	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CLEARFIELD		CLEARFIELD		CLEARFIELD	
FIELD	BOONE MOUNTAIN		DECATOR W		LE CONTES MILLS	
WELL NAME	A. J. PALUMBO NO. 3 N-684		GENERAL REFACTORIES NO. 1		COMMONWEALTH OF PA. 324 NO.1	
LOCATION	HUSTON TWP.		SEC. C, MOUTZDALE QUAD.		SEC. H, KNOBS QUAD.	
OWNER	CONSOLIDATED GAS SUPPLY CORP		TEXACO INC.		ADOBE OIL & GAS CORP.	
COMPLETED	12/04/58		03/30/73		01/13/83	
SAMPLED	02/08/66		11/19/74		04/02/83	
FORMATION	DEVO-ORISKANY		DEVO-ORISKANY		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	7133		7995		7210	
WELLHEAD PRESSURE,PSIG	3819		4250		3550	
OPEN FLOW, MCFD	5305		2196		5735	
COMPONENT, MOLE PCT						
METHANE	96.0		97.7		96.9	
ETHANE	1.9		1.5		2.0	
PROPANE	0.2		0.1		0.1	
N-BUTANE	0.0		0.0		TRACE	
ISOBUTANE	0.0		0.0		TRACE	
N-PENTANE	0.0		0.0		0.1	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.1	
NITROGEN	1.5		0.5		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.1		0.1	
HELIUM	0.03		0.02		0.02	
HEATING VALUE*	1012		1019		1030	
SPECIFIC GRAVITY	0.576		0.565		0.571	

	INDEX 7360 SAMPLE 10398		INDEX 7361 SAMPLE 10296		INDEX 7362 SAMPLE 10200	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CLEARFIELD		CLEARFIELD		CLEARFIELD	
FIELD	LUTHERSBURG		REED-DEEMER		ROCKTON	
WELL NAME	MERLE MARSHALL NO. 1 N-864		FEE A NO. 66		4474	
LOCATION	BRADY TWP.		BELL TWP.		SHAW PROPERTY	
OWNER	CONSOLIDATED GAS SUPPLY CORP		KEWANEE OIL CO.		MANUFACTURERS LT. & HEAT CO.	
COMPLETED	10/27/62		09/15/65		09/12/57	
SAMPLED	02/08/66		11/26/65		10/07/65	
FORMATION	DEVO-ORISKANY		DEVO-		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	7344		3290		7151	
WELLHEAD PRESSURE,PSIG	2837		1185		480	
OPEN FLOW, MCFD	696		1364		117	
COMPONENT, MOLE PCT						
METHANE	97.1		94.1		97.0	
ETHANE	2.0		3.8		2.2	
PROPANE	0.1		0.9		0.1	
N-BUTANE	0.0		0.2		0.0	
ISOBUTANE	0.0		TRACE		0.0	
N-PENTANE	0.0		0.2		0.0	
ISOPENTANE	0.0		TRACE		0.0	
CYCLOPENTANE	0.0		0.3		0.0	
HEXANES PLUS	0.0		0.6		0.0	
NITROGEN	0.5		0.9		0.6	
OXYGEN	0.1		0.1		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.1	
HELIUM	0.02		0.07		0.02	
HEATING VALUE*	1022		1075		1025	
SPECIFIC GRAVITY	0.570		0.605		0.570	

	INDEX 7363 SAMPLE 16428		INDEX 7364 SAMPLE 16279		INDEX 7365 SAMPLE 10123	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CRAWFORD		CRAWFORD		CRAWFORD	
FIELD	ATHENS		ATHENS PROSPECT		INDIAN SPRINGS	
WELL NAME	HERBERT VANDERHOFF NO. 1		JAMES K. ANDERSON NO. 2		NO. 401	
LOCATION	ROME POOL TITUSVILLE QUAD.		ON ROUTE 767		SUMMERHILL	
OWNER	WAINOCO OIL & GAS CO.		WAINOCO OIL & GAS CO.		SYLVANIA CORP.	
COMPLETED	06/09/79		03/21/79		12/03/63	
SAMPLED	02/16/82		06/05/81		09/15/65	
FORMATION	SILU-MEDINA		SILU-MEDINA		SILU-MEDINA	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	5200		4850		3766	
WELLHEAD PRESSURE,PSIG	1335		1350		1020	
OPEN FLOW, MCFD	3364		7898		346	
COMPONENT, MOLE PCT						
METHANE	93.0		93.3		87.9	
ETHANE	3.4		3.1		4.7	
PROPANE	0.5		0.9		1.3	
N-BUTANE	0.1		0.2		0.3	
ISOBUTANE	TRACE		TRACE		0.3	
N-PENTANE	0.1		TRACE		0.1	
ISOPENTANE	TRACE		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	2.7		2.7		4.9	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.6		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.1	
HELIUM	0.07		0.08		0.16	
HEATING VALUE*	1029		1027		1042	
SPECIFIC GRAVITY	0.593		0.592		0.626	

	INDEX 7366 SAMPLE 11124		INDEX 7367 SAMPLE 9727		INDEX 7368 SAMPLE 452	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	CRAWFORD		CRAWFORD		ELK	
FIELD	INDIAN SPRINGS		PALMER		BEAVER MEADOW	
WELL NAME	O. S. BURNHAM NO. 3		STEPHEN SZALAY NO. 1		SMITH-GRANT NO. 2	
LOCATION	SPRING TWP.		CONNEAUT TWP.		4 MI. N RIDGWAY	
OWNER	JAMES DRILLING CORP.		FELMONT OIL CORP.		RIDGWAY LIGHT & HEAT CO.	
COMPLETED	07/07/66		11/05/64		--/--/15	
SAMPLED	09/11/67		02/08/65		09/18/20	
FORMATION	SILU-MEDINA		SILU-MEDINA		NOT GIVEN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3880		3740		2585	
WELLHEAD PRESSURE,PSIG	920		1125		120	
OPEN FLOW, MCFD	8		1600		350	
COMPONENT, MOLE PCT						
METHANE	85.8		87.6		75.9	
ETHANE	9.7		4.1		22.0	
PROPANE	1.3		1.1		---	
N-BUTANE	0.5		0.3		---	
ISOBUTANE	0.2		0.2		---	
N-PENTANE	0.1		TRACE		---	
ISOPENTANE	0.2		0.1		---	
CYCLOPENTANE	TRACE		TRACE		---	
HEXANES PLUS	0.1		TRACE		---	
NITROGEN	0.5		5.1		0.0	
OXYGEN	0.1		TRACE		0.5	
ARGON	TRACE		TRACE		---	
HYDROGEN	TRACE		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.1		TRACE		0.2	
HELIUM	0.16		0.16		0.00	
HEATING VALUE*	1029		1011		1163	
SPECIFIC GRAVITY	0.638		0.620		0.640	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7369 SAMPLE 453	INDEX 7370 SAMPLE 10370	INDEX 7371 SAMPLE 10397
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ELK	ELK	ELK
FIELD	BEAVER MEADOW	BENEZETTE	BOONE MOUNTAIN
WELL NAME	O. B. GRANT NO. 1	PA. DEPT. F&W NO. 4 TRACT 33	LOGAN BOND NO. 1 N-507
LOCATION	3 MI. N RIDGWAY	BENEZETTE TWP.	MORTON TWP.
OWNER	RIDGWAY LIGHT & HEAT CO.	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	--/--/02	04/03/54	03/25/57
SAMPLED	09/18/20	01/21/66	02/08/66
FORMATION	NOT GIVEN	DEVO-ORISKANY	DEVO-ELK
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2100	6178	2333
WELLHEAD PRESSURE,PSIG	220	3500	870
OPEN FLOW, MCFD	35	4845	539
COMPONENT, MOLE PCT			
METHANE	88.4	97.2	95.4
ETHANE	11.0	2.1	3.0
PROPANE	---	0.2	0.5
N-BUTANE	---	0.0	0.1
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	0.6	0.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.3
HELIUM	0.00	0.03	0.09
HEATING VALUE*	1093	1027	1042
SPECIFIC GRAVITY	0.606	0.569	0.582

	INDEX 7372 SAMPLE 10198	INDEX 7373 SAMPLE 10199	INDEX 7374 SAMPLE 10163
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ELK	ELK	ELK
FIELD	KANE	KANE	MILLSTONE
WELL NAME	WELL NO. 1524	1370	NO. 300
LOCATION	JONES TWP.	JONES TWP.	MILLSTONE TWP.
OWNER	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.
COMPLETED	09/26/07	11/12/03	11/10/91
SAMPLED	10/06/65	10/06/65	09/21/65
FORMATION	DEVO-SPEECHLEY	DEVO-ELK	DEVO-SHEFFIELD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1628	2360	2313
WELLHEAD PRESSURE,PSIG	170	48	115
OPEN FLOW, MCFD	23	7	8
COMPONENT, MOLE PCT			
METHANE	82.1	73.6	78.2
ETHANE	7.4	13.5	13.1
PROPANE	2.9	6.6	4.8
N-BUTANE	0.6	2.1	1.1
ISOBUTANE	0.4	1.1	1.0
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.9	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	1.5	1.3	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.12	0.06	0.06
HEATING VALUE*	1129	1339	1244
SPECIFIC GRAVITY	0.644	0.775	0.714

	INDEX 7375 SAMPLE 9728	INDEX 7376 SAMPLE 10325	INDEX 7377 SAMPLE 10869
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ERIE	ERIE	ERIE
FIELD	CONNEAUT	CONNEAUT	CONNEAUT
WELL NAME	KRAMER FARM NO. 1608	CHASE WELL NO. 1613	M & K FROMBACH NO. 1
LOCATION	ELK CREEK TWP.	CONNEAUT TWP.	SEC. E, GIRARD QUAD.
OWNER	PENNSYLVANIA GAS CO.	PENNSYLVANIA GAS CO.	PENNSYLVANIA GAS CO.
COMPLETED	12/29/64	10/15/65	04/15/66
SAMPLED	02/11/65	12/13/65	02/14/67
FORMATION	SILU-MEDINA	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3348	3143	3127
WELLHEAD PRESSURE,PSIG	930	1020	950
OPEN FLOW, MCFD	499	3144	400
COMPONENT, MOLE PCT			
METHANE	91.0	89.9	90.6
ETHANE	4.0	4.0	4.0
PROPANE	0.7	0.8	1.0
N-BUTANE	0.2	0.3	0.3
ISOBUTANE	0.2	0.1	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	3.5	4.2	3.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.12	0.10	0.14
HEATING VALUE*	1035	1035	1038
SPECIFIC GRAVITY	0.605	0.614	0.610

	INDEX 7378 SAMPLE 17469	INDEX 7379 SAMPLE 17506	INDEX 7380 SAMPLE 17661
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ERIE	ERIE	ERIE
FIELD	BRUMLIN	ERIE	ERIE
WELL NAME	RUTKOWSKI NO. 2	CLIFFORD TROYER NO. 1	MITCHELL NO. 1
LOCATION	SEC. E, CAMBRIDGE SPRNGS. NE QD	SEC. G, HAMMETT QD, GREENE TWP	SEC. C, CAMBRIDGE SPG. QUAD
OWNER	VINEYARD OIL & GAS CO.	NRM PETROLEUM CORP.	NRM PETROLEUM CORP.
COMPLETED	07/17/84	03/12/83	10/11/83
SAMPLED	10/01/84	10/26/84	05/01/85
FORMATION	DEVO-ORISKANY & SILU-SALINA	SILU-MEDINA	DEVO-ORISKANT
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2990	3473	2380
WELLHEAD PRESSURE,PSIG	800	1075	650
OPEN FLOW, MCFD	3000	2316	4108
COMPONENT, MOLE PCT			
METHANE	78.7	90.5	78.1
ETHANE	12.6	3.2	10.2
PROPANE	4.3	0.4	4.2
N-BUTANE	1.1	0.2	1.6
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.3	0.1	0.6
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	2.0	5.1	4.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.20	0.14	0.21
HEATING VALUE*	1216	1006	1196
SPECIFIC GRAVITY	0.705	0.605	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7381 SAMPLE 8474	INDEX 7382 SAMPLE 8514	INDEX 7383 SAMPLE 14045
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ERIE	ERIE	ERIE
FIELD	ERIE COUNTY	ERIE COUNTY	ERIE COUNTY
WELL NAME	NO. 1597	ROSSITER NO. 1	MCLAUGHLIN NO. 1
LOCATION	MILLER PROPERTY, ELK CR.TWP.	NOT GIVEN	MCKEAN TWP.
OWNER	PENNSYLVANIA GAS CO.	PENNSYLVANIA GAS CO.	NATIONAL FUEL GAS SUP. CORP.
COMPLETED	11/10/61	10/25/61	01/17/73
SAMPLED	03/13/62	05/01/62	07/10/74
FORMATION	SILU---	SILU---	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3427	3118	2175
WELLHEAD PRESSURE,PSIG	1020	1050	808
OPEN FLOW, MCFD	3000	3000	15000
COMPONENT, MOLE PCT			
METHANE	90.4	90.5	77.3
ETHANE	4.1	4.1	4.9
PROPANE	0.8	1.0	2.4
N-BUTANE	0.2	0.2	0.6
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.9	3.7	11.7
OXYGEN	0.1	TRACE	2.1
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.14	0.14	0.22
HEATING VALUE*	1039	1039	985
SPECIFIC GRAVITY	0.611	0.610	0.688

	INDEX 7384 SAMPLE 16653	INDEX 7385 SAMPLE 9907	INDEX 7386 SAMPLE 10750
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ERIE	ERIE	ERIE
FIELD	ERIE COUNTY	LERINGTON	SPRINGFIELD
WELL NAME	G. H. MCGUIRE NO. 6225	CRIST NO. 1	N. NESBITT NO. 1
LOCATION	GREENFIELD TWP.	CONNEAUT TWP.	CONNEAUT TWP.
OWNER	NATIONAL FUEL GAS SUP. CORP.	WORLD WIDE PETROLEUM CORP.	CAYMAN CORP.
COMPLETED	02/08/80	09/30/65	08/27/65
SAMPLED	09/14/82	05/29/65	10/26/66
FORMATION	DEVO-ORISKANY	SILU-MEDINA	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7382	3200	2716
WELLHEAD PRESSURE,PSIG	775	1100	920
OPEN FLOW, MCFD	4347	9000	3800
COMPONENT, MOLE PCT			
METHANE	80.1	91.0	90.7
ETHANE	11.2	4.0	3.8
PROPANE	3.7	0.8	0.9
N-BUTANE	0.8	0.2	0.3
ISOBUTANE	0.3	0.2	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	2.9	1.5	3.9
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.20	0.10	0.17
HEATING VALUE*	1165	1032	1033
SPECIFIC GRAVITY	0.683	0.604	0.610

	INDEX 7387 SAMPLE 8567	INDEX 7388 SAMPLE 11703	INDEX 7389 SAMPLE 12214
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	CHALK HILL	ELLIOTSVILLE	NOT GIVEN
WELL NAME	P. N. G. NO. 4271	FRANK WHITE NO. 1	RYAN NO. 2D
LOCATION	STEWART TWP.	WHARTON TWP.	WHARTON TWP.
OWNER	PEOPLES NATURAL GAS CO., ET	ZENITH EXPLORATION CO.	ZENITH EXPLORATION CO.
COMPLETED	10/--/61	10/09/68	10/31/69
SAMPLED	05/11/62	12/11/68	03/05/70
FORMATION	DEVO-CHERT & ORISKANY	DEVO-SPEECHLEY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7611	2820	7657
WELLHEAD PRESSURE,PSIG	3413	1100	3400
OPEN FLOW, MCFD	3110	1000	3600
COMPONENT, MOLE PCT			
METHANE	97.5	95.6	97.2
ETHANE	1.6	2.7	1.6
PROPANE	TRACE	0.2	0.1
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.5	0.5	0.7
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.5	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.10	0.10	0.03
HEATING VALUE*	1016	1040	1016
SPECIFIC GRAVITY	0.565	0.577	0.568

	INDEX 7390 SAMPLE 10249	INDEX 7391 SAMPLE 13257	INDEX 7392 SAMPLE 10247
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	OHIOPYLE	SPRUCE	SUMMIT
WELL NAME	B. O. & E. M. MUELLER NO. 45	E. M. ABBEY NO. 1	W. P. BARTON NO. G-960
LOCATION	HENRY CLAY TWP.	STEWART TWP.	GEORGES TWP.
OWNER	MANUFACTURERS LT. & HEAT CO.	SNEE & EBERLY	MANUFACTURERS LT. & HEAT CO.
COMPLETED	10/23/59	12/09/71	01/27/44
SAMPLED	10/20/65	08/07/72	10/20/65
FORMATION	DEVO-CHERT & ORISKANY	DEVO-CHERT & ORISKANY	DEVO-CHERT & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8490	7578	7012
WELLHEAD PRESSURE,PSIG	3320	3086	492
OPEN FLOW, MCFD	31000	3500	251214
COMPONENT, MOLE PCT			
METHANE	97.5	97.6	97.7
ETHANE	1.7	1.6	1.5
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.6	0.4	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1021	1020	1019
SPECIFIC GRAVITY	0.567	0.566	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7393 SAMPLE 10250	INDEX 7394 SAMPLE 10227	INDEX 7395 SAMPLE 10318
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	FAYETTE	FOREST	FOREST
FIELD	SUMMIT	GUITONVILLE	MARIENVILLE
WELL NAME	EUTSEY NO. 3907	NO. 2346	CROASMAN 42C
LOCATION	GEORGES TWP.	GREEN TWP.	5 MI. SW MARIENVILLE
OWNER	MANUFACTURERS LT. & HEAT CO.	UNITED NATURAL GAS CO.	NORTH PENN GAS CO.
COMPLETED	06/21/47	10/01/06	10/01/55
SAMPLED	10/20/65	12/06/65	10/13/65
FORMATION	DEVO-CHERT	DEVO-VENANGO	PENN-CLARION 3RD SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6873	947	986
WELLHEAD PRESSURE,PSIG	365	14	NOT GIVEN
OPEN FLOW, MCFD	121430	31	150
COMPONENT, MOLE PCT			
METHANE	97.6	76.2	90.6
ETHANE	1.5	9.8	4.5
PROPANE	0.1	6.3	1.3
N-BUTANE	0.0	2.7	0.5
ISOBUTANE	0.0	1.5	0.2
N-PENTANE	0.0	0.7	0.2
ISOPENTANE	0.0	0.8	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.6	0.2
NITROGEN	0.7	1.1	1.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.02	0.09	0.14
HEATING VALUE*	1018	1351	1083
SPECIFIC GRAVITY	0.567	0.779	0.621

	INDEX 7396 SAMPLE 10203	INDEX 7397 SAMPLE 2490	INDEX 7398 SAMPLE 10265
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	FOREST	GREENE	GREENE
FIELD	QUEEN	APPALACHIAN	CARMICHAELS
WELL NAME	3137	NO. 2998	WILLIAM FLENNIKEN NO. J-372
LOCATION	HICKORY TWP.	A. B. WADE FARM, TERRY TWP.	CUMBERLAND TWP.
OWNER	UNITED NATURAL GAS CO.	EQUITABLE GAS CO.	CARNEGIE NATURAL GAS CO.
COMPLETED	10/22/18	01/15/32	05/04/22
SAMPLED	10/06/65	04/08/32	11/03/65
FORMATION	PERM-QUEEN	DEVO-GANTZ	DEVO-ELIZABETH
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1133	2996	3091
WELLHEAD PRESSURE,PSIG	209	685	16
OPEN FLOW, MCFD	52	6181	21
COMPONENT, MOLE PCT			
METHANE	80.8	90.5	88.2
ETHANE	11.7	4.9	6.6
PROPANE	3.8	---	2.3
N-BUTANE	0.8	---	0.7
ISOBUTANE	0.3	---	0.4
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.2	---	0.3
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.2
NITROGEN	1.9	3.8	1.1
OXYGEN	0.2	0.6	0.3
ARGON	0.0	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.17	0.20	0.08
HEATING VALUE*	1182	1005	1133
SPECIFIC GRAVITY	0.683	0.597	0.643

	INDEX 7399 SAMPLE 10267	INDEX 7400 SAMPLE 15992	INDEX 7401 SAMPLE 10438
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	GREENE	GREENE
FIELD	FORDYCE	FORDYCE	GARRISON
WELL NAME	THOMAS BREWER NO. 1-809	HEADLEY NO. 5453	B. F. RENNER-O. W. NO. 9332
LOCATION	CUMBERLAND TWP.	SEC. F, GARARDS FORT QUAD.	MANNINGTON TWP.
OWNER	CARNEGIE NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	BROWN & ALLEN
COMPLETED	12/31/34	02/05/80	09/24/48
SAMPLED	11/03/65	06/25/80	01/12/66
FORMATION	DEVO-BAYARD	MISS-BIG INJUN	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3226	1590	2294
WELLHEAD PRESSURE,PSIG	280	NOT GIVEN	12
OPEN FLOW, MCFD	12	7500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.9	88.5	80.6
ETHANE	5.2	6.3	10.9
PROPANE	1.1	2.2	3.9
N-BUTANE	0.2	0.5	1.3
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	1.0	1.4	1.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.09	0.11	0.09
HEATING VALUE*	1076	1120	1230
SPECIFIC GRAVITY	0.606	0.637	0.708

	INDEX 7402 SAMPLE 10445	INDEX 7403 SAMPLE 10449	INDEX 7404 SAMPLE 10268
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	GREENE	GREENE
FIELD	GARRISON	GARRISON	GUMP
WELL NAME	WELL NO. 2673 - TAYLOR	A. M. SNYDER-O. W. NO. 5035	C. A. DULANEY 949
LOCATION	MANNINGTON TWP.	MANNINGTON TWP.	WHITELEY TWP.
OWNER	EQUITABLE GAS CO.	T. SMITH	CARNEGIE NATURAL GAS CO.
COMPLETED	11/27/17	12/23/54	08/11/44
SAMPLED	01/12/66	01/12/66	11/03/65
FORMATION	MISS-MAXTON & BIG INJUN	DEVO-BAYARD	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2318	3645	2103
WELLHEAD PRESSURE,PSIG	19	NOT GIVEN	25
OPEN FLOW, MCFD	1	NOT GIVEN	8
COMPONENT, MOLE PCT			
METHANE	73.7	56.3	87.1
ETHANE	14.6	21.3	5.1
PROPANE	5.9	12.5	2.0
N-BUTANE	1.7	3.6	0.9
ISOBUTANE	1.4	2.3	0.5
N-PENTANE	0.4	0.7	0.4
ISOPENTANE	0.5	1.3	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.5	0.9	0.5
NITROGEN	0.9	0.8	2.7
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.04	0.05	0.16
HEATING VALUE*	1334	1614	1128
SPECIFIC GRAVITY	0.771	0.943	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7405 SAMPLE 10439	INDEX 7406 SAMPLE 10455	INDEX 7407 SAMPLE 10456
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	GREENE	GREENE
FIELD	JEFFERSON	JEFFERSON	JEFFERSON
WELL NAME	M-375 - HILL	VAN KIRK - NO. 1553	MOLESY - NO. 1492
LOCATION	WAYNESBURG TWP.	WAYNESBURG TWP.	WAYNESBURG TWP.
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	M. D. FREELAND
COMPLETED	05/21/19	07/18/04	10/16/02
SAMPLED	01/12/66	01/12/66	01/12/66
FORMATION	DEVO-BAYARD	DEVO-BAYARD	DEVO-ELIZABETH
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2360	2865	3125
WELLHEAD PRESSURE,PSIG	53	44	80
OPEN FLOW, MCFD	11	9	36
COMPONENT, MOLE PCT			
METHANE	92.3	92.0	90.2
ETHANE	3.1	3.9	5.2
PROPANE	0.5	0.7	1.5
N-BUTANE	0.2	0.3	0.6
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	3.0	2.2	1.2
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.12	0.15	0.10
HEATING VALUE*	1022	1056	1108
SPECIFIC GRAVITY	0.597	0.606	0.628

	INDEX 7408 SAMPLE 10266	INDEX 7409 SAMPLE 340	INDEX 7410 SAMPLE 341
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	GREENE	GREENE
FIELD	MCCRACKEN	WAYNESBURG	WAYNESBURG
WELL NAME	E. E. MOUSTON NO. 186	JOHN MILLER NO. 779	C. L. MAYNES NO. 2203
LOCATION	ALEPPO & RICHHILL TWP.	FRANKLIN TWP.	3 MI. E FRANKLIN
OWNER	CARNEGIE NATURAL GAS CO.	MANUFACTURERS LT. & HEAT CO.	MANUFACTURERS LT. & HEAT CO.
COMPLETED	09/07/13	06/--/18	06/--/18
SAMPLED	11/03/65	06/10/20	06/10/20
FORMATION	DEVO-FIFTY FOOT SAND	DEVO-BAYARD	PENN-GAS
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2578	2807	1275
WELLHEAD PRESSURE,PSIG	37	17	18
OPEN FLOW, MCFD	21	30	35
COMPONENT, MOLE PCT			
METHANE	75.4	82.8	85.8
ETHANE	11.1	14.4	11.3
PROPANE	5.6	---	---
N-BUTANE	2.3	---	---
ISOBUTANE	1.2	---	---
N-PENTANE	0.6	---	---
ISOPENTANE	0.9	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.7	---	---
NITROGEN	1.8	1.7	2.2
OXYGEN	0.0	0.9	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.0	0.2
HELIUM	0.10	0.10	0.13
HEATING VALUE*	1330	1097	1072
SPECIFIC GRAVITY	0.775	0.637	0.622

	INDEX 7411 SAMPLE 920	INDEX 7412 SAMPLE 10599	INDEX 7413 SAMPLE 10390
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	GREENE	INDIANA
FIELD	WAYNESBURG	WAYNESBURG	ARMAGH
WELL NAME	NO. 2902	O. W. NO. 10752 ALLISON	BEULAH STILES, ET AL. NO. 1
LOCATION	MORRIS TWP.	WBG. SW	BUFFINGTON TWP.
OWNER	MANUFACTURERS LT. & HEAT CO.	J. T. GALEY	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	--/--/00	01/12/63	07/08/58
SAMPLED	09/15/24	05/24/66	02/08/66
FORMATION	NOT GIVEN	DEVO-BRADFORD	DEVO-CHERT & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3048	3890	8257
WELLHEAD PRESSURE,PSIG	470	1215	NOT GIVEN
OPEN FLOW, MCFD	1565	250	444
COMPONENT, MOLE PCT			
METHANE	74.8	89.5	97.5
ETHANE	23.4	6.6	1.7
PROPANE	---	2.0	0.0
N-BUTANE	---	0.5	0.0
ISOBUTANE	---	0.5	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	1.4	0.5	0.5
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.10	0.03	0.03
HEATING VALUE*	1177	1123	1018
SPECIFIC GRAVITY	0.676	0.630	0.568

	INDEX 7414 SAMPLE 9833	INDEX 7415 SAMPLE 8891	INDEX 7416 SAMPLE 10532
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	BIG RUN	CHERRY MILL	CHERRY MILL
WELL NAME	M. C. BONNER NO. 1	A. B. CRICHTON NO. 1	O. M. GIBSON
LOCATION	BANKS TWP.	NOT GIVEN	CHERRY MILL TWP.
OWNER	FAIRMAN DRILLING CO.	MANUFACTURERS LT. & HEAT CO.	DELTA DRILLING CO.
COMPLETED	10/12/64	01/07/63	02/24/66
SAMPLED	04/01/65	03/18/63	04/19/66
FORMATION	DEVO-	DEVO-HUNTERSVILLE	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2465	7565	7854
WELLHEAD PRESSURE,PSIG	1170	4033	4150
OPEN FLOW, MCFD	1061	7710	2000
COMPONENT, MOLE PCT			
METHANE	96.0	97.7	96.7
ETHANE	2.6	1.5	1.7
PROPANE	0.6	0.1	0.1
N-BUTANE	0.2	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	0.5	0.4	1.1
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.2
HELIUM	0.07	0.02	0.02
HEATING VALUE*	1041	1021	1013
SPECIFIC GRAVITY	0.587	0.567	0.571

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7417 SAMPLE 12568	INDEX 7418 SAMPLE 12251	INDEX 7419 SAMPLE 12252
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	CREEKSIDE	CRETE	CRETE
WELL NAME	INVESTMENT NO. 3	F. M. KINTER NO.2PNG NO.4596	FRED A. BOWMAN NO.1,PNG 4589
LOCATION	WASHINGTON TWP.	SEC. A, CENTER TWP.	SEC. A, CENTER TWP.
OWNER	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	07/08/70	10/08/69	08/25/69
SAMPLED	11/--/70	04/05/70	04/09/70
FORMATION	DEVO-BALLTOWN & BRADFORD	DEVO-BALLTOWN (B&C)	DEVO-BALLTOWN & BRADFORD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5369	3047	3141
WELLHEAD PRESSURE,PSIG	1225	520	1200
OPEN FLOW, MCFD	2800	1000	6000
COMPONENT, MOLE PCT			
METHANE	93.4	94.5	95.7
ETHANE	3.6	2.8	2.8
PROPANE	1.1	0.6	0.4
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.0	1.1	0.9
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.08	0.07	0.08
HEATING VALUE*	1052	1051	1030
SPECIFIC GRAVITY	0.596	0.591	0.575

	INDEX 7420 SAMPLE 12839	INDEX 7421 SAMPLE 9774	INDEX 7422 SAMPLE 10205
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	GRIP	INDIANA	JACKSONVILLE
WELL NAME	CLEARFIELD COAL CORP. NO. 1	M. W. SIMPSON NO. 1	STEWART NO. 1, CO. NO. 4336
LOCATION	SEC. A, BARNESBORO QUAD.	WHITE TWP.	YOUNG TWP.
OWNER	FELMONT OIL CORP.	PEOPLES NATURAL GAS CO.	MANUFACTURERS LT. & HEAT CO.
COMPLETED	07/29/70	12/10/64	--/--/00
SAMPLED	05/21/71	--/--/00	10/06/65
FORMATION	DEVO-ORISKANY	DEVO-BRADFORD & BALLTOWN	DEVO-CHERT & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7964	3015	7384
WELLHEAD PRESSURE,PSIG	4261	1300	1442
OPEN FLOW, MCFD	10250	1300	40
COMPONENT, MOLE PCT			
METHANE	97.3	94.7	97.2
ETHANE	1.8	3.1	2.0
PROPANE	0.3	0.6	0.2
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.6	0.9	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.2
HELIUM	0.02	0.08	0.02
HEATING VALUE*	1020	1050	1026
SPECIFIC GRAVITY	0.570	0.587	0.570

	INDEX 7423 SAMPLE 9776	INDEX 7424 SAMPLE 8100	INDEX 7425 SAMPLE 12221
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	LEWISVILLE	NOT GIVEN	PINETON
WELL NAME	J. A. DIXON NO. 3	SHUMAKER	RICHARD HANWELL NO. 1
LOCATION	CONEMAUGH TWP.	T. BURRELL	GREEN TWP.
OWNER	PEOPLES NATURAL GAS CO.	JAMES DRILLING CO.	FELMONT OIL CORP.
COMPLETED	11/25/64	11/19/60	12/20/69
SAMPLED	--/--/00	06/18/61	03/05/70
FORMATION	DEVO-BALLTOWN	DEVO-BALLTOWN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2916	3100	8139
WELLHEAD PRESSURE,PSIG	1250	1320	4261
OPEN FLOW, MCFD	407	850	6154
COMPONENT, MOLE PCT			
METHANE	94.6	92.5	96.6
ETHANE	3.0	4.1	1.6
PROPANE	0.9	1.2	0.1
N-BUTANE	0.2	0.3	0.0
ISOBUTANE	0.2	0.5	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.0	0.7	1.2
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.07	0.10	0.02
HEATING VALUE*	1047	1083	1010
SPECIFIC GRAVITY	0.587	0.608	0.571

	INDEX 7426 SAMPLE 12464	INDEX 7427 SAMPLE 17435	INDEX 7428 SAMPLE 12633
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	INDIANA	INDIANA
FIELD	PINETON	PINETON N	ROCHESTER MILLS
WELL NAME	CLEARFIELD COAL CORP. NO. 1	GEORGE RICKARD NO. 1	WERNER M. WACHOB NO. 2
LOCATION	PINE TWP.	SEC. A, BARNESBORO QUAD, GREENE	MARCHAND TWP.
OWNER	FELMONT OIL CORP.	CONSOLIDATED GAS TRANS. CORP	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	07/31/70	09/20/82	09/11/70
SAMPLED	10/19/70	09/26/84	01/18/71
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-SHEFFIELD & BRADFORD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8053	8189	3252
WELLHEAD PRESSURE,PSIG	4231	4310	986
OPEN FLOW, MCFD	10500	1592	2477
COMPONENT, MOLE PCT			
METHANE	97.6	97.3	95.7
ETHANE	1.7	1.9	3.2
PROPANE	0.1	0.1	0.5
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.3	0.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.03	0.02	0.07
HEATING VALUE*	1022	1022	1040
SPECIFIC GRAVITY	0.566	0.568	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1- - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 7429 SAMPLE 12089	INDEX 7430 SAMPLE 9733	INDEX 7431 SAMPLE 9832
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	INDIANA	JEFFERSON	JEFFERSON
FIELD	ROCHESTER MILLS POOL	BIG RUN	BIG RUN
WELL NAME	D. J. SWANSON NO. 2	I. B. MILLER NO. 1	ROBERT MAINE NO. 1
LOCATION	CANOE TWP.	GASKILL TWP.	GASKILL TWP.
OWNER	CONSOLIDATED GAS SUPPLY CORP	NEW YORK STATE NAT. GAS CORP	FAIRMAN DRILLING CO.
COMPLETED	06/29/69	12/05/64	10/31/64
SAMPLED	10/13/69	02/11/65	04/01/65
FORMATION	DEVO-BRADFORD	DEVO-	DEVO----
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3360	2892	2500
WELLHEAD PRESSURE,PSIG	967	1306	1300
OPEN FLOW, MCFD	2144	3033	670
COMPONENT, MOLE PCT			
METHANE	94.9	94.4	95.4
ETHANE	3.0	2.8	2.9
PROPANE	0.5	0.5	0.4
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.9	1.4	0.7
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	TRACE
HELIUM	0.07	0.07	0.09
HEATING VALUE*	1036	1041	1042
SPECIFIC GRAVITY	0.579	0.589	0.580

	INDEX 7432 SAMPLE 10389	INDEX 7433 SAMPLE 10365	INDEX 7434 SAMPLE 10388
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	BIG RUN	ELK RUN	ELK RUN
WELL NAME	S. WINEBERG, ET AL. N-978	R & P COAL CO. NO. 4	R & P COAL CO. N-982
LOCATION	GASKILL	YOUNG TWP.	YOUNG TWP.
OWNER	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	08/12/65	11/23/65	06/20/65
SAMPLED	02/07/66	01/14/66	02/07/66
FORMATION	NOT GIVEN	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2992	7235	7170
WELLHEAD PRESSURE,PSIG	1081	3865	3845
OPEN FLOW, MCFD	1887	3499	2214
COMPONENT, MOLE PCT			
METHANE	95.0	97.1	96.6
ETHANE	2.9	2.1	1.9
PROPANE	0.7	0.0	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.7	0.6	1.0
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.07	0.02	0.02
HEATING VALUE*	1054	1021	1015
SPECIFIC GRAVITY	0.587	0.569	0.571

	INDEX 7435 SAMPLE 10164	INDEX 7436 SAMPLE 10165	INDEX 7437 SAMPLE 12034
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	MILLSTONE	MILLSTONE	ROCHESTER MILLS POOL
WELL NAME	NO. 3538	NO. 760	L. N. BLOSE NO. 1
LOCATION	HEATH TWP.	HEATH TWP.	YOUNG TWP.
OWNER	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	01/24/23	05/03/07	05/14/69
SAMPLED	09/21/65	09/21/65	09/12/69
FORMATION	DEVO-COOPER	DEVO-HASKELL	DEVO-BRADFORD & SHEFFIELD
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2164	2950	3698
WELLHEAD PRESSURE,PSIG	245	531	1205
OPEN FLOW, MCFD	NOT GIVEN	66	3033
COMPONENT, MOLE PCT			
METHANE	90.4	88.9	94.2
ETHANE	6.3	6.1	3.3
PROPANE	1.3	1.5	0.6
N-BUTANE	0.3	0.5	0.2
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.9	2.3	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.07	0.10	0.07
HEATING VALUE*	1096	1083	1046
SPECIFIC GRAVITY	0.618	0.625	0.587

	INDEX 7438 SAMPLE 10166	INDEX 7439 SAMPLE 6136	INDEX 7440 SAMPLE 11688
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	JEFFERSON	LACKAWANNA	LACKAWANNA
FIELD	SIGEL	NEW	NOT GIVEN
WELL NAME	NO. 4074	RICHARDS NO. 1	WATER WELL
LOCATION	HEATH TWP.	1.3 MI. N RANSOM, PENN	DALTON QUAD.
OWNER	UNITED NATURAL GAS CO.	TRANSCONTINENTAL PROD. CO.	EUGENE DECKER
COMPLETED	09/24/65	--/--/00	--/--/55
SAMPLED	09/22/65	04/11/56	11/14/68
FORMATION	PENN-KANE	DEVO-SHALE	DEVO-CATSKILL
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2402	2814	175
WELLHEAD PRESSURE,PSIG	253	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	267	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.6	91.0	67.6
ETHANE	9.3	2.5	0.0
PROPANE	2.4	0.3	TRACE
N-BUTANE	0.5	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.2	5.5	31.6
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.1	0.4
HYDROGEN	0.1	0.4	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.06	0.12	0.25
HEATING VALUE*	1141	976	685
SPECIFIC GRAVITY	0.650	0.593	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7441 SAMPLE 10214		INDEX 7442 SAMPLE 14429		INDEX 7443 SAMPLE 10179	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	MCKEAN		MCKEAN		MCKEAN	
FIELD	ANNIN		BRADFORD		CLERMONT	
WELL NAME	DILLENBECK NO. 1716		AMOCO-WITCO NO. 1		NO. 3450	
LOCATION	ANNIN TWP.		SEC. 1, BRADFORD QUAD.		NORWICH TWP.	
OWNER	NORTH PENN GAS CO.		AMOCO PRODUCTION CO.		UNITED NATURAL GAS CO.	
COMPLETED	01/01/20		07/30/74		08/13/33	
SAMPLED	10/14/65		08/01/75		09/30/65	
FORMATION	DEVO-BRADFORD		DEVO-ONONDAGA		DEVO-MASKELL	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1465		5184		2133	
WELLHEAD PRESSURE,PSIG	20		2250		97	
OPEN FLOW, MCFD	3000		3000		14	
COMPONENT, MOLE PCT						
METHANE	78.7		82.1		92.2	
ETHANE	12.6		11.7		4.3	
PROPANE	4.9		3.6		0.7	
N-BUTANE	1.3		0.8		0.2	
ISOBUTANE	0.9		0.6		0.1	
N-PENTANE	0.3		0.2		0.1	
ISOPENTANE	0.3		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.3		0.2		0.1	
NITROGEN	0.3		0.6		1.8	
OXYGEN	0.0		TRACE		0.1	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.2		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		TRACE	
HELIUM	0.10		0.02		0.21	
HEATING VALUE*	1266		1205		1054	
SPECIFIC GRAVITY	0.719		0.682		0.599	

	INDEX 7444 SAMPLE 10181		INDEX 7445 SAMPLE 5		INDEX 7446 SAMPLE 441	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	MCKEAN		MCKEAN		MCKEAN	
FIELD	HALSEY		MAIN GATHERING LINE		PORT ALLEGANY	
WELL NAME	1104		LIBERTY, KEATING & ANNIN TWP		554 COOPER NO. 1	
LOCATION	SERGEANT TWP.		NOT GIVEN		2 MI. N PORT ALLEGANY	
OWNER	UNITED NATURAL GAS CO.		POTTER GAS CO.		POTTER GAS CO.	
COMPLETED	01/01/90		--/--/00		--/--/00	
SAMPLED	09/29/65		05/03/19		09/17/20	
FORMATION	DEVO-BRADFORD		DEVO-THIRD SAND		PENN-KANE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1752		NOT GIVEN		1316	
WELLHEAD PRESSURE,PSIG	99		100		190	
OPEN FLOW, MCFD	2		10000		300	
COMPONENT, MOLE PCT						
METHANE	77.6		77.8		75.2	
ETHANE	13.9		18.5		24.2	
PROPANE	4.6		---		---	
N-BUTANE	1.2		---		---	
ISOBUTANE	0.7		---		---	
N-PENTANE	0.3		---		---	
ISOPENTANE	0.2		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.4		---		---	
NITROGEN	1.2		3.2		0.0	
OXYGEN	0.0		0.5		0.3	
ARGON	TRACE		---		---	
HYDROGEN	0.1		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.1		0.0		0.2	
HELIUM	0.07		TRACE		0.11	
HEATING VALUE*	1256		1120		1195	
SPECIFIC GRAVITY	0.722		0.662		0.677	

	INDEX 7447 SAMPLE 442		INDEX 7448 SAMPLE 10180		INDEX 7449 SAMPLE 10375	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	MCKEAN		MCKEAN		POTTER	
FIELD	PORT ALLEGANY		RAINEY S		BROOKLAND	
WELL NAME	456 GALLOUP NO. 1		1185		J. TORAK	
LOCATION	3 MI. N PORT ALLEGANY		SERGEANT TWP.		ULYSSES TWP. GOLD	
OWNER	POTTER GAS CO.		UNITED NATURAL GAS CO.		CONSOLIDATED GAS SUPPLY CORP	
COMPLETED	08/12/10		02/05/00		01/26/66	
SAMPLED	09/17/20		09/29/65		01/26/66	
FORMATION	PENN-KANE		PENN-KANE		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1385		2298		5238	
WELLHEAD PRESSURE,PSIG	150		51		NOT GIVEN	
OPEN FLOW, MCFD	200		10		50	
COMPONENT, MOLE PCT						
METHANE	70.5		64.9		96.7	
ETHANE	27.1		17.8		1.7	
PROPANE	---		10.5		0.2	
N-BUTANE	---		2.8		0.0	
ISOBUTANE	---		1.5		0.0	
N-PENTANE	---		0.2		0.0	
ISOPENTANE	---		1.4		0.0	
CYCLOPENTANE	---		TRACE		0.0	
HEXANES PLUS	---		0.9		0.0	
NITROGEN	1.3		0.3		1.2	
OXYGEN	0.7		0.0		0.2	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		TRACE	
HELIUM	0.11		0.05		0.04	
HEATING VALUE*	1200		1483		1015	
SPECIFIC GRAVITY	0.699		0.855		0.571	

	INDEX 7450 SAMPLE 440		INDEX 7451 SAMPLE 10218		INDEX 7452 SAMPLE 10316	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	POTTER		POTTER		POTTER	
FIELD	FISHING CREEK		FORK E		FORK E	
WELL NAME	CLARK NO. 1, WELL NO. 870		COSTELLO LANDS NO. 10-1699		GERALD LOGUE	
LOCATION	4 MI. NW ROULETTE		4 MI. NE OF WHARTON		4 MI. SW WHARTON	
OWNER	POTTER GAS CO.		NORTH PENN GAS CO.		MINTER ASSOC.	
COMPLETED	09/05/17		07/20/40		01/01/52	
SAMPLED	09/17/20		10/14/65		12/09/65	
FORMATION	NOT GIVEN		NOT GIVEN		DEVO-ORISKANY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1055		893		5453	
WELLHEAD PRESSURE,PSIG	120		170		2450	
OPEN FLOW, MCFD	75		12000		3000	
COMPONENT, MOLE PCT						
METHANE	88.3		94.9		95.5	
ETHANE	9.3		2.6		2.9	
PROPANE	---		0.5		0.5	
N-BUTANE	---		0.2		0.1	
ISOBUTANE	---		0.8		TRACE	
N-PENTANE	---		0.0		0.1	
ISOPENTANE	---		0.0		TRACE	
CYCLOPENTANE	---		0.0		TRACE	
HEXANES PLUS	---		0.0		0.1	
NITROGEN	1.2		1.2		0.5	
OXYGEN	0.0		0.0		TRACE	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.2		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.0		0.0		0.2	
HELIUM	0.14		0.10		0.01	
HEATING VALUE*	1071		1088		1045	
SPECIFIC GRAVITY	0.604		0.580		0.583	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7453 SAMPLE 2570	INDEX 7454 SAMPLE 10212	INDEX 7455 SAMPLE 10216
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	POTTER	POTTER	POTTER
FIELD	POTTER	ROULETTE	SHARON
WELL NAME	NUGENT NO. 1	L. G. POTTER 985	RATHBURN-DONOVAN
LOCATION	HEBRON TWP.	5 MI. N OF COUDERSPORT	OSWAGO TWP.
OWNER	WILLIAMSPORT NATURAL GAS CO.	NORTH PENN GAS CO.	NORTH PENN GAS CO.
COMPLETED	06/25/32	11/01/29	09/18/39
SAMPLED	11/03/32	10/14/65	10/14/65
FORMATION	DEVO-ORISKANY	DEVO-CRANDALL HILL	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4876	975	4997
WELLHEAD PRESSURE,PSIG	2160	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	16604	21	1600
COMPONENT, MOLE PCT			
METHANE	79.2	89.4	94.8
ETHANE	16.8	6.8	3.8
PROPANE	---	1.7	0.2
N-BUTANE	---	0.3	0.1
ISOBUTANE	---	0.5	TRACE
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	3.5	0.7	0.8
OXYGEN	0.4	0.0	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.3	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	TRACE	0.10	0.03
HEATING VALUE*	1103	1106	1041
SPECIFIC GRAVITY	0.655	0.621	0.582

	INDEX 7456 SAMPLE 10317	INDEX 7457 SAMPLE 14521	INDEX 7458 SAMPLE 14522
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	POTTER	SCHUYLKILL	SCHUYLKILL
FIELD	ULYSSES	ANTHRACITE COALFIELD	ANTHRACITE COALFIELD
WELL NAME	MOLSEY M. D.	PARKER NO. 2	PARKER NO. 2
LOCATION	3 MI. SW ULYSSES	SWATARA COAL TRACT	SWATARA COAL TRACT
OWNER	FAIRMAN DRILLING CO.	PARKERS SWATARA COAL CO.	PARKERS SWATARA COAL CO.
COMPLETED	09/22/62	09/16/75	10/19/75
SAMPLED	12/09/65	09/27/75	10/30/75
FORMATION	DEVO-ORISKANY	PENN-	-COAL SEAM
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5260	602	602
WELLHEAD PRESSURE,PSIG	1300	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	65000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.0	93.7	99.0
ETHANE	2.0	0.1	TRACE
PROPANE	0.2	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	6.0	0.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.03	TRACE	TRACE
HEATING VALUE*	1024	951	1003
SPECIFIC GRAVITY	0.570	0.581	0.559

	INDEX 7459 SAMPLE 14526	INDEX 7460 SAMPLE 8565	INDEX 7461 SAMPLE 16189
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	SCHUYLKILL	SOMERSET	SOMERSET
FIELD	SOUTHERN ANTHRACITE	PERRELTON	NOT GIVEN
WELL NAME	PARKER NO. 2	P. N. G. NO. 4295	DALE S. BARRON NO. 1
LOCATION	NEAR MINERSVILLE PA.	QUEMAHONING TWP.	BAKERSVILLE QUADRANGLE
OWNER	PARKERS SWATARA COAL CO.	PEOPLES NATURAL GAS CO., ET	AMOCO PRODUCTION CO.
COMPLETED	--/--/00	04/17/62	03/06/79
SAMPLED	11/03/75	05/11/62	02/15/80
FORMATION	PENN-	DEVO---	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	602	2756	8676
WELLHEAD PRESSURE,PSIG	NOT GIVEN	805	3425
OPEN FLOW, MCFD	NOT GIVEN	810	3500
COMPONENT, MOLE PCT			
METHANE	98.7	79.6	97.3
ETHANE	0.1	0.4	1.1
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.1	18.9	1.1
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	TRACE	0.70	0.03
HEATING VALUE*	1002	816	1008
SPECIFIC GRAVITY	0.559	0.633	0.567

	INDEX 7462 SAMPLE 10248	INDEX 7463 SAMPLE 15816	INDEX 7464 SAMPLE 11139
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	SOMERSET	SOMERSET	SOMERSET
FIELD	OHIOPYLE	SOMERSET W	WILDCAT
WELL NAME	STATE GAME LAND NO. 4562	S. G. ENGLEKA JR. NO. 1	A. A. DUPRE NO. 1
LOCATION	LOWER TURKEYFOOT TWP.	RURDOCK QUAD.	MIDDLE CREEK TWP.
OWNER	MANUFACTURERS LT. & HEAT CO.	AMOCO PRODUCTION CO.	PEOPLES NATURAL GAS CO.
COMPLETED	01/23/60	11/21/77	--/--/00
SAMPLED	10/20/65	10/--/79	08/25/67
FORMATION	DEVO-CHERT	DEVO-ORISKANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8147	9086	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3370	1000	NOT GIVEN
OPEN FLOW, MCFD	1917	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.5	98.0	97.5
ETHANE	1.5	1.1	1.3
PROPANE	0.1	0.1	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.6	0.6	0.8
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1012	1015	1019
SPECIFIC GRAVITY	0.572	0.565	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7465 SAMPLE 14154	INDEX 7466 SAMPLE 2353	INDEX 7467 SAMPLE 14106
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	SOMERSET	TIOGA	WENANGO
FIELD	WILDCAT	TIOGA COUNTY	BARNETVILLE
WELL NAME	W. J. LAMBERT NO. 1	PALMER NO. 1	W. F. DUNCAN NO. 1
LOCATION	STONY CREEK TWP.	FARMINGTON TWP.	SEC. A; MILLARDS QUAD.
OWNER	AMOCO PRODUCTION CO.	ALLEGANY GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	09/30/73	09/10/30	04/12/73
SAMPLED	08/28/74	03/01/31	07/16/74
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8636	4007	6535
WELLHEAD PRESSURE,PSIG	3250	1665	1638
OPEN FLOW, MCFD	1500	22000	5600
COMPONENT, MOLE PCT			
METHANE	98.3	98.9	94.1
ETHANE	0.9	0.0	2.2
PROPANE	0.1	---	0.2
N-BUTANE	0.0	---	TRACE
ISOBUTANE	0.0	---	TRACE
N-PENTANE	0.0	---	TRACE
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	TRACE
NITROGEN	0.5	0.6	3.3
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.1
CARBON DIOXIDE	0.2	0.4	TRACE
HELIUM	0.03	0.03	0.09
HEATING VALUE*	1014	1002	998
SPECIFIC GRAVITY	0.564	0.561	0.580

	INDEX 7468 SAMPLE 10215	INDEX 7469 SAMPLE 10122	INDEX 7470 SAMPLE 17258
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WENANGO	WENANGO	WENANGO
FIELD	CLARION-WENANGO	HAMPTON	KANTZ CORNERS
WELL NAME	SHAWKEY W. W. NO. 857	NO. 325	PA GLASS SAND CO. NO. 1-S
LOCATION	12 MI. SE OF OIL CITY	PINEGROVE TWP.	CANAL TWP.
OWNER	NORTH PENN GAS CO.	UNITED NATURAL GAS CO.	CABOT OIL & GAS CORP.
COMPLETED	03/01/27	04/18/92	04/16/84
SAMPLED	10/13/65	09/14/65	04/16/84
FORMATION	PENN-CLARION	DEVO-SPEECHLEY	SILU-MEDINA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	885	1976	5640
WELLHEAD PRESSURE,PSIG	NOT GIVEN	13	1282
OPEN FLOW, MCFD	NOT GIVEN	8	530
COMPONENT, MOLE PCT			
METHANE	87.1	60.9	91.6
ETHANE	6.8	17.7	4.1
PROPANE	1.8	11.0	0.6
N-BUTANE	0.8	3.7	0.2
ISOBUTANE	0.6	2.1	TRACE
N-PENTANE	0.6	0.9	0.1
ISOPENTANE	0.1	0.5	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	1.0	0.6	0.1
NITROGEN	0.9	2.1	3.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.10	0.06	0.08
HEATING VALUE*	1185	1509	1033
SPECIFIC GRAVITY	0.671	0.895	0.600

	INDEX 7471 SAMPLE 14835	INDEX 7472 SAMPLE 14107	INDEX 7473 SAMPLE 17838
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WENANGO	WENANGO	WARREN
FIELD	WENANGO	WESLEY	COLORADO
WELL NAME	SMITH NO. 4872	TASA CORP. NO. 1	REMSMA STEPMENS NO. 1
LOCATION	NOT GIVEN	SEC. A; MILLIARDS QUAD.	SOUTHWEST QUAD. 410 40M, 79D
OWNER	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	QUAKER STATE OIL REF. CORP.
COMPLETED	--/--/00	12/19/72	02/03/84
SAMPLED	10/27/76	07/16/74	09/16/85
FORMATION	SILU-CLINTON & MEDINA	SILU-MEDINA	SILU-MEDINA, WHIRLPOOL
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	6350	5692
WELLHEAD PRESSURE,PSIG	490	1630	1450
OPEN FLOW, MCFD	250	2740	1750
COMPONENT, MOLE PCT			
METHANE	91.5	88.5	92.2
ETHANE	3.1	6.6	3.9
PROPANE	0.8	1.5	0.5
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.2	0.3	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	2.0	2.4	2.7
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.07	0.07	0.01
HEATING VALUE*	1058	1093	1033
SPECIFIC GRAVITY	0.604	0.630	0.597

	INDEX 7474 SAMPLE 10346	INDEX 7475 SAMPLE 15036	INDEX 7476 SAMPLE 10264
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	APIT	BELLE VERNON	LINDEN
WELL NAME	W. C. MCCOLLUM NO. 166	MALLIE E. TAYLOR NO. 1	W. A. DONALDSON NO. 1-961
LOCATION	ANWELL TWP.	SEC. E; CALIF. QUAD.	N STRABANE TWP.
OWNER	CARNEGIE NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	CARNEGIE NATURAL GAS CO.
COMPLETED	11/15/12	10/11/76	09/12/46
SAMPLED	12/28/65	06/16/77	11/04/65
FORMATION	DEVO-GANTZ	DEVO-GANTZ	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2599	2323	1462
WELLHEAD PRESSURE,PSIG	11	900	105
OPEN FLOW, MCFD	NOT GIVEN	18600	8
COMPONENT, MOLE PCT			
METHANE	83.8	94.1	92.0
ETHANE	7.5	2.1	4.8
PROPANE	3.2	0.2	1.1
N-BUTANE	0.9	0.1	0.4
ISOBUTANE	0.8	TRACE	0.3
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	0.2
NITROGEN	2.5	3.0	0.6
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.12	0.20	0.07
HEATING VALUE*	1169	999	1090
SPECIFIC GRAVITY	0.682	0.578	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7477 SAMPLE 10595		INDEX 7478 SAMPLE 10446		INDEX 7479 SAMPLE 10447	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	WASHINGTON		WASHINGTON		WASHINGTON	
FIELD	NOT GIVEN		RODFIELD		RODFIELD	
WELL NAME	J. LEWIS		DENNISON - F44		R. GLASS-F-47	
LOCATION	WAYNESBURG NW		PITTSBURGH TWP.		PITTSBURGH TWP.	
OWNER	EQUITABLE GAS CO.		EQUITABLE GAS CO.		EQUITABLE GAS CO.	
COMPLETED	03/11/66		09/09/27		05/19/27	
SAMPLED	05/24/66		01/21/66		01/21/66	
FORMATION	PENN-LITTLE DUNKARD		DEVO-FIFTY FOOT SAND		DEVO-SPEECHLEY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1382		2305		3557	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		25		105	
OPEN FLOW, MCFD	NOT GIVEN		3		2	
COMPONENT, MOLE PCT						
METHANE	77.2		93.8		93.6	
ETHANE	5.1		2.9		4.2	
PROPANE	5.1		0.4		0.7	
N-BUTANE	3.3		0.2		0.1	
ISOBUTANE	2.2		0.4		0.2	
N-PENTANE	1.5		0.5		0.1	
ISOPENTANE	0.9		TRACE		TRACE	
CYCLOPENTANE	0.3		TRACE		TRACE	
HEXANES PLUS	1.5		0.3		0.1	
NITROGEN	2.6		1.2		0.8	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.5		0.1		0.1	
HELIUM	0.02		0.15		0.10	
HEATING VALUE*	1373		1069		1061	
SPECIFIC GRAVITY	0.815		0.604		0.595	

	INDEX 7480 SAMPLE 10452		INDEX 7481 SAMPLE 10263		INDEX 7482 SAMPLE 336	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	WASHINGTON		WASHINGTON		WASHINGTON	
FIELD	ROOFIELD		SOMERSET		WASHINGTON	
WELL NAME	S. YANT-F-43		D. E. MCNARY - 1 - 733		W. K. LONG NO. 2041	
LOCATION	PITTSBURGH TWP.		SOMERSET TWP.		8 MI. E WASHINGTON	
OWNER	EQUITABLE GAS CO.		CARNEGIE NATURAL GAS CO.		MANUFACTURERS LT. & HEAT CO.	
COMPLETED	02/17/27		10/10/27		--/--/17	
SAMPLED	01/21/66		11/04/65		06/09/20	
FORMATION	DEVO-GANTZ		DEVO-FIFTY FOOT SAND		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2400		2209		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	45		19		40	
OPEN FLOW, MCFD	140		29		50	
COMPONENT, MOLE PCT						
METHANE	92.1		91.5		86.7	
ETHANE	4.9		4.3		10.9	
PROPANE	1.2		1.3		---	
N-BUTANE	0.2		0.4		---	
ISOBUTANE	0.1		0.2		---	
N-PENTANE	0.1		0.1		---	
ISOPENTANE	TRACE		0.2		---	
CYCLOPENTANE	TRACE		0.1		---	
HEXANES PLUS	0.1		0.4		---	
NITROGEN	0.9		1.3		1.8	
OXYGEN	0.0		0.0		0.5	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.2		0.1		0.2	
HELIUM	0.07		0.09		0.10	
HEATING VALUE*	1071		1095		1074	
SPECIFIC GRAVITY	0.609		0.621		0.619	

	INDEX 7483 SAMPLE 337		INDEX 7484 SAMPLE 4828		INDEX 7485 SAMPLE 10448	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	WASHINGTON		WASHINGTON		WASHINGTON	
FIELD	WASHINGTON		WASHINGTON		ZOLLARSVILLE	
WELL NAME	J. A. BARR NO. 453		NO. L-4040		NO. 1496 - H. H. RICHARDS	
LOCATION	9 1/2 MI. E WASHINGTON		ARWELL TWP.		AMITY TWP.	
OWNER	MANUFACTURERS LT. & HEAT CO.		MANUFACTURERS LT. & HEAT CO.		G. K. GRAY & SON	
COMPLETED	--/--/01		10/05/49		10/28/02	
SAMPLED	06/09/20		12/27/49		01/20/66	
FORMATION	DEVO-FIFTH		NOT GIVEN		DEVO-ELIZABETH & WARREN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3100		3077		3117	
WELLHEAD PRESSURE,PSIG	22		590		74	
OPEN FLOW, MCFD	50		1739		29000	
COMPONENT, MOLE PCT						
METHANE	86.6		89.5		91.0	
ETHANE	11.5		6.0		5.0	
PROPANE	---		1.6		1.1	
N-BUTANE	---		0.4		0.4	
ISOBUTANE	---		0.2		0.3	
N-PENTANE	---		TRACE		0.2	
ISOPENTANE	---		0.2		TRACE	
CYCLOPENTANE	---		TRACE		TRACE	
HEXANES PLUS	---		0.0		0.3	
NITROGEN	1.3		1.7		1.4	
OXYGEN	0.4		0.1		0.1	
ARGON	---		0.0		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.0		0.2		0.1	
HELIUM	0.10		0.11		0.08	
HEATING VALUE*	1083		1088		1087	
SPECIFIC GRAVITY	0.618		0.622		0.619	

	INDEX 7486 SAMPLE 10454		INDEX 7487 SAMPLE 4673		INDEX 7488 SAMPLE 10283	
STATE	PENNSYLVANIA		PENNSYLVANIA		PENNSYLVANIA	
COUNTY	WASHINGTON		WESTMORELAND		WESTMORELAND	
FIELD	ZOLLARSVILLE		APPALACHIAN		BAGDAD	
WELL NAME	NO. 2887-PIPER		HICKS COAL NO. 1		J. H. BURNS NO. 860	
LOCATION	AMITY TWP.		BELL TWP.		LEECHBURG	
OWNER	EQUITABLE GAS CO.		PEOPLES NATURAL GAS CO.		APOLLO GAS CO.	
COMPLETED	11/04/24		03/25/43		04/28/18	
SAMPLED	01/20/66		02/08/49		11/03/65	
FORMATION	DEVO-FIFTY FOOT & BAYARD		DEVO-		DEVO-SPEECHLEY	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2754		3455		2741	
WELLHEAD PRESSURE,PSIG	41		85		210	
OPEN FLOW, MCFD	26		368		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	92.2		93.9		92.3	
ETHANE	4.7		3.6		4.9	
PROPANE	0.8		0.7		1.2	
N-BUTANE	0.3		0.2		0.3	
ISOBUTANE	0.3		0.1		0.1	
N-PENTANE	0.1		0.0		0.1	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.0		0.1	
NITROGEN	1.2		1.0		0.8	
OXYGEN	TRACE		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	0.1		0.0		0.0	
HELIUM	0.09		0.10		0.11	
HEATING VALUE*	1073		1054		1081	
SPECIFIC GRAVITY	0.607		0.591		0.606	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7489 SAMPLE 9908	INDEX 7490 SAMPLE 9079	INDEX 7491 SAMPLE 9729
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WESTMORELAND	WESTMORELAND	WESTMORELAND
FIELD	BLAIR	BLAIRSVILLE	CRABTREE
WELL NAME	PNG NO. 4441-J.S. BLAIR NO.4	NOT GIVEN	L. B. HUFF NO. 8 PNG 4442
LOCATION	COOK TWP.	DERRY	UNITY TWP.
OWNER	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	03/24/65	03/28/63	12/12/64
SAMPLED	--/--/00	09/04/63	--/--/00
FORMATION	DEVO-ORISKANY	DEVO-CHERT & ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8402	7764	7745
WELLHEAD PRESSURE,PSIG	2765	4133	3655
OPEN FLOW, MCFD	11000	6300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.7	97.8	96.6
ETHANE	1.4	1.5	1.9
PROPANE	0.0	0.1	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.3	0.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.7
HELIUM	0.04	0.02	0.02
HEATING VALUE*	1015	1020	1020
SPECIFIC GRAVITY	0.565	0.565	0.576

	INDEX 7492 SAMPLE 10609	INDEX 7493 SAMPLE 4767	INDEX 7494 SAMPLE 5239
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WESTMORELAND	WESTMORELAND	WESTMORELAND
FIELD	GREENSBURG	NOT GIVEN	PIPER-MUSNUG
WELL NAME	OWN. NO.10897 DUQUESNE GAS 1	WILLIAM PIPER NO. 1	FRED MUSNUG NO. 1-3921
LOCATION	GREENSBURG NW	UNITY TWP.	UNITY TWP.
OWNER	FOX-COEN-SLOAN	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	08/17/65	08/17/49	06/30/51
SAMPLED	05/25/66	10/27/49	04/25/52
FORMATION	DEVO-CHERT & ORISKANY	DEVO-ONONDAGA	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7490	8158	8004
WELLHEAD PRESSURE,PSIG	3832	3875	3675
OPEN FLOW, MCFD	1200	243	7194
COMPONENT, MOLE PCT			
METHANE	96.6	96.2	97.1
ETHANE	2.5	2.2	1.7
PROPANE	0.2	0.4	0.1
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	0.6	0.7
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1029	1033	1021
SPECIFIC GRAVITY	0.572	0.577	0.572

	INDEX 7495 SAMPLE 9731	INDEX 7496 SAMPLE 9778	INDEX 7497 SAMPLE 17525
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	WESTMORELAND	WESTMORELAND	WESTMORELAND
FIELD	SALTSBURG	SALTSBURG W	SEVEN SPRINGS
WELL NAME	F. M. DRUMMOND NO.2 PNG 4426	S. S. BEATTY NO. 1	ELEANOR & MORRIS NO. 1
LOCATION	LOYALHANNA TWP.	BELL TWP.	DONEGAL TOWNSHIP
OWNER	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	PEOPLES NATURAL GAS CO.
COMPLETED	10/15/64	11/27/64	08/03/82
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	DEVO-BRADFORD	DEVO-BALLTOWN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3488	3540	7658
WELLHEAD PRESSURE,PSIG	1190	1200	2240
OPEN FLOW, MCFD	327	570	4000
COMPONENT, MOLE PCT			
METHANE	95.5	93.4	97.5
ETHANE	2.9	3.2	1.6
PROPANE	0.2	0.8	0.1
N-BUTANE	0.0	0.3	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	1.5	1.4	0.6
OXYGEN	0.3	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.09	0.11	0.03
HEATING VALUE*	1016	1063	1019
SPECIFIC GRAVITY	0.576	0.601	0.566

	INDEX 7498 SAMPLE 12047	INDEX 7499 SAMPLE 17526	INDEX 7500 SAMPLE 17291
STATE	PENNSYLVANIA	PENNSYLVANIA	SOUTH DAKOTA
COUNTY	WESTMORELAND	WESTMORELAND	HARDING
FIELD	WILDCAT	WILPEN	CADY CREEK
WELL NAME	C. D. EVANS NO. 1	ARNOLD F. FREDERICK NO. 1	HARRISON-BECK NO. 2-9
LOCATION	E. HUNTINGTON TWP.	LIGONIER	SEC. 9, T15N, R3E
OWNER	SNEE & EBERLY, ET AL.	PEOPLES NATURAL GAS CO.	SAM G. HARRISON
COMPLETED	08/20/69	02/22/82	06/--/83
SAMPLED	09/15/69	--/--/00	05/15/84
FORMATION	MISS-MURRYSVILLE	DEVO-BALLTOWN & BRADFORD	CRET-SHANNON
GEOLOGIC PROVINCE CODE	160	160	395
DEPTH, FEET	2183	3923	1121
WELLHEAD PRESSURE,PSIG	601	1300	185
OPEN FLOW, MCFD	13000	411	84
COMPONENT, MOLE PCT			
METHANE	93.7	96.9	92.5
ETHANE	2.8	2.3	0.2
PROPANE	0.7	0.1	TRACE
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.7	1.8	7.1
OXYGEN	0.0	0.3	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.3	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.15	0.10	0.02
HEATING VALUE*	1035	1014	941
SPECIFIC GRAVITY	0.589	0.579	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7501 SAMPLE 17298	INDEX 7502 SAMPLE 17299	INDEX 7503 SAMPLE 16988
STATE	SOUTH DAKOTA	SOUTH DAKOTA	TENNESSEE
COUNTY	HARDING	HARDING	CAMPBELL
FIELD	SHORT PINE HILLS W	SHORT PINE HILLS W	WILDCAT
WELL NAME	FED. NO. 1-29	STATE NO. 2-5	KOPPERS NO. 8
LOCATION	SEC. 29, T16N, R2E	SEC. 5, T16N, R2E	SEC. 9, T2S, R63E
OWNER	SAM G. HARRISON	JERRY MCCUTCHIN, JR.	PETROLEUM DEVELOPMENT CORP.
COMPLETED	10/15/82	08/17/81	05/15/81
SAMPLED	05/21/84	05/--/84	07/19/83
FORMATION	CRET-SHANNON	CRET-SHANNON	MISS-MONTEAGLE
GEOLOGIC PROVINCE CODE	395	395	160
DEPTH, FEET	1246	1725	2265
WELLHEAD PRESSURE,PSIG	220	225	120
OPEN FLOW, MCFD	400	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.3	92.7	93.3
ETHANE	0.2	0.2	2.2
PROPANE	TRACE	TRACE	0.5
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	6.3	6.9	2.5
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	TRACE
HELIUM	0.02	0.02	0.26
HEATING VALUE*	949	943	1026
SPECIFIC GRAVITY	0.582	0.584	0.591

	INDEX 7504 SAMPLE 17611	INDEX 7505 SAMPLE 16485	INDEX 7506 SAMPLE 17250
STATE	TENNESSEE	TENNESSEE	TENNESSEE
COUNTY	CLAIBORNE	CLAIBORNE	FENTRESS
FIELD	BUFFALO CREEK	WILDCAT	WILDCAT
WELL NAME	SMITH-TEAGUE, ET AL NO. 1	J.M. HUBER CORP. AT NO. 2	PLATEAU PROPERTIES NO. 3
LOCATION	SEC. 4, T4N, R67E	ROCKCREEK	SEC. 22, T3S, R55E
OWNER	WISER OIL CO.	ALLEGHENY LAND & MINERAL CO.	CATOOSA EXPLORATION CORP.
COMPLETED	09/23/83	10/23/80	03/--/82
SAMPLED	03/06/85	03/12/82	04/11/84
FORMATION	MISS-MONTEAGLE	MISS-BIG LIME	MISS-FORT PAYNE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1836	2265	1297
WELLHEAD PRESSURE,PSIG	721	NOT GIVEN	10
OPEN FLOW, MCFD	523000	122	2
COMPONENT, MOLE PCT			
METHANE	78.6	70.5	82.2
ETHANE	10.5	8.3	7.1
PROPANE	4.1	2.7	2.3
N-BUTANE	1.1	0.6	0.7
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	4.2	15.9	5.3
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.2	1.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.4	TRACE
HELIUM	0.10	0.09	0.34
HEATING VALUE*	1169	970	1079
SPECIFIC GRAVITY	0.698	0.717	0.652

	INDEX 7507 SAMPLE 16529	INDEX 7508 SAMPLE 17466	INDEX 7509 SAMPLE 17840
STATE	TENNESSEE	TENNESSEE	TENNESSEE
COUNTY	MORGAN	MORGAN	OVERTON
FIELD	NOT GIVEN	PLEASANT RIDGE	FLAT ROCK
WELL NAME	LEE GRIFFITH NO. 2	BROWN-PEMBERTON NO. 1	K & M POSTON NO. 1
LOCATION	SEC. 21, T4S, R59E	SEC. 12, T3S, R58E	SEC. 21, T2S, R50E
OWNER	TARTAN OIL CO.	B-J INC.	POSTON & POSTON DRILLING CO.
COMPLETED	10/07/81	10/05/81	--/--/00
SAMPLED	04/22/82	10/01/84	09/25/85
FORMATION	MISS-MONTEAGLE	MISS-MONTEAGLE	ORDO-SUNNYBROOK
GEOLOGIC PROVINCE CODE	160	160	300
DEPTH, FEET	1532	1220	800
WELLHEAD PRESSURE,PSIG	530	285	NOT GIVEN
OPEN FLOW, MCFD	850	442	50
COMPONENT, MOLE PCT			
METHANE	79.2	73.8	79.6
ETHANE	11.1	13.2	11.1
PROPANE	4.2	5.2	4.1
N-BUTANE	1.0	1.9	1.0
ISOBUTANE	0.4	0.6	0.2
N-PENTANE	0.2	0.6	0.2
ISOPENTANE	0.2	0.5	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	2.2	2.9	3.0
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	1.1	0.6	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.13	0.18	0.13
HEATING VALUE*	1187	1275	1174
SPECIFIC GRAVITY	0.689	0.750	0.691

	INDEX 7510 SAMPLE 17837	INDEX 7511 SAMPLE 17485	INDEX 7512 SAMPLE 17659
STATE	TENNESSEE	TENNESSEE	TENNESSEE
COUNTY	OVERTON	PICKETT	SCOTT
FIELD	LIVINGSTON QUAD	WILDCAT	REUBEN HOLLOW
WELL NAME	HOLMAN NO. 3-A	W. CROUCH NO. 1	LUTHIE NO. 1
LOCATION	SEC. 16, T1S, R51E	SEC. 11, A-53E	SEC. 4, T3S, R60E
OWNER	POSTON & POSTON DRILLING CO.	MILLER CONTRACT DRLG., INC.	BRADY ENERGY CORP.
COMPLETED	08/--/84	--/--/80	03/02/81
SAMPLED	09/--/85	10/05/84	05/03/85
FORMATION	ORDO-TRENTON	ORDO-STONES RIVER	MISS-MONTEAGLE
GEOLOGIC PROVINCE CODE	300	300	160
DEPTH, FEET	400	1000	1549
WELLHEAD PRESSURE,PSIG	NOT GIVEN	100	50
OPEN FLOW, MCFD	NOT GIVEN	200	30
COMPONENT, MOLE PCT			
METHANE	69.2	79.5	68.1
ETHANE	8.3	11.3	15.1
PROPANE	4.5	3.4	8.8
N-BUTANE	1.5	0.8	2.3
ISOBUTANE	0.6	0.3	0.7
N-PENTANE	0.5	0.2	0.5
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	12.1	3.7	3.1
OXYGEN	1.9	0.2	0.1
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.1	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.17	0.14	0.19
HEATING VALUE*	1105	1156	1340
SPECIFIC GRAVITY	0.764	0.688	0.797

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7513 SAMPLE 16430	INDEX 7514 SAMPLE 16898	INDEX 7515 SAMPLE 12520
STATE	TENNESSEE	TENNESSEE	TEXAS
COUNTY	SCOTT	SCOTT	ANDERSON
FIELD	WILDCAT	WINONA	BETHEL
WELL NAME	STONECIPHER, ET AL. NO. 2	S. RR-COHEN NO. 1	CUMMINS GAS UNIT O/A NO. 1
LOCATION	SEC. 25, T3S, R6DE	SEC. 20, T2S, R6IE	NOT GIVEN
OWNER	PETROLEUM DEVELOPMENT CORP.	TENNESSEE LAND & EXPL. CO.	TEXACO INC.
COMPLETED	08/08/80	08/01/79	07/30/58
SAMPLED	02/17/82	04/19/83	11/04/70
FORMATION	MISS-FORT PAYNE	MISS-MONTEAGLE	CRET-RODESSA
GEOLOGIC PROVINCE CODE	160	160	260
DEPTH, FEET	2058	1730	8232
WELLHEAD PRESSURE,PSIG	920	500	2300
OPEN FLOW, MCFD	280	4000	18500
COMPONENT, MOLE PCT			
METHANE	79.3	79.4	85.0
ETHANE	11.1	9.3	6.8
PROPANE	3.7	3.6	2.6
N-BUTANE	0.9	1.0	0.8
ISOBUTANE	0.2	0.3	0.9
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	3.9	4.7	0.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.6	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	2.4
HELIUM	0.16	0.35	TRACE
HEATING VALUE*	1158	1137	1168
SPECIFIC GRAVITY	0.689	0.685	0.692

	INDEX 7516 SAMPLE 12521	INDEX 7517 SAMPLE 12518	INDEX 7518 SAMPLE 12522
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	BETHEL	BETHEL DOME E	BETHEL DOME E
WELL NAME	WALTON G.U. NO. 1-L	DERDIN GAS UNIT O/A NO. 1-U	DERDIN GAS UNIT O/A NO. 1-L
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	--/--/00	12/28/58	10/--/63
SAMPLED	11/04/70	11/04/70	11/04/70
FORMATION	CRET-PETTIT	CRET-RODESSA	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8814	8190	8670
WELLHEAD PRESSURE,PSIG	1050	1800	1600
OPEN FLOW, MCFD	4400	2100	2800
COMPONENT, MOLE PCT			
METHANE	94.9	94.4	95.2
ETHANE	2.2	2.3	2.0
PROPANE	0.6	0.6	0.6
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.6	0.7	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.1	0.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1039	1041	1035
SPECIFIC GRAVITY	0.592	0.597	0.589

	INDEX 7519 SAMPLE 9981	INDEX 7520 SAMPLE 9982	INDEX 7521 SAMPLE 12474
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	CAYUGA	CAYUGA	CAYUGA
WELL NAME	J. A. CAMPBELL 1-D	J. A. CAMPBELL 1-D	M. R. RAMPY NO. 1-D
LOCATION	JAMES WILSON SUR. A-793	JAMES WILSON SUR. A-793	JAMES WILSON SUR.
OWNER	TIDEWATER OIL CO.	TIDEWATER OIL CO.	GETTY OIL CO.
COMPLETED	10/26/64	10/26/64	04/01/65
SAMPLED	07/17/65	07/17/65	10/21/70
FORMATION	CRET-PETTIT	CRET-TRINITY & RODESSA	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7878	7232	7852
WELLHEAD PRESSURE,PSIG	3090	671	795
OPEN FLOW, MCFD	11700	455	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.6	84.8	86.4
ETHANE	6.6	6.5	6.5
PROPANE	2.4	2.8	2.6
N-BUTANE	0.7	1.1	0.7
ISOBUTANE	0.5	1.0	0.8
N-PENTANE	0.2	0.5	0.3
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.4	0.9	0.5
NITROGEN	1.3	0.8	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.2	0.8
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1136	1203	1156
SPECIFIC GRAVITY	0.661	0.701	0.670

	INDEX 7522 SAMPLE 12475	INDEX 7523 SAMPLE 10070	INDEX 7524 SAMPLE 16634
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	CAYUGA	ELKHART	HOLLY SPRINGS
WELL NAME	M. R. RAMPY NO. 1-D	ELKHART DOME GAS UNIT NO. 11	STAFFORD NO. 1-A
LOCATION	JAMES WILSON SUR.	ELKHART	POLLY SCRITCHFIELD, A-61
OWNER	GETTY OIL CO.	HUMBLE OIL & REFINING CO.	ENERGY SOURCES, INC.
COMPLETED	08/09/54	08/18/65	10/16/81
SAMPLED	10/21/70	08/18/65	09/--/82
FORMATION	CRET-TRINITY	CRET-PETTIT	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7370	9917	8906
WELLHEAD PRESSURE,PSIG	923	3428	3579
OPEN FLOW, MCFD	NOT GIVEN	1785	2100
COMPONENT, MOLE PCT			
METHANE	84.2	93.6	84.3
ETHANE	7.0	2.2	5.6
PROPANE	2.5	0.7	2.3
N-BUTANE	0.9	0.3	0.6
ISOBUTANE	1.2	0.3	1.2
N-PENTANE	0.5	0.2	0.6
ISOPENTANE	0.3	TRACE	0.9
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.4	0.4	1.9
NITROGEN	1.5	0.5	0.8
OXYGEN	0.8	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.7	1.8
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1168	1059	1219
SPECIFIC GRAVITY	0.689	0.615	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7525 SAMPLE 5147	INDEX 7526 SAMPLE 4754	INDEX 7527 SAMPLE 9684
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	ISAAC LINDSEY	LONG LAKE	LONG LAKE
WELL NAME	C. W. MANKS NO. L	J. O. MONNIG NO. 7	J. O. MONNIG NO. 1-D-UT
LOCATION	ISAAC LINDSEY SUR.	SIMON SANCHEZ SUR. NO. 2-10	S. SANCHEZ SUR. A-60,NO.1-11
OWNER	TEXAS CO.	TIDEWATER ASSOC.-SEABOARD	TIDEWATER OIL & TEXACO INC.
COMPLETED	08/28/51	12/24/48	11/02/64
SAMPLED	01/18/52	05/31/49	01/07/65
FORMATION	CRET-JAMES	CRET-RODESSA	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10094	8834	8725
WELLHEAD PRESSURE,PSIG	5250	1350	3749
OPEN FLOW, MCFD	8000	150	22000
COMPONENT, MOLE PCT			
METHANE	82.7	92.8	96.9
ETHANE	7.9	2.6	0.6
PROPANE	3.3	1.0	0.2
N-BUTANE	0.9	0.4	0.0
ISOBUTANE	0.7	0.3	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.5	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	1.8	0.8	0.4
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	2.3	1.5	0.8
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1157	1065	998
SPECIFIC GRAVITY	0.695	0.621	0.578

	INDEX 7528 SAMPLE 11029	INDEX 7529 SAMPLE 11030	INDEX 7530 SAMPLE 9196
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	LONG LAKE	LONG LAKE	MOUND PRAIRIE
WELL NAME	LONG LAKE PR GAS UNIT NO. 1	LONG LAKE PR GAS UNIT NO. 1	C. H. VALENTINE NO. 1
LOCATION	SIMON SANCHEZ SUR. A-60	SIMON SANCHEZ SUR. A-60	JOHN LITTLE SUR. A-37
OWNER	HUNT OIL CO.	HUNT OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/30/66	11/30/66	01/27/62
SAMPLED	07/15/67	07/15/67	02/11/64
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9103	9765	10688
WELLHEAD PRESSURE,PSIG	3165	4440	4925
OPEN FLOW, MCFD	3300	9000	1800
COMPONENT, MOLE PCT			
METHANE	95.5	94.7	80.8
ETHANE	1.0	1.0	10.1
PROPANE	0.2	0.1	2.9
N-BUTANE	0.1	0.1	1.2
ISOBUTANE	0.0	TRACE	1.1
N-PENTANE	0.2	TRACE	0.6
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.8
NITROGEN	1.5	2.3	0.6
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.4	1.6
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1012	988	1231
SPECIFIC GRAVITY	0.590	0.587	0.723

	INDEX 7531 SAMPLE 11952	INDEX 7532 SAMPLE 5071	INDEX 7533 SAMPLE 4844
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDERSON
FIELD	NEVIS	PRAIRIE LAKE	TENNESSEE COLONY
WELL NAME	WALTER B. BROWN NO. 1	FRANK H. CARROLL NO. 1	ROYALL NATIONAL BANK NO. 1-T
LOCATION	G.V. LUSK SUR. A-476	JUAN IGNACIO AGUILERA SUR.	A. G. MONROE SUR.
OWNER	STANDARD OIL CO. OF TEXAS	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	08/05/68	03/14/51	--/--/00
SAMPLED	07/02/69	08/01/51	02/10/50
FORMATION	CRET-RODESSA	CRET-L	CRET-L
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8074	8814	8865
WELLHEAD PRESSURE,PSIG	3250	4667	4640
OPEN FLOW, MCFD	9600	100000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.1	91.0	83.0
ETHANE	4.6	3.5	7.4
PROPANE	2.3	1.5	4.0
N-BUTANE	0.7	0.6	1.5
ISOBUTANE	0.8	0.2	1.2
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.8	0.1	0.6
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.5	0.3	0.3
NITROGEN	1.7	1.1	0.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.1	1.2	1.0
HELIUM	0.04	0.02	0.01
HEATING VALUE*	1132	1063	1225
SPECIFIC GRAVITY	0.664	0.630	0.713

	INDEX 7534 SAMPLE 4847	INDEX 7535 SAMPLE 12526	INDEX 7536 SAMPLE 4721
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDERSON	ANDERSON	ANDREWS
FIELD	TENNESSEE COLONY	TENNESSEE COLONY	ANDREWS
WELL NAME	ROYALL NATIONAL BANK NO. 1-C	J. R. WILLIAMS NCT-1 NO. 1-C	CHAMPLIN UNIV. NO. 1
LOCATION	A. G. MONROE SUR.	NEAR PALESTINE	SEC. 27, BLK. 12, UNIV. LAND
OWNER	CONTINENTAL OIL CO.	TEXACO INC.	CHAMPLIN REFINING CO.
COMPLETED	--/--/00	10/26/51	02/15/49
SAMPLED	02/10/50	11/06/70	07/20/49
FORMATION	CRET-L	CRET-RODESSA L	PERM-YATES
GEOLOGIC PROVINCE CODE	260	260	430
DEPTH, FEET	8942	8962	2830
WELLHEAD PRESSURE,PSIG	4682	500	1950
OPEN FLOW, MCFD	NOT GIVEN	300	1536
COMPONENT, MOLE PCT			
METHANE	85.3	80.3	53.2
ETHANE	6.8	6.6	7.8
PROPANE	2.6	4.2	5.0
N-BUTANE	0.7	1.7	0.7
ISOBUTANE	0.5	1.9	0.2
N-PENTANE	0.1	1.1	0.2
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.0	1.3	0.3
NITROGEN	0.9	0.7	30.6
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	2.3	1.9	0.1
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1113	1208	815
SPECIFIC GRAVITY	0.668	0.764	0.796

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7537 SAMPLE 6333	INDEX 7538 SAMPLE 4286	INDEX 7539 SAMPLE 6099
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	BEDFORD	BLK. 12	EMMA
WELL NAME	RATLIFF-BEDFORD	STATE OF TEXAS T NO. 2	UNIV. NO. 7-F
LOCATION	SEC. 4, BLK. 73, PSL SUR.	SEC. 22, BLK. 12, UNIV. LAND	SEC. 42, BLK. 9, ULS SUR.
OWNER	SHELL OIL CO.	TEXAS CO.	SKELLY OIL CO.
COMPLETED	--/--/00	11/04/46	02/23/56
SAMPLED	06/01/57	12/16/46	07/05/56
FORMATION	PERM-	PERM-	MISS-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2900	2950	10000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1675	700
OPEN FLOW, MCFD	NOT GIVEN	2215	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.9	48.8	43.6
ETHANE	TRACE	18.0	18.3
PROPANE	0.0	---	14.2
N-BUTANE	0.0	---	5.6
ISOBUTANE	0.0	---	2.3
N-PENTANE	0.0	---	2.7
ISOPENTANE	0.0	---	3.3
CYCLOPENTANE	0.0	---	0.9
HEXANES PLUS	0.0	---	2.0
NITROGEN	98.2	32.8	3.0
OXYGEN	0.4	0.3	0.5
ARGON	0.1	---	TRACE
HYDROGEN	0.2	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.04	0.03	0.02
HEATING VALUE*	9	817	1899
SPECIFIC GRAVITY	0.962	0.782	1.154

	INDEX 7540 SAMPLE 12810	INDEX 7541 SAMPLE 12753	INDEX 7542 SAMPLE 2727
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	FUHRMAN	FUHRMAN-MASCHO	MEANS
WELL NAME	WEST FUHRMAN UNIT NO. 46	J. W. BONER B NO. 10	J. S. MEANS NO. 7
LOCATION	SEC. 18, BLK. A-42, PSL SUR.	SEC. 25, BLK. A-43, PSL SUR.	SEC. 4, BLK. C-45, PSL SUR.
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/02/44	05/10/44	06/22/36
SAMPLED	05/03/71	04/05/71	07/01/36
FORMATION	PERM-GRAYBURG	PERM-GRAYBURG	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4270	4130	2565
WELLHEAD PRESSURE,PSIG	40	50	1925
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	19040
COMPONENT, MOLE PCT			
METHANE	75.5	12.4	1.7
ETHANE	11.2	1.8	2.2
PROPANE	5.5	0.7	---
N-BUTANE	1.6	0.2	---
ISOBUTANE	0.7	0.1	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.7	0.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	3.8	84.0	94.8
OXYGEN	0.1	0.0	0.7
ARGON	0.0	0.1	---
HYDROGEN	0.0	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.02	0.05	0.05
HEATING VALUE*	1253	205	57
SPECIFIC GRAVITY	0.748	0.931	0.965

	INDEX 7543 SAMPLE 7806	INDEX 7544 SAMPLE 8885	INDEX 7545 SAMPLE 5771
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	MEANS	MEANS	MIDLAND FARMS
WELL NAME	MEAN LEASE NO. A-7	TRACT 25-4W	MIDLAND FARMS AB NO. 12
LOCATION	SEC. 2, BLK. A35, PSL SUR.	SEC. 10, BLK. A-34	NOT GIVEN
OWNER	SHELL OIL CO.	CITIES SERVICE OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	01/28/61	03/06/63	--/--/00
SAMPLED	12/29/60	03/09/63	01/17/55
FORMATION	PERM-YATES	-SALT	PERM-GRAYBURG
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2806	2670	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	135	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	20	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.4	1.9	42.6
ETHANE	0.2	0.8	26.5
PROPANE	0.1	0.9	8.0
N-BUTANE	0.2	0.5	2.1
ISOBUTANE	0.1	0.1	2.3
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.1	0.1	1.1
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	97.2	95.1	1.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	TRACE	0.6
HYDROGEN SULFIDE**	0.0	0.0	5.3
CARBON DIOXIDE	0.2	0.1	8.7
HELIUM	0.03	0.02	0.02
HEATING VALUE*	44	91	1395
SPECIFIC GRAVITY	0.970	0.976	1.000

	INDEX 7546 SAMPLE 5772	INDEX 7547 SAMPLE 5773	INDEX 7548 SAMPLE 5774
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	MIDLAND FARMS	MIDLAND FARMS	MIDLAND FARMS
WELL NAME	UNIV. BF NO. 5	MIDLAND FARMS F NO. 5	DAVID FASKEN D NO. 5
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	01/17/55	01/17/55	01/18/55
FORMATION	PERM-GRAYBURG	NOT GIVEN	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	33.4	31.1	58.4
ETHANE	28.4	17.4	14.5
PROPANE	8.0	14.5	13.8
N-BUTANE	1.7	5.9	5.0
ISOBUTANE	2.1	3.0	1.9
N-PENTANE	0.2	1.3	1.2
ISOPENTANE	0.2	2.1	1.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	6.5	3.7	3.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	9.2	0.0	0.0
CARBON DIOXIDE	9.2	0.2	0.1
HELIUM	0.07	0.03	0.04
HEATING VALUE*	1308	1680	1555
SPECIFIC GRAVITY	1.040	1.017	0.937

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7549 SAMPLE 5775	INDEX 7550 SAMPLE 12747	INDEX 7551 SAMPLE 4097
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	MIDLAND FARMS	MIDLAND FARMS	SHAFTER LAKE
WELL NAME	DAVID FASKEN D NO. 5	FASKEN N NO. 5	NOT GIVEN
LOCATION	NOT GIVEN	SEC. 41, BLK. 41, G&MMB&A SUR.	SEC. 11, BLK. 14, UNIVERSITY
OWNER	STANOLIND OIL & GAS CO.	AMOCO PRODUCTION CO.	ANDREWS PRODUCTION CO.
COMPLETED	--/--/00	04/25/60	08/25/44
SAMPLED	01/18/55	04/01/71	--/--/00
FORMATION	PERM-WICHITA-ALBANY	DEVO-	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	11050	2964
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1925
OPEN FLOW, MCFD	NOT GIVEN	2520	12
COMPONENT, MOLE PCT			
METHANE	32.5	73.7	55.5
ETHANE	10.2	13.7	24.1
PROPANE	8.0	6.0	---
N-BUTANE	2.7	2.0	---
ISOBUTANE	0.9	0.7	---
N-PENTANE	0.4	0.5	---
ISOPENTANE	0.7	0.6	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.2	0.4	---
NITROGEN	35.0	1.3	20.2
OXYGEN	8.4	0.0	0.0
ARGON	0.4	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.8	0.2
HELIUM	0.01	0.03	0.83
HEATING VALUE*	902	1314	994
SPECIFIC GRAVITY	0.967	0.771	0.759

	INDEX 7552 SAMPLE 4542	INDEX 7553 SAMPLE 4543	INDEX 7554 SAMPLE 15046
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANDREWS	ANDREWS	ANDREWS
FIELD	SHAFTER LAKE	SHAFTER LAKE	THREE-BAR
WELL NAME	J. STEVENSON NO. 1	STATE SCHOOL BOARD NO. 1	J. E. PARKER NO. 43
LOCATION	SEC. 13, BLK. A-36	SEC. 14, BLK. A-36, PUB. SCHOOL	SEC. 2, BLK. A-54, PSL SUR.
OWNER	SINCLAIR-PRAIRIE OIL CO.	GULF OIL CORP.	EXXON CO., U.S.A.
COMPLETED	08/15/48	09/28/48	11/05/75
SAMPLED	12/21/48	12/10/48	06/--/77
FORMATION	PERM-YATES	PERM-YATES	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2945	2750	2884
WELLHEAD PRESSURE,PSIG	2160	1650	1603
OPEN FLOW, MCFD	1409	4500	8000
COMPONENT, MOLE PCT			
METHANE	52.4	51.5	50.6
ETHANE	26.0	26.4	7.7
PROPANE	---	---	2.7
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	21.3	21.4	37.8
OXYGEN	0.1	0.5	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.02	0.02	0.03
HEATING VALUE*	997	995	761
SPECIFIC GRAVITY	0.774	0.778	0.795

	INDEX 7555 SAMPLE 14853	INDEX 7556 SAMPLE 16778	INDEX 7557 SAMPLE 16779
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANGELINA	ANGELINA	ANGELINA
FIELD	CAMERON-HAMILL	CLAYTON	CLAYTON
WELL NAME	CAMERON MINERAL NO. B-2	TEMPLE-EASTEX NO. 1, INLET	TEMPLE-EASTEX NO. 1, OUTLET
LOCATION	VICENTI MICHELI SUR. A-29	JAMES G. W. CLAYTON, A-151	JAMES G. W. CLAYTON, A-151
OWNER	CLAUD B. HAMILL	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	04/04/75	05/10/82	05/10/82
SAMPLED	11/07/76	02/23/83	02/23/83
FORMATION	CRET-GLEN ROSE	CRET-AUSTIN CHALK	CRET-AUSTIN CHALK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7481	8218	8218
WELLHEAD PRESSURE,PSIG	1300	3553	3553
OPEN FLOW, MCFD	3000	9000	9000
COMPONENT, MOLE PCT			
METHANE	94.4	88.5	88.6
ETHANE	1.4	2.9	2.9
PROPANE	0.6	1.4	1.4
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.1	2.4	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	3.3	3.2
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1037	1030	1028
SPECIFIC GRAVITY	0.601	0.643	0.641

	INDEX 7558 SAMPLE 16300	INDEX 7559 SAMPLE 15834	INDEX 7560 SAMPLE 16063
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ANGELINA	ANGELINA	ANGELINA
FIELD	REDLANDS N	WILDCAT	WILDCAT
WELL NAME	BROWN "C" NO. 1	TUCKER NO. 1	TUCKER NO. 1
LOCATION	VINCENTI MICHELI SUR. A-29	3 MI. E OF HUNTINGTON	SARAH ODELL SUR. A-494
OWNER	COTTON PETROLEUM CORP.	HNG OIL CO.	HNG OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/31/81	11/07/79	09/06/80
FORMATION	CRET-TRAVIS PEAK	CRET-JAMES	CRET-JAMES
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	NOT GIVEN	9963	9836
WELLHEAD PRESSURE,PSIG	5700	5200	NOT GIVEN
OPEN FLOW, MCFD	8500	500	2858
COMPONENT, MOLE PCT			
METHANE	97.3	93.6	93.9
ETHANE	0.6	1.9	1.8
PROPANE	0.1	1.0	0.9
N-BUTANE	0.1	0.4	0.4
ISOBUTANE	0.1	0.5	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	0.3	0.4	0.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.7	1.7
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1024	1068	1062
SPECIFIC GRAVITY	0.582	0.620	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7561 SAMPLE 13586	INDEX 7562 SAMPLE 13587	INDEX 7563 SAMPLE 10692
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	BARTELL PASS	BARTELL PASS	COPANO BAY S
WELL NAME	TEXAS STATE TRACT 118 NO. 1	TEXAS STATE TRACT 118 NO. 1	STATE TRACT 121 NO. 1
LOCATION	ARANSAS BAY	ARANSAS BAY	STATE TRACT 121
OWNER	GETTY OIL CO.	GETTY OIL CO.	ALUMINUM CO. OF AMERICA
COMPLETED	07/06/70	07/06/70	03/13/66
SAMPLED	04/24/73	04/24/73	08/08/66
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO L-2
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9747	11204	8400
WELLHEAD PRESSURE,PSIG	5659	7485	3497
OPEN FLOW, MCFD	11800	19100	86000
COMPONENT, MOLE PCT			
METHANE	88.5	87.1	91.1
ETHANE	5.7	6.1	4.7
PROPANE	2.3	2.6	2.0
N-BUTANE	0.9	0.5	0.5
ISOBUTANE	1.1	1.6	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.4	0.4	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	0.4
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1145	1157	1120
SPECIFIC GRAVITY	0.655	0.667	0.630

	INDEX 7564 SAMPLE 12757	INDEX 7565 SAMPLE 11162	INDEX 7566 SAMPLE 13128
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	EASTER COVE	FULTON BEACH W	MEADQUARTERS
WELL NAME	J. C. HEPWORTH UNIT NO. 2	COPANO STATE NO. 75-2	ST. CHARLES NO. 50
LOCATION	LOT 7, BLK. 246	STATE TRACT 75, COPANO BAY	ARANSAS CLS SUR. A-7
OWNER	KELLY BELL	SUN OIL CO.	CONTINENTAL OIL CO.
COMPLETED	02/10/69	03/24/66	04/19/70
SAMPLED	04/09/71	10/12/67	12/--/71
FORMATION	OLIG-FRIO	OLIG-FRIO M	OLIG-FRIO J
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8908	7636	9503
WELLHEAD PRESSURE,PSIG	3527	365	5710
OPEN FLOW, MCFD	11800	323	54000
COMPONENT, MOLE PCT			
METHANE	87.7	90.3	89.6
ETHANE	5.5	4.5	5.0
PROPANE	2.4	1.7	2.0
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	1.0	0.6	0.7
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.4	0.7
NITROGEN	1.4	1.1	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1145	1118	1154
SPECIFIC GRAVITY	0.666	0.635	0.655

	INDEX 7567 SAMPLE 15461	INDEX 7568 SAMPLE 15462	INDEX 7569 SAMPLE 5172
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	NINE MILE POINT W	NINE MILE POINT W	NOT GIVEN
WELL NAME	STATE TRACT 146 NO. 2	STATE TRACT 170 NO. 1	ST. CHARLES NO. 14
LOCATION	ARANSAS BAY	ARANSAS BAY	ISAAC DOWERS SUR. NO. A-53
OWNER	HOUSTON OIL & MINERALS CORP.	HOUSTON OIL & MINERALS CORP.	WESTERN NATURAL GAS CO.
COMPLETED	05/08/77	10/09/77	--/--/00
SAMPLED	10/27/78	10/27/78	02/27/52
FORMATION	OLIG-FRIO D-4	OLIG-FRIO M	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8244	10934	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3215	3265	NOT GIVEN
OPEN FLOW, MCFD	11800	4200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	87.8	91.7
ETHANE	5.7	6.5	3.7
PROPANE	2.5	2.8	1.2
N-BUTANE	0.6	0.6	0.4
ISOBUTANE	0.9	0.9	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.4	0.4	0.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.2	1.8
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1150	1152	1061
SPECIFIC GRAVITY	0.654	0.650	0.621

	INDEX 7570 SAMPLE 15416	INDEX 7571 SAMPLE 12433	INDEX 7572 SAMPLE 5114
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	RATTLESNAKE POINT	ROCKPORT W	ST. CHARLES
WELL NAME	STATE LEASE 122 NO. A1	ZEPP-DUQUETTE NO. 2	NO. 13
LOCATION	STATE TRACT 122	BLK. 1, C.&.LUCAS SUR. A-239	NOT GIVEN
OWNER	SHENANDOAH OIL CORP.	CITIES SERVICE OIL CO.	WESTERN NATURAL GAS CO.
COMPLETED	05/29/76	10/16/69	06/16/51
SAMPLED	10/16/78	10/08/70	10/16/51
FORMATION	OLIG-FRIO	OLIG-FRIO UPPER M	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8744	8920	10260
WELLHEAD PRESSURE,PSIG	750	2165	6850
OPEN FLOW, MCFD	8700	3960	4300
COMPONENT, MOLE PCT			
METHANE	85.5	88.0	91.1
ETHANE	7.0	4.6	4.5
PROPANE	3.6	2.9	1.5
N-BUTANE	1.0	0.9	0.5
ISOBUTANE	1.0	1.5	0.0
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	0.5	0.8	0.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.2	1.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1189	1184	1087
SPECIFIC GRAVITY	0.683	0.679	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7573 SAMPLE 13126	INDEX 7574 SAMPLE 12010	INDEX 7575 SAMPLE 12011
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARANSAS	ARANSAS	ARANSAS
FIELD	ST. CHARLES	VIRGINIA	VIRGINIA
WELL NAME	ST. CHARLES NO. 9	V. H. TATTON NO. 18	V. H. TATTON NO. 18
LOCATION	R. D. BLASSMAN SUR. A-31	JOHN DURST SUR. A-51	JOHN DURST SUR. A-51
OWNER	CONTINENTAL OIL CO.	UNION PRODUCING CO.	UNION PRODUCING CO.
COMPLETED	05/20/70	12/06/68	12/06/68
SAMPLED	12/--/71	08/26/69	08/26/69
FORMATION	OLIG-FRIO P	OLIG-FRIO 9050	OLIG-FRIO 9700
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9994	9038	9680
WELLHEAD PRESSURE,PSIG	6455	3156	3020
OPEN FLOW, MCFD	145000	16200	9400
COMPONENT, MOLE PCT			
METHANE	89.6	45.3	46.7
ETHANE	5.0	14.1	16.4
PROPANE	2.2	15.9	15.1
N-BUTANE	0.6	6.6	6.0
ISOBUTANE	0.8	7.9	6.4
N-PENTANE	0.3	3.0	3.0
ISOPENTANE	0.1	2.2	2.0
CYCLOPENTANE	0.2	0.5	0.5
HEXANES PLUS	0.5	3.0	3.2
NITROGEN	0.3	1.1	0.5
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1152	2008	1973
SPECIFIC GRAVITY	0.651	1.193	1.163

	INDEX 7576 SAMPLE 4518	INDEX 7577 SAMPLE 3705	INDEX 7578 SAMPLE 4904
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARCHER	ARCHER	ARMSTRONG
FIELD	HULL-SILK	SCOTLAND	NOT GIVEN
WELL NAME	L. F. WILSON	W. M. COLEMAN NO. 8-1	BRUCE COBB B
LOCATION	NOT GIVEN	SEC. 74, ATNCL SUR.	SEC. 10, BLK. 1, TWNG SUR.
OWNER	KELMERICH & PAYNE, INC.	SHELL OIL CO.	C. C. COX
COMPLETED	--/--/00	01/20/41	--/--/00
SAMPLED	05/06/48	12/15/43	07/28/50
FORMATION	PENN-STRAWN	PENN-CADDO	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	435
DEPTH, FEET	3800	4976	NOT GIVEN
WELLHEAD PRESSURE,PSIG	175	1200	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.6	56.8	0.3
ETHANE	95.0	33.1	---
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.2	8.5	99.0
OXYGEN	0.4	1.1	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.4	0.1
HELIUM	0.03	0.10	0.00
HEATING VALUE*	1108	1169	3
SPECIFIC GRAVITY	1.048	0.763	0.967

	INDEX 7579 SAMPLE 4974	INDEX 7580 SAMPLE 4114	INDEX 7581 SAMPLE 12463
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ARMSTRONG	ATASCOSA	ATASCOSA
FIELD	NOT GIVEN	JOURDANTON	WILDCAT
WELL NAME	BRUCE COBB NO. 1	HENRY SCHORSCH NO. 1	JOSEPH COURAND NO. 1
LOCATION	SEC. 10, BLK. 1, TWNG SUR.	2 1/2 MI. SW OF JOURDANTON	NOAH SCOTT SUR. A-768
OWNER	BRUCE COBB	HUMBLE OIL & REFINING CO.	W. EARL ROWE
COMPLETED	--/--/00	12/23/45	11/22/69
SAMPLED	12/12/50	10/03/46	10/20/70
FORMATION	NOT GIVEN	CRET-EDWARDS	CRET-EDWARDS
GEOLOGIC PROVINCE CODE	435	220	220
DEPTH, FEET	NOT GIVEN	7260	7642
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3380	2748
OPEN FLOW, MCFD	18547	4400	4500
COMPONENT, MOLE PCT			
METHANE	0.8	80.4	85.0
ETHANE	0.1	9.1	2.7
PROPANE	0.2	---	1.1
N-BUTANE	0.1	---	0.4
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.1	---	0.2
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	98.1	1.8	1.3
OXYGEN	0.1	0.6	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.1
HYDROGEN SULFIDE**	---	---	1.1
CARBON DIOXIDE	0.1	8.1	7.4
HELIUM	0.09	0.01	0.01
HEATING VALUE*	26	978	997
SPECIFIC GRAVITY	0.968	0.689	0.686

	INDEX 7582 SAMPLE 11973	INDEX 7583 SAMPLE 14560	INDEX 7584 SAMPLE 14559
STATE	TEXAS	TEXAS	TEXAS
COUNTY	AUSTIN	AUSTIN	AUSTIN
FIELD	NELSONVILLE	NELSONVILLE	NELSONVILLE N
WELL NAME	JOE MIKESKA NO. 1	FRANK SUROWIK NO. 1	LEONARD SCHROEDER NO. 1
LOCATION	S. F. AUSTIN SUR. A-4	S. F. AUSTIN LEAGUE, A-4	STEPHEN F. AUSTIN GRANT, A-4
OWNER	SUN OIL CO.	PRAIRIE PRODUCING CO.	PRAIRIE PRODUCING CO.
COMPLETED	12/20/68	02/19/74	04/12/74
SAMPLED	07/17/69	01/16/76	01/16/76
FORMATION	-ROUDRY	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9830	9818	8392
WELLHEAD PRESSURE,PSIG	2936	3200	261
OPEN FLOW, MCFD	6704	15000	16750
COMPONENT, MOLE PCT			
METHANE	78.6	77.2	80.6
ETHANE	7.2	7.6	6.1
PROPANE	6.2	6.6	5.0
N-BUTANE	1.4	1.9	1.5
ISOBUTANE	1.4	1.5	1.9
N-PENTANE	0.4	0.3	0.0
ISOPENTANE	0.2	0.9	0.9
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	1.1	0.8	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	2.9	1.8
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1220	1274	1234
SPECIFIC GRAVITY	0.747	0.774	0.735

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7585 SAMPLE 13886	INDEX 7586 SAMPLE 12462	INDEX 7587 SAMPLE 11323
STATE	TEXAS	TEXAS	TEXAS
COUNTY	AUSTIN	AUSTIN	AUSTIN
FIELD	NEW ULM SW	ORANGE HILL	RACCOON BEND
WELL NAME	HENRY FOERSTER UNIT NO. 1	MRS. D. C. HILLBOLDT NO. 1	MIDCENE GAS UNIT NO. 1
LOCATION	JAMES TYLEE SUR. A-304	A. JORDAN SUR. A-251	WM. C. WHITE SUR. A-101
OWNER	PRAIRIE PRODUCING CO.	ROBERT MOSBACHER	HUMBLE OIL & REFINING CO.
COMPLETED	10/04/72	06/21/69	-/-/-00
SAMPLED	11/12/73	10/21/70	02/27/68
FORMATION	EOCE-WILCOX	EOCE-WILCOX	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9366	9246	917
WELLHEAD PRESSURE,PSIG	2897	2300	390
OPEN FLOW, MCFD	9800	6650	8860
COMPONENT, MOLE PCT			
METHANE	49.6	86.3	93.0
ETHANE	19.8	6.4	0.6
PROPANE	18.5	2.8	0.4
N-BUTANE	5.2	0.6	0.0
ISOBUTANE	4.5	0.6	0.0
N-PENTANE	1.0	TRACE	0.0
ISOPENTANE	1.9	0.3	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.6	0.2	0.0
NITROGEN	0.4	0.5	3.8
OXYGEN	TRACE	0.0	0.5
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.2	2.2	1.7
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1736	1125	963
SPECIFIC GRAVITY	1.067	0.666	0.598

	INDEX 7588 SAMPLE 15252	INDEX 7589 SAMPLE 15251	INDEX 7590 SAMPLE 3789
STATE	TEXAS	TEXAS	TEXAS
COUNTY	AUSTIN	AUSTIN	BEE
FIELD	SEALY W	SEALY W	BLANCONIA
WELL NAME	FENNE NO. 1	HINTZ "A" NO. 1	E. B. TUTTLE NO. 1
LOCATION	GEORGE T. ALLEN SUR. 180	GEORGE T. ALLEN SUR. 180	J. M. KEATING SUR.
OWNER	RANGER OIL CO.	RANGER OIL CO.	SUN OIL CO.
COMPLETED	07/16/77	08/26/75	12/30/43
SAMPLED	04/06/78	04/06/78	04/15/44
FORMATION	EOCE-WILCOX	EOCE-WILCOX	OLIG-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8860	10669	4086
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2770	1780
OPEN FLOW, MCFD	NOT GIVEN	12000	200000
COMPONENT, MOLE PCT			
METHANE	88.0	88.9	94.4
ETHANE	4.4	4.1	0.0
PROPANE	1.7	1.2	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	0.8	0.4	5.0
OXYGEN	0.1	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	3.6	4.4	0.2
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1076	1043	956
SPECIFIC GRAVITY	0.661	0.649	0.579

	INDEX 7591 SAMPLE 4386	INDEX 7592 SAMPLE 4886	INDEX 7593 SAMPLE 4963
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	BLANCONIA	BLANCONIA	BLANCONIA
WELL NAME	MICHAEL FOX B NO. 2	F. V. THOMAS NO. 1	FRED THOMAS NO. 2
LOCATION	J&M KEATING SUR. NO. A-33	JOHN KELLY SUR. NO. A-35	JOHN KELLY SUR. NO. A-35
OWNER	STANOLIND OIL & GAS CO.	BRIDWELL OIL CO.	BRIDWELL OIL CO.
COMPLETED	06/27/47	01/04/50	07/24/50
SAMPLED	12/04/47	05/17/50	11/01/50
FORMATION	TERT-	OLIG-SINTON	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4138	4137	4950
WELLHEAD PRESSURE,PSIG	1870	1715	1335
OPEN FLOW, MCFD	3000	9	1850
COMPONENT, MOLE PCT			
METHANE	97.4	97.6	91.9
ETHANE	1.4	0.6	4.1
PROPANE	---	0.1	0.8
N-BUTANE	---	0.0	0.2
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	TRACE	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.0	0.2
NITROGEN	0.4	0.5	1.8
OXYGEN	0.4	0.1	0.3
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.8	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1012	1010	1046
SPECIFIC GRAVITY	0.569	0.570	0.606

	INDEX 7594 SAMPLE 10116	INDEX 7595 SAMPLE 4438	INDEX 7596 SAMPLE 9565
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	BLANCONIA	BLANCONIA S	BURK HOLLOW
WELL NAME	M. FOX ESTATE NO. 3	CLARK WOOD NO. 1	LAURA D. THOMSON B-5
LOCATION	N KEATING SUR. A-33	NOT GIVEN	JOHN ROACH SUR. A-60
OWNER	FLOURNOY PRODUCTION CO.	BRIDWELL OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	07/09/65	08/30/46	02/23/64
SAMPLED	09/08/65	01/13/48	09/21/64
FORMATION	OLIG-SINTON	OLIG-SINTON	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4032	4360	2574
WELLHEAD PRESSURE,PSIG	1150	1870	998
OPEN FLOW, MCFD	972	57000	4050
COMPONENT, MOLE PCT			
METHANE	97.2	94.1	97.3
ETHANE	1.7	3.4	0.1
PROPANE	0.3	---	0.0
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.5	0.8	2.1
OXYGEN	0.0	0.5	0.3
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	1.2	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1023	1014	987
SPECIFIC GRAVITY	0.571	0.589	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7597 SAMPLE 14280	INDEX 7598 SAMPLE 7132	INDEX 7599 SAMPLE 14379
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	BURKE RIDGE	BURNELL	CADIZ
WELL NAME	SAMUEL DENVER CHESTNUTT NO.1	A. N. DAHL B NO. 1	R. R. LAWSON NO. 1
LOCATION	GARRETT ROACH SUR. A-59	NOT GIVEN	A. C. GILLETT SUR. A-1203
OWNER	EXXON CO., U.S.A.	TENNESSEE GAS TRANSMISSION C	HARKINS & CO.
COMPLETED	06/20/73	03/14/59	07/04/73
SAMPLED	03/01/75	06/24/59	05/30/75
FORMATION	OLIG-FRIO	EOCE-WILCOX & SLICK	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1914	6654	9086
WELLHEAD PRESSURE,PSIG	573	1659	3159
OPEN FLOW, MCFD	860	6250	9400
COMPONENT, MOLE PCT			
METHANE	98.7	85.0	81.1
ETHANE	0.1	5.8	7.6
PROPANE	TRACE	2.3	4.2
N-BUTANE	0.0	0.7	1.0
ISOBUTANE	0.0	0.0	0.7
N-PENTANE	0.0	2.7	0.2
ISOPENTANE	0.0	0.0	0.5
CYCLOPENTANE	0.0	0.7	0.1
HEXANES PLUS	0.0	1.4	0.2
NITROGEN	1.0	0.1	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.2	4.2
HELIUM	0.01	0.00	0.01
HEATING VALUE*	1002	1262	1168
SPECIFIC GRAVITY	0.559	0.728	0.723

	INDEX 7600 SAMPLE 5448	INDEX 7601 SAMPLE 4730	INDEX 7602 SAMPLE 12131
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	CAESAR	COSDEN W	HOLZMARK
WELL NAME	R. E. MILLER NO. 1	DUBAT C NO. 2	HOLZMARK D NO. 1
LOCATION	NOT GIVEN	JAMES GRAY SUR.	10 1/2 MI. NW BEEVILLE
OWNER	SIZMOD OIL CORP.	DIRKS BROTHERS	SOUTH STATES OIL & GAS CO.
COMPLETED	04/11/53	02/--/49	07/09/69
SAMPLED	08/21/53	05/12/49	12/04/69
FORMATION	EOCE-HOCKLEY	EOCE-	OLIG-WICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2280	7600	2766
WELLHEAD PRESSURE,PSIG	951	3500	1081
OPEN FLOW, MCFD	190	13000	5000
COMPONENT, MOLE PCT			
METHANE	99.2	87.6	99.0
ETHANE	TRACE	6.0	0.2
PROPANE	0.0	2.8	TRACE
N-BUTANE	0.0	0.6	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.5	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.5	0.6	0.3
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	1.5	0.4
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1005	1122	1007
SPECIFIC GRAVITY	0.559	0.657	0.560

	INDEX 7603 SAMPLE 12132	INDEX 7604 SAMPLE 13533	INDEX 7605 SAMPLE 3745
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	MINERAL
FIELD	HOLZMARK	LAURA THOMPSON	PAGE NO. 2
WELL NAME	HOLZMARK G NO. 1	LAURA T BARROW B NO. 25	BILKINGTON SUR.
LOCATION	13 MI. NW OF BEEVILLE	MIGUEL DE LOS SANTOS SUR.	DIRKS BROTHERS
OWNER	SOUTH STATES OIL & GAS CO.	EXXON CO., U.S.A.	03/--/43
COMPLETED	07/08/55	04/06/71	03/31/44
SAMPLED	12/04/69	02/13/73	EOCE-CARRIZO & WILCOX
FORMATION	EOCE-WHITSETT	OLIG-FRIO	220
GEOLOGIC PROVINCE CODE	220	220	7460
DEPTH, FEET	3198	9850	2475
WELLHEAD PRESSURE,PSIG	1190	1703	NOT GIVEN
OPEN FLOW, MCFD	560000	19600	
COMPONENT, MOLE PCT			
METHANE	98.6	94.2	77.6
ETHANE	0.6	2.9	19.5
PROPANE	0.1	1.3	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.7	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.2	---
NITROGEN	0.4	0.4	0.8
OXYGEN	TRACE	TRACE	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.0	1.7
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1012	1082	1136
SPECIFIC GRAVITY	0.560	0.602	0.673

	INDEX 7606 SAMPLE 5298	INDEX 7607 SAMPLE 4735	INDEX 7608 SAMPLE 9910
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	MINDAK	MINOAK N	NORMANNA S
WELL NAME	J. M. ANDREWS NO. 1	EMLERS-WOLTERS UNIT NO. 1	SUDIE SCOTT NO. 1-A
LOCATION	A.J. DAVIS & J.G. MORROW SUR.	A.B.&M. LEVI WRIGHT SUR.	JUAN MOLINA SUR. A-40
OWNER	STANOLIND OIL & GAS CO.	SUN OIL CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	04/16/52	01/08/49	05/11/63
SAMPLED	09/--/52	05/03/49	05/10/65
FORMATION	EOCE-	EOCE-SLICK	OLIG-FRIO 2050
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7352	7537	2041
WELLHEAD PRESSURE,PSIG	2635	3259	840
OPEN FLOW, MCFD	11250	5300	4300
COMPONENT, MOLE PCT			
METHANE	86.2	89.2	98.6
ETHANE	5.4	5.9	TRACE
PROPANE	2.4	2.3	0.0
N-BUTANE	0.6	0.5	0.0
ISOBUTANE	0.6	0.4	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.4	0.2	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.4	0.2	0.0
NITROGEN	1.5	1.0	1.1
OXYGEN	0.2	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.0	0.1	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1123	1119	999
SPECIFIC GRAVITY	0.673	0.634	0.560

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7609 SAMPLE 4773	INDEX 7610 SAMPLE 8272	INDEX 7611 SAMPLE 11935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	NOT GIVEN	PAWNEE	PETTUS
WELL NAME	MCCURDY-MOSS NO. 1	F. TOMASEK ET AL. NO. 1	G. A. RAY NO. 85
LOCATION	NOT GIVEN	SEC. 25, PLUMMER SUBD.	GEORGE A. KERR SUR. A-209
OWNER	WARREN OIL CORP.	SHELL OIL CO.	UNION PRODUCING CO.
COMPLETED	02/16/49	11/15/61	07/27/68
SAMPLED	10/26/49	11/24/61	06/14/69
FORMATION	NOT GIVEN	CRET-EDWARDS	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2518	13408	2900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4437	1170
OPEN FLOW, MCFD	46000	6700	9500
COMPONENT, MOLE PCT			
METHANE	98.4	91.5	94.9
ETHANE	0.1	0.2	0.1
PROPANE	0.1	0.2	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	0.4	3.5
OXYGEN	TRACE	0.1	0.8
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	7.5	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1000	936	963
SPECIFIC GRAVITY	0.565	0.632	0.579

	INDEX 7612 SAMPLE 14951	INDEX 7613 SAMPLE 4931	INDEX 7614 SAMPLE 4932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	PETTUS SE	PLUMMER	PLUMMER
WELL NAME	J. E. MCKINNEY NO. 2	W. A. ROBERSON NO. 1-T	W. A. ROBERSON NO. 1-C
LOCATION	L. C. RANDOLPH SUR. A-279	T. B. BARTON SUR.	T. B. BARTON SUR.
OWNER	HUGHES & HUGHES OIL & GAS	MID-STATES OIL CORP.	MID-STATES OIL CORP.
COMPLETED	06/18/75	02/14/50	02/14/50
SAMPLED	03/30/77	08/03/50	10/20/50
FORMATION	EOCE-WILCOX	EOCE-	EOCE-LULING
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8750	7017	6759
WELLHEAD PRESSURE,PSIG	4198	2442	2249
OPEN FLOW, MCFD	90000	26000	36000
COMPONENT, MOLE PCT			
METHANE	85.1	89.3	88.8
ETHANE	6.4	5.4	5.5
PROPANE	3.2	2.5	2.7
N-BUTANE	0.8	0.6	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.2	0.0	TRACE
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.1	1.2	1.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1130	1122	1127
SPECIFIC GRAVITY	0.681	0.644	0.646

	INDEX 7615 SAMPLE 17908	INDEX 7616 SAMPLE 12693	INDEX 7617 SAMPLE 12632
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	ROLLEM	SLIVA W	STRAUCH
WELL NAME	D. F. MEYER NO. 1	G. C. IMPSON NO. 1	R. G. VELA NO. 1
LOCATION	MARY CARROLL SUR., A-11	C. C. DITCH CO. SUR. A-356	OSCAR FARRIS SUR. A-161
OWNER	ARCO OIL & GAS CO.	RHODES & HICKS, ET AL.	MILLS BENNETT ESTATE
COMPLETED	04/--/85	03/24/70	12/10/68
SAMPLED	11/11/85	02/23/71	01/12/71
FORMATION	CAMB-REAGAN 1ST	OLIG-FRIO	EOCE-PETTUS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12173	2950	3997
WELLHEAD PRESSURE,PSIG	6125	1075	962
OPEN FLOW, MCFD	5351	4200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.0	98.5	89.7
ETHANE	8.0	0.5	4.9
PROPANE	2.3	0.1	2.3
N-BUTANE	0.6	0.0	0.7
ISOBUTANE	0.5	0.0	0.5
N-PENTANE	0.4	0.0	0.2
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	0.2	0.0	0.1
HEXANES PLUS	0.7	0.0	0.2
NITROGEN	TRACE	0.6	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.1	0.3	0.2
HELIUM	TRACE	0.03	TRACE
HEATING VALUE*	1125	1009	1136
SPECIFIC GRAVITY	0.723	0.563	0.643

	INDEX 7618 SAMPLE 10146	INDEX 7619 SAMPLE 2554	INDEX 7620 SAMPLE 13856
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	TELERANA	TULETA	TULETA N
WELL NAME	RAE WOOD WELDER NO. 5	COX NO. 1	W. E. MCKINNEY NO. 2
LOCATION	JAMES MCGEEHAN SUR. A-38	NOT GIVEN	L.C. RANDOLPH SUR. A-279
OWNER	FLOURNOY PRODUCTION CO.	TEXAS CO.	HUGHES & HUGHES OIL & GAS
COMPLETED	08/01/65	08/26/32	05/13/72
SAMPLED	09/21/65	10/04/32	01/02/74
FORMATION	OLIG-SINTON	EOCE-JACKSON	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4409	4074	8935
WELLHEAD PRESSURE,PSIG	1400	1600	3905
OPEN FLOW, MCFD	8000	NOT GIVEN	82520
COMPONENT, MOLE PCT			
METHANE	97.1	81.3	86.1
ETHANE	0.8	17.6	6.3
PROPANE	0.4	---	2.6
N-BUTANE	0.1	---	0.5
ISOBUTANE	TRACE	---	0.5
N-PENTANE	0.2	---	TRACE
ISOPENTANE	TRACE	---	0.3
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.4	---	0.1
NITROGEN	0.8	0.0	0.2
OXYGEN	0.0	0.6	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.5	3.3
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	1045	1139	1104
SPECIFIC GRAVITY	0.584	0.650	0.667

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7621 SAMPLE 3746	INDEX 7622 SAMPLE 5023	INDEX 7623 SAMPLE 5056
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	TULETA W	WILDCAT	WILDCAT
WELL NAME	ROY HARRIS	J. S. HALL NO. 1	SALLIE RAGSDALE NO. 1
LOCATION	RAGLEY SUBD.	ANNA BURKE SUR. A-5	A. J. DAVIS SUR. A-155
OWNER	DIRKS BROTHERS	BRIDWELL OIL CO.	TEXAS CO.
COMPLETED	12/--/41	11/20/50	02/15/51
SAMPLED	03/31/44	03/22/51	06/20/51
FORMATION	EOCE-CARRIZO & WILCOX	OLIG-VICKSBURG	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7480	3700	8058
WELLHEAD PRESSURE,PSIG	2650	NOT GIVEN	3400
OPEN FLOW, MCFD	42000	13800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.6	98.5	68.9
ETHANE	18.1	0.3	6.3
PROPANE	---	0.1	6.1
N-BUTANE	---	TRACE	4.6
ISOBUTANE	---	TRACE	3.1
N-PENTANE	---	0.0	3.0
ISOPENTANE	---	0.0	0.8
CYCLOPENTANE	---	TRACE	0.5
HEXANES PLUS	---	0.1	3.5
NITROGEN	0.8	0.7	0.6
OXYGEN	0.5	0.1	0.2
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	2.4
HELIUM	0.00	0.01	TRACE
HEATING VALUE*	1141	1013	1586
SPECIFIC GRAVITY	0.651	0.563	0.959

	INDEX 7624 SAMPLE 5177	INDEX 7625 SAMPLE 10117	INDEX 7626 SAMPLE 16056
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEE	BEE	BEE
FIELD	WILDCAT	WILDCAT	TOWARD
WELL NAME	MENGER NO. 1	M. FOX ESTATE B NO. 1	TOWARD NO. 2
LOCATION	NOT GIVEN	NEAR BLANCONIA	3 MI. SW MINERAL
OWNER	NEWMAN BROS. DRILLING CO.	FLOURNOY PRODUCTION CO.	TEXAS OIL & GAS CORP.
COMPLETED	--/--/00	07/19/65	06/05/80
SAMPLED	02/15/52	09/08/65	08/20/80
FORMATION	NOT GIVEN	OLIG-SINTON	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	3992	8236
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1300	1950
OPEN FLOW, MCFD	NOT GIVEN	748	1050
COMPONENT, MOLE PCT			
METHANE	92.9	98.6	87.6
ETHANE	4.0	0.4	5.9
PROPANE	1.0	0.1	2.5
N-BUTANE	0.1	0.0	0.7
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.3	0.0	0.2
NITROGEN	1.0	0.5	TRACE
OXYGEN	0.2	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.4	2.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1062	1009	1134
SPECIFIC GRAVITY	0.610	0.563	0.663

	INDEX 7627 SAMPLE 2663	INDEX 7628 SAMPLE 11746	INDEX 7629 SAMPLE 11747
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BEXAR	BOWIE	BOWIE
FIELD	NOT GIVEN	MAUD	MAUD
WELL NAME	NO. 1	J. D. OWENS NO. 1	HELEN HUGHES NO. 1
LOCATION	NOT GIVEN	J. S. MERRING SUR. A-263	MEP&P SUR. A-424
OWNER	ROBERT A. REINARZ	WESTLAND OIL DEV. CORP.	WESTLAND OIL DEV. CORP.
COMPLETED	--/--/00	06/15/67	07/27/67
SAMPLED	01/03/34	01/29/69	01/29/69
FORMATION	NOT GIVEN	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	400	260	260
DEPTH, FEET	265	8550	8699
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3094	2250
OPEN FLOW, MCFD	NOT GIVEN	78000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	47.1	40.8
ETHANE	4.1	0.1	4.9
PROPANE	---	0.9	4.3
N-BUTANE	---	0.3	3.9
ISOBUTANE	---	0.8	2.2
N-PENTANE	---	1.3	1.9
ISOPENTANE	---	0.6	0.6
CYCLOPENTANE	---	0.6	0.5
HEXANES PLUS	---	2.2	2.5
NITROGEN	95.5	39.3	26.1
OXYGEN	0.1	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	6.3
CARBON DIOXIDE	0.3	6.2	6.3
HELIUM	0.00	0.10	0.06
HEATING VALUE*	73	794	1096
SPECIFIC GRAVITY	0.972	0.923	1.033

	INDEX 7630 SAMPLE 3857	INDEX 7631 SAMPLE 16201	INDEX 7632 SAMPLE 15146
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BOWIE	BOWIE	BRAZORIA
FIELD	NOT GIVEN	GILDAM	ALLIGATOR POINT
WELL NAME	HEILBRON NO. 2	B. E. LEWIS NO. 1	ALLIGATOR POINT UNIT 1
LOCATION	SEC. 38, H. JANES SUR. A-304	JOHN C. CARSON SUR. A-112	PIERCE MILLER SUR. A-348
OWNER	BARNSDALL OIL CO.	MCCORMICK OPERATING CO.	GENERAL CRUDE OIL CO.
COMPLETED	07/22/44	10/21/78	02/06/76
SAMPLED	07/15/44	03/03/81	11/05/77
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	OLIG-FRIO
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	7686	8580	11358
WELLHEAD PRESSURE,PSIG	1300	2925	7350
OPEN FLOW, MCFD	8050	6700	1250
COMPONENT, MOLE PCT			
METHANE	20.9	42.6	91.4
ETHANE	13.4	1.9	4.4
PROPANE	---	0.9	1.3
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.6	0.4
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	63.6	39.7	0.3
OXYGEN	0.5	1.6	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	4.1	0.0
CARBON DIOXIDE	1.5	7.7	1.4
HELIUM	0.14	0.09	TRACE
HEATING VALUE*	452	564	1085
SPECIFIC GRAVITY	0.900	0.869	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7633 SAMPLE 15381	INDEX 7634 SAMPLE 14869	INDEX 7635 SAMPLE 15144
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	ALLIGATOR POINT W	ALVIN CITY	ALVIN CITY
WELL NAME	STATE LEASE 66709 NO. 1	TRIANGLE MOORE NO. 1	M. C. BAIRD NO. 1
LOCATION	BBB&C RR SUR. A-445	HOOPER & WADE SUR. A-422	HT&B RR SUR. A-228
OWNER	GENERAL CRUDE OIL CO.	MCCORMICK OIL & GAS CORP.	CROWN CENTRAL PETROLEUM CORP
COMPLETED	01/05/77	11/06/75	06/17/76
SAMPLED	09/25/78	12/--/76	11/11/77
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12214	9983	9995
WELLHEAD PRESSURE,PSIG	7835	3333	2475
OPEN FLOW, MCFD	15457	11928	6800
COMPONENT, MOLE PCT			
METHANE	85.3	95.2	95.5
ETHANE	6.8	2.4	2.4
PROPANE	3.0	0.7	0.7
N-BUTANE	0.7	0.2	0.2
ISOBUTANE	1.2	0.1	0.1
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.5	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	0.3	0.3	0.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.8	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1187	1045	1056
SPECIFIC GRAVITY	0.688	0.591	0.592

	INDEX 7636 SAMPLE 15470	INDEX 7637 SAMPLE 15471	INDEX 7638 SAMPLE 9601
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	ALVIN N	ALVIN N	ALVIN S
WELL NAME	REESE G.U. NO. 1	REESE G.U. NO. 1	LOCKHART BANK UNIT NO. 1
LOCATION	HT&B RR SUR. 19, A-229	HT&B RR SUR. 19, A-229	MYLES O'DONNELL SUR. A-488
OWNER	BUTTES RESOURCES CO.	BUTTES RESOURCES CO.	SUPERIOR OIL CO.
COMPLETED	11/25/76	11/25/76	03/26/63
SAMPLED	10/06/78	10/06/78	10/16/64
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8108	8534	10490
WELLHEAD PRESSURE,PSIG	2832	3010	5375
OPEN FLOW, MCFD	11162	33782	75000
COMPONENT, MOLE PCT			
METHANE	92.5	93.1	90.8
ETHANE	3.5	3.4	3.7
PROPANE	1.6	1.4	1.8
N-BUTANE	0.4	0.4	0.7
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.6
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	0.6	0.6	TRACE
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1098	1086	1145
SPECIFIC GRAVITY	0.612	0.611	0.650

	INDEX 7639 SAMPLE 10983	INDEX 7640 SAMPLE 15409	INDEX 7641 SAMPLE 5157
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	ANGLETON	ANGLETON	BASTROP BAY
WELL NAME	BLACKWELL GAS UNIT NO. 1	D. M. MOODY, TRUSTEE NO. 1	STATE A NO. 1
LOCATION	WALDERAS SUR. A-380	J. W. CLOUD SUR. A-160	STATE TRACT NO. 13
OWNER	MONSANTO CO.	GOLDKING PRODUCTION CO.	CHAMPLIN REFINING CO.
COMPLETED	01/20/67	12/03/76	09/12/51
SAMPLED	06/07/67	10/02/78	02/20/52
FORMATION	MISS-	OLIG-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11000	10250	5772
WELLHEAD PRESSURE,PSIG	5852	3065	2660
OPEN FLOW, MCFD	96000	3800	60000
COMPONENT, MOLE PCT			
METHANE	91.6	92.9	95.6
ETHANE	4.7	2.7	1.9
PROPANE	1.3	1.1	0.5
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.4	0.3	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.7	0.6	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	----
CARBON DIOXIDE	0.9	1.4	1.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1075	1065	1032
SPECIFIC GRAVITY	0.616	0.616	0.587

	INDEX 7642 SAMPLE 15412	INDEX 7643 SAMPLE 14226	INDEX 7644 SAMPLE 14227
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	BELL LAKE	BRAZOS BLK. 386-S	BRAZOS BLK. 386-S
WELL NAME	BALWIN NASH YOUNG NO. 1	NO. 3	NO. 3
LOCATION	J. E. A. PHELPS SUR. A-117	BLK. 387-L, OFFSHORE	BLK. 387-L OFFSHORE
OWNER	GEOLOGICAL RESEARCH CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	02/15/77	08/08/72	08/04/72
SAMPLED	10/12/78	11/18/74	11/18/74
FORMATION	OLIG-FRIO	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9818	6895	6895
WELLHEAD PRESSURE,PSIG	4775	2055	2055
OPEN FLOW, MCFD	11700	24000	24000
COMPONENT, MOLE PCT			
METHANE	94.5	96.6	96.6
ETHANE	2.7	1.9	1.9
PROPANE	0.8	0.5	0.6
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.3	0.4	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1067	1045	1048
SPECIFIC GRAVITY	0.601	0.580	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7645 SAMPLE 12676	INDEX 7646 SAMPLE 4738	INDEX 7647 SAMPLE 13382
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	BUFFALO CAMP	CHOCOLATE BAYOU	CHOCOLATE BAYOU
WELL NAME	J. R. SMITH ET AL. NO. 1	HOUSTON H NO. 1	HOUSTON R NO. 1
LOCATION	S. F. AUSTIN SUR. A-19	BLK. 231, E. ANDREWS SUR.	PERRY E AUSTIN SUR. A-110
OWNER	MOBIL OIL CORP.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	08/18/70	10/18/48	12/08/70
SAMPLED	02/11/71	04/27/49	09/06/72
FORMATION	OLIG-FRIO F-9	OLIG-M	OLIG-FRIO P
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10716	11020	11000
WELLHEAD PRESSURE,PSIG	3882	6380	1617
OPEN FLOW, MCFD	142000	5000	60000
COMPONENT, MOLE PCT			
METHANE	91.7	89.5	88.8
ETHANE	3.1	5.3	5.8
PROPANE	1.5	2.0	2.5
N-BUTANE	0.4	0.5	0.6
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	1.1	1.0	0.3
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.9	0.7	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1090	1105	1136
SPECIFIC GRAVITY	0.629	0.639	0.649

	INDEX 7648 SAMPLE 15413	INDEX 7649 SAMPLE 12684	INDEX 7650 SAMPLE 12685
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	CHOCOLATE BAYOU	CLEMENS N	CLEMENS N
WELL NAME	GRACE MCILVAINE GU NO. 1	STATE TRACT 5 NO. 2	STATE TRACT 5 NO. 2
LOCATION	ASA BRIGHAM SUR. A47	WM. CUMMINGS SUR. A-59	WM. CUMMINGS SUR. A-59
OWNER	SUPERIOR OIL CO.	P. R. RUTHERFORD	P. R. RUTHERFORD
COMPLETED	10/10/76	07/26/69	07/26/69
SAMPLED	10/16/78	02/15/71	02/15/71
FORMATION	OLIG-FRIO	OLIG-FRIO C	OLIG-FRIO B
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13566	10800	10486
WELLHEAD PRESSURE,PSIG	9056	3898	2344
OPEN FLOW, MCFD	5530	14000	18515
COMPONENT, MOLE PCT			
METHANE	89.0	83.2	83.5
ETHANE	5.1	8.3	8.2
PROPANE	1.7	3.7	3.8
N-BUTANE	0.4	1.0	0.8
ISOBUTANE	0.4	1.5	1.6
N-PENTANE	0.1	0.4	0.5
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.5
NITROGEN	0.3	0.3	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	1.0	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1095	1222	1225
SPECIFIC GRAVITY	0.648	0.705	0.703

	INDEX 7651 SAMPLE 13924	INDEX 7652 SAMPLE 13925	INDEX 7653 SAMPLE 5004
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	CLEMENS SW	CLEMENS SW	COLLINS LAKE
WELL NAME	E. R. MCCARTHY NO. 1	E. R. MCCARTHY NO. 1	M. L. JAMISON ESTATE NO. 1
LOCATION	T. B. BELL SUR. A-41	T. B. BELL SUR. A-41	C. SMITH LEAGUE
OWNER	DOW CHEMICAL CO. U.S.A.	DOW CHEMICAL CO. U.S.A.	MCCARTHY OIL & GAS CORP.
COMPLETED	10/23/72	10/23/72	10/30/50
SAMPLED	02/14/74	02/14/74	02/15/51
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-HACKBERRY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11352	12692	11424
WELLHEAD PRESSURE,PSIG	2780	7770	5950
OPEN FLOW, MCFD	14300	706	90687
COMPONENT, MOLE PCT			
METHANE	94.0	92.8	88.5
ETHANE	2.8	3.1	5.5
PROPANE	0.9	1.1	2.7
N-BUTANE	0.2	0.2	0.6
ISOBUTANE	0.3	0.4	1.0
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.5	0.4	0.2
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	1.6	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1056	1058	1136
SPECIFIC GRAVITY	0.601	0.614	0.657

	INDEX 7654 SAMPLE 5165	INDEX 7655 SAMPLE 4693	INDEX 7656 SAMPLE 3759
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	COWTRAP	DAMON MOUND	DANBURY
WELL NAME	NO. 1	CONOCO FEE NO. 1	TEXAS RICE PROD. CO. NO. 1
LOCATION	ABSTRACT NO. A368	NOT GIVEN	NOT GIVEN
OWNER	BRAZOS OIL & GAS CO.	TEXAS CO.	HUMBLE & STANOLIND
COMPLETED	09/02/51	12/21/48	--/--/00
SAMPLED	01/27/52	03/12/49	04/01/44
FORMATION	MIOC-	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3067	3966	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1395	1596	2500
OPEN FLOW, MCFD	11000	13200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.7	98.1	89.2
ETHANE	0.6	0.4	8.8
PROPANE	0.1	0.2	---
N-BUTANE	0.0	TRACE	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	1.2	0.7	1.0
OXYGEN	0.1	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.4	0.6
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1008	1015	1061
SPECIFIC GRAVITY	0.568	0.570	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7657 SAMPLE 4663	INDEX 7658 SAMPLE 4664	INDEX 7659 SAMPLE 4666
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	DANBURY	DANBURY	DANBURY
WELL NAME	BENNETT OIL & GAS CO. NO. 6	ROBERSON ESTATE NO. 1	JOHN CHOWANEC, JR., NO. 1
LOCATION	MT&B RR SUR. A-265	HENRY AUSTIN SUR. A-13	HENRY AUSTIN SUR. A-13
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/24/49	05/02/48	10/20/48
SAMPLED	03/01/49	03/10/49	03/10/49
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8378	7545	8310
WELLHEAD PRESSURE,PSIG	3895	3450	3625
OPEN FLOW, MCFD	36000	38000	38000
COMPONENT, MOLE PCT			
METHANE	90.6	94.3	92.0
ETHANE	4.8	2.7	3.2
PROPANE	1.6	0.9	1.4
N-BUTANE	0.4	0.3	0.5
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.2	0.6	0.6
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.7	1.2
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1091	1057	1085
SPECIFIC GRAVITY	0.625	0.600	0.624

	INDEX 7660 SAMPLE 4964	INDEX 7661 SAMPLE 16182	INDEX 7662 SAMPLE 10886
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	DANBURY	DANBURY NW	HASTINGS
WELL NAME	DANBURY GAS UNIT NO. 1	ADA SHARPE NO. 1	EMIL GROTE NO. 14
LOCATION	H. AUSTIN LEA. SUR. NO. A-13	G. M. PATRICK SUR. 3, A-105	ACH&B SUR. 2, A-462
OWNER	HUMBLE OIL & REFINING CO.	ANSCHUTZ CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	08/23/50	04/03/80	02/22/67
SAMPLED	11/28/50	02/01/81	03/07/67
FORMATION	OLIG-FRIO	OLIG-FRIO	MIOC~
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9275	13661	5918
WELLHEAD PRESSURE,PSIG	4325	3650	1608
OPEN FLOW, MCFD	5750	4296	50000
COMPONENT, MOLE PCT			
METHANE	92.4	89.0	98.3
ETHANE	3.2	5.0	0.3
PROPANE	1.1	1.8	TRACE
N-BUTANE	0.4	0.4	0.0
ISOBUTANE	0.1	0.4	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.5	1.2	1.0
OXYGEN	0.2	0.0	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.3	1.6	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1061	1083	1001
SPECIFIC GRAVITY	0.618	0.637	0.563

	INDEX 7663 SAMPLE 13049	INDEX 7664 SAMPLE 13048	INDEX 7665 SAMPLE 12335
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	HASTINGS	HASTINGS E	HASTINGS W
WELL NAME	M. B. WILLIAMS NO. 5	R. O. SURFACE NO. 6	EMIL GROTE NO. 14
LOCATION	ACH&B SUR. NO.1, A-416	GB&B SUR. A-160	NOT GIVEN
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PETROLEUM CORP.
COMPLETED	03/17/70	02/21/70	07/13/70
SAMPLED	10/01/71	10/01/71	07/21/70
FORMATION	MIOC-HASTINGS M-6	MIOC-HASTINGS M-12	MIOC-HASTINGS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3301	4570	3690
WELLHEAD PRESSURE,PSIG	2074	1536	1512
OPEN FLOW, MCFD	210000	28000	16500
COMPONENT, MOLE PCT			
METHANE	99.1	97.7	97.3
ETHANE	0.1	0.9	0.4
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.5	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	1.8
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1008	1014	995
SPECIFIC GRAVITY	0.560	0.571	0.576

	INDEX 7666 SAMPLE 3697	INDEX 7667 SAMPLE 13631	INDEX 7668 SAMPLE 14532
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	LOCHRIDGE	MARTIN RANCH	MARTIN RANCH
WELL NAME	RAMSEY B NO. 1	T. MARTIN FEE NO. 1	T. MARTIN NO. 4
LOCATION	J. W. HALL SUR.	PERRY & AUSTIN SUR. A-106	PERRY & MARTIN SUR. A-106
OWNER	SHELL OIL CO.	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.
COMPLETED	09/02/37	01/08/73	02/14/74
SAMPLED	10/31/43	06/01/73	11/05/75
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6360	14600	14888
WELLHEAD PRESSURE,PSIG	2756	10300	9450
OPEN FLOW, MCFD	1000	56000	13645
COMPONENT, MOLE PCT			
METHANE	83.0	88.6	91.6
ETHANE	16.0	3.6	3.6
PROPANE	---	1.0	0.9
N-BUTANE	---	0.1	0.2
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	0.1	3.1	0.4
OXYGEN	0.2	0.7	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	2.4	2.9
HELIUM	0.00	0.01	TRACE
HEATING VALUE*	1128	1002	1034
SPECIFIC GRAVITY	0.642	0.628	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7669 SAMPLE 13827	INDEX 7670 SAMPLE 13828	INDEX 7671 SAMPLE 13829
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	OLD OCEAN	OLD OCEAN	OLD OCEAN
WELL NAME	OLD OCEAN UNIT NO. 27	OLD OCEAN UNIT NO. 148L	OLD OCEAN NO. 171
LOCATION	BATTLE, BERRY & WILLIAMS SUR	CHARLES BREEN LEAGUE	DAVID MCCORMICK LEAGUE
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	11/22/60	11/20/67	11/10/60
SAMPLED	11/26/73	11/26/73	11/26/73
FORMATION	OLIG-F-8	OLIG-LARSON	OLIG-F-7
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9538	10755	9342
WELLHEAD PRESSURE,PSIG	2600	1050	1500
OPEN FLOW, MCFD	2550	95000	18500
COMPONENT, MOLE PCT			
METHANE	90.5	90.1	89.9
ETHANE	3.4	4.1	5.2
PROPANE	0.9	1.7	2.1
N-BUTANE	0.2	0.3	0.5
ISOBUTANE	0.3	0.6	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	2.5	0.9	0.6
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.0	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1046	1092	1128
SPECIFIC GRAVITY	0.625	0.638	0.639

	INDEX 7672 SAMPLE 13830	INDEX 7673 SAMPLE 13831	INDEX 7674 SAMPLE 13832
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	OLD OCEAN	OLD OCEAN	OLD OCEAN
WELL NAME	OLD OCEAN UNIT NO. 105	OLD OCEAN UNIT NO. 223	OLD OCEAN UNIT NO. 110U
LOCATION	CHARLES BREEN LEAGUE	OLIVER JONES LEAGUE	CHARLES BREEN LEAGUE
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	07/31/53	08/09/67	05/01/71
SAMPLED	11/27/73	11/26/73	11/26/73
FORMATION	OLIG-F-13	OLIG-HELLMUTH	OLIG-F-9 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10170	12473	9629
WELLHEAD PRESSURE,PSIG	2712	2760	1850
OPEN FLOW, MCFD	7200	36400	10500
COMPONENT, MOLE PCT			
METHANE	93.3	95.1	87.2
ETHANE	3.4	2.1	3.7
PROPANE	0.7	0.7	1.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.8	0.3	4.9
OXYGEN	0.1	0.0	1.2
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1053	1038	1005
SPECIFIC GRAVITY	0.607	0.591	0.631

	INDEX 7675 SAMPLE 13833	INDEX 7676 SAMPLE 15175	INDEX 7677 SAMPLE 15238
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	OLD OCEAN	OYSTER CREEK	PEACH POINT
WELL NAME	OLD OCEAN UNIT NO. 127-T	SUN-FEE NO. 1	AUSTIN COLLEGE NO. 1
LOCATION	OLIVER JONES LEAGUE	JOHN MARTIN SUR. A-33	STEPHEN F. AUSTIN SUR. A-27
OWNER	AMOCO PRODUCTION CO.	HILLIARD OIL & GAS, INC.	MONSANTO CO.
COMPLETED	08/12/64	12/03/75	06/17/76
SAMPLED	11/26/73	12/27/77	03/17/78
FORMATION	OLIG-CAMPBELL	OLIG-FRIO	OLIG-FRIO A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10477	7000	11250
WELLHEAD PRESSURE,PSIG	1625	3300	7380
OPEN FLOW, MCFD	7000	64000	92045
COMPONENT, MOLE PCT			
METHANE	93.1	96.2	94.4
ETHANE	3.6	2.1	3.0
PROPANE	1.0	0.5	0.8
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	0.4	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.1	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1057	1049	1058
SPECIFIC GRAVITY	0.607	0.583	0.601

	INDEX 7678 SAMPLE 16101	INDEX 7679 SAMPLE 15237	INDEX 7680 SAMPLE 8908
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	PEACH POINT	PEACH POINT S	PERRY LANDING
WELL NAME	AUSTIN COLLEGE NO. 2	AUSTIN COLLEGE NO. 2	ST. OF TEXAS, TR.49016 NO. 1
LOCATION	STEPHEN F. AUSTIN SUR. A-27	STEPHEN F. AUSTIN SUR. A-27	TR. 49016
OWNER	MONSANTO CO.	MONSANTO CO.	MOBIL OIL CO.
COMPLETED	08/--/78	01/06/77	11/23/62
SAMPLED	10/15/80	--/--/00	03/27/63
FORMATION	OLIG-FRIO	OLIG-FRIO A	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11216	11350	10382
WELLHEAD PRESSURE,PSIG	5295	4839	4666
OPEN FLOW, MCFD	5730	28455	34000
COMPONENT, MOLE PCT			
METHANE	93.8	94.3	94.5
ETHANE	3.4	2.8	2.9
PROPANE	0.9	0.8	0.8
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.2	0.2	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.9	0.5
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1070	1062	1066
SPECIFIC GRAVITY	0.607	0.602	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7681 SAMPLE 3758	INDEX 7682 SAMPLE 15180	INDEX 7683 SAMPLE 14516
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	PLEDGER	PLEDGER	RATTLESNAKE MOUND
WELL NAME	HUNT NO. 2	L. L. SMITH NO. 8	SWEET NO. 1-A
LOCATION	NOT GIVEN	GRAY & MOORE SUR. A-65	ALFRED SWINGLE SUR. A-369
OWNER	DANCIGER OIL & REFINING CO.	EXXON CO., U.S.A.	GENERAL CRUDE OIL CO.
COMPLETED	--/--/33	08/04/76	03/27/75
SAMPLED	04/02/44	01/04/78	10/22/75
FORMATION	OLIG-FRIO	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6752	4806	7017
WELLHEAD PRESSURE,PSIG	3600	1941	2975
OPEN FLOW, MCFD	25000	490000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.0	94.8	93.0
ETHANE	7.2	2.7	5.4
PROPANE	---	0.9	1.4
N-BUTANE	---	0.3	0.3
ISOBUTANE	---	0.2	0.6
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	0.4	0.4	0.5
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1061	1071	1068
SPECIFIC GRAVITY	0.595	0.600	0.611

	INDEX 7684 SAMPLE 15149	INDEX 7685 SAMPLE 14870	INDEX 7686 SAMPLE 15177
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZORIA	BRAZORIA
FIELD	RATTLESNAKE MOUND	RATTLESNAKE MOUND W	SWEENEY
WELL NAME	E. A. SWEET NO. 2-A	SHELL POINT UNIT NO. 1	BERNARD RIVER LD. DEV. NO. 1
LOCATION	A. SWINGLE SUR. A-369	PERRY & AUSTIN SUR. A-106	OLIVER JONES SUR. A-78
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	AMOCO PRODUCTION CO.
COMPLETED	02/05/76	12/14/74	06/27/76
SAMPLED	11/05/77	12/14/76	12/29/77
FORMATION	MIOC-	OLIG-FRIO SCHENCK	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5288	14128	11670
WELLHEAD PRESSURE,PSIG	2000	6500	4375
OPEN FLOW, MCFD	15000	6092	2490
COMPONENT, MOLE PCT			
METHANE	97.8	84.0	93.8
ETHANE	1.0	9.2	3.1
PROPANE	0.2	2.0	0.7
N-BUTANE	TRACE	0.4	0.2
ISOBUTANE	TRACE	0.4	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.7	0.7	0.4
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.6	1.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1019	1117	1048
SPECIFIC GRAVITY	0.567	0.672	0.603

	INDEX 7687 SAMPLE 4768	INDEX 7688 SAMPLE 17203	INDEX 7689 SAMPLE 17204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BRAZOS	BRAZOS
FIELD	WILDCAT	BRYAN	BRYAN
WELL NAME	BLACKWELL NO. 1	HARPER NO. 1	AUSTIN HIGH SCHOOL NO. 1
LOCATION	I&GN SUR. NO. 27 A&22-B	S. F. AUSTIN SUR., A-62	S. F. AUSTIN SUR., A-62
OWNER	ROWAN & TEXAS GULF	MCMURREY PETROLEUM CO., INC.	MCMURREY PETROLEUM CO., INC.
COMPLETED	06/--/49	05/--/83	05/--/83
SAMPLED	10/--/49	02/10/84	02/10/84
FORMATION	OLIG-FRIO	CRET-WOODBINE	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10554	8300	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4990	850	NOT GIVEN
OPEN FLOW, MCFD	2	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	74.0	71.2
ETHANE	2.1	12.0	12.9
PROPANE	0.7	7.1	7.9
N-BUTANE	0.2	1.8	2.1
ISOBUTANE	0.1	0.7	0.7
N-PENTANE	0.0	0.3	0.3
ISOPENTANE	0.3	0.4	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.3	0.9	1.5
OXYGEN	0.1	TRACE	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	2.5	2.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1052	1275	1300
SPECIFIC GRAVITY	0.591	0.770	0.793

	INDEX 7690 SAMPLE 3880	INDEX 7691 SAMPLE 6295	INDEX 7692 SAMPLE 9716
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZOS	BRISCOE	BROOKS
FIELD	MILLICAN	NOT GIVEN	ALTA MESA
WELL NAME	WHARTON WEEMS NO. 1	RITCHIE NO. 2	GARCIA NO. 1-20
LOCATION	J. M. BARRERA SUR.	SEC. 34, BLK. 5, G&A SUR.	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	J. F. SMITH & J. W. COLLINS	STANDARD OIL CO. OF TEXAS
COMPLETED	04/02/44	--/--/00	04/30/63
SAMPLED	05/17/44	04/02/57	01/29/65
FORMATION	EOCE-WILCOX U	NOT GIVEN	OLIG-WICKSBURG
GEOLOGIC PROVINCE CODE	220	435	220
DEPTH, FEET	3096	NOT GIVEN	7300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	4300
OPEN FLOW, MCFD	5800	NOT GIVEN	8680
COMPONENT, MOLE PCT			
METHANE	96.9	89.3	90.6
ETHANE	1.0	0.0	5.1
PROPANE	---	0.0	1.8
N-BUTANE	---	0.0	0.5
ISOBUTANE	---	0.0	0.6
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.3
NITROGEN	1.2	8.2	0.5
OXYGEN	0.1	2.2	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	0.1	0.2
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1000	905	1125
SPECIFIC GRAVITY	0.573	0.602	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7693 SAMPLE 15527	INDEX 7694 SAMPLE 12175	INDEX 7695 SAMPLE 15214
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	ALTA MESA E	BOEDECKER W	CARL PETERS
WELL NAME	PEREZ G.U. NO. 1	ED RACHAL FOUNDATION NO. 1	D. J. SULLIVAN "F" NO. 6
LOCATION	LA ENCANTADA GRANT, A-97	JOSE NAVAZ SUR. 660; A-420	S. A. DEL ENCINAL GT, A-370
OWNER	SAMEDAN OIL CORP.	FOREST OIL CORP.	EXXON CO., U.S.A.
COMPLETED	04/1/76	09/01/69	12/03/73
SAMPLED	11/29/78	07/--/70	02/17/78
FORMATION	EOCE-LOMA BLANCA	OLIG-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8717	7566	7014
WELLHEAD PRESSURE,PSIG	6217	2722	2370
OPEN FLOW, MCFD	5800	4600	3400
COMPONENT, MOLE PCT			
METHANE	91.3	92.8	93.7
ETHANE	4.7	3.5	3.0
PROPANE	1.8	1.2	1.0
N-BUTANE	0.4	0.1	0.3
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.1	1.5	0.7
OXYGEN	0.0	0.2	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1114	1058	1081
SPECIFIC GRAVITY	0.627	0.601	0.607

	INDEX 7696 SAMPLE 9596	INDEX 7697 SAMPLE 12573	INDEX 7698 SAMPLE 14622
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	ENCINITAS	ENCINITAS E	FLOWELLA
WELL NAME	BRAULIA DE GARCIA NO. 23	HECTOR LOPEZ NO. 1	NEWMONT NO. 1
LOCATION	R. G. SALINAS SUR., A-480	LA RUICA GRANT A-481	SEC. 14, LOMA BLANCO GNT.
OWNER	STANDARD OIL CO. OF TEXAS	COASTAL STATES GAS PROD. CO.	CROWN CENTRAL PETROLEUM CORP
COMPLETED	--/--/63	03/10/70	05/17/74
SAMPLED	10/08/64	12/08/70	03/20/76
FORMATION	OLIG-SALINAS	OLIG-VICKSBURG	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9970	9100	10220
WELLHEAD PRESSURE,PSIG	3500	3500	5889
OPEN FLOW, MCFD	1240	37000	10000
COMPONENT, MOLE PCT			
METHANE	89.9	88.5	88.5
ETHANE	5.4	5.6	6.1
PROPANE	1.9	2.4	2.3
N-BUTANE	0.7	0.5	0.9
ISOBUTANE	0.5	0.8	0.7
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.2	0.2	TRACE
HEXANES PLUS	0.6	0.5	0.2
NITROGEN	TRACE	0.9	0.5
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	1.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1157	1157	1126
SPECIFIC GRAVITY	0.648	0.657	0.647

	INDEX 7699 SAMPLE 10649	INDEX 7700 SAMPLE 13900	INDEX 7701 SAMPLE 10186
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	KELSEY DEEP	KELSEY DEEP	LA ENCANTADA
WELL NAME	MCGILL BROS. NO. 350	MCGILL BROS. NO. 203 T	T. MANGEL NO. 1
LOCATION	SAN ANTONIO GRANT A-214	LA BLANCO GRANT	LA ENCANTADA GRANT, TRACT 4
OWNER	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.	BIRDWELL & BRADY
COMPLETED	10/21/65	09/09/72	04/14/62
SAMPLED	07/07/66	01/30/74	09/30/65
FORMATION	OLIG-VICKSBURG 26-A	OLIG-FRIO 19-K-NW	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7835	5906	9268
WELLHEAD PRESSURE,PSIG	2995	1910	6315
OPEN FLOW, MCFD	29000	8857	6100
COMPONENT, MOLE PCT			
METHANE	89.7	92.8	91.6
ETHANE	4.2	3.9	4.6
PROPANE	2.1	1.5	1.7
N-BUTANE	0.8	0.4	0.5
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.4	TRACE	0.1
ISOPENTANE	0.3	0.3	0.5
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	1.1	0.1	0.2
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1187	1098	1112
SPECIFIC GRAVITY	0.670	0.614	0.625

	INDEX 7702 SAMPLE 10114	INDEX 7703 SAMPLE 4385	INDEX 7704 SAMPLE 10257
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	LA GLORIA	MARIPOSA	MARIPOSA
WELL NAME	LAGLORIA GAS UNIT 49-T	D. J. SULLIVAN C-4	D. J. SULLIVAN NO. 2
LOCATION	BLK. 8, JACOBS SUBD.	TM RR CO. SUR. 151	KINGSVILLE DIST.; FLOYD SUR.
OWNER	SOCONY MOBIL OIL CO., INC.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/21/63	04/19/46	08/16/51
SAMPLED	09/09/65	11/14/47	10/29/65
FORMATION	OLIG-ONEIL	OLIG-FRIO	OLIG-VICKSBURG M-10
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6924	7502	8834
WELLHEAD PRESSURE,PSIG	1640	3535	3560
OPEN FLOW, MCFD	4400	22000	7220
COMPONENT, MOLE PCT			
METHANE	91.9	87.2	94.4
ETHANE	4.1	11.5	3.3
PROPANE	1.8	---	0.9
N-BUTANE	0.4	---	0.3
ISOBUTANE	0.4	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.3	---	0.1
NITROGEN	0.5	0.6	0.4
OXYGEN	0.2	0.4	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.3	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1110	1089	1073
SPECIFIC GRAVITY	0.623	0.619	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7705 SAMPLE 13839	INDEX 7706 SAMPLE 13536	INDEX 7707 SAMPLE 15907
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	MILLS BENNETT	PITA	RUCIAS N
WELL NAME	MILLS BENNETT FEE NO. 34	D. J. SULLIVAN NO. B-29F	CARTER RANCH NO. 1
LOCATION	PALO BLANCO GRANT A-258	SAN ANTONIO DE ENCINAL GRANT	LA RUCIO GRANT A-481
OWNER	MILLS BENNETT ESTATE	EXXON CO., U.S.A.	MCCORMICK OIL & GAS CORP.
COMPLETED	07/27/72	09/--/70	02/21/80
SAMPLED	12/21/73	02/15/73	02/17/80
FORMATION	OLIG-FRIO-L-3, SE6. 3	OLIG-FRIO	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5706	8254	10314
WELLHEAD PRESSURE,PSIG	1788	2975	7646
OPEN FLOW, MCFD	7170	33	16000
COMPONENT, MOLE PCT			
METHANE	89.6	93.6	85.4
ETHANE	4.5	3.6	7.8
PROPANE	2.4	1.2	3.4
N-BUTANE	0.6	0.2	0.7
ISOBUTANE	0.7	0.4	0.9
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.7	0.8	0.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.8
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1117	1078	1179
SPECIFIC GRAVITY	0.640	0.601	0.675

	INDEX 7708 SAMPLE 15986	INDEX 7709 SAMPLE 16099	INDEX 7710 SAMPLE 15524
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	RUCIAS N	RUCIAS N	SANTA FE E
WELL NAME	BARBARA LIPS "C" NO. 1	BARBARA LIPS "C" NO. 1	SANTA FE NO. 33-D
LOCATION	9 MI. SW RACHAL	VARGAS GRANT A-192	SAN SALVADOR DEL TULE GRANT
OWNER	MILLIARD OIL & GAS, INC.	MILLIARD OIL & GAS, INC.	EXXON CO., U.S.A.
COMPLETED	10/16/79	10/16/79	04/19/77
SAMPLED	06/18/80	10/14/80	11/14/78
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	OLIG-MASSIVE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10470	10470	8150
WELLHEAD PRESSURE,PSIG	8360	8500	1200
OPEN FLOW, MCFD	43000	3000	1700
COMPONENT, MOLE PCT			
METHANE	71.8	67.8	94.0
ETHANE	9.0	10.2	3.5
PROPANE	6.7	7.9	0.9
N-BUTANE	3.2	3.6	0.2
ISOBUTANE	2.2	3.7	0.3
N-PENTANE	1.3	1.5	0.1
ISOPENTANE	1.9	2.0	0.1
CYCLOPENTANE	0.2	0.3	TRACE
HEXANES PLUS	1.5	1.9	0.2
NITROGEN	0.1	0.0	0.5
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.2	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1499	1579	1074
SPECIFIC GRAVITY	0.878	0.928	0.601

	INDEX 7711 SAMPLE 3834	INDEX 7712 SAMPLE 10184	INDEX 7713 SAMPLE 15212
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROOKS	BROOKS
FIELD	SCOTT & MOPPER	SKIPPER	TIO AYOLA
WELL NAME	SCOTT & MOPPER NO. 1	SKIPPER G.U. 1 WELL NO. 1	R. J. KLEBERG, JR. NO. 17
LOCATION	SEC. 187, ACH&B SUR.	LA ENCANTADA GRANT, A-97	TIO AYOLA GRANT A-389
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & TEXAS CO.	EXXON CO., U.S.A.
COMPLETED	--/--/08	06/22/65	01/21/75
SAMPLED	05/04/44	10/01/65	02/15/78
FORMATION	OLIG-FRIO	OLIG-FRIO 1-2M	MIOC-B-25
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6536	8219	1258
WELLHEAD PRESSURE,PSIG	1700	5360	485
OPEN FLOW, MCFD	NOT GIVEN	54000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.4	90.0	98.2
ETHANE	11.3	4.7	0.2
PROPANE	---	1.8	TRACE
N-BUTANE	---	0.5	0.0
ISOBUTANE	---	0.4	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.2	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.2	0.0
NITROGEN	4.0	0.1	1.5
OXYGEN	0.2	0.0	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1057	1105	998
SPECIFIC GRAVITY	0.629	0.614	0.561

	INDEX 7714 SAMPLE 11594	INDEX 7715 SAMPLE 7959	INDEX 7716 SAMPLE 7963
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROOKS	BROWN	BROWN
FIELD	VIBORAS W	BROOKESMITH	BROOKESMITH
WELL NAME	LOS MUERTOS PASTURE NO. 90	LEWIS HENDERSON NO. 1-A	LEWIS & EMMA HENDERSON NO. 1
LOCATION	EL LUZERO GRANT A-199	NOT GIVEN	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	LEECO GAS & OIL CO.	LEECO GAS & OIL CO.
COMPLETED	03/23/67	--/--/00	--/--/00
SAMPLED	07/29/68	05/16/61	05/16/61
FORMATION	OLIG-FRIO I-12	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	220	425	425
DEPTH, FEET	7850	1214	1155
WELLHEAD PRESSURE,PSIG	2500	500	565
OPEN FLOW, MCFD	89000	250	3000
COMPONENT, MOLE PCT			
METHANE	78.1	80.7	81.2
ETHANE	3.9	2.8	1.9
PROPANE	1.5	1.5	0.8
N-BUTANE	0.5	0.6	0.2
ISOBUTANE	0.5	0.2	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	12.2	13.0	15.1
OXYGEN	2.9	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.6	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.01	0.40	0.40
HEATING VALUE*	949	949	892
SPECIFIC GRAVITY	0.678	0.651	0.641

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 7717 SAMPLE 7965	INDEX 7718 SAMPLE 7958	INDEX 7719 SAMPLE 7960
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROWN	BROWN	BROWN
FIELD	BROOKESMITH	BROOKESMITH E	BROOKESMITH E
WELL NAME	CONNAWAY NO. 1	MCNURLEN & KIRKPATRICK NO. 1	MCNURLEN & KIRKPATRICK NO. 6
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	LEECO GAS & OIL CO.	LEECO GAS & OIL CO.	LEECO GAS & OIL CO.
COMPLETED	--/--/00	06/--/59	02/--/60
SAMPLED	05/16/61	05/16/61	05/16/61
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1112	1262	1102
WELLHEAD PRESSURE,PSIG	575	613	635
OPEN FLOW, MCFD	2200	1100	4200
COMPONENT, MOLE PCT			
METHANE	81.6	77.0	79.6
ETHANE	1.7	3.7	4.4
PROPANE	0.6	1.7	1.9
N-BUTANE	0.1	0.4	0.4
ISOBUTANE	TRACE	0.3	0.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	14.9	16.1	12.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.40	0.50	0.40
HEATING VALUE*	880	914	964
SPECIFIC GRAVITY	0.635	0.666	0.660

	INDEX 7720 SAMPLE 7961	INDEX 7721 SAMPLE 7962	INDEX 7722 SAMPLE 7967
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROWN	BROWN	BROWN
FIELD	BROOKESMITH E	BROOKESMITH E	BROOKESMITH E
WELL NAME	BAXTER & KIRKPATRICK NO. 1	ZELMA FRY NO. 1-A	GRELLE-KIRKPATRICK NO. 1
LOCATION	NOT GIVEN	W. GUTHRIE SUR.	NOT GIVEN
OWNER	LEECO GAS & OIL CO.	LEECO GAS & OIL CO.	LEECO GAS & OIL CO.
COMPLETED	01/--/60	--/--/00	10/24/60
SAMPLED	05/16/61	05/16/61	05/16/61
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1286	1286	1223
WELLHEAD PRESSURE,PSIG	600	625	613
OPEN FLOW, MCFD	480	900	840
COMPONENT, MOLE PCT			
METHANE	77.3	77.0	78.1
ETHANE	3.7	5.8	3.9
PROPANE	1.6	1.7	1.6
N-BUTANE	0.4	0.5	0.3
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	15.8	15.8	14.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.50	0.50	0.50
HEATING VALUE*	919	929	927
SPECIFIC GRAVITY	0.667	0.674	0.662

	INDEX 7723 SAMPLE 4935	INDEX 7724 SAMPLE 4937	INDEX 7725 SAMPLE 10895
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROWN	BROWN	BROWN
FIELD	BROWN COUNTY REGULAR	BROWN COUNTY REGULAR	BROWN COUNTY REGULAR
WELL NAME	J. M. MOORE HEIRS NO. 1	G. W. WILLIAMS NO. 1	G. W. WILLIAMS NO. 1-A
LOCATION	J. O. BAILEY SUR. NO. 137	JOHN BECK SUR. NO. 792	J. BECK SUR. NO. 792
OWNER	HICKOK & REYNOLDS ROYALTY CO	HICKOK & REYNOLDS ROYALTY CO	KIRK & MEEB
COMPLETED	04/02/50	04/30/50	--/--/00
SAMPLED	08/21/50	08/21/50	02/21/67
FORMATION	PENN-MARBLE FALLS	PENN-FRY	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2714	1473	2732
WELLHEAD PRESSURE,PSIG	700	600	NOT GIVEN
OPEN FLOW, MCFD	4000	8500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.3	77.7	69.2
ETHANE	10.3	5.2	12.4
PROPANE	4.5	2.3	8.0
N-BUTANE	1.0	0.7	1.9
ISOBUTANE	0.3	0.1	0.5
N-PENTANE	0.2	0.2	0.5
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	6.6	12.8	6.3
OXYGEN	0.2	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.14	0.81	0.10
HEATING VALUE*	1136	986	1274
SPECIFIC GRAVITY	0.712	0.677	0.788

	INDEX 7726 SAMPLE 863	INDEX 7727 SAMPLE 7964	INDEX 7728 SAMPLE 7966
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROWN	BROWN	BROWN
FIELD	BROWNWOOD	BROWNWOOD S	BROWNWOOD S
WELL NAME	CAPPS	THOMPSON NO. 1	E. J. BALL NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	H. E. LUCAS	LEECO GAS & OIL CO.	LEECO GAS & OIL CO.
COMPLETED	--/--/00	10/29/59	09/18/58
SAMPLED	04/20/24	05/16/61	05/16/61
FORMATION	PENN-CADDO U	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1450	1141	1336
WELLHEAD PRESSURE,PSIG	725	608	517
OPEN FLOW, MCFD	1500	3650	600
COMPONENT, MOLE PCT			
METHANE	91.1	82.1	74.3
ETHANE	2.8	5.2	3.2
PROPANE	---	2.3	1.3
N-BUTANE	---	0.6	0.3
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	4.7	8.4	19.8
OXYGEN	0.8	0.0	0.0
ARGON	---	TRACE	0.1
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.30	0.30	0.60
HEATING VALUE*	973	1029	865
SPECIFIC GRAVITY	0.594	0.662	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7729 SAMPLE 7046	INDEX 7730 SAMPLE 15408	INDEX 7731 SAMPLE 12494
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BROWN	BURLESON	CALHOUN
FIELD	MAY W	CLAY NE	APPLING SE
WELL NAME	L. GARNETT & J. CLARK NO. 1	JESSE MOORE ESTATE NO. 2	TRULL HEIRS NO. 1
LOCATION	J. UDO SUR. NO. 16	J. B. CHANCE SUR. A-9	JAMES HUGHSON SUR. A-23
OWNER	CHAPMAN OIL CO.	MILL PRODUCTION CO.	MARKINS & CO.
COMPLETED	09/21/58	11/27/76	07/10/69
SAMPLED	04/20/59	10/10/78	10/02/70
FORMATION	PENN-MARBLE FALLS	CRET-AUSTIN CHALK	OLIG-MASSIVE
GEOLOGIC PROVINCE CODE	425	220	220
DEPTH, FEET	2552	11436	8320
WELLHEAD PRESSURE,PSIG	1020	4842	4650
OPEN FLOW, MCFD	150	30500	9800
COMPONENT, MOLE PCT			
METHANE	77.7	80.8	87.8
ETHANE	9.5	9.2	4.2
PROPANE	4.3	2.5	1.6
N-BUTANE	1.1	0.7	0.4
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.3	0.3	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	5.3	0.2	3.4
OXYGEN	0.0	0.0	0.7
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	5.2	0.3
HELIUM	0.20	TRACE	0.01
HEATING VALUE*	1154	1124	1081
SPECIFIC GRAVITY	0.711	0.710	0.646

	INDEX 7732 SAMPLE 13866	INDEX 7733 SAMPLE 16738	INDEX 7734 SAMPLE 9223
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	APPLING SE	CAVALLO	GREEN LAKE W
WELL NAME	FLORENCE M. TRULL NO. 1	B-8	NO. 1-LT
LOCATION	JAMES HUGHSON SUR. A-23	ST. TRACT 526-L	MUELLER G. U.
OWNER	ROBERT MOSBACHER	TENNECO OIL EXPL. & PROD. CO	PAN AMERICAN PETROLEUM CORP.
COMPLETED	12/02/71	--/--/79	12/--/61
SAMPLED	01/17/74	12/18/82	01/15/64
FORMATION	OLIG-MELBOURNE	OLIG-DISCORBIS	OLIG-FRIO & SHERIFF
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8237	10400	9115
WELLHEAD PRESSURE,PSIG	4812	1690	2300
OPEN FLOW, MCFD	12400	9	7322
COMPONENT, MOLE PCT			
METHANE	88.9	93.7	90.1
ETHANE	4.1	2.9	5.3
PROPANE	1.7	0.9	2.0
N-BUTANE	0.3	0.3	0.7
ISOBUTANE	0.8	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	3.0	0.4	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.5
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1078	1077	1129
SPECIFIC GRAVITY	0.638	0.610	0.638

	INDEX 7735 SAMPLE 12745	INDEX 7736 SAMPLE 12746	INDEX 7737 SAMPLE 13129
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	MEYSER	MEYSER	KELLER'S BAY
WELL NAME	M. T. MARSHALL NO. 11F	M. T. MARSHALL NO. 11D	STATE G.U. NO. 18
LOCATION	AGATON SISNEROS SUR. A-36	AGATON SISNEROS SUR. A-36	STATE TRACT 55, LAVACA BAY
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/70	--/--/70	02/10/70
SAMPLED	03/31/71	03/31/71	12/27/71
FORMATION	MICO-3500 FT SD.	MICO-3700 FT SD.	OLIG-MELBOURNE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3500	3700	8258
WELLHEAD PRESSURE,PSIG	1400	1405	600
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1900
COMPONENT, MOLE PCT			
METHANE	99.2	99.3	91.9
ETHANE	0.1	0.1	4.0
PROPANE	TRACE	TRACE	1.6
N-BUTANE	0.0	0.0	0.5
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	0.5	0.4	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1007	1008	1116
SPECIFIC GRAVITY	0.557	0.557	0.630

	INDEX 7738 SAMPLE 13130	INDEX 7739 SAMPLE 13522	INDEX 7740 SAMPLE 9599
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	KELLER'S BAY	KELLER'S CREEK	LAVACA BAY
WELL NAME	STATE G.U. NO. 18	L. B. GRIFFITH NO. 1	STATE TRACT 23 NO. 1-LT
LOCATION	STATE TRACT 55, LAVACA BAY	SAMUEL HOUSTON SUR. A-22	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	COTTON PETROLEUM CORP.	ALUMINUM CO. OF AMERICA
COMPLETED	02/10/70	06/17/71	05/23/64
SAMPLED	12/27/71	02/06/73	09/--/64
FORMATION	-FOESTER	-GRIFFITH	OLIG-FRIO L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8727	8787	9763
WELLHEAD PRESSURE,PSIG	600	3320	4430
OPEN FLOW, MCFD	34000	9000	13000
COMPONENT, MOLE PCT			
METHANE	91.9	85.2	88.6
ETHANE	3.8	7.9	5.6
PROPANE	1.6	3.2	2.4
N-BUTANE	0.9	0.7	0.8
ISOBUTANE	0.6	0.9	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.7	1.3	0.3
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.5
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1101	1164	1149
SPECIFIC GRAVITY	0.624	0.673	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7741 SAMPLE 9600	INDEX 7742 SAMPLE 10173	INDEX 7743 SAMPLE 11155
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	LAVACA BAY	LAVACA BAY	LAVACA BAY
WELL NAME	STATE TRACT 23 NO. 1-UT	STATE TRACT 7A NO. 1	STATE TRACT 26 NO. 3
LOCATION	NOT GIVEN	STATE TRACT 7A	LAVACA BAY
OWNER	ALUMINUM CO. OF AMERICA	CITIES SERVICE OIL CO.	ALUMINUM CO. OF AMERICA
COMPLETED	05/23/64	11/03/64	04/23/66
SAMPLED	09/--/64	09/30/65	10/10/67
FORMATION	OLIG-FRIO L	OLIG-FRIO	OLIG-FRIO F-33
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9588	8920	9538
WELLHEAD PRESSURE,PSIG	4226	3007	4604
OPEN FLOW, MCFD	15000	17200	63000
COMPONENT, MOLE PCT			
METHANE	89.1	91.9	88.4
ETHANE	5.7	3.7	5.4
PROPANE	2.4	1.5	2.3
N-BUTANE	0.7	0.3	0.6
ISOBUTANE	0.6	0.5	0.8
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.1	1.1	1.0
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.7
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1142	1077	1126
SPECIFIC GRAVITY	0.647	0.617	0.652

	INDEX 7744 SAMPLE 11156	INDEX 7745 SAMPLE 17844	INDEX 7746 SAMPLE 5037
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	LAVACA BAY	LAVACA BAY	LONG MOTT
WELL NAME	STATE TRACT 26 NO. 3	STATE TRACT 39 NO. 3	JAMIE MYNES NO. 1
LOCATION	NOT GIVEN	STATE TRACT 39	J. F. DE LA FUENTES SUR.
OWNER	ALUMINUM CO. OF AMERICA	NEUMIN PRODUCTION CO.	QUINTANA PETROLEUM CORP.
COMPLETED	04/23/66	11/25/84	12/07/50
SAMPLED	10/10/67	09/24/85	04/01/51
FORMATION	OLIG-FRIO F-33	OLIG-FRIO F-40A	OLIG-FRIO U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9538	10400	7788
WELLHEAD PRESSURE,PSIG	4618	3900	4864
OPEN FLOW, MCFD	63000	3250	10200
COMPONENT, MOLE PCT			
METHANE	89.0	87.3	90.3
ETHANE	5.5	6.1	5.1
PROPANE	2.3	2.7	2.1
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.6	0.7	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.6	0.4	0.2
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	1.2	0.6
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1128	1147	1121
SPECIFIC GRAVITY	0.644	0.662	0.635

	INDEX 7747 SAMPLE 4339	INDEX 7748 SAMPLE 13117	INDEX 7749 SAMPLE 13118
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	MATAGORDA BAY	MAUDE B. TRAYLOR	MAUDE B. TRAYLOR
WELL NAME	STATE OF TEXAS NO. 1 TR. 118	MAUDE B. TRAYLOR NO. 5	MAUDE B. TRAYLOR NO. 3
LOCATION	TRACT 118, MATAGORDA BAY	PHILLIP DIMMIT SUR. A-11	PHILLIP DIMMIT SUR. A-11
OWNER	TEXAS CO.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	--/--/00	09/22/70	09/14/70
SAMPLED	08/12/47	12/16/71	12/16/71
FORMATION	MIOC-	OLIG-FRIO 35A	OLIG-FRIO 85
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4716	8714	9957
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4712	5932
OPEN FLOW, MCFD	40000	7000	54000
COMPONENT, MOLE PCT			
METHANE	98.8	89.0	87.5
ETHANE	0.6	5.4	6.9
PROPANE	---	2.4	2.7
N-BUTANE	---	0.5	0.8
ISOBUTANE	---	0.8	0.4
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.3
NITROGEN	0.2	0.6	0.2
OXYGEN	0.2	0.0	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1012	1136	1165
SPECIFIC GRAVITY	0.561	0.647	0.663

	INDEX 7750 SAMPLE 12041	INDEX 7751 SAMPLE 4861	INDEX 7752 SAMPLE 12513
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	PANTHER REEF SW	POWDERHORN	POWDERHORN
WELL NAME	STATE TRACT 90 NO. 3	POWDER HORN NO. 2	STATE OF TEXAS NO. 15-C
LOCATION	STATE TRACT 90	SEC-4, BLK.J, JUAN CANO SUR.	STATE OF TEXAS TRACT NO. 49
OWNER	SUN OIL CO.	BRAZOS OIL & GAS CO.	DOW CHEMICAL CO.
COMPLETED	08/26/68	08/05/50	05/16/69
SAMPLED	09/17/69	04/07/50	10/21/70
FORMATION	OLIG-FRIO	MIOC-	MIOC-2-A SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8706	4640	4815
WELLHEAD PRESSURE,PSIG	5152	2000	1050
OPEN FLOW, MCFD	15000	23	14800
COMPONENT, MOLE PCT			
METHANE	87.9	93.8	95.2
ETHANE	6.0	4.6	3.0
PROPANE	2.8	0.3	0.1
N-BUTANE	0.6	0.1	0.0
ISOBUTANE	1.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.8	0.6	1.2
OXYGEN	0.0	0.2	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1152	1051	1021
SPECIFIC GRAVITY	0.654	0.589	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7753 SAMPLE 10528	INDEX 7754 SAMPLE 5159	INDEX 7755 SAMPLE 14989
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALHOUN	CALHOUN
FIELD	POWDERHORN RANCH	STEAMBOAT PASS	STEAMBOAT PASS
WELL NAME	STOFER-EIBAND NO. 1	STATE LEASE 35951 NO. 172-1	STATE TRACT 184 NO. 1
LOCATION	JUAN CANO SUR. A-5	SAN ANTONIO BAY ST TRACT 172	ESPRITU SANTO BAY
OWNER	VIKING DRILLING CO.	ALCOA MINING CO.	HOUSTON OIL & MINERALS CORP.
COMPLETED	11/11/65	06/03/51	10/05/75
SAMPLED	04/19/66	03/07/52	05/01/77
FORMATION	MIOC-OAKVILLE	MIOC-OAKVILLE	MIOC-
GEOLOGIC PROVINCE CODE	220	220	954
DEPTH, FEET	3498	2630	1700
WELLHEAD PRESSURE,PSIG	1498	1155	700
OPEN FLOW, MCFD	6500	5900	1200
COMPONENT, MOLE PCT			
METHANE	96.9	97.9	97.0
ETHANE	0.8	0.1	0.1
PROPANE	0.2	0.1	TRACE
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	1.7	1.4	2.8
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.2	0.1
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1015	1002	984
SPECIFIC GRAVITY	0.574	0.568	0.567

	INDEX 7756 SAMPLE 12109	INDEX 7757 SAMPLE 10078	INDEX 7758 SAMPLE 16629
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALHOUN	CALLAHAN	CALLAHAN
FIELD	STOFER	CALLAHAN COUNTY REGULAR	CALLAHAN NE
WELL NAME	MARY A. STOFER NO. 1	OSCAR ROSE NO. 1	DYER 2988 NO.2
LOCATION	WM. P. LEWIS SUR. A-100	SEC. 8, BLK 8, SPRR SUR.	SEC. 2988, TE&L SUR., A-464
OWNER	MAYFAIR MINERALS, INC.	DIXON DRILLING CO.	JONES CO.
COMPLETED	03/24/69	07/25/64	09/18/81
SAMPLED	11/09/69	08/01/65	08/30/82
FORMATION	OLIG-BRAUN	PENN-MORRIS	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	220	425	425
DEPTH, FEET	8090	3397	3870
WELLHEAD PRESSURE,PSIG	2907	1254	1311
OPEN FLOW, MCFD	4500	9200	4600
COMPONENT, MOLE PCT			
METHANE	90.2	70.0	52.7
ETHANE	4.2	8.4	16.8
PROPANE	1.9	4.7	12.1
N-BUTANE	0.5	1.3	4.6
ISOBUTANE	0.6	0.6	2.3
N-PENTANE	0.2	0.3	1.6
ISOPENTANE	0.4	0.3	1.0
CYCLOPENTANE	0.1	0.1	0.7
HEXANES PLUS	0.2	0.2	1.6
NITROGEN	1.8	13.6	6.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.6
HELIUM	0.01	0.34	0.05
HEATING VALUE*	1116	1085	1601
SPECIFIC GRAVITY	0.635	0.747	0.998

	INDEX 7759 SAMPLE 8152	INDEX 7760 SAMPLE 16935	INDEX 7761 SAMPLE 12629
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALLAHAN	CALLAHAN	CALLAHAN
FIELD	HUTCHINSON	LAURA MAE HILL	MYERS
WELL NAME	R. D. HUTCHINSON NO. 1	WINDHAM NO. 3	MAGGIE SHAFFRINA
LOCATION	BBB&C SUR. SEC. 119	GEORGE HANCOCK SUR.342,A-245	BB&C RR CO. SUR.
OWNER	FULWILER, WATKINS & FRALEY	LE CLAIR OPERATING CO., INC.	DIXON OIL CO.
COMPLETED	05/17/54	05/16/83	--/--/00
SAMPLED	08/10/61	05/15/83	01/13/72
FORMATION	PENN-BEND CONGLOMERATE	ORDO-ELLENBURGER	CRET-GARDNER
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4112	4370	3600
WELLHEAD PRESSURE,PSIG	1080	1425	500
OPEN FLOW, MCFD	1100	15100	895
COMPONENT, MOLE PCT			
METHANE	71.0	68.4	75.9
ETHANE	11.8	9.0	6.2
PROPANE	4.8	5.2	3.1
N-BUTANE	1.2	1.4	0.7
ISOBUTANE	0.7	0.5	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	9.0	12.1	12.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.2	0.0
CARBON DIOXIDE	0.2	1.4	0.2
HELIUM	0.10	0.47	0.34
HEATING VALUE*	1155	1099	1030
SPECIFIC GRAVITY	0.743	0.763	0.701

	INDEX 7762 SAMPLE 4749	INDEX 7763 SAMPLE 14756	INDEX 7764 SAMPLE 8957
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALLAHAN	CALLAHAN	CALLAHAN
FIELD	NOT GIVEN	PUTNAM NE	WILDCAT
WELL NAME	MYRTLE WILSON NO. 1	TARBROUGH NO. 1	BROWN NO. 1
LOCATION	BLK. 1, SUR. NO. 6	SEC. 3197, TE&L SUR. A508	SEC. 80, BAYLAND ASTLUM SUR.
OWNER	SKELLY OIL CO.	DALLAS PRODUCTION, INC.	W. C. CUMMINGS & T. STEWART
COMPLETED	12/--/48	03/16/75	04/10/63
SAMPLED	05/27/49	09/14/76	05/09/63
FORMATION	NOT GIVEN	PENN-CONGLOMERATE	CRET-GARDNER
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	NOT GIVEN	3952	2614
WELLHEAD PRESSURE,PSIG	1380	1535	1070
OPEN FLOW, MCFD	2190	2700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.5	72.1	77.7
ETHANE	8.6	10.1	3.4
PROPANE	3.1	4.4	1.4
N-BUTANE	0.9	1.2	0.3
ISOBUTANE	0.2	0.4	TRACE
N-PENTANE	0.3	0.3	TRACE
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	13.6	10.6	16.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.49	0.34	0.50
HEATING VALUE*	1030	1110	905
SPECIFIC GRAVITY	0.717	0.731	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7765 SAMPLE 9072	INDEX 7766 SAMPLE 10894	INDEX 7767 SAMPLE 14371
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CALLAHAN	CALLAHAN	CAMERON
FIELD	WILDCAT	WILDCAT	MOLLY BEACH
WELL NAME	NO. 2A	MYRTLE WILSON NO. 1	STATE TRACT 713 NO. 2-L
LOCATION	SEC. 79, BOA SUR.	LAVACA CO. SCHOOL LAND SEC.	LAGUNA MADRE BLK. 713
OWNER	SLIP INC.	SKELLY OIL CO.	TEXACO INC.
COMPLETED	08/15/63	--/--/00	11/09/73
SAMPLED	08/28/63	02/22/67	05/13/75
FORMATION	CRET-GARDNER	PENN-DUFFER	MIOC-LM-8
GEOLOGIC PROVINCE CODE	425	425	220
DEPTH, FEET	2620	3798	7495
WELLHEAD PRESSURE, PSIG	1270	1265	2900
OPEN FLOW, MCFD	8	3000	8711
COMPONENT, MOLE PCT			
METHANE	78.1	72.0	95.8
ETHANE	3.5	8.9	2.1
PROPANE	1.4	3.6	0.3
N-BUTANE	0.2	1.0	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	15.7	13.0	1.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.52	0.50	0.01
HEATING VALUE*	909	1045	1016
SPECIFIC GRAVITY	0.658	0.716	0.575

	INDEX 7768 SAMPLE 10702	INDEX 7769 SAMPLE 10747	INDEX 7770 SAMPLE 14589
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CAMERON	CAMERON	CAMERON
FIELD	SAN MARTIN	SAN MARTIN	VISTA DEL MAR
WELL NAME	GATEWOOD NEWBERRY NO. 1-L	GATEWOOD NEWBERRY NO. 1	BROWNSVILLE N.D. NO. 1
LOCATION	SAN MARTIN GRANT	H. M. SKELTON SUR. A-269	SAN MARTIN GRANT, A-6
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	03/03/65	03/03/65	12/01/73
SAMPLED	08/26/66	10/13/66	02/20/76
FORMATION	MIOC-	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9385	8943	7212
WELLHEAD PRESSURE, PSIG	4634	3657	1200
OPEN FLOW, MCFD	8600	19500	11300
COMPONENT, MOLE PCT			
METHANE	95.9	96.0	96.1
ETHANE	1.9	1.7	1.8
PROPANE	0.4	0.3	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.6	1.5	1.5
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1016	1011	1014
SPECIFIC GRAVITY	0.580	0.576	0.574

	INDEX 7771 SAMPLE 7375	INDEX 7772 SAMPLE 7426	INDEX 7773 SAMPLE 8013
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	BOBBITT	BOBBITT	BOBBITT
WELL NAME	BOBBITT NO. 1	BOBBITT NO. 1	VANCE NO. 1
LOCATION	SEC. 95, TTRR SUR.	SEC. 95, BLK. 2, TT&RR SUR.	SEC. 41, BLK. T, W&NW SUR.
OWNER	TEXAS-GULF PRODUCING CO.	TEXAS GULF PRODUCING CO.	TEXAS GULF PRODUCING CO.
COMPLETED	02/06/60	--/--/00	--/--/00
SAMPLED	02/06/60	03/01/60	06/11/61
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3306	3247	3235
WELLHEAD PRESSURE, PSIG	250	497	530
OPEN FLOW, MCFD	450	9500	4400
COMPONENT, MOLE PCT			
METHANE	57.4	59.7	59.1
ETHANE	2.0	2.0	2.4
PROPANE	0.7	0.9	0.5
N-BUTANE	0.1	0.0	0.1
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	34.1	35.2	34.6
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	0.0	0.8
HELIUM	2.00	2.00	2.20
HEATING VALUE*	639	664	661
SPECIFIC GRAVITY	0.730	0.711	0.717

	INDEX 7774 SAMPLE 11662	INDEX 7775 SAMPLE 11663	INDEX 7776 SAMPLE 11667
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	BOBBITT	BOBBITT	BOBBITT
WELL NAME	BOBBITT NO. 1	BOBBITT NO. 1	MARTIN L. VANCE NO. 1
LOCATION	SEC. 95, BLK 2, TTRR SUR.	SEC. 95, BLK 2, TTRR SUR.	SEC. 1, BLK. T, W&NW SUR.
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	03/01/60	03/01/60	06/19/61
SAMPLED	10/10/68	10/09/68	10/11/68
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3239	3239	3367
WELLHEAD PRESSURE, PSIG	524	524	533
OPEN FLOW, MCFD	9600	9600	9600
COMPONENT, MOLE PCT			
METHANE	60.4	59.3	59.9
ETHANE	2.1	2.2	2.4
PROPANE	0.6	0.6	0.6
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	34.6	35.5	34.8
OXYGEN	0.2	0.3	0.0
ARGON	0.1	0.2	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	1.90	1.93	2.11
HEATING VALUE*	665	656	665
SPECIFIC GRAVITY	0.709	0.715	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7777 SAMPLE 13764	INDEX 7778 SAMPLE 13779	INDEX 7779 SAMPLE 6863
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	BOBBITT	BOBBITT	NOT GIVEN
WELL NAME	LOOTEN NO. 1	LOOTEN NO. 1	MAUDIE NO. 1
LOCATION	SEC. 86, BLK.2, TTRR SUR.	SEC. 86, BLK.2, TTRR SUR.	SEC. 30, BLK. 2
OWNER	HUNTER OIL CORP.	HUNTER OIL CORP.	NAVAJO NATURAL GAS CORP.
COMPLETED	10/23/73	10/23/73	--/--/00
SAMPLED	10/25/73	10/25/73	--/--/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3342	3304	NOT GIVEN
WELLHEAD PRESSURE,PSIG	487	475	NOT GIVEN
OPEN FLOW, MCFD	100	250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.3	59.1	47.1
ETHANE	1.9	2.0	16.3
PROPANE	0.5	0.5	16.9
N-BUTANE	0.0	0.0	6.7
ISOBUTANE	0.0	0.0	3.5
N-PENTANE	0.0	0.0	1.5
ISOPENTANE	0.0	0.0	2.2
CYCLOPENTANE	0.0	0.0	0.4
HEXANES PLUS	0.0	0.0	1.2
NITROGEN	32.6	33.9	4.0
OXYGEN	TRACE	TRACE	0.2
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.9	2.6	0.1
HELIUM	1.67	1.74	0.20
HEATING VALUE*	607	647	1787
SPECIFIC GRAVITY	0.774	0.728	1.086

	INDEX 7780 SAMPLE 8014	INDEX 7781 SAMPLE 6555	INDEX 7782 SAMPLE 11215
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	NOT GIVEN	PANHANDLE	PANHANDLE
WELL NAME	MCDOWELL NO. 1	MCCRAY NO. 4	MCCONNELL NO. 6
LOCATION	SEC. 12, BLK. 7, I&GN SUR.	SEC. 2, BLK. 2, TT&RR SUR.	SEC. 67, BLK. 4, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	R. L. TRIPPLEHORN
COMPLETED	10/24/58	10/23/56	10/10/63
SAMPLED	06/23/61	05/20/58	11/10/67
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2912	3252	3204
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	70
OPEN FLOW, MCFD	NOT GIVEN	768	50
COMPONENT, MOLE PCT			
METHANE	62.5	66.4	68.9
ETHANE	5.0	4.6	8.6
PROPANE	3.4	2.9	6.9
N-BUTANE	0.9	1.1	3.5
ISOBUTANE	0.6	0.6	1.9
N-PENTANE	0.2	0.3	0.9
ISOPENTANE	0.1	0.3	1.7
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	25.9	20.3	5.7
OXYGEN	0.0	2.9	0.0
ARGON	0.1	0.2	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	1.30	0.30	0.19
HEATING VALUE*	879	927	1391
SPECIFIC GRAVITY	0.747	0.753	0.856

	INDEX 7783 SAMPLE 11216	INDEX 7784 SAMPLE 11217	INDEX 7785 SAMPLE 11218
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
WELL NAME	MCCONNELL A NO. 5	MCCONNELL A NO. 4	MCCONNELL A NO. 8
LOCATION	SEC. 67, BLK. 4, I&GN SUR.	SEC. 67, BLK. 4, I&GN SUR.	SEC. 67, BLK. 4, I&GN SUR.
OWNER	R. L. TRIPPLEHORN	R. L. TRIPPLEHORN	R. L. TRIPPLEHORN
COMPLETED	07/12/66	11/25/65	10/01/66
SAMPLED	11/10/67	11/10/67	11/10/67
FORMATION	PENN-ARKOSIC & GRANITE WASH	PENN-ARKOSIC & GRANITE WASH	PENN-ARKOSIC & GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3078	NOT GIVEN	3204
WELLHEAD PRESSURE,PSIG	70	NOT GIVEN	70
OPEN FLOW, MCFD	100	NOT GIVEN	50
COMPONENT, MOLE PCT			
METHANE	48.8	60.7	62.3
ETHANE	18.2	11.7	14.7
PROPANE	16.1	11.2	11.2
N-BUTANE	5.9	4.7	3.6
ISOBUTANE	2.8	2.4	1.8
N-PENTANE	1.2	1.5	0.6
ISOPENTANE	1.8	1.5	1.1
CYCLOPENTANE	0.3	0.1	0.3
HEXANES PLUS	0.9	1.0	0.5
NITROGEN	3.3	4.6	3.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.5
HELIUM	0.03	0.12	0.07
HEATING VALUE*	1718	1538	1477
SPECIFIC GRAVITY	1.044	0.939	0.890

	INDEX 7786 SAMPLE 11219	INDEX 7787 SAMPLE 11220	INDEX 7788 SAMPLE 837
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE	PANHANDLE	PANHANDLE W
WELL NAME	MCCONNELL A NO. 1	MCCONNELL A NO. 6	TEXAS CO. NO. 2
LOCATION	SEC. 67, BLK. 4, I&GN SUR.	SEC. 67, BLK. 4, I&GN SUR.	SEC. 92, BLK. 5
OWNER	R. L. TRIPPLEHORN	R. L. TRIPPLEHORN	TEXAS CO.
COMPLETED	08/26/64	07/15/67	--/--/00
SAMPLED	11/10/67	11/10/67	--/--/00
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3228	3268	2000
WELLHEAD PRESSURE,PSIG	70	70	430
OPEN FLOW, MCFD	350	100	17000
COMPONENT, MOLE PCT			
METHANE	72.7	62.2	74.6
ETHANE	7.9	13.4	18.0
PROPANE	6.2	11.0	---
N-BUTANE	2.5	3.9	---
ISOBUTANE	1.2	1.8	---
N-PENTANE	0.8	0.7	---
ISOPENTANE	0.8	1.4	---
CYCLOPENTANE	0.2	0.3	---
HEXANES PLUS	0.6	0.8	---
NITROGEN	6.6	3.9	6.7
OXYGEN	0.2	TRACE	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	0.19	0.10	0.33
HEATING VALUE*	1279	1490	1078
SPECIFIC GRAVITY	0.791	0.904	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7789 SAMPLE 839	INDEX 7790 SAMPLE 980	INDEX 7791 SAMPLE 981
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	TEXAS CO. NO. 1	M. C. BURNETT NO. 1	S. B. BURNETT NO. 4
LOCATION	SEC. 114, BLK. 5	SEC. 90 BLK. 5, I&GN SUR.	SEC. 114, BLK. 5, I&GN SUR.
OWNER	TEXAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	--/--/00	08/--/24	09/--/24
SAMPLED	--/--/00	01/25/25	01/20/25
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2000	2535	2760
WELLHEAD PRESSURE,PSIG	380	448	485
OPEN FLOW, MCFD	25000	100	29000
COMPONENT, MOLE PCT			
METHANE	72.9	71.0	73.6
ETHANE	18.9	19.9	17.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.4	8.2	7.4
OXYGEN	0.2	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.5
HELIUM	0.38	0.33	0.36
HEATING VALUE*	1077	1076	1065
SPECIFIC GRAVITY	0.681	0.693	0.679

	INDEX 7792 SAMPLE 982	INDEX 7793 SAMPLE 1013	INDEX 7794 SAMPLE 1014
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	S. B. BURNETT NO. 3	BURNETT ESTATE NO. 1	S. B. BURNETT NO. 1
LOCATION	SEC. 108, BLK. 5, I&GN SUR.	SEC. 91, BLK. 5, I&GN SUR.	SEC. 118, BLK. 5, I&GN SUR.
OWNER	TEXAS CO.	GULF PRODUCTION CO.	GULF PRODUCTION CO.
COMPLETED	06/--/24	09/--/24	--/--/20
SAMPLED	01/19/25	03/22/25	03/22/25
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3031	2335	2410
WELLHEAD PRESSURE,PSIG	450	455	450
OPEN FLOW, MCFD	30000	15000	80000
COMPONENT, MOLE PCT			
METHANE	71.0	70.3	66.7
ETHANE	19.9	19.7	18.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.7	9.5	13.1
OXYGEN	0.4	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.2	0.6
HELIUM	0.35	0.29	0.38
HEATING VALUE*	1076	1065	1014
SPECIFIC GRAVITY	0.691	0.694	0.709

	INDEX 7795 SAMPLE 1015	INDEX 7796 SAMPLE 1181	INDEX 7797 SAMPLE 1304
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	S. B. BURNETT NO. 2	NO. 2 MARLAND	BIVINS B-3
LOCATION	SEC. 106, BLK. 5	SEC. --, BLK. 5, I&GN SUR.	SEC. 15, BLK. T2, GB&CNG SUR
OWNER	GULF PRODUCTION CO.	MARLAND OIL CO. OF TEXAS	AMARILLO OIL CO.
COMPLETED	--/--/20	--/--/00	04/26/26
SAMPLED	03/22/25	11/10/25	09/24/26
FORMATION	PERM-	PERM-	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2525	2955	NOT GIVEN
WELLHEAD PRESSURE,PSIG	450	400	430
OPEN FLOW, MCFD	20000	NOT GIVEN	30000
COMPONENT, MOLE PCT			
METHANE	69.8	70.5	66.7
ETHANE	19.1	20.8	21.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.0	7.1	9.7
OXYGEN	0.4	0.4	1.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.8	0.5
HELIUM	0.34	0.33	0.45
HEATING VALUE*	1049	1087	1065
SPECIFIC GRAVITY	0.695	0.695	0.711

	INDEX 7798 SAMPLE 1643	INDEX 7799 SAMPLE 1644	INDEX 7800 SAMPLE 1645
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	S. B. BURNETT B-1	S. B. BURNETT A-5	S. B. BURNETT J-1
LOCATION	SEC. 101, BLK. 4, I&GN SUR.	SEC. 116, BLK. 5, I&GN SUR.	SEC. 121, BLK. 5, I&GN SUR.
OWNER	KAY COUNTY GAS CO.	KAY COUNTY GAS CO.	KAY COUNTY GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/25/28	05/25/28	05/25/28
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	68.5	71.0
ETHANE	19.2	21.5	19.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.0	9.1	8.5
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.27	0.37	0.44
HEATING VALUE*	1086	1079	1072
SPECIFIC GRAVITY	0.681	0.701	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7801 SAMPLE 2079	INDEX 7802 SAMPLE 2080	INDEX 7803 SAMPLE 2284
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	S. B. BURNETT B-1	S. B. BURNETT C-3	BIVINS A-1
LOCATION	SEC. 101, BLK. 4, I&GN SUR.	SEC. 105, BLK. 5, I&GN SUR.	SEC. 42, BLK. M-20, G&M SUR.
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	RED RIVER GAS CO.
COMPLETED	05/25/26	10/19/26	04/28/26
SAMPLED	06/25/30	06/25/30	02/09/31
FORMATION	PERM-	PERM-	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2935	2880	2000
WELLHEAD PRESSURE,PSIG	380	345	424
OPEN FLOW, MCFD	14000	24000	13680
COMPONENT, MOLE PCT			
METHANE	71.0	69.7	74.0
ETHANE	19.4	22.0	17.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.4	7.5	8.2
OXYGEN	0.5	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.3	0.1
HELIUM	0.26	0.33	0.48
HEATING VALUE*	1067	1100	1056
SPECIFIC GRAVITY	0.692	0.697	0.672

	INDEX 7804 SAMPLE 2287	INDEX 7805 SAMPLE 2289	INDEX 7806 SAMPLE 3379
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-4	DEAHL A-1	POLING NO. A-1
LOCATION	SEC. 44, BLK M-20, G&M SUR.	SEC. 5, BLK 5, B&B SUR.	SEC. 23, BLK. S, H&GN SUR.
OWNER	RED RIVER GAS CO.	RED RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	09/04/30	12/27/26	--/--/00
SAMPLED	02/09/31	02/09/31	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2265	2200	NOT GIVEN
WELLHEAD PRESSURE,PSIG	424	424	NOT GIVEN
OPEN FLOW, MCFD	19000	15000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.6	74.5	70.0
ETHANE	16.3	16.5	19.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.4	8.1	9.4
OXYGEN	0.1	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.52	0.53	0.51
HEATING VALUE*	1048	1050	1059
SPECIFIC GRAVITY	0.669	0.671	0.692

	INDEX 7807 SAMPLE 3380	INDEX 7808 SAMPLE 3386	INDEX 7809 SAMPLE 3612
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. D-1	BOST NO. C-2	MARTIN NO. 1
LOCATION	SEC. 1, BLK. Y-2, TTRR SUR.	SEC. 10, BLK. Y-2, TTRR SUR.	SEC. 66, BLK. 7, I&GN SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	NORTHERN NATURAL GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	03/01/43
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.6	70.4	69.1
ETHANE	19.7	19.1	21.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.7	9.4	8.6
OXYGEN	0.3	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.49	0.52	0.35
HEATING VALUE*	1068	1055	1085
SPECIFIC GRAVITY	0.689	0.690	0.697

	INDEX 7810 SAMPLE 3613	INDEX 7811 SAMPLE 3614	INDEX 7812 SAMPLE 3615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	OSBORNE NO. 1	YICARS NO. 1	THOMPSON NO. 1
LOCATION	SEC. 68, BLK. 7, I&GN SUR.	SEC. 234, BLK. B-2, H&GN SUR	SEC. 247, BLK. B-2, H&GN SUR
OWNER	H&GT, HARRINGTON & MARSH	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
COMPLETED	06/30/39	--/--/00	--/--/00
SAMPLED	03/01/43	03/01/43	03/01/43
FORMATION	PERM-CHASE GROUP	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2955	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	386	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	20800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.1	70.0	69.6
ETHANE	19.1	19.7	19.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	19.9	9.2	9.6
OXYGEN	0.1	0.7	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.79	0.32	0.39
HEATING VALUE*	951	1062	1064
SPECIFIC GRAVITY	0.728	0.693	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7813 SAMPLE 3616	INDEX 7814 SAMPLE 3617	INDEX 7815 SAMPLE 3619
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	SMOOT NO. 1	HODGES NO. 1	HODGE NO. 1
LOCATION	SEC. 87, BLK. 7, I&GN SUR.	SEC. 67, BLK. 7, I&GN SUR.	SEC. 112, BLK. 7, I&GN SUR.
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	MAGY, HARRINGTON & MARSH
COMPLETED	--/--/00	--/--/00	06/07/48
SAMPLED	03/01/43	03/01/43	03/01/43
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2575
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	387
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2650
COMPONENT, MOLE PCT			
METHANE	70.6	69.0	61.3
ETHANE	19.2	18.6	17.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.6	11.5	19.8
OXYGEN	0.2	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.30	0.49	1.03
HEATING VALUE*	1059	1032	938
SPECIFIC GRAVITY	0.690	0.694	0.721

	INDEX 7816 SAMPLE 3621	INDEX 7817 SAMPLE 3622	INDEX 7818 SAMPLE 3623
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	URBANCZYK NO. 2	HODGES NO. 2	HEAP NO. 1
LOCATION	SEC. 91, BLK. 7, I&GN SUR.	SEC. 250, BLK. B-2, H&GN SUR	SEC. 231, BLK. B-2, H&GN SUR
OWNER	MAGY, HARRINGTON & MARSH	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
COMPLETED	10/02/39	--/--/00	--/--/00
SAMPLED	03/01/43	03/01/43	03/01/43
FORMATION	PERM-CHASE GROUP	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2960	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	378	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	11400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.5	74.5	74.5
ETHANE	17.2	18.0	18.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	18.0	6.7	6.0
OXYGEN	0.3	0.4	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	1.01	0.31	0.23
HEATING VALUE*	951	1077	1093
SPECIFIC GRAVITY	0.711	0.673	0.674

	INDEX 7819 SAMPLE 3624	INDEX 7820 SAMPLE 3625	INDEX 7821 SAMPLE 3974
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MARTIN NO. 1	FIELDS NO. 1	MOORE NO. 1-T
LOCATION	SEC. 90, BLK. 7, I&GN SUR.	SEC. 89, BLK. 7, I&GN SUR.	SEC. 21, BLK. 7, I&GN SUR.
OWNER	MAGY, HARRINGTON & MARSH	NORTHERN NATURAL GAS CO.	TEXOMA NATURAL GAS CO.
COMPLETED	10/02/38	--/--/00	08/14/32
SAMPLED	03/01/43	03/01/43	12/21/44
FORMATION	PERM-CHASE GROUP	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2775	NOT GIVEN	2574
WELLHEAD PRESSURE,PSIG	367	NOT GIVEN	283
OPEN FLOW, MCFD	17200	NOT GIVEN	8280
COMPONENT, MOLE PCT			
METHANE	65.6	68.4	74.0
ETHANE	17.7	21.6	14.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.8	9.5	10.4
OXYGEN	0.1	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	1.0
HELIUM	0.75	0.31	0.22
HEATING VALUE*	982	1080	1008
SPECIFIC GRAVITY	0.704	0.700	0.678

	INDEX 7822 SAMPLE 3975	INDEX 7823 SAMPLE 4539	INDEX 7824 SAMPLE 4544
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BURNETT NO. I-P	SIMMS NO. 1	WIGHAM NO. 1
LOCATION	SEC. 54, BLK. 4, I&GN SUR.	NOT GIVEN	SEC. 14, BLK. 2, TT&RR SUR.
OWNER	TEXOMA NATURAL GAS CO.	J. M. HUBER CORP.	BURNETT & CORNELIUS
COMPLETED	02/29/32	--/--/00	07/14/48
SAMPLED	12/21/44	08/--/48	08/17/48
FORMATION	PERM-WICHITA-ALBANY	PERM-	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2415	NOT GIVEN	2735
WELLHEAD PRESSURE,PSIG	297	NOT GIVEN	298
OPEN FLOW, MCFD	11200	NOT GIVEN	16000
COMPONENT, MOLE PCT			
METHANE	78.0	62.6	67.9
ETHANE	15.0	26.0	19.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.3	10.2	11.2
OXYGEN	0.0	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.6	0.5	0.3
HELIUM	0.24	0.48	0.31
HEATING VALUE*	1059	1100	1044
SPECIFIC GRAVITY	0.666	0.729	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7825 SAMPLE 5232	INDEX 7826 SAMPLE 5235	INDEX 7827 SAMPLE 5383
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	QUIRK NO. 1	HODGES NO. 1	BURNETT NO. 7
LOCATION	SEC. 108, BLK. 7, I&GN SUR.	SEC. 112, BLK. 7, I&GN SUR.	SEC. 127, BLK. 5, H&GN SUR.
OWNER	PANOMA CORP.	PANOMA CORP.	J. GORDON BURCH
COMPLETED	04/25/48	09/21/35	11/01/52
SAMPLED	06/11/52	06/11/52	02/03/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2979	2885	NOT GIVEN
WELLHEAD PRESSURE,PSIG	257	335	169
OPEN FLOW, MCFD	4200	1750	2000
COMPONENT, MOLE PCT			
METHANE	66.1	69.9	77.1
ETHANE	4.2	4.2	6.3
PROPANE	2.9	2.8	4.2
N-BUTANE	0.9	0.7	1.4
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	21.7	20.4	8.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	1.07	1.03	0.37
HEATING VALUE*	906	901	1113
SPECIFIC GRAVITY	0.721	0.710	0.714

	INDEX 7828 SAMPLE 5393	INDEX 7829 SAMPLE 6143	INDEX 7830 SAMPLE 6151
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	ANNAWAS NO. 1	PEACOCK ESTATE NO. 1	MONTGOMERY NO. 1
LOCATION	SEC. 227, BLK. B2, H&GN SUR.	SEC. 93, BLK. 7, I&GN SUR.	SEC. 113, BLK. 7, I&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	J. F. SMITH & J. W. COLLINS	CABOT CARBON CO.
COMPLETED	01/15/51	07/--/56	--/--/49
SAMPLED	02/05/53	09/19/56	09/28/56
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2810	2920	2852
WELLHEAD PRESSURE,PSIG	330	382	289
OPEN FLOW, MCFD	3320	1000	1293
COMPONENT, MOLE PCT			
METHANE	67.7	59.6	65.9
ETHANE	4.2	4.6	4.2
PROPANE	3.2	3.2	2.7
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	21.9	28.7	23.0
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.77	1.72	1.27
HEATING VALUE*	922	841	915
SPECIFIC GRAVITY	0.731	0.756	0.740

	INDEX 7831 SAMPLE 6152	INDEX 7832 SAMPLE 6153	INDEX 7833 SAMPLE 6157
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	ROBBINS NO. 1	NEIGHBORS NO. 1	RAMMING
LOCATION	SEC. 12D, BLK. 7, I&GN SUR.	SEC. 92, BLK. 7, I&GN SUR.	SEC. 253, BLK. B-2, H&NG SUR
OWNER	CABOT CARBON CO.	CABOT CARBON CO.	PHILLIPS PETROLEUM CO.
COMPLETED	01/11/53	04/19/50	06/19/45
SAMPLED	09/28/56	09/28/56	10/08/56
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2825	2880	2769
WELLHEAD PRESSURE,PSIG	338	280	281
OPEN FLOW, MCFD	1123	141	1393
COMPONENT, MOLE PCT			
METHANE	64.9	63.9	69.7
ETHANE	3.8	4.3	4.6
PROPANE	2.5	3.0	3.5
N-BUTANE	0.8	0.9	1.0
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.3	0.5	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	25.3	25.0	19.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	1.20	1.26	0.78
HEATING VALUE*	863	891	961
SPECIFIC GRAVITY	0.732	0.746	0.726

	INDEX 7834 SAMPLE 6158	INDEX 7835 SAMPLE 6183	INDEX 7836 SAMPLE 6241
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	LAURIE NO. 1	J. W. KNORPP NO. 1	BURNETT NO. 97-A
LOCATION	SEC. 228, BLK. B-2, H&GN SUR	SEC. 135, BLK. 7, I&GN SUR.	SEC. 5, BLK. 5, I&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	TEXAS CO.	CITIES SERVICE GAS CO.
COMPLETED	05/28/45	09/01/51	09/21/56
SAMPLED	10/08/56	11/16/56	01/14/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2807	2869	2614
WELLHEAD PRESSURE,PSIG	259	417	225
OPEN FLOW, MCFD	2301	2879	5364
COMPONENT, MOLE PCT			
METHANE	73.9	60.7	78.6
ETHANE	5.2	5.9	5.8
PROPANE	0.9	1.6	3.1
N-BUTANE	0.9	1.2	1.1
ISOBUTANE	1.1	0.0	0.6
N-PENTANE	0.1	0.7	0.2
ISOPENTANE	0.7	0.2	0.3
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.6	29.1	9.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.1
HELIUM	0.57	1.33	0.41
HEATING VALUE*	976	819	1070
SPECIFIC GRAVITY	0.709	0.750	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7837 SAMPLE 6242	INDEX 7838 SAMPLE 6467	INDEX 7839 SAMPLE 6548
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BURNETT NO. 96-A	CRUMBPACKER NO. 1	BURGIN NO. 1
LOCATION	SEC. 16, BLK. 5, I&GN SUR.	SEC. 84, BLK. 7, I&GN SUR.	SEC. 132, BLK. 7, I&GN SUR.
OWNER	CITIES SERVICE GAS CO.	SMITH & COLLINS	DORCHESTER CORP.
COMPLETED	10/25/56	--/--/00	07/11/48
SAMPLED	01/14/57	02/03/58	04/08/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2791	NOT GIVEN	3000
WELLHEAD PRESSURE,PSIG	222	NOT GIVEN	252
OPEN FLOW, MCFD	20000	19700	785
COMPONENT, MOLE PCT			
METHANE	77.7	61.8	72.4
ETHANE	5.8	4.0	4.8
PROPANE	2.9	2.9	3.1
N-BUTANE	1.0	1.9	1.0
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	10.7	27.7	16.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.56	1.40	0.70
HEATING VALUE*	1051	846	990
SPECIFIC GRAVITY	0.694	0.747	0.715

	INDEX 7840 SAMPLE 6549	INDEX 7841 SAMPLE 6569	INDEX 7842 SAMPLE 6570
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MCBRAYER NO. 1	BRITTEN A NO. 1	JOHNSON V NO. 1
LOCATION	SEC. 69, BLK. 7, I&GN SUR.	SEC. 254, BLK. B-2, H&GN SUR	SEC. 133, BLK. 7, I&GN SUR.
OWNER	DORCHESTER CORP.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	11/10/45	10/02/52	03/31/52
SAMPLED	04/08/58	04/25/58	04/25/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3000	2773	2860
WELLHEAD PRESSURE,PSIG	274	252	270
OPEN FLOW, MCFD	1620	1296	1195
COMPONENT, MOLE PCT			
METHANE	69.8	64.5	66.2
ETHANE	4.5	4.0	4.2
PROPANE	2.9	2.8	2.8
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.6	0.6	1.0
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	19.5	25.3	23.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.80	0.90	0.90
HEATING VALUE*	941	879	905
SPECIFIC GRAVITY	0.719	0.741	0.740

	INDEX 7843 SAMPLE 6578	INDEX 7844 SAMPLE 6579	INDEX 7845 SAMPLE 6580
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	GILL MORROW NO. 1	FARLEY NO. 1	TUCKER NO. 1
LOCATION	SEC. 153, BLK. 7, I&GN SUR.	SEC. 134, BLK. 7, I&GN SUR.	SEC. 166, BLK. 7, I&GN SUR.
OWNER	ADA OIL CO.	ADA OIL CO.	ADA OIL CO.
COMPLETED	01/14/53	02/03/53	01/21/53
SAMPLED	05/12/58	05/12/58	05/12/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2860	2799	2805
WELLHEAD PRESSURE,PSIG	325	308	330
OPEN FLOW, MCFD	705	1522	908
COMPONENT, MOLE PCT			
METHANE	60.9	64.6	61.1
ETHANE	3.9	4.0	3.5
PROPANE	2.6	2.7	2.6
N-BUTANE	0.8	0.8	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.2	25.3	29.6
OXYGEN	0.2	0.3	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.30	1.00	1.00
HEATING VALUE*	816	862	822
SPECIFIC GRAVITY	0.746	0.755	0.751

	INDEX 7846 SAMPLE 6581	INDEX 7847 SAMPLE 6582	INDEX 7848 SAMPLE 6604
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	JIM WALL NO. 1	JACKSON-MCCASLAND NO. 1	MCCRAY NO. 6, RRC NO. 9
LOCATION	SEC. 226, BLK. B-2, I&GN SUR	SEC. 154, BLK. 7, I&GN SUR.	SEC. 2, BLK. 2, TYLER RR SUR
OWNER	ADA OIL CO.	ADA OIL CO.	CONSOLIDATED GAS & EQUIP. CO
COMPLETED	01/21/53	01/14/53	06/15/56
SAMPLED	05/12/58	05/12/58	05/20/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2765	2825	3348
WELLHEAD PRESSURE,PSIG	320	248	NOT GIVEN
OPEN FLOW, MCFD	941	634	876
COMPONENT, MOLE PCT			
METHANE	63.8	61.3	77.7
ETHANE	3.9	3.5	5.4
PROPANE	2.6	2.6	3.3
N-BUTANE	0.9	0.9	1.3
ISOBUTANE	0.5	0.6	0.7
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.5
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	26.4	29.0	10.2
OXYGEN	TRACE	0.4	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.90	1.00	0.30
HEATING VALUE*	861	828	1081
SPECIFIC GRAVITY	0.740	0.751	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7849 SAMPLE 6631	INDEX 7850 SAMPLE 6707	INDEX 7851 SAMPLE 6861
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CAVIN NO. 1	CRUMPACKER NO. 2	NAVAJO MAUDIE NO. 1
LOCATION	SEC. 86, BLK. 7, I&GN SUR.	SEC. 15	SEC. 30, BLK. 2, TTRR SUR.
OWNER	NORTHERN NATURAL GAS PROD. C	CITIES SERVICE OIL CO.	POWER PETROLEUM CO.
COMPLETED	04/26/44	03/05/58	01/03/59
SAMPLED	06/13/58	07/11/58	11/14/58
FORMATION	PERM-WICHITA-ALBANY	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2785	3102	3103
WELLHEAD PRESSURE,PSIG	3945	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	12088	NOT GIVEN	50
COMPONENT, MOLE PCT			
METHANE	73.2	81.8	79.0
ETHANE	5.0	5.8	6.0
PROPANE	3.9	2.8	3.3
N-BUTANE	1.1	0.8	1.0
ISOBUTANE	0.6	0.4	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	15.6	7.5	8.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.70	0.30	0.32
HEATING VALUE*	1002	1076	1096
SPECIFIC GRAVITY	0.714	0.675	0.697

	INDEX 7852 SAMPLE 6875	INDEX 7853 SAMPLE 6937	INDEX 7854 SAMPLE 6938
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	H. C. MCDOWELL NO. 1	BOONE WELL NO. 1	SEVERTSON NO. 1
LOCATION	SEC. 72, BLK. 7, I&GN SUR.	SEC. 115, BLK. 7, I&GN SUR.	SEC. 137, BLK. 7, I&GN SUR.
OWNER	HARVEST QUEEN MILL & ELEVATO	SMITH & COLLINS	SMITH & COLLINS
COMPLETED	10/24/58	02/13/59	02/09/59
SAMPLED	11/23/58	02/13/59	02/13/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3075	2846	2892
WELLHEAD PRESSURE,PSIG	420	371	402
OPEN FLOW, MCFD	NOT GIVEN	10100	3400
COMPONENT, MOLE PCT			
METHANE	61.5	59.1	68.4
ETHANE	4.8	3.1	1.3
PROPANE	3.6	2.4	1.5
N-BUTANE	1.1	0.9	0.4
ISOBUTANE	0.8	0.5	0.2
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.4	0.5	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	25.4	31.1	26.9
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.0
HELIUM	1.30	1.90	1.40
HEATING VALUE*	898	791	771
SPECIFIC GRAVITY	0.763	0.747	0.689

	INDEX 7855 SAMPLE 6979	INDEX 7856 SAMPLE 7048	INDEX 7857 SAMPLE 7135
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	LLOYD RIGGINS NO. 1	CLARK NO. 1	WITTEN NO. 1
LOCATION	SEC. 115, BLK. 7, I&GN SUR.	NOT GIVEN	SEC. 1, BLK. 7, I&GN SUR.
OWNER	CABOT CARBON CO.	NORTHERN NATURAL GAS PROD. C	DORCHESTER CORP.
COMPLETED	10/06/57	12/--/39	02/26/43
SAMPLED	02/21/59	05/01/59	06/26/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2782	2685	2468
WELLHEAD PRESSURE,PSIG	NOT GIVEN	363	134
OPEN FLOW, MCFD	NOT GIVEN	12027	6810
COMPONENT, MOLE PCT			
METHANE	62.6	80.2	80.1
ETHANE	3.7	6.5	6.4
PROPANE	2.4	3.5	3.3
N-BUTANE	0.6	1.2	1.2
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.4	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	27.1	6.7	7.0
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.59	0.20	0.20
HEATING VALUE*	818	1120	1109
SPECIFIC GRAVITY	0.731	0.695	0.692

	INDEX 7858 SAMPLE 7136	INDEX 7859 SAMPLE 7258	INDEX 7860 SAMPLE 7259
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MCILROY NO. 1	SIMMONS NO. 1	MAIDUK NO. 1
LOCATION	SEC. 18, BLK. 7, I&GN SUR.	SEC. 70, BLK. 7, I&GN SUR.	SEC. 85, BLK. 7, I&GN RR SUR
OWNER	DORCHESTER CORP.	SMITH & COLLINS, ET AL.	SMITH & COLLINS
COMPLETED	09/09/38	10/--/59	10/--/59
SAMPLED	06/26/59	10/22/59	10/22/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2610	2930	2900
WELLHEAD PRESSURE,PSIG	160	320	330
OPEN FLOW, MCFD	2706	6000	9000
COMPONENT, MOLE PCT			
METHANE	80.4	68.6	62.9
ETHANE	6.2	4.4	3.8
PROPANE	3.1	2.9	3.0
N-BUTANE	0.0	0.8	0.7
ISOBUTANE	1.6	0.9	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	7.7	21.4	27.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.20	0.90	1.30
HEATING VALUE*	1080	916	842
SPECIFIC GRAVITY	0.681	0.722	0.738

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7861 SAMPLE 7299	INDEX 7862 SAMPLE 7498	INDEX 7863 SAMPLE 7499
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	WICARS A NO. 2	CRAWFORD NO. 1	URBANCZYK NO. 1
LOCATION	SEC. 23, B-2, H&GN SUR.	SEC. 73, BLK. 7, I&GN SUR.	SEC. 75, BLK. 7, I&GN SUR.
OWNER	NORTHERN NATURAL GAS CO.	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO
COMPLETED	09/25/59	04/10/60	04/07/60
SAMPLED	12/08/59	04/16/60	04/16/60
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2720	3008	2982
WELLHEAD PRESSURE,PSIG	235	411	406
OPEN FLOW, MCFD	3290	1800	10200
COMPONENT, MOLE PCT			
METHANE	79.4	63.7	64.1
ETHANE	5.6	2.3	1.5
PROPANE	3.6	1.9	0.3
N-BUTANE	1.3	0.6	0.1
ISOBUTANE	0.6	0.4	TRACE
N-PENTANE	0.4	0.1	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	TRACE	0.0
NITROGEN	8.2	28.5	32.2
OXYGEN	TRACE	0.2	0.2
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.6	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.30	1.50	1.40
HEATING VALUE*	1098	780	687
SPECIFIC GRAVITY	0.697	0.717	0.696

	INDEX 7864 SAMPLE 7630	INDEX 7865 SAMPLE 7631	INDEX 7866 SAMPLE 7632
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CAREY NO. 1	BURNS NO. 1-A	BROADWAY NO. 1
LOCATION	SEC. 46, BLK. 7, I&GN SUR.	SEC. 106, BLK. 7, I&GN SUR.	SEC. 94, BLK. 7, I&GN SUR.
OWNER	SMITH & COLLINS	SMITH & COLLINS	SMITH & COLLINS
COMPLETED	01/30/60	04/06/60	04/23/60
SAMPLED	08/01/60	08/01/60	08/01/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2852	2900	2859
WELLHEAD PRESSURE,PSIG	273	372	352
OPEN FLOW, MCFD	2650	3100	9400
COMPONENT, MOLE PCT			
METHANE	72.6	56.9	61.9
ETHANE	6.1	4.0	3.4
PROPANE	3.9	2.9	3.1
N-BUTANE	1.2	0.7	1.0
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	14.3	32.5	28.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.2	0.1
HYDROGEN	0.2	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.60	2.10	1.50
HEATING VALUE*	1023	770	831
SPECIFIC GRAVITY	0.716	0.752	0.739

	INDEX 7867 SAMPLE 7651	INDEX 7868 SAMPLE 7652	INDEX 7869 SAMPLE 7655
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIGGS HORN B NO. 1	J. B. RICE GAS UNIT NO. 1	BIGGS HORN UNIT NO. 1
LOCATION	SEC. 136, BLK. 7, I&GN SUR.	SEC. 152, BLK. 7, I&GN SUR.	SEC. 129, BLK. 7, I&GN SUR.
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	04/07/60	06/16/60	04/06/60
SAMPLED	08/23/60	08/23/60	08/25/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2813	2881	2830
WELLHEAD PRESSURE,PSIG	393	379	368
OPEN FLOW, MCFD	20000	3700	14200
COMPONENT, MOLE PCT			
METHANE	61.5	60.8	59.6
ETHANE	2.9	3.7	2.8
PROPANE	2.2	2.6	1.9
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	30.1	29.9	32.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	1.30	1.40	1.80
HEATING VALUE*	800	800	751
SPECIFIC GRAVITY	0.741	0.737	0.736

	INDEX 7870 SAMPLE 7658	INDEX 7871 SAMPLE 7743	INDEX 7872 SAMPLE 7839
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	DEAHL NO. B-3	DEAHL B-3-R	MERRITT NO. 1
LOCATION	SEC. 5, BLK. 5, B&B SUR.	SEC. 5, B&B SUR.	SEC. 12, BLK. Y-2, AB&M SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	M. N. BURNETT
COMPLETED	--/--/00	09/24/60	09/03/60
SAMPLED	08/30/60	12/27/60	02/03/61
FORMATION	PERM-TUBB	PERM-TUBB	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1437	1430	2850
WELLHEAD PRESSURE,PSIG	530	519	176
OPEN FLOW, MCFD	NOT GIVEN	2950	9300
COMPONENT, MOLE PCT			
METHANE	10.2	11.0	76.6
ETHANE	1.9	1.9	6.5
PROPANE	2.9	1.8	3.8
N-BUTANE	0.9	0.7	1.3
ISOBUTANE	0.1	0.3	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	83.8	83.2	9.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.2	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.30	0.30	0.50
HEATING VALUE*	246	250	1094
SPECIFIC GRAVITY	0.956	0.952	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7873 SAMPLE 8205	INDEX 7874 SAMPLE 8247	INDEX 7875 SAMPLE 8258
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MCBRAYER	CRUMPACKER NO. 1	SAILOR NO. 2
LOCATION	SEC. 63, BLK. 7, I&GN SUR.	SEC. 80, BLK. 7, I&GN SUR.	SEC. 64, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	J. F. SMITH & J. W. COLLINS
COMPLETED	--/--/00	--/--/00	09/26/61
SAMPLED	09/22/61	10/19/61	10/24/61
FORMATION	PERM-	PERM-	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2910
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	307
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7000
COMPONENT, MOLE PCT			
METHANE	57.4	51.1	62.0
ETHANE	6.4	1.7	3.7
PROPANE	4.7	1.1	2.7
N-BUTANE	1.4	0.5	0.9
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	26.8	43.0	28.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	1.36	1.49	1.30
HEATING VALUE*	936	632	838
SPECIFIC GRAVITY	0.794	0.771	0.745

	INDEX 7876 SAMPLE 8352	INDEX 7877 SAMPLE 8393	INDEX 7878 SAMPLE 8463
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	ORLANDO MEAKER C NO. 1	BOONE NO. 6	TRATLER NO. 2
LOCATION	SEC. 62, BLK. 7, I&GN SUR.	SEC. 63, BLK. 7, I&GNRR SUR.	SEC. 74, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO
COMPLETED	12/20/61	--/--/00	10/24/61
SAMPLED	12/23/61	12/07/62	04/04/62
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2980	6100	2986
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	392
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7600
COMPONENT, MOLE PCT			
METHANE	47.5	35.2	65.4
ETHANE	2.2	0.8	1.6
PROPANE	0.6	0.1	0.4
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	45.1	56.4	31.1
OXYGEN	TRACE	2.1	TRACE
ARGON	0.2	0.6	0.1
HYDROGEN	TRACE	2.7	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	2.20	1.73	1.32
HEATING VALUE*	556	391	705
SPECIFIC GRAVITY	0.752	0.791	0.692

	INDEX 7879 SAMPLE 8468	INDEX 7880 SAMPLE 8475	INDEX 7881 SAMPLE 8476
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MCBRAYER NO. 1	NICHOLSON NO. 2	MEAKER C NO. 1
LOCATION	SEC. 63, BLK. 7, I&GN SUR.	SEC. 62, BLK. 7, I&GN SUR.	SEC. 62, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/05/62	04/06/62	04/06/62
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3068	3098	2964
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.1	62.4	64.7
ETHANE	5.7	6.4	9.0
PROPANE	4.7	4.6	7.0
N-BUTANE	1.6	1.3	2.0
ISOBUTANE	0.8	0.7	1.1
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.5	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	21.7	22.5	14.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.5	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	1.42	1.12	0.64
HEATING VALUE*	931	969	1156
SPECIFIC GRAVITY	0.804	0.768	0.796

	INDEX 7882 SAMPLE 10753	INDEX 7883 SAMPLE 10755	INDEX 7884 SAMPLE 11809
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. C-4	POLING NO. A-2	WARRICK A-7
LOCATION	SEC. 10, BLK. Y-2, TTRR SUR.	SEC. 12, BLK. Y-2, TTRR SUR.	SEC. 12, BLK. Y-2, B&B SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/11/66	10/11/66	02/03/69
SAMPLED	10/13/66	10/13/66	04/10/69
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2352	2398	2368
WELLHEAD PRESSURE,PSIG	146	140	126
OPEN FLOW, MCFD	73000	22500	118000
COMPONENT, MOLE PCT			
METHANE	74.7	75.3	76.4
ETHANE	6.3	6.5	6.2
PROPANE	4.1	4.5	4.2
N-BUTANE	1.4	1.4	1.3
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.3	0.5	0.4
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	10.8	9.7	9.3
OXYGEN	0.3	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.49	0.45	0.47
HEATING VALUE*	1083	1116	1111
SPECIFIC GRAVITY	0.722	0.726	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 7885 SAMPLE 1537	INDEX 7886 SAMPLE 1538	INDEX 7887 SAMPLE 1539
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	LANE NO. 1	BURNETT NO. 2	BURNETT NO. 3
LOCATION	SEC. 72, BLK. 4, I&GN SUR.	SEC. 23, BLK. 5, I&GN SUR.	SEC. 44, BLK. 5, I&GN SUR.
OWNER	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.
COMPLETED	11/--/26	09/--/27	09/--/27
SAMPLED	11/01/27	11/01/27	11/01/27
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2300	2200	2200
WELLHEAD PRESSURE,PSIG	425	435	435
OPEN FLOW, MCFD	19000	19000	18000
COMPONENT, MOLE PCT			
METHANE	72.5	71.3	68.7
ETHANE	20.1	21.5	22.8
PROPANE	----	----	----
N-BUTANE	----	----	----
ISOBUTANE	----	----	----
N-PENTANE	----	----	----
ISOPENTANE	----	----	----
CYCLOPENTANE	----	----	----
HEXANES PLUS	----	----	----
NITROGEN	6.6	6.6	7.9
OXYGEN	0.3	0.2	0.5
ARGON	----	----	----
HYDROGEN	----	----	----
HYDROGEN SULFIDE**	----	----	----
CARBON DIOXIDE	0.3	0.2	0.0
HELIUM	0.22	0.23	0.19
HEATING VALUE*	1095	1108	1105
SPECIFIC GRAVITY	0.685	0.690	0.702

	INDEX 7888 SAMPLE 1540	INDEX 7889 SAMPLE 1541	INDEX 7890 SAMPLE 5277
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BURNETT NO. 7	BURNETT NO. 9	S. B. BURNETT NO. 81-A
LOCATION	SEC. 49, BLK. 5, I&GN SUR.	SEC. 50, BLK. 5, I&GN SUR.	SEC. 87, BLK. 5, I&GN SUR.
OWNER	EMPIRE GAS & FUEL CO.	EMPIRE GAS & FUEL CO.	CITIES SERVICE GAS CO.
COMPLETED	09/--/27	09/--/27	03/07/52
SAMPLED	11/02/27	11/02/27	09/15/52
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2200	2200	2347
WELLHEAD PRESSURE,PSIG	435	435	169
OPEN FLOW, MCFD	40000	27000	3102
COMPONENT, MOLE PCT			
METHANE	70.4	69.0	79.6
ETHANE	21.8	21.6	6.5
PROPANE	----	----	3.6
N-BUTANE	----	----	1.1
ISOBUTANE	----	----	0.8
N-PENTANE	----	----	0.3
ISOPENTANE	----	----	0.2
CYCLOPENTANE	----	----	0.1
HEXANES PLUS	----	----	0.2
NITROGEN	7.2	8.8	7.3
OXYGEN	0.2	0.2	TRACE
ARGON	----	----	TRACE
HYDROGEN	----	----	0.0
HYDROGEN SULFIDE**	----	----	----
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.29	0.30	0.23
HEATING VALUE*	1104	1086	1116
SPECIFIC GRAVITY	0.693	0.700	0.698

	INDEX 7891 SAMPLE 5283	INDEX 7892 SAMPLE 7837	INDEX 7893 SAMPLE 7917
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	S. B. BURNETT NO. 80-A	POLING R NO. 1	Ge. We. DEAKE NO. 2-R
LOCATION	SEC. 97, BLK. 5, I&GN SUR.	SEC. 22, BLK. Y-2, AB&M SUR.	SEC. 25, BLK. Y-8, AB&M SUR.
OWNER	CITIES SERVICE GAS CO.	M. N. BURNETT	CITIES SERVICE GAS CO.
COMPLETED	04/10/52	--/--/00	01/17/61
SAMPLED	09/15/52	02/03/61	03/30/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2145	NOT GIVEN	1752
WELLHEAD PRESSURE,PSIG	146	260	301
OPEN FLOW, MCFD	3933	NOT GIVEN	825
COMPONENT, MOLE PCT			
METHANE	78.9	80.7	80.9
ETHANE	6.6	7.1	7.3
PROPANE	3.8	2.9	2.9
N-BUTANE	1.2	0.7	0.6
ISOBUTANE	0.9	0.4	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.3	7.5	7.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	----	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.23	0.20	0.20
HEATING VALUE*	1127	1071	1073
SPECIFIC GRAVITY	0.707	0.672	0.671

	INDEX 7894 SAMPLE 8198	INDEX 7895 SAMPLE 8425	INDEX 7896 SAMPLE 12821
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CASS
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	BRYANS MILL
WELL NAME	POLING 1R	POLING NO. 1R	B. M. U. NO. 7
LOCATION	SEC. 12, BLK. Y-2, TT&RR SUR	SEC. 12, Y-2, TTRR SUR.	NOT GIVEN
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	PURE OIL CO.
COMPLETED	--/--/00	10/23/61	05/25/62
SAMPLED	09/13/61	03/02/62	05/18/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	440	440	260
DEPTH, FEET	1715	1715	10142
WELLHEAD PRESSURE,PSIG	336	336	1600
OPEN FLOW, MCFD	2650	2650	1133
COMPONENT, MOLE PCT			
METHANE	81.5	80.8	60.8
ETHANE	6.5	6.8	7.2
PROPANE	2.5	2.9	3.1
N-BUTANE	0.6	0.8	1.0
ISOBUTANE	0.3	0.3	0.9
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	7.9	7.7	9.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	10.4
CARBON DIOXIDE	0.1	TRACE	5.8
HELIUM	0.15	0.15	0.03
HEATING VALUE*	1051	1071	1005
SPECIFIC GRAVITY	0.664	0.672	0.833

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7909 SAMPLE 17662		INDEX 7910 SAMPLE 14891		INDEX 7911 SAMPLE 13805	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CHAMBERS		CHAMBERS		CHAMBERS	
FIELD	BAY ROAD		DEVILLIER		FIG RIDGE	
WELL NAME	U.S. STEEL NO. B-1		EARL COOPER NO. 2		DOORNBOS NO. 1	
LOCATION	JOHN STEELE SUR. A-227		WILLIAM GODFREY SUR. A-511		TENO RR CO. SUR.	
OWNER	MICHEL T. HALBOUTY ENERGY CO		GULF ENERGY & MINERALS CO.		TEXAS CRUDE, INC.	
COMPLETED	11/20/83		12/05/75		09/29/72	
SAMPLED	05/05/85		01/24/77		11/10/73	
FORMATION	OLIG-VICKSBURG L		OLIG-VICKSBURG		OLIG-MARGINULINA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	10784		10782		7870	
WELLHEAD PRESSURE,PSIG	5500		7440		NOT GIVEN	
OPEN FLOW, MCFD	27000		50000		17000	
COMPONENT, MOLE PCT						
METHANE	86.0		91.5		92.2	
ETHANE	6.7		3.9		3.5	
PROPANE	3.9		1.1		1.5	
N-BUTANE	0.9		0.3		0.3	
ISOBUTANE	0.6		0.2		0.5	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.1		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	0.5		1.4		0.7	
OXYGEN	0.1		0.3		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.8		0.2	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1161		1060		1093	
SPECIFIC GRAVITY	0.669		0.615		0.615	

	INDEX 7912 SAMPLE 10625		INDEX 7913 SAMPLE 4925		INDEX 7914 SAMPLE 3736	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CHAMBERS		CHAMBERS		CHAMBERS	
FIELD	FIG RIDGE NW		FISHERS REEF N		JACKSON PASTURE	
WELL NAME	C. DOORNBOS NO. 2		GALVESTON BAY STATE NO. 1		J. E. JACKSON NO. 1	
LOCATION	SEC. 83, T&NORR SUR.A-252		NOT GIVEN		NOT GIVEN	
OWNER	SUN OIL CO.		HUMBLE OIL & REFINING CO.		WYNN CROSBY DRILLING CO.	
COMPLETED	10/30/64		05/27/50		07/02/43	
SAMPLED	06/21/66		09/13/50		03/29/44	
FORMATION	OLIG-FRIO F-1		OLIG-FRIO		OLIG-MARGINULINA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8112		8790		8090	
WELLHEAD PRESSURE,PSIG	2200		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	17000		NOT GIVEN		25000	
COMPONENT, MOLE PCT						
METHANE	94.3		90.8		70.2	
ETHANE	2.9		3.9		28.9	
PROPANE	1.0		2.1		---	
N-BUTANE	0.3		0.7		---	
ISOBUTANE	0.2		0.6		---	
N-PENTANE	0.1		0.3		---	
ISOPENTANE	0.2		0.0		---	
CYCLOPENTANE	0.1		0.1		---	
HEXANES PLUS	0.2		0.3		---	
NITROGEN	0.5		0.6		0.5	
OXYGEN	0.0		0.2		0.4	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.2		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.2		0.3		0.0	
HELIUM	0.01		0.01		0.00	
HEATING VALUE*	1077		1120		1229	
SPECIFIC GRAVITY	0.603		0.636		0.702	

	INDEX 7915 SAMPLE 3743		INDEX 7916 SAMPLE 4830		INDEX 7917 SAMPLE 7995	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CHAMBERS		CHAMBERS		CHAMBERS	
FIELD	JACKSON PASTURE		JACKSON PASTURE		LAKE STEPHENSON	
WELL NAME	MAYES NO. 1		J. E. JACKSON NO. 4		ROY DAWSON NO. 1	
LOCATION	ROBERT OLIVER SUR.		NOT GIVEN		J. T. WHITE A-415 SUR.	
OWNER	WYNN CROSBY DRILLING CO.		MCCARTHY OIL & GAS CORP.		TEXAS NATIONAL PETROLEUM CO.	
COMPLETED	12/23/43		11/08/46		03/09/61	
SAMPLED	03/29/44		01/28/50		05/25/61	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-FRIO MASSIVE	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8675		8088		9430	
WELLHEAD PRESSURE,PSIG	2950		1945		3000	
OPEN FLOW, MCFD	25000		41000		19000	
COMPONENT, MOLE PCT						
METHANE	73.8		71.6		90.6	
ETHANE	25.2		7.5		4.9	
PROPANE	---		6.7		2.1	
N-BUTANE	---		3.1		0.4	
ISOBUTANE	---		3.5		0.7	
N-PENTANE	---		1.8		0.1	
ISOPENTANE	---		0.3		0.1	
CYCLOPENTANE	---		0.3		TRACE	
HEXANES PLUS	---		2.5		0.2	
NITROGEN	0.7		1.2		0.7	
OXYGEN	0.2		0.1		0.0	
ARGON	---		0.0		0.0	
HYDROGEN	---		---		TRACE	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.1		1.2		0.1	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1199		1488		1116	
SPECIFIC GRAVITY	0.684		0.883		0.628	

	INDEX 7918 SAMPLE 4924		INDEX 7919 SAMPLE 10072		INDEX 7920 SAMPLE 10246	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	CHAMBERS		CHAMBERS		CHAMBERS	
FIELD	DYSTER BAYOU		DYSTER BAYOU		DYSTER BAYOU	
WELL NAME	FELIX JACKSON NO. 31		FELIX JACKSON NO. 51		FELIX JACKSON NO. 51	
LOCATION	SEC. 124, T&ND SUR. NO. 419		ANASTACIO YBARBO A-30		ANASTACIA YBARBO SUR. A-30	
OWNER	SUN OIL CO.		SUN OIL CO.		SUN OIL CO.	
COMPLETED	07/18/50		02/02/64		02/12/64	
SAMPLED	09/13/50		08/19/65		10/25/65	
FORMATION	OLIG-FRIO		OLIG-HACKBERRY A		OLIG-HACKBERRY	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8402		9264		9264	
WELLHEAD PRESSURE,PSIG	3906		4940		4200	
OPEN FLOW, MCFD	35000		100		100000	
COMPONENT, MOLE PCT						
METHANE	93.2		93.8		93.9	
ETHANE	3.4		3.2		3.2	
PROPANE	1.3		0.9		1.0	
N-BUTANE	0.4		0.5		0.3	
ISOBUTANE	0.3		0.2		0.2	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.0		0.1		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.3		0.1		0.2	
NITROGEN	0.4		0.8		0.7	
OXYGEN	0.2		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.3		0.3		0.3	
HELIUM	0.01		0.25		TRACE	
HEATING VALUE*	1088		1061		1070	
SPECIFIC GRAVITY	0.614		0.599		0.602	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7897 SAMPLE 16085	INDEX 7898 SAMPLE 9593	INDEX 7899 SAMPLE 14800
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CASS	CASS	CASS
FIELD	KILDARE	MCKINNEY	RAMBO N
WELL NAME	G. B. JOHNSON NO. 1	MARY O. AMERN NO. 1	RAMBO NO. 1
LOCATION	JOHN M. WATSON SUR. A-1075	DESERR SUR. A-1204	JESSE DINSON SUR. A-305
OWNER	HILLIARD OIL & GAS, INC.	SHELL OIL CO.	SOUTHLAND ROYALTY CO.
COMPLETED	--/--/00	04/16/64	06/01/75
SAMPLED	10/01/80	10/07/64	10/08/76
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10661	9102	10300
WELLHEAD PRESSURE,PSIG	5200	3200	4500
OPEN FLOW, MCFD	2892	1075	3800
COMPONENT, MOLE PCT			
METHANE	64.8	35.4	79.9
ETHANE	4.1	5.2	3.4
PROPANE	1.9	4.6	1.2
N-BUTANE	0.8	1.1	0.6
ISOBUTANE	1.0	0.7	0.5
N-PENTANE	0.6	0.4	0.2
ISOPENTANE	0.9	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.9	0.2	0.2
NITROGEN	24.7	47.6	12.2
OXYGEN	0.1	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	4.6	1.5
HELIUM	0.05	0.09	0.04
HEATING VALUE*	915	659	966
SPECIFIC GRAVITY	0.767	0.908	0.677

	INDEX 7900 SAMPLE 3803	INDEX 7901 SAMPLE 12317	INDEX 7902 SAMPLE 12318
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CASS	CHAMBERS	CHAMBERS
FIELD	WILDCAT	ANAHUAC	ANAHUAC
WELL NAME	ADDIE SP. BALDWIN NO. 1	J. E. BROUSSARD NO. 20-H	J. E. BROUSSARD NO. 4
LOCATION	JAMES TAYLOR SUR.	NOT GIVEN	NOT GIVEN
OWNER	SKELLY OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	05/08/44	10/06/69	09/25/57
SAMPLED	04/19/44	07/08/70	07/08/70
FORMATION	NOT GIVEN	TERT-MIOCENE 10	TERT-MIOCENE 21
GEOLOGIC PROVINCE CODE	260	220	220
DEPTH, FEET	5850	3090	4957
WELLHEAD PRESSURE,PSIG	2210	1323	1883
OPEN FLOW, MCFD	1400	10600	88000
COMPONENT, MOLE PCT			
METHANE	80.7	99.2	98.3
ETHANE	8.2	0.1	0.8
PROPANE	---	TRACE	0.2
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	10.3	0.6	0.5
OXYGEN	0.4	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.2
HELIUM	0.00	0.01	0.01
HEATING VALUE*	964	1007	1035
SPECIFIC GRAVITY	0.644	0.557	0.564

	INDEX 7903 SAMPLE 12319	INDEX 7904 SAMPLE 12320	INDEX 7905 SAMPLE 12321
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	ANAHUAC	ANAHUAC	ANAHUAC
WELL NAME	J. E. BROUSSARD NO. 20-F	J. E. BROUSSARD NO. 17	J. E. BROUSSARD NO. 14-F
LOCATION	NOT GIVEN	SEC.63, H&TC RR CO SUR.A-136	SEC.63, H&TC RR CO SUR.A-136
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	04/23/69	03/27/69	11/26/69
SAMPLED	07/08/70	07/08/70	07/08/70
FORMATION	TERT-MIOCENE 20	TERT-MIOCENE 19	TERT-MIOCENE 13
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4911	4764	3460
WELLHEAD PRESSURE,PSIG	1330	2151	1545
OPEN FLOW, MCFD	40592	851000	8544
COMPONENT, MOLE PCT			
METHANE	98.6	96.5	99.2
ETHANE	0.6	0.3	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	2.6	0.5
OXYGEN	0.0	0.5	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1010	983	1007
SPECIFIC GRAVITY	0.561	0.570	0.557

	INDEX 7906 SAMPLE 12322	INDEX 7907 SAMPLE 3867	INDEX 7908 SAMPLE 12355
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	ANAHUAC	ANAHUAC 8	ANGELINA
WELL NAME	ANAHUAC GUS NO. 1-C	STATE NO. 1	OWEN M.ACOM NO. 2
LOCATION	SEC. 50, H&TC RR CO. SUR.	TRACT 21-D, GALVESTON BAY	J. W. ACOM SUR. A-612
OWNER	HUMBLE OIL & REFINING CO.	STANDARD OIL CO. OF TEXAS	BELCO PETROLEUM CORP.
COMPLETED	11/05/58	05/--/44	06/08/69
SAMPLED	07/08/70	09/21/44	08/11/70
FORMATION	OLIG-DISCORBIS-1	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5980	7565	12061
WELLHEAD PRESSURE,PSIG	2141	NOT GIVEN	3600
OPEN FLOW, MCFD	130000	41	550
COMPONENT, MOLE PCT			
METHANE	93.6	90.9	89.0
ETHANE	3.3	7.3	4.2
PROPANE	1.2	---	2.0
N-BUTANE	0.3	---	0.6
ISOBUTANE	0.3	---	0.5
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	0.5	1.6	1.8
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.1	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1081	1052	1093
SPECIFIC GRAVITY	0.606	0.599	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7921 SAMPLE 14198	INDEX 7922 SAMPLE 9567	INDEX 7923 SAMPLE 3996
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	RED FISH REEF N	REDFISH REEF SW	SEABREEZE
WELL NAME	STATE TRACT 131 NO. 2	NO. 8 STATE TRACT 307	F. C. THOMPSON NO. 1
LOCATION	GALVESTON BAY		T&NO 133
OWNER	SUN OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	02/27/73	01/17/63	05/12/44
SAMPLED	10/31/74	10/07/64	--/--/00
FORMATION	OLIG-FRIO F-7	OLIG-FRIO F-17	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8379	11184	9454
WELLHEAD PRESSURE,PSIG	2985	2150	3815
OPEN FLOW, MCFD	29056	3800	20500
COMPONENT, MOLE PCT			
METHANE	92.3	91.7	89.0
ETHANE	3.9	3.7	10.5
PROPANE	1.6	1.6	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.5	0.5	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.2	TRACE	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.5	---
NITROGEN	0.4	0.2	0.8
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	1.0	0.3
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1095	1105	1090
SPECIFIC GRAVITY	0.615	0.630	0.610

	INDEX 7924 SAMPLE 16263	INDEX 7925 SAMPLE 11964	INDEX 7926 SAMPLE 13730
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	SMIP CHANNEL S	STOWELL	UMBRELLA POINT
WELL NAME	STATE TRACT 299 NO. 1	BETTIE C. GREEN NO. 2	TEXAS TRACT 87 NO. 3
LOCATION	GALVESTON BAY	FRANCISCO VALMORE LEAGUEA-26	GALVESTON BAY
OWNER	HOUSTON OIL & MINERALS CORP.	SUN OIL CO.	GETTY OIL CO.
COMPLETED	05/--/80	06/18/68	12/20/71
SAMPLED	05/22/81	07/15/69	09/27/73
FORMATION	OLIG-FRIO	OLIG-MARGINULINA	OLIG-FRIO F-24
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11000	7332	10679
WELLHEAD PRESSURE,PSIG	8572	2775	6815
OPEN FLOW, MCFD	7546	90639	134326
COMPONENT, MOLE PCT			
METHANE	83.7	91.5	94.6
ETHANE	6.6	3.7	2.6
PROPANE	3.4	1.7	0.9
N-BUTANE	1.0	0.4	0.1
ISOBUTANE	1.0	0.6	0.2
N-PENTANE	0.3	0.2	TRACE
ISOPENTANE	0.9	0.1	0.1
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	0.8	0.5	0.1
NITROGEN	0.4	0.7	0.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.2	0.7
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1225	1117	1051
SPECIFIC GRAVITY	0.714	0.631	0.596

	INDEX 7927 SAMPLE 3995	INDEX 7928 SAMPLE 10610	INDEX 7929 SAMPLE 10611
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHAMBERS	CHAMBERS	CHAMBERS
FIELD	WINNIE N	WINNIE N	WINNIE N
WELL NAME	ROSA ARENS NO. 1	JONES GAS UNIT NO. 1	JONES GAS UNIT NO. 1
LOCATION	LOT 12, VALMORE LEAGUE	J.M.DURAN SUR. LOT 2, BLK.69	J.M.DURAN SUR. LOT 2, BLK.69
OWNER	SUN OIL CO.	SUNSET INTERNATL. PET. CORP.	SUNSET INTERNATL. PET. CORP.
COMPLETED	12/11/44	04/25/65	04/25/66
SAMPLED	03/20/45	06/14/66	06/14/66
FORMATION	OLIG-NODOSARIA	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9840	6603	6743
WELLHEAD PRESSURE,PSIG	3750	2150	2650
OPEN FLOW, MCFD	51000	26670	148000
COMPONENT, MOLE PCT			
METHANE	92.4	92.8	93.4
ETHANE	7.1	3.3	3.3
PROPANE	---	1.3	1.0
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.5	0.5
N-PENTANE	---	0.1	0.2
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.5	0.5
NITROGEN	0.0	0.7	0.7
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1063	1101	1090
SPECIFIC GRAVITY	0.594	0.619	0.612

	INDEX 7930 SAMPLE 4605	INDEX 7931 SAMPLE 17716	INDEX 7932 SAMPLE 10052
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHEROKEE	CHEROKEE	CHEROKEE
FIELD	NOT GIVEN	OVERTON	REKLAW
WELL NAME	NEW BIRMINGHAM NO. 1	W. L. RUCKER NO. 1	REKLAW G. U. NO. 2, 1-C
LOCATION	G. E. LODNEY SUR. ABST. 509	WILLIAM GEORGE SUR., A-295	THOMAS STANDFORD SUR.
OWNER	STANDARD OIL CO. OF TEXAS	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.
COMPLETED	04/06/47	--/--/68	08/29/55
SAMPLED	10/17/48	06/14/85	08/05/65
FORMATION	CRET-RODESSA	JURA-COTTON VALLEY	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8608	10361	8486
WELLHEAD PRESSURE,PSIG	3350	3400	1925
OPEN FLOW, MCFD	147000	1220	315
COMPONENT, MOLE PCT			
METHANE	94.4	92.6	94.6
ETHANE	3.7	3.2	0.9
PROPANE	---	0.6	0.5
N-BUTANE	---	0.2	0.2
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	0.0	1.2	2.1
OXYGEN	0.3	0.1	0.1
ARGON	---	TRACE	0.0
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.6	1.4	1.0
HELIUM	0.02	TRACE	0.02
HEATING VALUE*	1023	1047	1021
SPECIFIC GRAVITY	0.590	0.611	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7933 SAMPLE 10053	INDEX 7934 SAMPLE 12542	INDEX 7935 SAMPLE 12548
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHEROKEE	CHEROKEE	CHEROKEE
FIELD	REKLAW	REKLAW	REKLAW
WELL NAME	REKLAW G. U. NO. 2, 1-T	REKLAW G.U. 2 NO. 1	REKLAW G.U. 2 NO. 1
LOCATION	THOMAS STANDFORD SUR.	RAYMOND SALES SUR.	RAYMOND SALES SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/22/64	06/20/55	09/22/64
SAMPLED	08/05/65	11/10/70	11/10/70
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7813	8486	7814
WELLHEAD PRESSURE,PSIG	3400	3603	3403
OPEN FLOW, MCFD	9050	11800	9050
COMPONENT, MOLE PCT			
METHANE	92.7	83.3	93.1
ETHANE	0.7	0.6	0.7
PROPANE	0.3	0.2	0.3
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	4.8	12.2	4.3
OXYGEN	0.0	1.7	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.7	1.5
HELIUM	0.04	0.03	0.04
HEATING VALUE*	959	865	964
SPECIFIC GRAVITY	0.595	0.635	0.593

	INDEX 7936 SAMPLE 15377	INDEX 7937 SAMPLE 15378	INDEX 7938 SAMPLE 11953
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHEROKEE	CHEROKEE	CHEROKEE
FIELD	WHITE OAK CREEK	WHITE OAK CREEK	WILLIAM WISE AREA
WELL NAME	ALVIE F. JONES NO. 1	ALVIE F. JONES NO. 1	SALLIE D. WHITEMAN NO. 1
LOCATION	G. RUDDELL SUR. A-67	G. RUDDELL SUR. A-67	J. H. ARMSTRONG SUR. A-69
OWNER	DAVIS OIL CO.	DAVIS OIL CO.	STANDARD OIL CO. OF TEXAS
COMPLETED	02/05/77	02/05/77	04/05/69
SAMPLED	09/19/78	09/19/78	07/02/69
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8522	9502	10650
WELLHEAD PRESSURE,PSIG	2550	2600	3417
OPEN FLOW, MCFD	14495	20384 0	2330
COMPONENT, MOLE PCT			
METHANE	94.7	95.1	97.5
ETHANE	1.7	1.9	0.3
PROPANE	0.7	0.5	0.1
N-BUTANE	0.3	0.2	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.6	0.8	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.4	1.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1048	1034	997
SPECIFIC GRAVITY	0.602	0.598	0.568

	INDEX 7939 SAMPLE 8359	INDEX 7940 SAMPLE 3704	INDEX 7941 SAMPLE 882
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CHILDRESS	CLAY	CLAY
FIELD	KIRKLAND	ANTELOPE	CLAY COUNTY
WELL NAME	COATS B NO. 1	M. HENDERSON NO. 11	C. M. WORSHAM NO. 1
LOCATION	SEC. 389	SEC. 2605, BLK. A-464, TE&L	SEC. 3, T&NO SUR.
OWNER	BRITISH AMERICAN OIL PROD. C	SHELL OIL CO.	GULF PRODUCTION CO.
COMPLETED	10/21/61	05/20/41	--/--/00
SAMPLED	12/24/61	12/15/43	06/08/24
FORMATION	PENN-CANYON	-M-1	-TOP LIME
GEOLOGIC PROVINCE CODE	435	420	420
DEPTH, FEET	NOT GIVEN	3165	3386
WELLHEAD PRESSURE,PSIG	200	920	150
OPEN FLOW, MCFD	NOT GIVEN	15	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.3	17.3	3.9
ETHANE	11.1	74.0	87.0
PROPANE	9.2	---	---
N-BUTANE	5.0	---	---
ISOBUTANE	1.3	---	---
N-PENTANE	1.5	---	---
ISOPENTANE	2.6	---	---
CYCLOPENTANE	1.3	---	---
HEXANES PLUS	1.9	---	---
NITROGEN	7.4	8.2	8.2
OXYGEN	0.2	0.2	0.5
ARGON	0.0	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.0	0.2	0.2
HELIUM	0.08	0.06	0.06
HEATING VALUE*	1600	1501	1599
SPECIFIC GRAVITY	1.018	0.957	1.022

	INDEX 7942 SAMPLE 4778	INDEX 7943 SAMPLE 11947	INDEX 7944 SAMPLE 3710
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CLAY	CLAY	CLAY
FIELD	CLAY COUNTY	DILLARD SW	NEW YORK CITY
WELL NAME	EDRINGTON NO. 1-A	HARVILL NO. 1	E. D. COLEMAN NO. A-3
LOCATION	NOT GIVEN	SEC. 76, WOOD CSL SUR. A705	BLK. 24, T. W. TYREE SUR.
OWNER	BRIDWELL OIL CO.	LONGHORN PRODUCTION CO.	SHELL OIL CO.
COMPLETED	03/--/48	06/24/68	12/17/41
SAMPLED	10/17/49	07/03/67	12/22/43
FORMATION	PENN-CISCO	PENN-MARBLE FALLS	MISS-CHAPPEL
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	1291	5782	6216
WELLHEAD PRESSURE,PSIG	550	800	2100
OPEN FLOW, MCFD	NOT GIVEN	1200	200
COMPONENT, MOLE PCT			
METHANE	56.8	67.4	43.1
ETHANE	1.7	12.8	54.8
PROPANE	0.5	9.6	---
N-BUTANE	0.2	2.5	---
ISOBUTANE	TRACE	1.0	---
N-PENTANE	0.1	0.6	---
ISOPENTANE	0.0	0.4	---
CYCLOPENTANE	0.0	0.2	---
HEXANES PLUS	0.2	0.5	---
NITROGEN	38.9	4.8	1.2
OXYGEN	TRACE	TRACE	0.2
ARGON	0.1	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.1	0.7
HELIUM	1.48	0.09	0.04
HEATING VALUE*	636	1355	1419
SPECIFIC GRAVITY	0.734	0.823	0.839

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7945 SAMPLE 90	INDEX 7946 SAMPLE 386	INDEX 7947 SAMPLE 752
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CLAY	CLAY	CLAY
FIELD	PETROLIA	PETROLIA	PETROLIA
WELL NAME	SKELLEY NO. 8	MARTIN NO. 11	MILLER NO. 8
LOCATION	BLK 48, PARKER CO. SCL. LAND	BLK. 13, BOSQUE CO.SCL.LAND	BLK. 59 PARKER CO. SCH. LAND
OWNER	LONE STAR GAS CO.	TEXAS CO.	LONE STAR GAS CO.
COMPLETED	--/--/00	02/--/20	10/15/22
SAMPLED	02/27/20	07/30/20	10/--/22
FORMATION	PENN-CISCO	NOT GIVEN	PENN-CISCO
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	NOT GIVEN	1683	1399
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	450
OPEN FLOW, MCFD	NOT GIVEN	4000	620
COMPONENT, MOLE PCT			
METHANE	56.8	71.0	49.8
ETHANE	10.3	0.0	9.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	31.1	26.6	39.4
OXYGEN	0.5	1.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.0	0.1
HELIUM	0.90	1.24	1.11
HEATING VALUE*	760	719	668
SPECIFIC GRAVITY	0.735	0.665	0.760

	INDEX 7948 SAMPLE 1157	INDEX 7949 SAMPLE 1159	INDEX 7950 SAMPLE 12841
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CLAY	CLAY	COCHRAN
FIELD	PETROLIA	PETROLIA	LEVELLAND
WELL NAME	MILLER NO. 11	PANHANDLE NO. 3	D. S. WRIGHT & NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	LABOR 26, LEAGUE 95, CSL SUR
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	ARD DRILLING CO.
COMPLETED	--/--/00	--/--/00	05/16/58
SAMPLED	09/24/25	09/25/25	06/01/71
FORMATION	PENN-CISCO	PENN-CISCO	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	420	420	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	4838
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	60
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	54
COMPONENT, MOLE PCT			
METHANE	39.6	32.0	74.2
ETHANE	13.8	40.8	7.1
PROPANE	---	---	3.1
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	43.7	26.1	11.5
OXYGEN	2.1	0.9	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.9	0.4	3.0
HELIUM	0.85	0.62	0.02
HEATING VALUE*	639	1041	999
SPECIFIC GRAVITY	0.812	0.867	0.715

	INDEX 7951 SAMPLE 11611	INDEX 7952 SAMPLE 4106	INDEX 7953 SAMPLE 12657
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COCHRAN	COCHRAN	COKE
FIELD	MONCRIEF-WASTEN	SLAUGHTER	BRONTE
WELL NAME	F. D. WASTEN NO. 1	IDGE SMITH NO. 34	BRONTE GARDNER UNIT NO. 5
LOCATION	ARMSTRONG CSL SUR.	OLDHAM CO. SCHOOL LAND	SEC. 453, BLK. 1A, M&TC SUR.
OWNER	W. A. MONCRIEF, JR.	MONOLULU OIL CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	12/10/66	02/19/42	12/28/67
SAMPLED	09/02/68	06/--/96	02/05/71
FORMATION	DEVO-	PERM-SAN ANDRES	CRET-GARDNER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10067	4931	5102
WELLHEAD PRESSURE,PSIG	2186	375	1970
OPEN FLOW, MCFD	6500	504	18100
COMPONENT, MOLE PCT			
METHANE	72.0	61.1	70.1
ETHANE	9.7	16.9	9.2
PROPANE	4.8	---	7.3
N-BUTANE	1.8	---	2.3
ISOBUTANE	0.5	---	0.8
N-PENTANE	0.5	---	0.4
ISOPENTANE	0.2	---	0.4
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.3	---	0.3
NITROGEN	7.1	14.9	8.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.9	6.9	0.6
HELIUM	0.01	0.11	0.25
HEATING VALUE*	1154	922	1222
SPECIFIC GRAVITY	0.769	0.767	0.783

	INDEX 7954 SAMPLE 12266	INDEX 7955 SAMPLE 4961	INDEX 7956 SAMPLE 4962
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COKE	COKE	COKE
FIELD	FRANK PEARSON	JAMESON	JAMESON
WELL NAME	CAMP NO. 2	J. B. WALKER NO. 4	R. W. WALKER NO. 3
LOCATION	SEC. 126, BLK. 2, H&TC SUR.	CARL BRODKHUTSEN SUR.NO.A-31	SNYDER&VON ROSENBERG,JR. SUR
OWNER	PEARSON-SIBERT OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	08/18/69	10/26/50	10/27/50
SAMPLED	05/15/70	11/13/50	11/09/50
FORMATION	PENN-STRAWN REEF	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6068	5770	5730
WELLHEAD PRESSURE,PSIG	1225	1275	1700
OPEN FLOW, MCFD	24000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.5	71.9	72.5
ETHANE	10.3	13.9	13.1
PROPANE	6.0	6.6	5.9
N-BUTANE	1.3	1.6	1.2
ISOBUTANE	0.4	0.5	0.3
N-PENTANE	0.2	0.4	0.2
ISOPENTANE	0.6	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.3	3.9	5.4
OXYGEN	0.0	0.1	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.6	0.8
HELIUM	0.13	0.11	0.11
HEATING VALUE*	1185	1253	1194
SPECIFIC GRAVITY	0.743	0.757	0.749

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7957 SAMPLE 12805	INDEX 7958 SAMPLE 12807	INDEX 7959 SAMPLE 7053
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COKE	COKE	COLEMAN
FIELD	JAMESON	MILLICAN	CAMP COLORADO
WELL NAME	J. S. U. NO. 6-35	M. R. U. NO. 3-E	O. H. TERRY NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	M. KIGAN SUR. NO. 498
OWNER	SUN OIL CO.	SUN OIL CO.	CHAPMAN OIL CO.
COMPLETED	10/13/53	11/21/53	12/31/58
SAMPLED	04/27/71	04/27/71	04/29/59
FORMATION	PERM-JAMESON	PENN-STRAWN	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	430	430	425
DEPTH, FEET	5840	5850	2628
WELLHEAD PRESSURE,PSIG	600	220	983
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5400
COMPONENT, MOLE PCT			
METHANE	63.1	58.2	72.2
ETHANE	16.0	17.6	0.1
PROPANE	9.0	11.9	0.0
N-BUTANE	2.5	3.2	0.1
ISOBUTANE	1.4	1.8	0.0
N-PENTANE	0.7	0.6	0.1
ISOPENTANE	0.3	1.2	0.0
CYCLOPENTANE	0.2	0.5	0.1
HEXANES PLUS	0.5	0.8	0.2
NITROGEN	6.1	3.7	26.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.008	0.05	1.80
HEATING VALUE*	1360	1519	755
SPECIFIC GRAVITY	0.843	0.920	0.670

	INDEX 7960 SAMPLE 10893	INDEX 7961 SAMPLE 10890	INDEX 7962 SAMPLE 11031
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	CAMP COLORADO	CAMP COLORADO N	CAMP COLORADO N
WELL NAME	DELLA TERRY NO. A-1	NELLE BAILEY NO. 1	NELLE BAILEY NO. 1
LOCATION	DAVID MOSES SUR. NO. 499	SEC. 15, BLK. 3, H&TB SUR.	SEC. 15, BLK. 3, HT&B SUR.
OWNER	CHAPMAN OIL CO.	DAVIS & DAVIS, INC.	DAVIS & DAVIS, INC.
COMPLETED	--/--/00	--/--/00	08/01/66
SAMPLED	02/21/67	02/21/67	07/15/67
FORMATION	PENN-MARBLE FALLS	CRET-GARDNER	CRET-GARDNER
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2579	2134	2150
WELLHEAD PRESSURE,PSIG	903	872	825
OPEN FLOW, MCFD	NOT GIVEN	16000	15980
COMPONENT, MOLE PCT			
METHANE	71.2	72.4	72.0
ETHANE	10.2	6.9	6.9
PROPANE	5.7	4.2	3.9
N-BUTANE	1.5	1.2	1.2
ISOBUTANE	0.7	0.4	0.6
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.2	13.5	13.8
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.28	0.45	0.44
HEATING VALUE*	1170	1055	1051
SPECIFIC GRAVITY	0.754	0.726	0.729

	INDEX 7963 SAMPLE 1817	INDEX 7964 SAMPLE 7403	INDEX 7965 SAMPLE 7404
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	COLEMAN COUNTY REGULAR	FISK	FISK
WELL NAME	VANCE NO. 1	STOBAUGH NO. 1	A. C. SPARKS NO. 1
LOCATION	E.T.R.R. SUR.	SEC. 95, BLK. 1, GH&HRR SUR.	SEC. 88, BLK. 1, GH&RR SUR.
OWNER	TEXAS CO.	EDLO-TEXAS CORP.	EDLO-TEXAS CORP.
COMPLETED	06/01/28	--/--/00	03/--/59
SAMPLED	07/16/29	02/22/60	02/22/60
FORMATION	NOT GIVEN	EOCE-JENNINGS	EOCE-JENNINGS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2010	2455	2381
WELLHEAD PRESSURE,PSIG	800	990	1033
OPEN FLOW, MCFD	1500	25800	11400
COMPONENT, MOLE PCT			
METHANE	80.0	74.5	74.3
ETHANE	5.3	8.0	8.2
PROPANE	---	4.0	4.2
N-BUTANE	---	0.9	1.1
ISOBUTANE	---	0.6	0.6
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.2
NITROGEN	13.7	10.8	10.5
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.57	0.50	0.40
HEATING VALUE*	905	1070	1089
SPECIFIC GRAVITY	0.639	0.707	0.716

	INDEX 7966 SAMPLE 7405	INDEX 7967 SAMPLE 7406	INDEX 7968 SAMPLE 7407
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	FISK	FISK	FISK
WELL NAME	G. W. SCOTT B NO. 1	STOBAUGH NO. 1	R. C. ADRIAN NO. 1
LOCATION	SEC. 91, BLK. 1, GH&HRR SUR.	SEC. 70, BLK. 1, GH&HRR SUR.	SEC.86, BLK.1, GH&HRR SUR.
OWNER	KATZ OIL CO.	KATZ OIL CO.	EDLO-TEXAS CORP.
COMPLETED	02/07/58	03/10/58	--/--/00
SAMPLED	02/22/60	02/22/60	02/22/60
FORMATION	EOCE-JENNINGS	EOCE-JENNINGS	EOCE-JENNINGS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2496	2466	NOT GIVEN
WELLHEAD PRESSURE,PSIG	940	940	NOT GIVEN
OPEN FLOW, MCFD	1300	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	73.0	74.6
ETHANE	7.8	7.9	7.8
PROPANE	3.9	3.9	4.2
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	12.7	12.5	10.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.50	0.40
HEATING VALUE*	1059	1060	1082
SPECIFIC GRAVITY	0.720	0.718	0.715

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7969 SAMPLE 11071	INDEX 7970 SAMPLE 3763	INDEX 7971 SAMPLE 8162
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	FISK	GRAVES	HUDSON
WELL NAME	A. C. SPARKS	MOSE THOMPSON NO. 1	HUDSON A-1
LOCATION	FISK, TEXAS	SEC. 2, BLK. 1, HT&B SUR.	SEC. 74, BLK. 2, GH&RR SUR.
OWNER	BRADY MUNICIPAL GAS CORP.	WOODLEY PETROLEUM CO.	LONE STAR GAS CO.
COMPLETED	--/--/00	07/06/42	09/16/57
SAMPLED	08/18/67	03/30/44	08/12/61
FORMATION	NOT GIVEN	NOT GIVEN	PENN-MORRIS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	NOT GIVEN	2807	3251
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1000	815
OPEN FLOW, MCFD	NOT GIVEN	2950	798
COMPONENT, MOLE PCT			
METHANE	73.5	66.0	70.9
ETHANE	8.6	22.4	10.1
PROPANE	4.5	---	5.2
N-BUTANE	1.3	---	1.3
ISOBUTANE	0.6	---	0.6
N-PENTANE	0.2	---	0.2
ISOPENTANE	0.3	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	9.9	10.7	10.9
OXYGEN	TRACE	0.4	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.42	0.41	0.35
HEATING VALUE*	1115	1070	1124
SPECIFIC GRAVITY	0.727	0.711	0.742

	INDEX 7972 SAMPLE 8163	INDEX 7973 SAMPLE 8563	INDEX 7974 SAMPLE 8564
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	HUDSON	JUNCTION	JUNCTION
WELL NAME	HUDSON NO. 1	T. M. HAYES NO. 2	T. M. HAYES NO. 3
LOCATION	SEC. 74, BLK. 2, GH&RR SUR.	BOND & SANDERS SUR. NO. 92	BOND & SANDERS SUR. NO. 92
OWNER	LOUIS FRANKLIN & SON	BIG D DRILLING CO.	BIG D DRILLING CO.
COMPLETED	12/05/58	--/--/56	--/--/58
SAMPLED	08/12/61	05/22/62	05/22/62
FORMATION	PENN-GRAY	PENN-BRENECKE	PENN-BRENECKE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3597	1114	1096
WELLHEAD PRESSURE,PSIG	705	46	54
OPEN FLOW, MCFD	2605	1560	1800
COMPONENT, MOLE PCT			
METHANE	70.7	80.0	81.0
ETHANE	11.3	3.6	4.0
PROPANE	5.5	5.1	5.5
N-BUTANE	1.4	2.1	2.9
ISOBUTANE	0.8	1.7	1.7
N-PENTANE	0.3	1.2	0.8
ISOPENTANE	0.4	0.9	0.6
CYCLOPENTANE	TRACE	0.4	0.3
HEXANES PLUS	0.1	1.0	0.7
NITROGEN	9.0	2.6	2.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.15	0.13
HEATING VALUE*	1171	1326	1297
SPECIFIC GRAVITY	0.751	0.779	0.760

	INDEX 7975 SAMPLE 17929	INDEX 7976 SAMPLE 1442	INDEX 7977 SAMPLE 2075
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	LAKE NOVICE	NOT GIVEN	NOT GIVEN
WELL NAME	RAY PARKER NO. 1	NOT GIVEN	HUTCHINS NO. 1
LOCATION	SEC. 31, BLK. 2, T&NO SUR.,	SEC. 19, 2 MI N VALERA	SEC. 59, BLK. 1, GH&H SUR.
OWNER	HRUBETZ OIL CO.	ROTH & FAUROT	SUNRAY OIL CORP.
COMPLETED	11/12/83	--/--/00	--/--/00
SAMPLED	12/11/85	08/24/27	06/20/30
FORMATION	CRET-GARDNER	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3687	2580	NOT GIVEN
WELLHEAD PRESSURE,PSIG	200	700	NOT GIVEN
OPEN FLOW, MCFD	2601	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.6	56.3	60.7
ETHANE	8.9	30.1	25.0
PROPANE	6.6	---	---
N-BUTANE	2.7	---	---
ISOBUTANE	0.7	---	---
N-PENTANE	1.2	---	---
ISOPENTANE	0.6	---	---
CYCLOPENTANE	0.4	---	---
HEXANES PLUS	1.0	---	---
NITROGEN	9.7	12.4	13.3
OXYGEN	TRACE	0.3	0.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.6	0.6
HELIUM	0.29	0.31	0.34
HEATING VALUE*	1273	1110	1063
SPECIFIC GRAVITY	0.825	0.761	0.738

	INDEX 7978 SAMPLE 17262	INDEX 7979 SAMPLE 8164	INDEX 7980 SAMPLE 11037
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	REEVES	SANTA ANNA	TALPA
WELL NAME	ERNEST REEVES NO. 1	LUCAS NO. 2	CHARLES PRICE NO. 2
LOCATION	SEC. 13, BLK 2, T&NO SUR., A-662	SEC. 13, M. MARTINEZ NO. 751	SEC. 67, BBB&C SUR.
OWNER	HRUBETZ OIL CO.	LONE STAR GAS CO.	G. W. STRAKE
COMPLETED	05/17/83	05/04/51	02/04/67
SAMPLED	04/18/84	08/12/61	07/24/67
FORMATION	DROO-ELLENBURGER	PENN-MARBLE FALLS	PENN-SERRATT
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4553	2112	2116
WELLHEAD PRESSURE,PSIG	300	520	775
OPEN FLOW, MCFD	58	1784	4200
COMPONENT, MOLE PCT			
METHANE	68.8	80.8	68.5
ETHANE	10.6	3.9	5.5
PROPANE	5.1	1.2	1.7
N-BUTANE	1.5	0.2	1.0
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	11.5	10.9	19.3
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	0.39	0.38	0.53
HEATING VALUE*	1125	980	979
SPECIFIC GRAVITY	0.757	0.651	0.737

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 7981 SAMPLE 5615	INDEX 7982 SAMPLE 6285	INDEX 7983 SAMPLE 7306
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLLINGSWORTH	COLLINGSWORTH	COLLINGSWORTH
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	D. J. BETENBOUGH NO. A-1	WATTENBARGER NO. 4-A	LAYCOCK 6-A
LOCATION	SEC. 100, BLK. 16, H&GN SUR.	SEC. 92, BLK. 12, H&GN SUR.	SEC. 96, BLK. 12, H&GN SUR.
OWNER	PANOMA CORP.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	04/07/54	02/25/57	09/20/59
SAMPLED	04/30/54	03/22/57	12/11/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	1898	1741	1942
WELLHEAD PRESSURE,PSIG	412	414	395
OPEN FLOW, MCFD	NOT GIVEN	6500	2275
COMPONENT, MOLE PCT			
METHANE	88.4	90.3	91.8
ETHANE	3.1	3.0	3.1
PROPANE	1.5	1.4	1.3
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	5.6	4.2	2.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.17	0.15	0.10
HEATING VALUE*	1023	1042	1049
SPECIFIC GRAVITY	0.622	0.617	0.607

	INDEX 7984 SAMPLE 5429	INDEX 7985 SAMPLE 4911	INDEX 7986 SAMPLE 4914
STATE	TEXAS	TEXAS	COLORADO
COUNTY	COLLINGSWORTH	COLORADO	BUCK SNAG
FIELD	WILDCAT	BUCK SNAG	CLAUD B. HAMILL NO. 1-A
WELL NAME	COLEMAN NO. 1	C. R. SCHIURRING NO. 1	SEC. 6
LOCATION	SEC. 87, BLK. 16, H&GN SUR.	SEC. 6	CLAUD B. HAMILL
OWNER	PANOMA CORP.	CLAUD B. HAMILL	07/07/49
COMPLETED	03/--/53	05/15/49	05/18/50
SAMPLED	03/27/53	05/18/50	EOCE-YEGUA
FORMATION	PERM-WICHITA-ALBANY	EOCE-YEGUA	220
GEOLOGIC PROVINCE CODE	435	220	6652
DEPTH, FEET	1895	6134	2133
WELLHEAD PRESSURE,PSIG	395	2570	12500
OPEN FLOW, MCFD	1100	3600	
COMPONENT, MOLE PCT			
METHANE	86.4	89.7	86.2
ETHANE	3.5	5.5	6.2
PROPANE	1.6	2.4	4.2
N-BUTANE	0.4	0.7	1.0
ISOBUTANE	0.4	0.3	0.9
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	7.0	0.4	0.2
OXYGEN	0.0	0.2	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	0.21	0.01	0.01
HEATING VALUE*	1026	1128	1182
SPECIFIC GRAVITY	0.640	0.636	0.675

	INDEX 7987 SAMPLE 14890	INDEX 7988 SAMPLE 10098	INDEX 7989 SAMPLE 10099
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	CECIL NOBLE	COLUMBUS	COLUMBUS
WELL NAME	FORD WESENHOFT NO. 1	COLUMBUS FIELD UNIT 10-15-U1	COLUMBUS FIELD UNIT 10-15-MT
LOCATION	SEL E. TUMLINSON SUR. A-44	J. TUMLINSON SUR. A-46	J. TUMLINSON SUR. A-46
OWNER	PRAIRIE PRODUCING CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	07/28/75	11/24/63	12/27/63
SAMPLED	01/20/77	09/02/65	09/02/65
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8842	9160	9428
WELLHEAD PRESSURE,PSIG	1749	1136	1464
OPEN FLOW, MCFD	4600	4249	890
COMPONENT, MOLE PCT			
METHANE	86.6	85.8	83.4
ETHANE	5.5	5.7	5.7
PROPANE	3.0	3.1	4.1
N-BUTANE	0.8	0.7	1.2
ISOBUTANE	0.5	0.8	0.8
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.3	0.6
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.4	0.6
NITROGEN	0.5	0.6	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	2.6	2.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1137	1139	1197
SPECIFIC GRAVITY	0.676	0.681	0.717

	INDEX 7990 SAMPLE 10100	INDEX 7991 SAMPLE 11669	INDEX 7992 SAMPLE 15374
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	COLUMBUS	COLUMBUS	DUBINA S
WELL NAME	COLUMBUS FIELD UNIT 10-15-LT	UNIT NO. 10-14	SCHOENEBERG A NO. 1
LOCATION	J. TUMLINSON SUR. A-46	J. TUMLINSON SUR. A-46	JESSE BURNHAM SUR. A-9
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE CO.
COMPLETED	11/26/63	03/07/68	06/04/77
SAMPLED	09/02/65	10/14/68	09/12/78
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10110	7252	9165
WELLHEAD PRESSURE,PSIG	2371	3175	2220
OPEN FLOW, MCFD	22630	64000	3300
COMPONENT, MOLE PCT			
METHANE	86.1	82.6	81.9
ETHANE	5.3	4.9	6.5
PROPANE	3.0	2.8	5.1
N-BUTANE	0.8	0.7	1.2
ISOBUTANE	0.4	0.6	0.8
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	0.4	5.2	0.8
OXYGEN	0.0	1.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	1.3	2.8
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1149	1077	1176
SPECIFIC GRAVITY	0.681	0.683	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 7993 SAMPLE 12122		INDEX 7994 SAMPLE 14200		INDEX 7995 SAMPLE 3876	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	ENGLEHART		ENGLEHART		FRELSBURG	
WELL NAME	W. F. ZOELLNER NO. 2		HAROLD JOHNSON NO. B-1		THOMPSON NO. 1	
LOCATION	JOHNSON&STAFFORD SUR. A-729		SA&MG SUR. 17, A-539		CHAS. FRIOSHE SUR. A-199	
OWNER	ROBERT MOSBACHER		TEXAS OIL & GAS CORP.		SINCLAIR-PRAIRIE OIL CO.	
COMPLETED	04/14/68		07/20/73		06/15/44	
SAMPLED	11/20/69		10/30/74		08/29/44	
FORMATION	EOCE-YEGUA		EOCE-WILCOX C		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6230		8818		6800	
WELLHEAD PRESSURE,PSIG	2238		2440		NOT GIVEN	
OPEN FLOW, MCFD	5300		750		26100	
COMPONENT, MOLE PCT						
METHANE	89.7		89.4		78.9	
ETHANE	4.8		4.6		18.8	
PROPANE	1.7		2.1		---	
N-BUTANE	0.5		0.5		---	
ISOBUTANE	0.2		0.5		---	
N-PENTANE	0.4		TRACE		---	
ISOPENTANE	0.2		0.3		---	
CYCLOPENTANE	---		TRACE		---	
HEXANES PLUS	0.1		0.1		---	
NITROGEN	0.5		0.2		0.8	
OXYGEN	0.0		0.0		0.2	
ARGON	0.0		0.0		---	
HYDROGEN	0.1		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	2.4		2.2		2.1	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1087		1094		1136	
SPECIFIC GRAVITY	0.645		0.643		0.669	

	INDEX 7996 SAMPLE 5301		INDEX 7997 SAMPLE 9098		INDEX 7998 SAMPLE 14965	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	FRELSBURG		GARWOOD		GARWOOD SE	
WELL NAME	R. A. JOHNSON NO. 1		C. F. KALLINA		MCLANE TRUST "B" NO. 1C	
LOCATION	ED. RUHMAN SUR. NO. A-479		I&N RR SUR. NO. 44 A-295		BLK. 42, I&GNRR SUR. A-293	
OWNER	ANDERSON-PRICHARD OIL CORP.		CRESCENT OIL & GAS CORP.		GOLDKING PRODUCTION CO.	
COMPLETED	06/20/52		12/02/68		01/15/75	
SAMPLED	10/17/52		09/25/63		04/13/77	
FORMATION	EOCE-WILCOX		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9652		3942		3202	
WELLHEAD PRESSURE,PSIG	2908		1625		1465	
OPEN FLOW, MCFD	2725		8600		5000	
COMPONENT, MOLE PCT						
METHANE	73.8		98.9		98.6	
ETHANE	6.4		0.2		0.2	
PROPANE	6.7		TRACE		TRACE	
N-BUTANE	3.3		0.0		0.0	
ISOBUTANE	2.0		0.0		0.0	
N-PENTANE	1.1		0.0		0.0	
ISOPENTANE	1.5		0.0		0.0	
CYCLOPENTANE	0.2		0.0		0.0	
HEXANES PLUS	0.8		0.0		0.0	
NITROGEN	0.9		0.5		0.3	
OXYGEN	0.1		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.0		0.2		0.8	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1375		1005		1002	
SPECIFIC GRAVITY	0.840		0.559		0.564	

	INDEX 7999 SAMPLE 14195		INDEX 8000 SAMPLE 13458		INDEX 8001 SAMPLE 13822	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	GLIDDEN		HAMEL E		HAMEL E	
WELL NAME	J. E. JOHNSON NO.1		CLARA MOYD RODGERS NO. 1		G. J. MILLER II B NO. 10	
LOCATION	DANIEL GILLELAND SUR. A-26		RICHARD DOWDY SUR. A-163		RICHARD DOWDY SUR. A-163	
OWNER	SUPERIOR OIL CO.		HUMBLE OIL & REFINING CO.		EXXON CO., U.S.A.	
COMPLETED	04/23/73		06/02/71		09/22/72	
SAMPLED	10/25/74		10/20/72		09/27/73	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		EOCE-WILCOX & HAMEL	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	10297		9607		9900	
WELLHEAD PRESSURE,PSIG	4680		2984		2715	
OPEN FLOW, MCFD	12950		5800		460	
COMPONENT, MOLE PCT						
METHANE	87.8		78.6		68.4	
ETHANE	4.6		6.4		7.9	
PROPANE	2.2		6.0		10.4	
N-BUTANE	0.5		1.9		4.0	
ISOBUTANE	0.6		1.7		3.0	
N-PENTANE	0.1		0.6		1.2	
ISOPENTANE	0.4		0.4		1.6	
CYCLOPENTANE	0.1		0.2		0.4	
HEXANES PLUS	0.3		0.6		1.0	
NITROGEN	0.2		0.9		0.4	
OXYGEN	0.0		TRACE		0.1	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.1		2.7		1.8	
HELIUM	0.01		TRACE		TRACE	
HEATING VALUE*	1106		1269		1526	
SPECIFIC GRAVITY	0.665		0.769		0.911	

	INDEX 8002 SAMPLE 13823		INDEX 8003 SAMPLE 15000		INDEX 8004 SAMPLE 10862	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	HAMEL E		KAINER		MARMADUKE BATON	
WELL NAME	G. J. MILLER II8 NO. 11		KAINER & JOHNSON NO. 1		M. E. BINGAMAN NO. 1	
LOCATION	RICHARD DOWDY SUR. A-163		B. RATCLIFF SUR. A-894		MARMADUKE BATON SUR. A-105	
OWNER	EXXON CO., U.S.A.		PETRO-LEWIS CORP.		LONE STAR PRODUCING CO.	
COMPLETED	10/13/72		01/31/74		01/17/66	
SAMPLED	11/27/73		05/10/77		--/--/00	
FORMATION	EOCE-WILCOX		EOCE-YEGUA		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	10000		6165		4949	
WELLHEAD PRESSURE,PSIG	3110		2310		1829	
OPEN FLOW, MCFD	460		6600		10200	
COMPONENT, MOLE PCT						
METHANE	71.3		88.7		93.4	
ETHANE	6.9		6.0		3.9	
PROPANE	7.3		2.4		0.5	
N-BUTANE	3.5		0.6		0.1	
ISOBUTANE	2.1		0.5		0.4	
N-PENTANE	1.2		0.2		TRACE	
ISOPENTANE	1.9		0.3		0.1	
CYCLOPENTANE	0.5		0.1		TRACE	
HEXANES PLUS	1.5		0.2		0.1	
NITROGEN	0.4		0.5		1.2	
OXYGEN	0.0		TRACE		0.2	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.9		0.4		0.2	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1470		1141		1055	
SPECIFIC GRAVITY	0.890		0.647		0.599	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8005 SAMPLE 10863	INDEX 8006 SAMPLE 12250	INDEX 8007 SAMPLE 15018
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	MARMADUKE BATON	MONAT	MUSTANG CREEK
WELL NAME	M. E. BINGARAN NO. 1	D. WINTERMANN NO. 1A	LEHRER NO. 1
LOCATION	MARMADUKE BATON SUR. A-105	THOMAS CLARK SUR. A-682	I&GNRR SUR. 27 A-275
OWNER	LONE STAR PRODUCING CO.	CICO OIL & GAS CO.	TEAL PETROLEUM CO.
COMPLETED	01/17/66	02/12/69	12/30/74
SAMPLED	--/--/70	04/30/70	05/30/77
FORMATION	OLIG-FRIO	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2854	8564	5570
WELLHEAD PRESSURE,PSIG	1201	2976	1225
OPEN FLOW, MCFD	3700	12000	6000
COMPONENT, MOLE PCT			
METHANE	96.7	62.1	95.0
ETHANE	0.0	11.9	2.8
PROPANE	TRACE	10.4	0.7
N-BUTANE	0.0	3.7	0.1
ISOBUTANE	0.0	2.8	0.1
N-PENTANE	0.0	0.4	0.0
ISOPENTANE	0.0	3.3	0.1
CYCLOPENTANE	0.0	0.5	TRACE
HEXANES PLUS	0.0	1.2	TRACE
NITROGEN	2.5	1.8	0.8
OXYGEN	0.4	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.0	0.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	980	1569	1042
SPECIFIC GRAVITY	0.571	0.954	0.587

	INDEX 8008 SAMPLE 15019	INDEX 8009 SAMPLE 15065	INDEX 8010 SAMPLE 11792
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	MUSTANG CREEK	MUSTANG CREEK	MUSTANG CREEK W
WELL NAME	LEHRER NO. A-1	ALTON ALLEN NO. 2	LEHRER A NO. 1
LOCATION	I&GNRR SUR. 27 A-274	SA&MG SUR. A-876	F. G. MAHON SUR. A-747
OWNER	TEAL PETROLEUM CO.	DUER WAGNER & CO.	ANADARKO PRODUCTION CO.
COMPLETED	03/26/75	02/04/75	11/13/67
SAMPLED	05/30/77	07/29/77	03/18/69
FORMATION	MIOC-	MIOC-	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3344	2019	5838
WELLHEAD PRESSURE,PSIG	325	990	2192
OPEN FLOW, MCFD	9000	350	74000
COMPONENT, MOLE PCT			
METHANE	95.5	99.3	91.2
ETHANE	2.7	0.1	4.1
PROPANE	0.6	TRACE	1.8
N-BUTANE	0.1	0.0	0.5
ISOBUTANE	0.1	0.0	0.5
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.2
HEXANES PLUS	TRACE	0.0	0.6
NITROGEN	0.5	0.5	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1042	1008	1133
SPECIFIC GRAVITY	0.583	0.556	0.639

	INDEX 8011 SAMPLE 12323	INDEX 8012 SAMPLE 10543	INDEX 8013 SAMPLE 13884
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	NADA	NADA SE	NEW ULM SW
WELL NAME	MCDERMOTT NO. 1	GUY STOVALL NO. 1	ARCO-FEE NO. 1-C
LOCATION	JOHNSON & STAFFORD SUR.A-270	SEC.3, SA&MGRRCO.,SUR.A-531	JAMES NELSON SUR. A-434
OWNER	WADSWORTH OIL CO.	SHELL OIL CO.	PRAIRIE PRODUCING CO.
COMPLETED	10/20/69	01/14/66	12/16/71
SAMPLED	07/12/70	04/28/66	11/12/73
FORMATION	MIOC-	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2010	11695	9414
WELLHEAD PRESSURE,PSIG	1050	11779	3107
OPEN FLOW, MCFD	12000	13500	5200
COMPONENT, MOLE PCT			
METHANE	96.2	89.1	58.8
ETHANE	0.1	0.1	13.9
PROPANE	0.1	0.0	13.9
N-BUTANE	0.0	0.0	4.0
ISOBUTANE	0.0	0.0	3.4
N-PENTANE	0.0	0.0	0.7
ISOPENTANE	0.0	0.0	1.8
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	2.9	0.5	0.4
OXYGEN	0.8	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	10.3	3.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	979	904	1584
SPECIFIC GRAVITY	0.572	0.657	0.970

	INDEX 8014 SAMPLE 13885	INDEX 8015 SAMPLE 13887	INDEX 8016 SAMPLE 2542
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	NEW ULM SW	NEW ULM SW	NOT GIVEN
WELL NAME	ARCO-FEE NO. 2UT	JOHN M. GAY NO. 1	NELSON NO. 1
LOCATION	JAMES NELSON SUR. A-434	JAMES TYLEE SUR. A-550	I&GN R.R. SUR. 43
OWNER	PRAIRIE PRODUCING CO.	PRAIRIE PRODUCING CO.	COYLE-CONCORD OIL CO.
COMPLETED	08/31/72	08/12/72	--/--/00
SAMPLED	11/12/73	11/12/73	08/25/32
FORMATION	EOCE-WILCOX	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9156	9382	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2300	3007	NOT GIVEN
OPEN FLOW, MCFD	2500	5900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	41.6	74.4	99.4
ETHANE	12.0	5.9	0.0
PROPANE	27.0	4.5	---
N-BUTANE	7.1	1.0	---
ISOBUTANE	6.5	1.0	---
N-PENTANE	1.4	0.2	---
ISOPENTANE	0.7	0.5	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	0.2	7.7	0.0
OXYGEN	TRACE	1.7	0.3
ARGON	0.0	0.1	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.9	2.9	0.3
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1909	1082	1007
SPECIFIC GRAVITY	1.171	0.748	0.559

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8017 SAMPLE 14263		INDEX 8018 SAMPLE 13824		INDEX 8019 SAMPLE 12450	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	PRAIRIE BELL		RABEL		RAMSEY E	
WELL NAME	JOHN MASTEDT NO. 1		MATTIE RABEL NO. 1		ADA M. WINTERMANN NO. 1	
LOCATION	BENJAMIN PARKER SUR. A-450		JOHN M. DABNEY SUR. A-17		PETER K. BARTLESON SUR. A-84	
OWNER	PRAIRIE PRODUCING CO.		EXXON CO., U.S.A.		NATURAL RESOURCES CORP.	
COMPLETED	03/09/73		06/19/72		11/30/69	
SAMPLED	02/--/75		11/27/73		10/13/70	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	11012		7650		10692	
WELLHEAD PRESSURE,PSIG	4320		2634		3614	
OPEN FLOW, MCFD	8700		25000		10800	
COMPONENT, MOLE PCT						
METHANE	82.2		80.8		88.1	
ETHANE	7.8		5.6		5.6	
PROPANE	3.7		4.5		2.0	
N-BUTANE	0.8		1.7		0.4	
ISOBUTANE	0.7		1.7		0.5	
N-PENTANE	0.2		0.8		0.1	
ISOPENTANE	0.3		1.1		0.1	
CYCLOPENTANE	TRACE		0.4		TRACE	
HEXANES PLUS	0.1		1.1		0.2	
NITROGEN	0.5		0.8		0.6	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		TRACE		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.7		0.4		2.4	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1145		1303		1094	
SPECIFIC GRAVITY	0.703		0.767		0.650	

	INDEX 8020 SAMPLE 12451		INDEX 8021 SAMPLE 12452		INDEX 8022 SAMPLE 12453	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	RAMSEY E		RAMSEY E		RAMSEY E	
WELL NAME	METTIE POOL ET AL, NO. 1		LOREASE PRESMEYER NO. 1		METTIE POOL ET AL, NO. 1	
LOCATION	PETER K. BARTLESON SUR. A-84		PETER K. BARTLESON SUR. A-84		PETER K. BARTLESON SUR. A-84	
OWNER	NATURAL RESOURCES CORP.		NATURAL RESOURCES CORP.		NATURAL RESOURCES CORP.	
COMPLETED	08/22/69		09/17/69		08/22/69	
SAMPLED	10/13/70		10/13/70		10/13/70	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9334		8919		8908	
WELLHEAD PRESSURE,PSIG	3131		2950		2945	
OPEN FLOW, MCFD	10300		9000		15600	
COMPONENT, MOLE PCT						
METHANE	86.2		84.1		86.8	
ETHANE	5.7		5.7		5.5	
PROPANE	3.4		4.0		3.2	
N-BUTANE	0.7		1.0		0.7	
ISOBUTANE	0.7		0.9		0.7	
N-PENTANE	0.2		0.4		0.2	
ISOPENTANE	0.1		0.6		0.1	
CYCLOPENTANE	TRACE		0.2		0.1	
HEXANES PLUS	0.2		0.5		0.2	
NITROGEN	0.8		1.0		0.7	
OXYGEN	0.1		TRACE		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8		1.5		1.6	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1134		1198		1135	
SPECIFIC GRAVITY	0.669		0.705		0.665	

	INDEX 8023 SAMPLE 12454		INDEX 8024 SAMPLE 15239		INDEX 8025 SAMPLE 4085	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		ROCK ISLAND	
FIELD	RAMSEY E		RHINEHART		FELIX FEHRENKAMP NO. 1	
WELL NAME	LOREASE PRESMEYER NO. 1		MUNN NO. 1		NOT GIVEN	
LOCATION	PETER K. BARTLESON SUR. A-28		I&GN RR SUR. 11 A-297		SINCLAIR-PRAIRIE OIL CO.	
OWNER	NATURAL RESOURCES CORP.		GUEST & WOLFSON CO.		04/18/45	
COMPLETED	09/17/69		02/27/76		06/18/45	
SAMPLED	10/13/70		03/--/78		EOCE-WILCOX	
FORMATION	EOCE-WILCOX		OLIG-FRIO		220	
GEOLOGIC PROVINCE CODE	220		220		9681	
DEPTH, FEET	9115		3357		3350	
WELLHEAD PRESSURE,PSIG	2999		1344		6000	
OPEN FLOW, MCFD	11900		7000			
COMPONENT, MOLE PCT						
METHANE	87.2		99.0		79.9	
ETHANE	5.6		0.1		16.5	
PROPANE	2.8		TRACE		---	
N-BUTANE	0.6		0.0		---	
ISOBUTANE	0.6		0.0		---	
N-PENTANE	TRACE		0.0		---	
ISOPENTANE	0.2		0.0		---	
CYCLOPENTANE	TRACE		0.0		---	
HEXANES PLUS	0.1		0.0		---	
NITROGEN	0.9		0.7		0.7	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.1		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	1.8		0.2		2.9	
HELIUM	0.02		0.01		0.01	
HEATING VALUE*	1111		1005		1105	
SPECIFIC GRAVITY	0.655		0.560		0.667	

	INDEX 8026 SAMPLE 5248		INDEX 8027 SAMPLE 14748		INDEX 8028 SAMPLE 14749	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	COLORADO		COLORADO		COLORADO	
FIELD	ROCK ISLAND N		ROSS-BENNER		ROSS-BENNER	
WELL NAME	H. A. HOUCK WELL NO. 1		ROSS-BENNER NO. 1-T		ROSS BENNER NO. 1-C	
LOCATION	SEC. 53, TRACT A, I&GN SUR.		SA&MG SUR. 15, A-877		SA&MG SUR. 15, A-877	
OWNER	SINCLAIR OIL & GAS CO.		PETRO-LEWIS CORP.		PETRO-LEWIS CORP.	
COMPLETED	03/13/52		02/19/73		02/19/73	
SAMPLED	06/20/52		05/24/76		05/24/76	
FORMATION	MIOC-		OLIG-FRIO		MIOC-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2573		3180		2100	
WELLHEAD PRESSURE,PSIG	1038		860		801	
OPEN FLOW, MCFD	50000		18000		3800	
COMPONENT, MOLE PCT						
METHANE	98.7		98.8		99.0	
ETHANE	0.1		0.1		0.1	
PROPANE	0.1		TRACE		TRACE	
N-BUTANE	TRACE		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.1		0.0		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	TRACE		0.0		0.0	
NITROGEN	0.9		1.0		0.8	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1008		1003		1005	
SPECIFIC GRAVITY	0.563		0.560		0.559	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8029 SAMPLE 14750	INDEX 8030 SAMPLE 3695	INDEX 8031 SAMPLE 4734
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	ROSS-BENNER	SHERIDAN	SHERIDAN
WELL NAME	ROSS BENNER NO. 5	PLOW REALTY NO. 3	HILL BANK & TRUST NO. 2
LOCATION	SA&MG SUR. 15, A-877	O. K. WINN SUR.	CHEETHAM SUR. TRACT NO. 6
OWNER	PETRO-LEWIS CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	05/25/74	04/25/41	01/07/49
SAMPLED	05/24/76	10/28/43	05/02/49
FORMATION	MIOC-CATAHOULA	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2100	8740	9386
WELLHEAD PRESSURE,PSIG	801	3840	2646
OPEN FLOW, MCFD	3800	9300	7600
COMPONENT, MOLE PCT			
METHANE	98.3	74.1	81.8
ETHANE	0.1	23.2	6.8
PROPANE	TRACE	---	4.8
N-BUTANE	0.0	---	1.2
ISOBUTANE	0.0	---	1.0
N-PENTANE	0.0	---	0.4
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.5
NITROGEN	1.3	0.5	0.9
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	2.0	2.4
HELIUM	0.01	0.00	0.01
HEATING VALUE*	998	1166	1197
SPECIFIC GRAVITY	0.563	0.692	0.719

	INDEX 8032 SAMPLE 11998	INDEX 8033 SAMPLE 13821	INDEX 8034 SAMPLE 3967
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	SHERIDAN	SKULL CREEK	SUBLIME
WELL NAME	SHERIDAN G.U. NO. 60	CARRIE STAFFORD NO. 1	D. L. UNDERWOOD NO. 1
LOCATION	FRANCIS MAYHAR SUR. A-400	CHARLES WINFREE SUR. A-565	MULDOON SUR. NO. 30
OWNER	SHELL OIL CO.	TERRA RESOURCES, INC.	TIDEWATER ASSOC. OIL CO.
COMPLETED	01/07/68	08/26/72	11/28/44
SAMPLED	08/14/69	11/20/73	01/29/45
FORMATION	EOCE-YEGUA Q	MIOC-	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5290	1740	9448
WELLHEAD PRESSURE,PSIG	1990	842	940
OPEN FLOW, MCFD	16500	5358	1440
COMPONENT, MOLE PCT			
METHANE	92.5	97.4	80.6
ETHANE	4.1	0.1	14.7
PROPANE	1.6	0.2	---
N-BUTANE	0.3	TRACE	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	0.6	1.6	0.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	4.6
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1090	1028	1080
SPECIFIC GRAVITY	0.613	0.580	0.672

	INDEX 8035 SAMPLE 5223	INDEX 8036 SAMPLE 13550	INDEX 8037 SAMPLE 15163
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	TAIT	THIRD CREEK	THOMAS
WELL NAME	TAIT NO. D-1	BOX ELDER "C" NO. 1	GARDNER DUNCAN NO. 1C
LOCATION	NOT GIVEN	SEC. 11, T2S, R65W	JAMES ROSS SUR. A-39
OWNER	SUPERIOR OIL CO.	KOCH EXPLORATION CO.	GAS PRODUCING ENTERPRISES
COMPLETED	04/15/51	05/18/72	02/26/76
SAMPLED	02/03/52	02/21/73	12/03/77
FORMATION	EOCE-WILCOX L	CRET-J SAND	MIOC-THOMAS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10715	8179	2170
WELLHEAD PRESSURE,PSIG	4800	1400	750
OPEN FLOW, MCFD	NOT GIVEN	500	1000
COMPONENT, MOLE PCT			
METHANE	87.3	66.7	97.8
ETHANE	6.2	12.5	0.2
PROPANE	2.0	8.5	TRACE
N-BUTANE	0.4	4.3	0.0
ISOBUTANE	0.4	1.8	0.0
N-PENTANE	0.1	1.5	0.0
ISOPENTANE	0.3	1.4	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.5	0.0
NITROGEN	0.6	1.0	1.9
OXYGEN	0.1	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.5	1.6	TRACE
HELIUM	TRACE	0.03	0.01
HEATING VALUE*	1096	1479	995
SPECIFIC GRAVITY	0.655	0.885	0.568

	INDEX 8038 SAMPLE 15164	INDEX 8039 SAMPLE 15165	INDEX 8040 SAMPLE 3989
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLORADO	COLORADO	COLORADO
FIELD	THOMAS	THOMAS	WILDCAT
WELL NAME	GARDNER DUNCAN NO. 2	GARDNER DUNCAN NO. 1T	C. G. GLASSCOCK NO. 2
LOCATION	JAMES ROSS SUR. A-39	JAMES ROSS SUR. A-39	J. COLLIER SUR. A-148
OWNER	GAS PRODUCING ENTERPRISES	GAS PRODUCING ENTERPRISES	SINCLAIR-PRAIRIE OIL CO.
COMPLETED	03/28/76	02/26/76	11/29/44
SAMPLED	12/03/77	12/03/77	03/11/45
FORMATION	MIOC-THOMAS	MIOC-THOMAS	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2296	2303	9177
WELLHEAD PRESSURE,PSIG	850	966	875
OPEN FLOW, MCFD	1000	31000	4900
COMPONENT, MOLE PCT			
METHANE	88.1	98.3	73.7
ETHANE	0.1	0.1	23.6
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	9.3	1.5	0.8
OXYGEN	2.3	0.0	0.0
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	2.7
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	894	998	1169
SPECIFIC GRAVITY	0.608	0.567	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8041 SAMPLE 8141	INDEX 8042 SAMPLE 9962	INDEX 8043 SAMPLE 12626
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COMANCHE	COMANCHE	COMANCHE
FIELD	ENERGY	MITTIE	SIPE SPRINGS
WELL NAME	C. T. RUDD NO. 2	B. L. BARNES NO. 1	F. B. WHITLOCK NO. 1
LOCATION	BENJAMIN JOHNSON SUR.	SEC. 18, BLK 2, H&TCRR SUR.	5 MI. NW SIPE SPRING
OWNER	TERRELL PETROLEUM CO.	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	08/--/61	01/14/64	--/--/59
SAMPLED	08/09/61	06/28/65	01/13/71
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	2635	2629	2720
WELLHEAD PRESSURE,PSIG	1146	836	160
OPEN FLOW, MCFD	39000	1509	250
COMPONENT, MOLE PCT			
METHANE	87.6	77.2	62.8
ETHANE	5.1	9.3	15.5
PROPANE	1.3	4.5	10.6
N-BUTANE	0.5	0.9	2.9
ISOBUTANE	0.4	0.8	1.6
N-PENTANE	TRACE	0.2	0.7
ISOPENTANE	0.2	0.2	0.6
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	4.8	6.2	4.6
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.4
HELIUM	0.20	0.12	0.07
HEATING VALUE*	1053	1150	1423
SPECIFIC GRAVITY	0.632	0.711	0.869

	INDEX 8044 SAMPLE 4804	INDEX 8045 SAMPLE 16536	INDEX 8046 SAMPLE 8881
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COMANCHE	CONCHO	CONCHO
FIELD	SYDNEY	FUZZY CREEK	NOT GIVEN
WELL NAME	W. D. CHAPMAN NO. 1	RANSBARGER NO. 1	CARTER NO. A-1
LOCATION	SEC. 43, ETRR CO. SUR.	HE&WT 1, A-1087	SUR. 276, A279
OWNER	SOHIO PETROLEUM CO.	ROBERT KLABZUBA	SUNRAY DX OIL CO.
COMPLETED	07/11/49	10/--/81	--/--/00
SAMPLED	11/14/49	06/--/82	02/27/63
FORMATION	PENN-	PENN-GOEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	410	410
DEPTH, FEET	2159	3346	NOT GIVEN
WELLHEAD PRESSURE,PSIG	922	1050	NOT GIVEN
OPEN FLOW, MCFD	6600	3050	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.4	75.2	66.3
ETHANE	6.6	7.2	11.1
PROPANE	2.6	4.1	7.9
N-BUTANE	0.6	1.3	3.1
ISOBUTANE	0.1	0.6	1.2
N-PENTANE	0.2	0.3	0.7
ISOPENTANE	0.1	0.4	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	11.6	9.8	7.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.32	0.33	0.30
HEATING VALUE*	1018	1106	1306
SPECIFIC GRAVITY	0.684	0.720	0.833

	INDEX 8047 SAMPLE 8880	INDEX 8048 SAMPLE 9989	INDEX 8049 SAMPLE 8879
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	CONCHO	CONCHO
FIELD	PAINT ROCK S	PAINT ROCK W	SPECK N
WELL NAME	W. F. MEIXNER	C. E. NORMAN NO. 3	R. L. CARTER A-1
LOCATION	SEC. 9, H.C. MCGLASSON	SEC. 60, EIKEL SUR.	SUR. 276, A-729
OWNER	SUNRAY DX OIL CO.	SUN OIL CO.	SUNRAY DX OIL CO.
COMPLETED	12/08/61	02/28/64	07/31/61
SAMPLED	02/27/63	07/21/65	02/27/63
FORMATION	PENN-CANYON	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	410	410	410
DEPTH, FEET	3146	3551	3573
WELLHEAD PRESSURE,PSIG	1320	1325	NOT GIVEN
OPEN FLOW, MCFD	4950	6260	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.5	74.1	51.6
ETHANE	7.4	7.4	15.8
PROPANE	3.5	3.9	14.4
N-BUTANE	1.0	1.1	6.4
ISOBUTANE	0.5	0.8	2.3
N-PENTANE	0.3	0.3	1.1
ISOPENTANE	0.3	0.3	1.7
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	0.3	0.8
NITROGEN	11.8	11.0	3.8
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	1.7
HELIUM	0.40	0.35	0.10
HEATING VALUE*	1055	1089	1645
SPECIFIC GRAVITY	0.709	0.727	1.020

	INDEX 8050 SAMPLE 8877	INDEX 8051 SAMPLE 17849	INDEX 8052 SAMPLE 12827
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	CONCHO	COOKE
FIELD	SPECK S	WINSON GOEN	DELAWARE BEND
WELL NAME	FLORENCE HALL NO. 1	M. C. WINSON NO. 1	YOUNG-WILLIAMS NO. 1
LOCATION	LOUISA ROBBINS SUR. NO. 1	SEC. 60, C. KIRCHNER SUR.	NOT GIVEN
OWNER	SUNRAY DX OIL CO.	WINSON EXPLORATION, INC.	MAGNA OIL CORP.
COMPLETED	02/22/62	12/09/84	--/--/62
SAMPLED	02/27/63	09/23/85	05/17/71
FORMATION	PENN-STRAWN C-1	PENN-GOEN	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	410	410	350
DEPTH, FEET	3812	3778	14300
WELLHEAD PRESSURE,PSIG	1500	1440	1200
OPEN FLOW, MCFD	39000	3925	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	67.9	87.2
ETHANE	6.7	8.5	6.4
PROPANE	4.0	4.9	2.8
N-BUTANE	1.3	1.4	1.0
ISOBUTANE	0.8	0.6	0.4
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	10.5	14.3	0.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.2	0.3
HELIUM	0.33	0.41	0.02
HEATING VALUE*	1098	1071	1163
SPECIFIC GRAVITY	0.724	0.761	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8053 SAMPLE 4846	INDEX 8054 SAMPLE 4944	INDEX 8055 SAMPLE 5493
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COOKE	COOKE	CERYELL
FIELD	GATEWOOD	MEADORS	WILDCAT
WELL NAME	THOMASON NO. 1	S. D. MEADORS NO. 3	C. E. GOTCHER
LOCATION	T. D. BELL SUR. A-052	NOT GIVEN	J. J. ALBRITTON SUR. 160 AC.
OWNER	R. B. HOLLANDSWORTH, ET AL.	MIDLAND OIL CO.	T. S. WHITIS
COMPLETED	09/23/49	03/29/50	--/--/51
SAMPLED	02/20/50	10/05/50	05/19/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	350	350	415
DEPTH, FEET	2142	1500	1450
WELLHEAD PRESSURE,PSIG	750	340	280
OPEN FLOW, MCFD	1000	2190	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.7	49.6	88.0
ETHANE	2.7	3.6	0.1
PROPANE	1.2	3.2	0.0
N-BUTANE	0.3	0.9	0.1
ISOBUTANE	0.2	0.5	0.0
N-PENTANE	TRACE	0.3	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	34.6	40.9	10.3
OXYGEN	0.1	0.1	0.6
ARGON	0.1	0.1	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.2	0.4
HELIUM	0.31	0.70	0.42
HEATING VALUE*	712	711	897
SPECIFIC GRAVITY	0.741	0.855	0.605

	INDEX 8056 SAMPLE 14029	INDEX 8057 SAMPLE 14030	INDEX 8058 SAMPLE 14667
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COTTLE	COTTLE	COTTLE
FIELD	PROVIDENCE	PROVIDENCE	PROVIDENCE
WELL NAME	J. J. GIBSON NO. 4	J. J. GIBSON NO. 3	B. J. BROWNING NO. 1
LOCATION	SEC. 38, F. P. KNOTT SUR.	SEC. 34, F. P. KNOTT SUR.	SEC. 2, P.B. BROTHERS SUR.
OWNER	GUS EDWARDS	GUS EDWARDS	JACK GRIMM
COMPLETED	06/21/74	06/18/74	--/--/00
SAMPLED	06/21/74	06/18/74	05/06/76
FORMATION	PENN-ATOKA	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	6146	6158	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1900	2059	NOT GIVEN
OPEN FLOW, MCFD	4600	8500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	80.8	80.7
ETHANE	9.6	9.8	10.2
PROPANE	4.4	4.5	4.4
N-BUTANE	1.2	1.0	1.0
ISOBUTANE	0.8	0.6	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.6	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	3.1	2.6	2.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.10	0.09
HEATING VALUE*	1210	1183	1191
SPECIFIC GRAVITY	0.715	0.693	0.693

	INDEX 8059 SAMPLE 14876	INDEX 8060 SAMPLE 9919	INDEX 8061 SAMPLE 15847
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COTTLE	COTTLE	COTTLE
FIELD	STESCOTT	TIPPEN	TIPPEN SE
WELL NAME	T. B. HAVINS NO. 1	PERKINS	GILBREATH NO. 1R
LOCATION	G. M. HUFF SUR.	A. G. LANE SUR. NO. A-1567	MARY A. COCK SUR. A-65
OWNER	BASS ENTERPRISES PROD. CO.	ROBINSON BROS. OIL PRODUCERS	HARKIN OIL & GAS, INC.
COMPLETED	02/28/76	07/10/64	10/03/78
SAMPLED	12/21/76	05/21/65	11/28/78
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	6188	6732	6922
WELLHEAD PRESSURE,PSIG	1775	2300	2200
OPEN FLOW, MCFD	5000	22500	4074
COMPONENT, MOLE PCT			
METHANE	74.2	84.8	82.2
ETHANE	10.2	8.3	10.0
PROPANE	6.2	2.8	3.8
N-BUTANE	2.0	0.7	0.9
ISOBUTANE	0.9	0.5	0.4
N-PENTANE	0.4	0.1	0.1
ISOPENTANE	0.6	0.4	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	5.3	1.7	1.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.13	0.07	0.12
HEATING VALUE*	1246	1196	1176
SPECIFIC GRAVITY	0.759	0.668	0.681

	INDEX 8062 SAMPLE 9923	INDEX 8063 SAMPLE 8673	INDEX 8064 SAMPLE 8674
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	ABELL	ARMER	ARMER
WELL NAME	MOBIL GLENN NO. 7	M. B. MCKNIGHT NO. 56	M. B. MCKNIGHT NO. 83
LOCATION	SEC. 20, BLK. 1, H&TC SUR.	SEC. 15, BLK. B-17, PSL SUR.	SEC. 20, BLK. B-17, PSL SUR.
OWNER	BELL PETROLEUM CO.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	02/02/62	11/26/61	08/11/62
SAMPLED	06/14/65	09/15/62	09/15/62
FORMATION	ORDO-MONTOYA	PERM-	ORDO-MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5135	6090	6243
WELLHEAD PRESSURE,PSIG	NOT GIVEN	500	1180
OPEN FLOW, MCFD	14000	120	170
COMPONENT, MOLE PCT			
METHANE	89.5	73.4	84.8
ETHANE	4.9	11.3	7.3
PROPANE	1.9	7.3	3.3
N-BUTANE	0.7	3.0	0.9
ISOBUTANE	0.2	1.1	0.4
N-PENTANE	0.1	0.7	0.2
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	1.8	1.4	2.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.5
HELIUM	TRACE	0.02	0.05
HEATING VALUE*	1093	1349	1146
SPECIFIC GRAVITY	0.632	0.792	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8065 SAMPLE 12796	INDEX 8066 SAMPLE 14161	INDEX 8067 SAMPLE 2053
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	BLK. 27	BLK. 27	CRIER-MCELROY NO. 1
WELL NAME	W. N. WADDELL ET AL. NO. 889	ELL LONG NO. 13	SEC. 198, CCSDRGN6 SUR.
LOCATION	SEC. 25, BLK. B-21, PSL SUR.	SEC. 25, BLK. 27, PSL SUR.	GULF PRODUCTION CO.
OWNER	GULF OIL CO.- U.S.	AMOCO PRODUCTION CO.	10/25/26
COMPLETED	03/--/65	03/08/73	06/17/30
SAMPLED	04/27/71	10/03/74	NOT GIVEN
FORMATION	ORDO-MCKEE	PERM-TUBB	430
GEOLOGIC PROVINCE CODE	430	430	2700
DEPTH, FEET	5800	4200	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	200	
COMPONENT, MOLE PCT			
METHANE	93.5	53.8	60.2
ETHANE	2.9	27.8	26.7
PROPANE	1.2	0.0	---
N-BUTANE	0.6	4.1	---
ISOBUTANE	0.1	3.2	---
N-PENTANE	0.2	2.6	---
ISOPENTANE	0.1	3.5	---
CYCLOPENTANE	0.1	0.9	---
HEXANES PLUS	0.2	1.5	---
NITROGEN	1.0	0.0	7.2
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.6	---
CARBON DIOXIDE	0.1	2.4	5.8
HELIUM	0.04	0.03	0.05
HEATING VALUE*	1081	1646	1088
SPECIFIC GRAVITY	0.609	0.993	0.775

	INDEX 8068 SAMPLE 12795	INDEX 8069 SAMPLE 12743	INDEX 8070 SAMPLE 12798
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	CRAWAR	SAND HILLS	SAND HILLS
WELL NAME	J. B. TUBB N NO. 1	PR. J. LEA NO. 30	W. N. WADDELL ET AL.NO.846-J
LOCATION	SEC. 9, BLK. B-28, PSL SUR.	SEC. 40, BLK. 32, PSL SUR.	SEC. 27, BLK. B-26, PSL SUR.
OWNER	GULF OIL CO.- U.S.	MOBIL OIL CORP.	GULF OIL CO.- U.S.
COMPLETED	10/--/60	01/21/57	01/07/63
SAMPLED	04/28/71	03/31/71	04/27/71
FORMATION	DEVO-	-MCKNIGHT	PERM-JUDKINS
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6450	3332	2700
WELLHEAD PRESSURE,PSIG	1151	900	900
OPEN FLOW, MCFD	32000	NOT GIVEN	115000
COMPONENT, MOLE PCT			
METHANE	90.0	84.9	84.6
ETHANE	4.5	6.7	7.0
PROPANE	1.6	2.0	2.9
N-BUTANE	0.6	1.7	0.7
ISOBUTANE	0.2	0.0	0.4
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.2	0.8	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.0	1.3	1.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.6	0.3
CARBON DIOXIDE	1.5	1.7	1.7
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1088	1136	1115
SPECIFIC GRAVITY	0.636	0.679	0.668

	INDEX 8071 SAMPLE 14446	INDEX 8072 SAMPLE 1831	INDEX 8073 SAMPLE 12783
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	T. R. BARR	W. N. WADDELL	WADDELL
WELL NAME	REED BUTLER NO. 1	W. N. WADDELL NO. 7	W. N. WADDELL NO. 895
LOCATION	SEC. 10, BLK. 4, H&TC SUR.	SEC. 10, BLK. B-23	SEC. 9, BLK. B-23, PSL SUR.
OWNER	TEXAS OIL & GAS CORP.	GULF PRODUCTION CO.	GULF OIL CO.- U.S.
COMPLETED	04/01/74	07/18/29	11/05/64
SAMPLED	08/29/75	08/09/29	04/23/71
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	PERM-GRAYBURG
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5458	2972	3022
WELLHEAD PRESSURE,PSIG	2368	1150	357
OPEN FLOW, MCFD	8250	5000	2147
COMPONENT, MOLE PCT			
METHANE	95.6	77.2	80.5
ETHANE	2.8	19.2	9.4
PROPANE	0.5	---	4.2
N-BUTANE	0.1	---	1.0
ISOBUTANE	0.1	---	0.6
N-PENTANE	0.1	---	0.3
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.6	3.0	3.5
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.3	TRACE
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1041	1126	1174
SPECIFIC GRAVITY	0.585	0.666	0.693

	INDEX 8074 SAMPLE 2098	INDEX 8075 SAMPLE 8600	INDEX 8076 SAMPLE 9641
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CROCKETT	CROCKETT
FIELD	WEST TEXAS	ANGUS	BAGGETT
WELL NAME	J. B. TUBB NO. 1	T. C. GLASSCOCK	E. G. BAGGETT NO. 1
LOCATION	SEC. 8, BLK. B-27, PS LAND	SEC. 4, BLK. M, GC&S SUR.	SEC. 29, BLK. F, GC&SF SUR.
OWNER	GULF PRODUCTION CO.	SUNRAY DX OIL CO.	SIGNAL OIL & JON L. CRAWFORD
COMPLETED	--/--/00	03/15/62	04/02/64
SAMPLED	08/21/30	07/02/62	11/23/64
FORMATION	NOT GIVEN	PENN-STRAWN	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	8680	7570
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3110	3850
OPEN FLOW, MCFD	NOT GIVEN	4450	1600
COMPONENT, MOLE PCT			
METHANE	83.3	91.9	91.8
ETHANE	12.7	5.1	5.0
PROPANE	---	0.8	1.2
N-BUTANE	---	0.2	0.2
ISOBUTANE	---	0.1	0.1
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	2.6	0.7	0.9
OXYGEN	0.2	TRACE	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	1.1	0.8
HELIUM	0.10	0.05	0.02
HEATING VALUE*	1071	1057	1074
SPECIFIC GRAVITY	0.639	0.608	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE.

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8077 SAMPLE 5619	INDEX 8078 SAMPLE 12226	INDEX 8079 SAMPLE 4876
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	BLK. 56	BROWN-BASSETT	CLARA COUCH
WELL NAME	UNIV. CROCKETT 127 NO. 1	MITCHELL NO. 1-111	OWENS C NO. 1
LOCATION	SEC. 7, BLK. 56	SEC. 111, BLK. 1, I&GN SUR.	SEC. 18, BLK. GG
OWNER	SINCLAIR OIL & GAS CO.	SHELL OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	04/01/54	11/28/67	10/22/49
SAMPLED	05/09/54	03/16/70	04/19/50
FORMATION	ORDO-ELLENBURGER	ORDO-BROMIDE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8236	12700	5825
WELLHEAD PRESSURE,PSIG	3000	1413	2718
OPEN FLOW, MCFD	2500	11000	35000
COMPONENT, MOLE PCT			
METHANE	77.4	96.3	79.2
ETHANE	11.2	0.6	9.8
PROPANE	5.2	TRACE	4.7
N-BUTANE	1.3	0.0	1.5
ISOBUTANE	0.5	0.0	0.8
N-PENTANE	0.3	0.0	0.6
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.5
NITROGEN	3.1	0.5	1.9
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	2.3	0.8
HELIUM	0.09	0.02	0.06
HEATING VALUE*	1216	987	1232
SPECIFIC GRAVITY	0.722	0.581	0.727

	INDEX 8080 SAMPLE 5046	INDEX 8081 SAMPLE 1278	INDEX 8082 SAMPLE 13274
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	CLARA COUCH	CROCKETT COUNTY	DENISON
WELL NAME	OWENS D NO. 1	NOT GIVEN	L. M. HUDSPETH NO. 1
LOCATION	SEC. 17, BLK. 17, GS&SF SUR.	SEC. 50, BLK. YZ, GC&SF SUR.	SEC. 6, J. W. ODEM SUR.
OWNER	CITIES SERVICE OIL CO.	TEXAS CO.	TEXACO INC.
COMPLETED	01/25/51	01/--/26	07/06/71
SAMPLED	04/07/51	04/20/26	06/21/72
FORMATION	PENN-CISCO	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5920	1699	7655
WELLHEAD PRESSURE,PSIG	2731	180	2100
OPEN FLOW, MCFD	40000	1000	331
COMPONENT, MOLE PCT			
METHANE	79.1	67.3	91.2
ETHANE	9.6	18.0	5.1
PROPANE	4.5	---	1.2
N-BUTANE	1.5	---	0.2
ISOBUTANE	0.5	---	0.2
N-PENTANE	0.5	---	TRACE
ISOPENTANE	0.1	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.4	---	0.1
NITROGEN	2.0	13.4	0.9
OXYGEN	TRACE	0.4	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.6	0.7	0.7
HELIUM	0.05	0.25	0.07
HEATING VALUE*	1203	1004	1066
SPECIFIC GRAVITY	0.722	0.707	0.609

	INDEX 8083 SAMPLE 10586	INDEX 8084 SAMPLE 11235	INDEX 8085 SAMPLE 2505
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	DEPAUL	DEPAUL	DONHAM
WELL NAME	MCMULLAN NO. 1	MEYSIN NO. 1	ROBERT MASSIE NO. 1
LOCATION	SEC. 3, BLK. FP, GC&SF SUR.	SEC. 15, BLK.KL, GC&SF SUR.	SEC. 47, BLK. UV
OWNER	DELTA DRILLING CO.	DELTA DRILLING CO.	STANOLIND OIL & GAS CO., ET
COMPLETED	12/14/65	12/01/65	05/30/32
SAMPLED	06/03/66	12/02/67	06/15/32
FORMATION	PENN-STRAWN	PENN-CANYON	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10001	7844	1269
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2379	450
OPEN FLOW, MCFD	6400	5300	18
COMPONENT, MOLE PCT			
METHANE	90.3	84.2	71.8
ETHANE	6.1	8.9	15.8
PROPANE	1.5	2.7	---
N-BUTANE	0.3	0.7	---
ISOBUTANE	TRACE	0.4	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	TRACE	0.5	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.7	1.5	10.5
OXYGEN	0.0	TRACE	0.7
ARGON	0.0	TRACE	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.8	0.9	0.9
HELIUM	0.03	0.04	0.32
HEATING VALUE*	1082	1146	1010
SPECIFIC GRAVITY	0.619	0.659	0.687

	INDEX 8086 SAMPLE 15380	INDEX 8087 SAMPLE 11490	INDEX 8088 SAMPLE 12741
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	ELKORN	HOWARD DRAW	HUNT-BAGGETT
WELL NAME	J. M. SHANNON A NO. 18	TODD RANCH NO. 1-A	BAGGETT NO. B-1
LOCATION	SEC. 21, BLK. U, VGC&SP SUR.	NOT GIVEN	SEC. 24, BLK. F
OWNER	CONTINENTAL OIL CO.	MCGRATH & SMITH, INC., ET AL	AMERICAN PETROFINA CO. OF TE
COMPLETED	12/06/76	--/--/67	05/18/60
SAMPLED	09/29/78	05/10/68	03/24/71
FORMATION	PERM-QUEEN	PERM-SAN ANDRES	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1110	1165	9040
WELLHEAD PRESSURE,PSIG	326	409	1200
OPEN FLOW, MCFD	4900	26500	1500
COMPONENT, MOLE PCT			
METHANE	71.8	77.6	95.9
ETHANE	11.5	12.4	1.4
PROPANE	2.3	0.6	0.1
N-BUTANE	0.4	TRACE	0.0
ISOBUTANE	0.5	0.4	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	0.4	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.8	6.9	1.0
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.5	0.0
CARBON DIOXIDE	0.1	0.6	1.3
HELIUM	0.16	0.18	0.03
HEATING VALUE*	1061	1063	1004
SPECIFIC GRAVITY	0.716	0.674	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8089 SAMPLE 12955	INDEX 8090 SAMPLE 10476	INDEX 8091 SAMPLE 9642
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	INGHAM	J M	JOE T
WELL NAME	INGHAM NO. 1-A	MITCHELL NO. 1	E. G. BAGGETT NO. 1-T
LOCATION	SEC. 1, BLK. 3F, T&CRR SUR.	SEC. 3, BLK. G-6, TCRR SUR.	SEC. 29, BLK. F, GC&SF SUR.
OWNER	SOHIO PETROLEUM CO.	SHELL OIL CO.	SIGNAL OIL & JON L. CRAWFORD
COMPLETED	11/--/60	10/18/65	04/14/64
SAMPLED	08/18/71	03/24/66	11/23/64
FORMATION	DEVO-	ORDO-ELLENBURGER	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7501	13700	9188
WELLHEAD PRESSURE,PSIG	6486	4800	2672
OPEN FLOW, MCFD	21500	130000	11000
COMPONENT, MOLE PCT			
METHANE	90.1	77.9	95.6
ETHANE	5.1	0.3	1.9
PROPANE	1.7	0.0	0.3
N-BUTANE	0.5	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.0	1.7	0.7
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	20.5	1.4
HELIUM	0.04	0.02	0.04
HEATING VALUE*	1090	795	1010
SPECIFIC GRAVITY	0.626	0.759	0.584

	INDEX 8092 SAMPLE 12714	INDEX 8093 SAMPLE 12715	INDEX 8094 SAMPLE 12664
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	JOE T	JOE T	LANCASTER HILL
WELL NAME	SIGNAL-BAGGETT NO. 1-T	SIGNAL-BAGGETT NO. 1-C	UNIV. LANDS E NO. 2
LOCATION	SEC. 29, BLK. F, GC&SF SUR.	SEC. 29, BLK. F, GC&SF SUR.	SEC. 11,BLK. 29,UNIV.LD.SUR.
OWNER	TEXAM OIL CORP.	TEXAM OIL CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	04/--/64	06/--/64	--/--/00
SAMPLED	03/16/71	03/16/71	02/10/71
FORMATION	PENN-STRAWN	PENN-CANYON	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9246	7973	6869
WELLHEAD PRESSURE,PSIG	1150	856	1770
OPEN FLOW, MCFD	3050	387	19500
COMPONENT, MOLE PCT			
METHANE	90.4	91.7	85.4
ETHANE	2.0	4.5	6.4
PROPANE	0.2	1.1	2.6
N-BUTANE	0.0	0.1	0.7
ISOBUTANE	0.0	0.2	0.4
N-PENTANE	0.0	TRACE	0.4
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.3
NITROGEN	4.9	1.0	2.0
OXYGEN	1.0	0.1	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.0	1.6
HELIUM	0.03	0.02	0.05
HEATING VALUE*	957	1058	1125
SPECIFIC GRAVITY	0.607	0.610	0.671

	INDEX 8095 SAMPLE 15638	INDEX 8096 SAMPLE 12166	INDEX 8097 SAMPLE 10807
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	LAURA HOOVER ESTATE	McF.L.	MIDWAY LANE
WELL NAME	LAURA HOOVER NO. 1-2	CONOCO-ENCO NO. 1	CHAMBERS CSL NO. 1
LOCATION	SEC. 2, BLK. NWN, HOOVER SUR	SEC. 2, N. A. MILLER SUR.	LEAGUE 4, CHAMBERS CLS SUR.
OWNER	CANYON CO.	MALLARD PETROLEUM, INC.	ASHMUN & HILLIARD
COMPLETED	08/--/79	11/23/68	--/--/00
SAMPLED	06/06/79	12/31/69	12/03/66
FORMATION	PENN-CANYON	ORDO-ELLENBURGER	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6469	8000	7384
WELLHEAD PRESSURE,PSIG	2400	1800	NOT GIVEN
OPEN FLOW, MCFD	4200	3800	15000
COMPONENT, MOLE PCT			
METHANE	75.0	37.9	74.4
ETHANE	11.7	29.7	10.6
PROPANE	6.2	21.6	5.5
N-BUTANE	1.8	4.3	1.4
ISOBUTANE	1.1	1.5	0.5
N-PENTANE	0.5	0.5	0.3
ISOPENTANE	1.0	0.9	0.4
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.6	0.3	0.1
NITROGEN	1.3	2.8	0.4
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	2.2
HELIUM	0.04	0.01	0.06
HEATING VALUE*	1331	1751	1185
SPECIFIC GRAVITY	0.776	1.056	0.747

	INDEX 8098 SAMPLE 10074	INDEX 8099 SAMPLE 13574	INDEX 8100 SAMPLE 12667
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	MILLER	MILLER RANCH	NOELKE NE
WELL NAME	MILLER RANCH GAS UNIT NO. 1	MILLER RANCH NO. 1-10	SHANNON ESTATE C NO. 1
LOCATION	SEC. 6,BLK. 0, W. E. JONES SUR.	SEC. 10, BLK 000, GC&F SUR.	SHANNON ESTATE
OWNER	PAN AMERICAN PETROLEUM CORP.	HNG OIL CO.	SUN OIL CO.
COMPLETED	03/23/64	10/13/72	--/--/00
SAMPLED	08/16/65	04/01/73	02/18/71
FORMATION	ORDO-ELLENBURGER	ORDO-ELLENBURGER	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11330	11744	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4073	4000	NOT GIVEN
OPEN FLOW, MCFD	20800	455000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.1	84.3	73.3
ETHANE	0.7	0.7	16.8
PROPANE	0.1	0.0	6.1
N-BUTANE	0.0	0.1	2.3
ISOBUTANE	0.0	0.0	1.1
N-PENTANE	0.0	0.0	0.6
ISOPENTANE	0.0	0.0	0.8
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.4
NITROGEN	2.4	7.6	4.2
OXYGEN	0.2	1.2	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.5	5.9	0.1
HELIUM	0.09	0.08	0.04
HEATING VALUE*	928	870	1297
SPECIFIC GRAVITY	0.631	0.655	0.779

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES-

	INDEX 8101 SAMPLE 8666	INDEX 8102 SAMPLE 12770	INDEX 8103 SAMPLE 12771
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	OZONA	OZONA	OZONA
WELL NAME	KINCAID NO. 1	VADA BEAN NO. 1	MONTGOMERY NO. 14-1
LOCATION	SEC. 6, BLK. MN, GC&SFRR SUR	10 MI. SW OF OZONA	18 MI. SW OF OZONA
OWNER	DELTA DRILLING CO., ET AL.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	05/--/62	--/--/65	--/--/67
SAMPLED	09/16/62	04/20/71	04/20/71
FORMATION	ORDO-ELLENBURGER	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8300	6229	6416
WELLHEAD PRESSURE,PSIG	2600	1075	NOT GIVEN
OPEN FLOW, MCFD	4500	244	317
COMPONENT, MOLE PCT			
METHANE	85.5	78.8	80.9
ETHANE	5.6	11.1	10.1
PROPANE	2.0	5.6	4.7
N-BUTANE	0.4	1.2	1.1
ISOBUTANE	0.2	0.6	0.7
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.1	1.6	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	0.4	0.4
HELIUM	0.09	0.04	0.05
HEATING VALUE*	1053	1230	1210
SPECIFIC GRAVITY	0.657	0.715	0.709

	INDEX 8104 SAMPLE 12772	INDEX 8105 SAMPLE 12774	INDEX 8106 SAMPLE 12775
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	OZONA	OZONA	OZONA
WELL NAME	J. R. BAILEY NO. 1	MONTGOMERY NO. 15-1	ADDIE CLAYTON NO. 1
LOCATION	20 MI. NE OF OZONA	18 MI. SW OF OZONA	20 MI. NE OF OZONA
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/66	--/--/00	--/--/66
SAMPLED	04/20/71	04/20/71	04/20/71
FORMATION	PENN-CANYON	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7698	6438	7455
WELLHEAD PRESSURE,PSIG	150	NOT GIVEN	150
OPEN FLOW, MCFD	25	289	495
COMPONENT, MOLE PCT			
METHANE	71.9	81.3	78.0
ETHANE	14.5	9.7	10.8
PROPANE	6.8	4.5	5.3
N-BUTANE	2.2	1.0	0.9
ISOBUTANE	1.0	0.8	0.9
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.3	1.5	2.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.4	0.6
HELIUM	0.04	0.04	0.07
HEATING VALUE*	1304	1202	1218
SPECIFIC GRAVITY	0.774	0.696	0.722

	INDEX 8107 SAMPLE 12696	INDEX 8108 SAMPLE 9608	INDEX 8109 SAMPLE 11716
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	OZONA NE	OZONA SW	PERNER RANCH
WELL NAME	SINCLAIR CLAYTON NO. 1-11	MELBING NO. 1	PERNER RANCH NO. 1
LOCATION	NOT GIVEN	SEC. 28, BLK. QR, EL&RR SUR.	SEC. 40, BL.2, I&GNRR SUR.
OWNER	TOM BROWN DRILLING CO.	D. M. COBB & TEXAS AMER. OIL	CHAMBERS & KENNEDY
COMPLETED	--/--/00	12/28/62	01/25/68
SAMPLED	02/27/71	10/10/64	12/21/68
FORMATION	PENN-CANYON	PENN-	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7370	6372	9414
WELLHEAD PRESSURE,PSIG	800	2000	3500
OPEN FLOW, MCFD	350	3500	13500
COMPONENT, MOLE PCT			
METHANE	76.8	79.1	92.9
ETHANE	10.7	9.3	2.1
PROPANE	5.1	4.3	0.6
N-BUTANE	1.3	0.9	0.2
ISOBUTANE	0.6	0.3	0.0
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.6	0.2	0.0
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	3.5	2.4	2.5
OXYGEN	0.2	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	1.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.9	0.8
HELIUM	0.07	0.04	0.11
HEATING VALUE*	1229	1154	1036
SPECIFIC GRAVITY	0.739	0.699	0.608

	INDEX 8110 SAMPLE 4372	INDEX 8111 SAMPLE 11614	INDEX 8112 SAMPLE 11615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	SHANNON	TIPPETT W	TIPPETT W
WELL NAME	SHANNON ESTATE B NO. 9	TIPPETT NO. 36-1	TIPPETT NO. 36-1
LOCATION	SEC. 12, BLK. 1, GC&SFRR SUR	SEC. 36	SEC. 36
OWNER	SUN OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	10/04/47	08/08/68	08/08/67
SAMPLED	10/06/47	08/05/68	08/05/68
FORMATION	PERM-SEVEN RIVERS	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1690	5050	5050
WELLHEAD PRESSURE,PSIG	700	2034	2034
OPEN FLOW, MCFD	NOT GIVEN	9400	9400
COMPONENT, MOLE PCT			
METHANE	0.9	79.0	79.1
ETHANE	6.3	9.3	9.6
PROPANE	---	4.6	4.7
N-BUTANE	---	1.5	1.4
ISOBUTANE	---	0.5	0.6
N-PENTANE	---	0.5	0.4
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.3
NITROGEN	89.7	3.7	3.5
OXYGEN	2.6	0.1	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.27	0.08	0.09
HEATING VALUE*	122	1203	1207
SPECIFIC GRAVITY	0.971	0.716	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8113 SAMPLE 14727	INDEX 8114 SAMPLE 13553	INDEX 8115 SAMPLE 15079
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CROCKETT
FIELD	UNIVERSITY, 30-32	WIP	WHITEHEAD
WELL NAME	UNIV. 31-5 NO. 1	W. I. PIERCE-STATE "A" NO. 1	JAKE BEASLEY NO. 1
LOCATION	SEC.5,BLK.31, UNIV.LAND SUR.	SEC 106 BLK WC, N AGULAR SUR	SEC. 6, BLK. D, GC&SFRR SUR.
OWNER	MCMORAN EXPLORATION CO.	GULF OIL CO.- U.S.	AMOCO PRODUCTION CO.
COMPLETED	05/05/75	10/23/72	03/16/76
SAMPLED	07/01/76	03/01/73	08/24/77
FORMATION	SILU-FUSSELMAN	PERM-CLEARFORK	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8174	2116	9401
WELLHEAD PRESSURE,PSIG	1190	788	2755
OPEN FLOW, MCFD	125	4400	7525
COMPONENT, MOLE PCT			
METHANE	90.6	81.8	95.7
ETHANE	4.8	11.0	1.9
PROPANE	1.4	4.4	0.5
N-BUTANE	0.4	0.8	0.1
ISOBUTANE	0.2	0.6	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.5	0.6	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.8
HELIUM	0.06	0.04	0.03
HEATING VALUE*	1078	1205	1025
SPECIFIC GRAVITY	0.623	0.686	0.583

	INDEX 8116 SAMPLE 4899	INDEX 8117 SAMPLE 5422	INDEX 8118 SAMPLE 16435
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CROCKETT	CULBERSON
FIELD	WILDCAT	WILDCAT	COVE
WELL NAME	W. I. PIERCE NO. 1	M. MITCHELL NO. 1	COVINGTON STATE NO. 1
LOCATION	SEC. 5, BLK. 0,CW BROWN SUR.	BLK. 1, I&GN RR SUR.	SEC. 4, BLK. 115, PSL SUR.
OWNER	TEXAS CO.	SUN OIL CO.	SUPERIOR OIL CO.
COMPLETED	07/25/49	04/03/53	--/--/00
SAMPLED	02/23/50	02/24/53	02/25/82
FORMATION	NOT GIVEN	DEVO-	PENN-MORROW
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11775	13750	11822
WELLHEAD PRESSURE,PSIG	3000	3675	4550
OPEN FLOW, MCFD	20000	11400	1800
COMPONENT, MOLE PCT			
METHANE	89.8	58.4	95.9
ETHANE	0.7	0.3	0.6
PROPANE	0.2	0.0	0.2
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	3.1	0.4	1.0
OXYGEN	0.1	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	5.8	40.9	1.7
HELIUM	0.10	0.02	0.03
HEATING VALUE*	933	597	1004
SPECIFIC GRAVITY	0.631	0.956	0.589

	INDEX 8119 SAMPLE 15198	INDEX 8120 SAMPLE 15199	INDEX 8121 SAMPLE 7609
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CULBERSON	CULBERSON	CULBERSON
FIELD	KING EDWARD	KING EDWARD	SIGNAL PEAK
WELL NAME	BATEMAN STATE NO. 1-29	BATEMAN NO. 1-28	STATE BARRETT NO. 1
LOCATION	SEC. 29, BLK. 45, PSL SUR.	SEC. 28, BLK. 45, PSL SUR.	SEC. 18, BLK. 2, T&P SUR.
OWNER	AMERICAN QUASAR PET. CO.	AMERICAN QUASAR PET. CO.	SOCONY MOBIL OIL CO., INC.
COMPLETED	12/20/77	05/08/77	07/15/60
SAMPLED	01/25/78	01/25/78	07/18/60
FORMATION	SILU-	SILU-	PENN-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15397	15418	5798
WELLHEAD PRESSURE,PSIG	5150	5110	2012
OPEN FLOW, MCFD	5000	8000	13500
COMPONENT, MOLE PCT			
METHANE	94.5	95.2	95.5
ETHANE	0.4	0.5	2.0
PROPANE	TRACE	TRACE	0.2
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.2	1.3	1.4
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.1	0.2	0.0
CARBON DIOXIDE	2.6	2.6	0.4
HELIUM	0.04	0.04	0.02
HEATING VALUE*	965	975	1020
SPECIFIC GRAVITY	0.591	0.588	0.581

	INDEX 8122 SAMPLE 5514	INDEX 8123 SAMPLE 5750	INDEX 8124 SAMPLE 5870
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CULBERSON	DALLAM	DALLAM
FIELD	WILDCAT	KERRICK	KERRICK
WELL NAME	M. A. GRISHAM FEE NO. 1	KERRICK GAS UNIT NO. 1	FOXWORTH-SKAER NO. 1
LOCATION	SEC. 10, BLK. 60, T&P SUR.	SEC. 16, BLK. 5D, HETCRR SUR	SEC. 29, BLK. 1-Y, T&NO SUR.
OWNER	GRISHAM-HUNTER CORP.	HUMBLE OIL & REFINING CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	03/26/52	09/19/54	05/20/55
SAMPLED	07/08/53	11/16/54	06/30/55
FORMATION	PENN-	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	430	435	435
DEPTH, FEET	9040	3564	3460
WELLHEAD PRESSURE,PSIG	1280	471	476
OPEN FLOW, MCFD	9900	7500	4250
COMPONENT, MOLE PCT			
METHANE	97.6	71.6	71.2
ETHANE	1.2	5.1	4.8
PROPANE	0.0	3.1	3.4
N-BUTANE	0.1	1.1	1.3
ISOBUTANE	TRACE	0.5	0.5
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.4	16.9	17.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	0.02	0.86	0.87
HEATING VALUE*	1014	973	992
SPECIFIC GRAVITY	0.569	0.712	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8125 SAMPLE 6017	INDEX 8126 SAMPLE 6299	INDEX 8127 SAMPLE 6456
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	PRICE A NO. 1	HELEN P. BELO NO. 3	DAVID P. MCBRYDE NO. 1
LOCATION	SEC. 122, BLK. 47, H&TC SUR.	SEC. 17, BLK. 1, I&GN SUR.	SEC. 52, BLK. 1-T, T&NO SUR.
OWNER	HARRINGTON, MARSH & WAGNER	HUMBLE OIL & REFINING CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	01/31/56	09/13/56	10/08/57
SAMPLED	02/18/56	04/10/57	12/26/57
FORMATION	PENN-CISCO	PENN-CISCO	PENN-VIRGIL
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3500	3473	3519
WELLHEAD PRESSURE,PSIG	464	444	480
OPEN FLOW, MCFD	6550	1300	2000
COMPONENT, MOLE PCT			
METHANE	70.6	72.5	71.6
ETHANE	4.8	5.1	5.0
PROPANE	3.2	3.2	3.2
N-BUTANE	1.0	1.2	1.2
ISOBUTANE	0.0	0.5	0.6
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.5	0.2
NITROGEN	16.3	15.5	16.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.88	0.86	0.90
HEATING VALUE*	1028	1006	994
SPECIFIC GRAVITY	0.739	0.717	0.722

	INDEX 8128 SAMPLE 6563	INDEX 8129 SAMPLE 6564	INDEX 8130 SAMPLE 7080
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	H. P. BELO NO. 2	H. P. BELO NO. 4	FOXWORTH NO. 1
LOCATION	SEC. 20, BLK. 1, I&GN SUR.	SEC. 19, BLK. 1, I&GN SUR.	SEC. 54, BLK. 1-T, T&NO SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	KERR-MCGEE OIL IND., INC.
COMPLETED	11/16/54	08/07/57	--/--/00
SAMPLED	04/21/58	08/21/58	05/25/59
FORMATION	PENN-CISCO	PENN-CISCO	PENN-MASSIVE LIMESTONE
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3510	3554	NOT GIVEN
WELLHEAD PRESSURE,PSIG	455	462	NOT GIVEN
OPEN FLOW, MCFD	3000	2100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.1	72.5	75.1
ETHANE	5.0	5.2	5.4
PROPANE	3.1	3.2	3.1
N-BUTANE	1.2	1.2	1.1
ISOBUTANE	0.5	0.5	0.8
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	17.3	15.8	12.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.90	0.80	0.60
HEATING VALUE*	978	998	1029
SPECIFIC GRAVITY	0.720	0.716	0.707

	INDEX 8131 SAMPLE 7222	INDEX 8132 SAMPLE 7223	INDEX 8133 SAMPLE 7224
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	BELO NO. 1	MOON NO. 1	SCHRAYER NO. 1
LOCATION	SEC. 18, BLK. 1, I&GN SUR.	SEC. 87, BLK. 1-T, T&NORR SUR	SEC. 84, BLK. 1-T, T&NORR SUR
OWNER	RIP C. UNDERWOOD	RIP C. UNDERWOOD	RIP C. UNDERWOOD
COMPLETED	--/--/00	11/25/57	01/29/58
SAMPLED	09/29/59	09/29/59	09/29/59
FORMATION	PENN-CISCO	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3455	3442	3609
WELLHEAD PRESSURE,PSIG	479	480	461
OPEN FLOW, MCFD	700	6800	1350
COMPONENT, MOLE PCT			
METHANE	67.3	69.5	72.5
ETHANE	4.8	5.0	5.2
PROPANE	3.2	3.0	3.2
N-BUTANE	1.2	1.1	1.1
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.5	0.7	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	20.8	18.5	15.7
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	1.30	1.10	0.70
HEATING VALUE*	940	973	1006
SPECIFIC GRAVITY	0.732	0.728	0.720

	INDEX 8134 SAMPLE 7225	INDEX 8135 SAMPLE 7291	INDEX 8136 SAMPLE 7335
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DALLAM	DALLAM	DALLAM
FIELD	KERRICK	KERRICK	KERRICK
WELL NAME	PEELER NO. 1	DAVID MCBRYDE A NO. 1	MURDOCK NO. 1
LOCATION	SEC. 49, BLK. 1-T, T&NORR SUR	SEC. 15, BLK. 50, H&TC SUR.	SEC. 2, F. M. DAVIS SUR.
OWNER	RIP C. UNDERWOOD	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	11/25/57	08/29/59	11/04/59
SAMPLED	09/29/59	11/20/59	01/12/60
FORMATION	PENN-CISCO	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2400	3517	3472
WELLHEAD PRESSURE,PSIG	477	2700	240
OPEN FLOW, MCFD	27500	900	275
COMPONENT, MOLE PCT			
METHANE	73.0	68.2	70.6
ETHANE	5.3	5.8	5.2
PROPANE	3.2	3.5	3.1
N-BUTANE	1.1	1.3	1.1
ISOBUTANE	0.6	0.9	0.5
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.7	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	14.7	19.8	17.6
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.60	0.60	0.90
HEATING VALUE*	1017	971	983
SPECIFIC GRAVITY	0.717	0.739	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8137 SAMPLE 6551		INDEX 8138 SAMPLE 6753		INDEX 8139 SAMPLE 6754	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DALLAM		DALLAM		DALLAM	
FIELD	KERRICK-MALLETT		KERRICK-MALLETT		KERRICK-MALLETT	
WELL NAME	D. P. MCBRYDE B NO. 1		D. P. MCBRYDE B NO. 1		O. GAMBLE A NO. 1	
LOCATION	SEC. 55, BLK. 1-T, T&NO SUR.		SEC. 55, BLK. 1-T, T&NO SUR.		SEC. 56, BLK. 1-T, T&NO SUR.	
OWNER	GULF OIL CORP.		GULF OIL CORP.		GULF OIL CORP.	
COMPLETED	--/--/00		03/11/58		05/08/58	
SAMPLED	05/05/58		08/18/58		07/18/58	
FORMATION	NOT GIVEN		PENN-CISCO		PENN-CISCO	
GEOLOGIC PROVINCE CODE	435		435		435	
DEPTH, FEET	NOT GIVEN		3394		3372	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		450		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	62.9		75.4		74.6	
ETHANE	4.5		5.5		5.4	
PROPANE	2.6		3.2		3.3	
N-BUTANE	0.9		1.1		1.3	
ISOBUTANE	0.5		0.6		0.5	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.2		0.3		0.5	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		TRACE	
NITROGEN	24.0		12.7		13.3	
OXYGEN	3.2		0.0		TRACE	
ARGON	0.2		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.52		0.60		0.60	
HEATING VALUE*	694		1029		1032	
SPECIFIC GRAVITY	0.751		0.703		0.710	

	INDEX 8140 SAMPLE 14284		INDEX 8141 SAMPLE 14285		INDEX 8142 SAMPLE 13610	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DE WITT		DE WITT		DE WITT	
FIELD	ARNECKEVILLE		ARNECKEVILLE		BALFOUR	
WELL NAME	FLORA PURCELL NO. 1-T		FLORA PURCELL NO. 1-C		RUSSELMAN CATTLE CO. NO. 1	
LOCATION	MUMFORD SUR. A-226		MUMFORD SUR. A-226		A.J.HOUSE SUR. A-793	
OWNER	LONE STAR PRODUCING CO.		LONE STAR PRODUCING CO.		B.D.K. PRODUCTION CO.	
COMPLETED	01/02/73		01/02/73		11/08/70	
SAMPLED	03/05/75		03/05/75		05/24/73	
FORMATION	EOCE-YEGUA		EOCE-YEGUA		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	5353		4867		5392	
WELLHEAD PRESSURE,PSIG	1647		1407		1535	
OPEN FLOW, MCFD	435		3600		2477	
COMPONENT, MOLE PCT						
METHANE	90.4		90.7		88.5	
ETHANE	5.0		5.0		5.5	
PROPANE	2.2		2.2		3.0	
N-BUTANE	0.8		0.4		0.7	
ISOBUTANE	0.6		0.6		0.7	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.3		0.3		0.4	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	0.3		0.3		0.7	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		0.3	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1125		1130		1146	
SPECIFIC GRAVITY	0.636		0.635		0.651	

	INDEX 8143 SAMPLE 13611		INDEX 8144 SAMPLE 15742		INDEX 8145 SAMPLE 10202	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DE WITT		DE WITT		DE WITT	
FIELD	BALFOUR		CHRISTMAS S		DANIELS RANCH	
WELL NAME	RUSSELMAN CATTLE CO. NO. 1		GREEN NO. 1		SIDNEY DANIELS, NO. 1	
LOCATION	A.J.HOUSE SUR. A-793		DELORES ALDRETTE SUR. A-52		WM. S. TOWNSEND SUR. A-457	
OWNER	B.D.K. PRODUCTION CO.		MILLIARD OIL & GAS, INC.		APACHE CORP.	
COMPLETED	11/08/70		12/13/77		04/12/64	
SAMPLED	05/24/73		09/--/79		10/08/65	
FORMATION	OLIG-VICKSBURG		EOCE-WILCOX		-FRIAR	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3320		10860		10117	
WELLHEAD PRESSURE,PSIG	940		7129		3130	
OPEN FLOW, MCFD	7799		7000		1600	
COMPONENT, MOLE PCT						
METHANE	99.2		87.2		84.9	
ETHANE	0.1		4.8		6.8	
PROPANE	TRACE		1.5		3.1	
N-BUTANE	0.0		0.4		0.6	
ISOBUTANE	0.0		0.5		0.5	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0		0.5		0.3	
CYCLOPENTANE	0.0		0.1		0.1	
HEXANES PLUS	0.0		0.4		0.2	
NITROGEN	0.4		0.2		0.4	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		4.2		3.8	
HELIUM	0.01		TRACE		0.01	
HEATING VALUE*	1007		1088		1130	
SPECIFIC GRAVITY	0.558		0.671		0.681	

	INDEX 8146 SAMPLE 17148		INDEX 8147 SAMPLE 14258		INDEX 8148 SAMPLE 12007	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DE WITT		DE WITT		DE WITT	
FIELD	DRY HOLLOW		FRIAR RANCH W		GO WITT	
WELL NAME	COPENHAVER NO. 1		STILES CATTLE CO. NO. 1		M. C. GIPS NO. 1	
LOCATION	NICHOLAS PECK SUR., A-383		JOHN DALEY SUR. A-11		CYRUS DONNELLY SUR. A-166	
OWNER	GULFSTREAM PETROLEUM CORP.		COASTAL STATES GAS PROD. CO.		LONE STAR PRODUCING CO.	
COMPLETED	02/--/83		02/05/75		03/14/68	
SAMPLED	12/--/83		02/10/75		08/22/68	
FORMATION	EOCE-WILCOX & PECK		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	11024		9890		13071	
WELLHEAD PRESSURE,PSIG	5900		2394		9344	
OPEN FLOW, MCFD	6948		13100		13000	
COMPONENT, MOLE PCT						
METHANE	86.0		79.2		87.8	
ETHANE	6.5		6.8		4.7	
PROPANE	2.1		6.0		1.6	
N-BUTANE	0.5		1.5		0.4	
ISOBUTANE	0.3		1.2		0.2	
N-PENTANE	0.1		0.2		TRACE	
ISOPENTANE	0.1		0.5		0.1	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.0		0.5		0.5	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.9		3.8		4.0	
HELIUM	TRACE		0.01		TRACE	
HEATING VALUE*	1091		1226		1057	
SPECIFIC GRAVITY	0.667		0.743		0.652	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8149 SAMPLE 8580	INDEX 8150 SAMPLE 14896	INDEX 8151 SAMPLE 14898
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	MENZE	MOLLY	MOLLY
WELL NAME	JIMMIE SPEED NO. 1	E. MOMBA NO. 1-A	E. MOMBA NO. 1-A
LOCATION	JOSE SANTOS LEAGUE A-420	JAMES DUFF SUR. A-153	JAMES DUFF SUR. A-153
OWNER	SKELLY OIL CO.	HARKINS & CO.	HARKINS & CO.
COMPLETED	03/22/61	08/08/74	08/08/74
SAMPLED	06/14/62	02/07/77	02/07/77
FORMATION	EOCE-WILCOX	NOT GIVEN	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11291	NOT GIVEN	4802
WELLHEAD PRESSURE,PSIG	7326	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2600	2000	2000
COMPONENT, MOLE PCT			
METHANE	84.7	89.6	88.1
ETHANE	7.2	5.3	5.3
PROPANE	2.7	2.2	2.5
N-BUTANE	0.6	0.6	1.0
ISOBUTANE	0.6	0.5	0.8
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	0.4	0.6	0.7
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	1.2	0.4	0.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	0.3	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1124	1146	1188
SPECIFIC GRAVITY	0.677	0.647	0.674

	INDEX 8152 SAMPLE 10909	INDEX 8153 SAMPLE 15025	INDEX 8154 SAMPLE 5875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	PRIDGEN	REIFFERT	SALLY
WELL NAME	ADA B. PRIDGEN NO. 1	REIFFERT-FRAIA NO. 1	AMELIA BOLDT NO. 1
LOCATION	T & NO SUR. A-570	SAMBRANO SUR. 9, A-492	F. RAGSDALE SUR. NO. 414
OWNER	VIKING DRILLING CO.	BDK PRODUCTION CO., INC.	F. WILLIAM CARR
COMPLETED	11/19/66	12/24/74	02/24/54
SAMPLED	04/03/67	06/13/77	08/19/54
FORMATION	EOCE-YEGUA	EOCE-YEGUA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5586	4933	4845
WELLHEAD PRESSURE,PSIG	2150	1365	NOT GIVEN
OPEN FLOW, MCFD	22500	3764	15000
COMPONENT, MOLE PCT			
METHANE	90.2	94.2	90.4
ETHANE	4.1	2.6	4.8
PROPANE	2.3	1.3	1.9
N-BUTANE	0.7	0.4	0.5
ISOBUTANE	0.5	0.3	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.4	0.1	0.3
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	0.7	0.6	0.7
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1140	1076	1125
SPECIFIC GRAVITY	0.643	0.604	0.633

	INDEX 8155 SAMPLE 11148	INDEX 8156 SAMPLE 9162	INDEX 8157 SAMPLE 12333
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	SLICK N	TERRYVILLE SW	TERRYVILLE W
WELL NAME	SINAST NO. 1	SW TERRYVILLE G.U. NO. 1	JOHN GARRETT NO. 1
LOCATION	BRETON ODEM SUR. A-376	J. S. SWISHER SUR. A-421	JOHN R. FOSTER SUR. A-189
OWNER	SAMEDAN OIL CORP.	HUMBLE OIL & REFINING CO.	KILROY CO. OF TEXAS, INC.
COMPLETED	08/11/65	02/15/63	07/08/69
SAMPLED	10/17/67	11/28/63	07/24/70
FORMATION	EOCE-LULING	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7545	11910	4889
WELLHEAD PRESSURE,PSIG	2440	5810	1862
OPEN FLOW, MCFD	27000	700	6700
COMPONENT, MOLE PCT			
METHANE	80.6	85.2	89.6
ETHANE	6.3	6.7	4.8
PROPANE	4.6	3.3	2.6
N-BUTANE	1.6	0.7	0.6
ISOBUTANE	1.6	0.3	0.7
N-PENTANE	0.4	0.1	0.3
ISOPENTANE	1.2	0.2	TRACE
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	0.7	0.1	0.3
NITROGEN	1.0	0.0	0.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	3.3	0.1
HELIUM	TRACE	0.04	0.01
HEATING VALUE*	1273	1120	1137
SPECIFIC GRAVITY	0.753	0.676	0.643

	INDEX 8158 SAMPLE 12334	INDEX 8159 SAMPLE 4041	INDEX 8160 SAMPLE 4698
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	TERRYVILLE W	THOMASTON	WILDCAT
WELL NAME	JOHN GARRETT NO. 1	PEARL CONWELL NO. 1	ED ZINGERLE ET AL. NO. 1
LOCATION	JOHN R. FOSTER SUR. A-189	LOCKHART	JAMES QUINN SUR. A-395
OWNER	KILROY CO. OF TEXAS, INC.	ATLANTIC REFINING CO.	WESTERN NATURAL GAS CO.
COMPLETED	07/08/69	03/15/40	10/29/48
SAMPLED	07/24/70	05/29/45	03/12/49
FORMATION	EOCE-YEGUA	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4917	7855	8158
WELLHEAD PRESSURE,PSIG	1797	2900	3437
OPEN FLOW, MCFD	35000	33	16500
COMPONENT, MOLE PCT			
METHANE	89.6	82.6	89.1
ETHANE	4.8	15.2	5.5
PROPANE	2.6	---	2.3
N-BUTANE	0.7	---	0.6
ISOBUTANE	0.4	---	0.3
N-PENTANE	0.3	---	0.2
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.3	---	0.2
NITROGEN	0.8	0.0	0.7
OXYGEN	0.0	0.1	0.1
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	2.1	0.9
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1141	1109	1117
SPECIFIC GRAVITY	0.645	0.651	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8161 SAMPLE 10680	INDEX 8162 SAMPLE 12009	INDEX 8163 SAMPLE 12032
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DE WITT
FIELD	YOAKUM	YORKTOWN	YORKTOWN
WELL NAME	ZULA E. BOYD NO. 1	WALTER FELLER NO. 2	E. N. BROUGHTON G. U. NO. 1
LOCATION	JOHN MAY SUR. A-329	L. W. CRISWELL SUR. A-116	J. A. TINSLEY SUR. A-455
OWNER	INDUSTRIAL GAS SUPPLY CORP.	MONSANTO CO.	TEXACO INC.
COMPLETED	09/19/63	10/25/68	01/13/69
SAMPLED	07/25/66	08/26/69	09/10/69
FORMATION	CRET-EDWARDS	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14124	10310	9613
WELLHEAD PRESSURE,PSIG	4800	6679	3384
OPEN FLOW, MCFD	3300	18000	2345
COMPONENT, MOLE PCT			
METHANE	89.2	86.5	59.3
ETHANE	1.4	5.4	16.8
PROPANE	0.4	2.2	10.9
N-BUTANE	0.2	0.5	2.8
ISOBUTANE	0.1	0.4	1.9
N-PENTANE	0.3	0.2	0.9
ISOPENTANE	0.0	0.2	0.6
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	0.2	0.9	2.0
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	8.0	2.9	3.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	967	1110	1445
SPECIFIC GRAVITY	0.660	0.683	0.910

	INDEX 8164 SAMPLE 12156	INDEX 8165 SAMPLE 13881	INDEX 8166 SAMPLE 11189
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DE WITT	DE WITT	DENTON
FIELD	YORKTOWN S	YORKTOWN S	BOLIVAR
WELL NAME	OSCAR D. JOCHEN NO. 1	CLIFFORD F. SPIES NO. 1	MARRERSON
LOCATION	G. H. WOOD SUR. 45, A-82	J. J. TINSLEY SUR. A-455	NOT GIVEN
OWNER	QUINTANA PETROLEUM CORP.	ROBERT MOSBACHER	BURK ROYALTY CO.
COMPLETED	09/25/68	01/17/72	--/--/00
SAMPLED	12/18/69	01/27/74	10/26/67
FORMATION	EOCE-WILCOX	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	420
DEPTH, FEET	9930	11100	1300
WELLHEAD PRESSURE,PSIG	2865	6850	560
OPEN FLOW, MCFD	1250	12500	750
COMPONENT, MOLE PCT			
METHANE	85.5	62.8	43.6
ETHANE	6.2	13.7	1.2
PROPANE	2.9	5.9	0.3
N-BUTANE	0.5	1.1	0.1
ISOBUTANE	0.4	1.7	0.0
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.9	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	1.1	5.0	53.4
OXYGEN	0.1	1.3	0.1
ARGON	0.0	TRACE	0.1
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	6.7	TRACE
HELIUM	0.05	TRACE	0.75
HEATING VALUE*	1088	1205	489
SPECIFIC GRAVITY	0.665	0.852	0.789

	INDEX 8167 SAMPLE 4943	INDEX 8168 SAMPLE 7205	INDEX 8169 SAMPLE 10896
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DENTON	DIMMIT	DIMMIT
FIELD	NOT GIVEN	CELESTE-FAY	NELSON
WELL NAME	FORESTER NO. 1	SHOOK NO. 4	STRAUDER G. NELSON NO. 1
LOCATION	W. WILSON SUR. A-1381	SEC. 29, I&GN RR, 4903 SUR.	J. J. WEBB SUR. NO.4 A-1460
OWNER	J. M. MICKEY & SONS	MICHEL T. HALBOUTY, ET AL.	GULF OIL CORP.
COMPLETED	--/--/00	06/28/59	09/24/66
SAMPLED	10/01/50	09/01/59	03/07/67
FORMATION	NOT GIVEN	CRET-OLMOS	CRET-OLMOS
GEOLOGIC PROVINCE CODE	420	220	220
DEPTH, FEET	NOT GIVEN	6987	3300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	920	1500
OPEN FLOW, MCFD	NOT GIVEN	1500	7350
COMPONENT, MOLE PCT			
METHANE	43.3	94.1	82.9
ETHANE	1.6	3.7	8.9
PROPANE	1.1	0.1	1.9
N-BUTANE	0.3	0.1	1.1
ISOBUTANE	0.1	0.2	0.7
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.0	0.4	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	52.2	1.2	1.9
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.77	0.02	0.02
HEATING VALUE*	520	1054	1206
SPECIFIC GRAVITY	0.801	0.593	0.692

	INDEX 8170 SAMPLE 13914	INDEX 8171 SAMPLE 17894	INDEX 8172 SAMPLE 15788
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DIMMIT	DIMMIT	DIMMIT
FIELD	PENA CREEK	SHEPARD	STRAIT
WELL NAME	L. STEWART NO. 1	SHEPARD NO. 4	STRAIT G.U. NO. 1
LOCATION	SAM L. WILSON SUR.654,A-1452	F. VANDERVOORT SUR. 74, A-12	SEC. 47, BLK. 1, H&GN RR CO.
OWNER	HUGHES & HUGHES OIL & GAS	HOME PETROLEUM CORP.	IKE LOVELADY, INC.
COMPLETED	10/13/72	--/--/00	08/12/79
SAMPLED	02/07/74	11/07/80	09/25/79
FORMATION	CRET-OLMOS	CRET-OLMOS	CRET-EDWARDS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2341	4596	7189
WELLHEAD PRESSURE,PSIG	775	NOT GIVEN	6000
OPEN FLOW, MCFD	3400	4250	89000
COMPONENT, MOLE PCT			
METHANE	94.1	79.6	93.6
ETHANE	3.8	8.6	4.2
PROPANE	0.1	6.1	1.4
N-BUTANE	TRACE	3.0	0.2
ISOBUTANE	0.2	1.0	0.2
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.1	0.5	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.4	0.1
NITROGEN	0.8	1.2	1.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.6
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1037	1278	1011
SPECIFIC GRAVITY	0.589	0.739	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8173 SAMPLE 7206	INDEX 8174 SAMPLE 4867	INDEX 8175 SAMPLE 3862
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DIMMIT	DIMMIT	DUVAL
FIELD	WILDCAT	WINTER GARDEN	AGUA PRIETA
WELL NAME	SHOOK NO. 7	E. MCKNIGHT NO. 2	VALENTIN SEPULVEDA NO. 2-B
LOCATION	SEC. 6, I&GN RR, A-830 SUR.	R. S. RIDDLE SUR. NO. A-1317	SEC. 15
OWNER	MICHEL T. HALBOUTY, ET AL.	CONTINENTAL OIL CO.	TAYLOR REFINING CO.
COMPLETED	07/29/59	12/01/50	02/28/44
SAMPLED	09/01/59	04/05/50	06/01/44
FORMATION	CRET-OLMOS	CRET-OLMOS	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2892	2804	NOT GIVEN
WELLHEAD PRESSURE,PSIG	900	1293	NOT GIVEN
OPEN FLOW, MCFD	2000	5100	36000
COMPONENT, MOLE PCT			
METHANE	88.5	92.7	78.1
ETHANE	3.5	3.9	21.3
PROPANE	2.7	1.1	---
N-BUTANE	0.7	0.7	---
ISOBUTANE	0.7	0.3	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	0.6	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.4	0.2	---
NITROGEN	3.3	0.8	0.4
OXYGEN	0.3	0.2	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.3	0.5
HELIUM	0.03	0.02	0.00
HEATING VALUE*	1103	1088	1173
SPECIFIC GRAVITY	0.649	0.615	0.665

	INDEX 8176 SAMPLE 15086	INDEX 8177 SAMPLE 4753	INDEX 8178 SAMPLE 4885
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	BRELUM	CANTU	EMILIPIN
WELL NAME	OCRC NCT-29 NO. 7	CENORIO CANTU JR. NO. 1	FLORENCIA GARCIA
LOCATION	J. POITEVENT SUR. A-447	SEC. 11, BENITO ROMOS SUR.	M. G. PEREZ SUR. NO. 412
OWNER	TEXACO INC.	TEXAS CO.	LULING OIL & GAS CO.
COMPLETED	01/07/75	04/08/49	10/20/49
SAMPLED	08/--/77	06/11/49	03/15/50
FORMATION	EOCE-CHERNOSKY	EOCE-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1526	4670	3268
WELLHEAD PRESSURE,PSIG	660	1413	1068
OPEN FLOW, MCFD	5600	375	2280
COMPONENT, MOLE PCT			
METHANE	97.9	88.3	95.5
ETHANE	0.1	4.6	3.6
PROPANE	0.1	2.2	0.1
N-BUTANE	0.0	0.6	0.0
ISOBUTANE	0.1	0.5	0.0
N-PENTANE	TRACE	0.3	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	1.6	2.7	0.4
OXYGEN	TRACE	0.2	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.01	0.03	0.01
HEATING VALUE*	1005	1196	1036
SPECIFIC GRAVITY	0.567	0.644	0.577

	INDEX 8179 SAMPLE 4153	INDEX 8180 SAMPLE 10154	INDEX 8181 SAMPLE 11649
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	CONOCO-DRISCOLL	CONOCO-DRISCOLL	DUVAL COUNTY RANCH CO. 79S
WELL NAME	CLARA DRISCOLL NO. 4	ROBERT DRISCOLL NO. 112	DCR-79 UNIT 2 NO. 1
LOCATION	24 MI. N OF BENEVIDES	J.P.W. NELSON SUR.NO.448-A9120	SANTOS MONCADOS SUR. 262
OWNER	EDWIN B. COX & JAKE L. HAMON	CONTINENTAL OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	06/13/45	10/06/64	05/23/68
SAMPLED	10/01/46	09/24/65	09/18/68
FORMATION	EOCE-LOMA NOVIO	EOCE-YEGUA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3170	4007	7218
WELLHEAD PRESSURE,PSIG	700	1265	2507
OPEN FLOW, MCFD	6000	9400	3900
COMPONENT, MOLE PCT			
METHANE	96.0	89.7	87.2
ETHANE	1.6	6.3	0.5
PROPANE	---	1.5	2.7
N-BUTANE	---	0.3	0.8
ISOBUTANE	---	0.6	0.4
N-PENTANE	---	TRACE	0.2
ISOPENTANE	---	0.5	0.4
CYCLOPENTANE	---	0.1	0.3
HEXANES PLUS	---	0.3	0.6
NITROGEN	0.0	0.4	0.3
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.4	0.3	1.6
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	1011	1131	1160
SPECIFIC GRAVITY	0.586	0.638	0.676

	INDEX 8182 SAMPLE 2608	INDEX 8183 SAMPLE 2276	INDEX 8184 SAMPLE 4513
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	FREER	GOVERNMENT WELLS	GOVERNMENT WELLS
WELL NAME	JOHNSON NO. 5	J. O. WILSON NO. 1	H. WENDT NO. 1
LOCATION	NOT GIVEN	SEC. 136	NOT GIVEN
OWNER	TEXAS CO.	UNITED GAS CORP., ET AL.	RALPH E. FAIR, INC.
COMPLETED	01/13/33	02/09/31	07/06/48
SAMPLED	02/17/33	02/09/31	05/04/58
FORMATION	NOT GIVEN	EOCE-	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2251	2244	7488
WELLHEAD PRESSURE,PSIG	825	650	3890
OPEN FLOW, MCFD	15000	NOT GIVEN	16000
COMPONENT, MOLE PCT			
METHANE	98.6	95.1	81.0
ETHANE	0.0	0.0	14.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	3.6	2.0
OXYGEN	0.5	1.0	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	1.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	999	963	1086
SPECIFIC GRAVITY	0.563	0.578	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8185 SAMPLE 4593		INDEX 8186 SAMPLE 16677		INDEX 8187 SAMPLE 4655	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	GOVERNMENT WELLS S		GUERRA		HAGIST RANCH	
WELL NAME	J. O. WILSON NO. 21		G. GUERRA, ET AL. NO. 1		HAGIST RANCH NO. 1	
LOCATION	SEC. 136, WHITE SUR.		A-185, W. MEYER 146 SUR.		SEC. 267	
OWNER	MAGNOLIA PETROLEUM CO.		AMINOIL U.S.A., INC.		ATLANTIC REFINING CO.	
COMPLETED	06/--/48		--/--/79		10/06/48	
SAMPLED	10/12/48		10/04/82		01/19/49	
FORMATION	EOCE-COLE		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	1460		10600		7180	
WELLHEAD PRESSURE,PSIG	375		6700		3120	
OPEN FLOW, MCFD	28000		10000		6600	
COMPONENT, MOLE PCT						
METHANE	98.0		90.7		87.9	
ETHANE	1.6		2.5		5.7	
PROPANE	---		0.5		2.6	
N-BUTANE	---		0.1		0.8	
ISOBUTANE	---		0.1		0.2	
N-PENTANE	---		0.1		0.2	
ISOPENTANE	---		0.1		0.2	
CYCLOPENTANE	---		TRACE		0.1	
HEXANES PLUS	---		0.1		0.4	
NITROGEN	0.0		0.2		0.4	
OXYGEN	0.2		TRACE		0.1	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		0.1		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		5.4		1.5	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1021		997		1139	
SPECIFIC GRAVITY	0.565		0.635		0.657	

	INDEX 8188 SAMPLE 15643		INDEX 8189 SAMPLE 4779		INDEX 8190 SAMPLE 14002	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	HAGIST RANCH		HOFFMAN		HOFFMAN	
WELL NAME	J. R. FOSTER NO. 5		J. FLORES NO. 1		A. WEIL NO. B-2	
LOCATION	SUR. 270, A-1642		SEC. 118		SA&MG SUR. A-524	
OWNER	ARCO OIL & GAS CO.		BRIDWELL OIL CO.		KILLAM & HURD, LTD.	
COMPLETED	03/16/76		06/19/49		09/15/71	
SAMPLED	06/13/76		09/20/49		05/02/74	
FORMATION	EOCE-WILCOX		OLIG-		EOCE-JACKSON	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9300		1938		1970	
WELLHEAD PRESSURE,PSIG	3185		670		600	
OPEN FLOW, MCFD	2450		2000		5600	
COMPONENT, MOLE PCT						
METHANE	89.0		97.7		98.4	
ETHANE	5.4		0.3		TRACE	
PROPANE	1.8		0.2		TRACE	
N-BUTANE	0.4		0.1		0.0	
ISOBUTANE	0.3		0.0		0.0	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	0.2		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.0		0.6	
NITROGEN	0.2		1.4		1.4	
OXYGEN	0.0		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	2.4		0.1		0.1	
HELIUM	TRACE		0.01		0.01	
HEATING VALUE*	1087		1011		997	
SPECIFIC GRAVITY	0.642		0.571		0.561	

	INDEX 8191 SAMPLE 13530		INDEX 8192 SAMPLE 4480		INDEX 8193 SAMPLE 3861	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		MURALLA	
FIELD	KOHLER NE		LONGHORN S		J. M. SEPULVEDA NO. 1-A	
WELL NAME	W. KOHLER "A" NO. 89F		LEROY DENMAN A-1		SEC. 12	
LOCATION	P. R. TEVENT SUR. NO. 163		NOT GIVEN		TAYLOR REFINING CO.	
OWNER	EXXON CO., U.S.A.		HIAWATHA OIL & GAS CO.		12/17/43	
COMPLETED	08/13/70		01/21/48		06/01/44	
SAMPLED	02/08/73		03/31/48		NOT GIVEN	
FORMATION	EOCE-YEGUA		OLIG-		220	
GEOLOGIC PROVINCE CODE	220		220		NOT GIVEN	
DEPTH, FEET	3642		4842		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1271		925		2700	
OPEN FLOW, MCFD	59000		NOT GIVEN			
COMPONENT, MOLE PCT						
METHANE	89.6		83.3		85.6	
ETHANE	4.0		14.7		13.6	
PROPANE	0.3		---		---	
N-BUTANE	TRACE		---		---	
ISOBUTANE	0.5		---		---	
N-PENTANE	0.0		---		---	
ISOPENTANE	0.2		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.1		---		---	
NITROGEN	3.8		1.2		0.0	
OXYGEN	0.7		0.4		0.3	
ARGON	TRACE		---		---	
HYDROGEN	0.5		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.7		0.4		0.5	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1018		1107		1111	
SPECIFIC GRAVITY	0.617		0.638		0.628	

	INDEX 8194 SAMPLE 4281		INDEX 8195 SAMPLE 4878		INDEX 8196 SAMPLE 9171	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
WELL NAME	J. F. WELDER HEIRS NO. 8C		HAGIST NO. 2		ADLEE PARR A NO. 4	
LOCATION	SEC. 102, S&M. ALEXANDER SUR		BS&F SUR.		ANDRES GARCIA SAN ANDRES GRT	
OWNER	HICOK & REYNOLDS, INC.		DELHI OIL CORP.		SUPERIOR OIL CO.	
COMPLETED	11/28/46		10/--/49		--/--/00	
SAMPLED	02/06/47		03/14/50		11/14/63	
FORMATION	EOCE-LOMA NOVIO		EOCE-WILCOX U		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2520		7100		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	1005		2600		NOT GIVEN	
OPEN FLOW, MCFD	4000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	99.2		87.2		90.7	
ETHANE	0.0		5.9		4.7	
PROPANE	---		2.8		1.9	
N-BUTANE	---		0.8		0.6	
ISOBUTANE	---		0.5		0.6	
N-PENTANE	---		0.4		0.1	
ISOPENTANE	---		0.0		0.3	
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---		0.3		0.2	
NITROGEN	0.1		0.6		0.6	
OXYGEN	0.4		0.1		0.0	
ARGON	---		TRACE		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.3		1.4		0.2	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1025		1137		1124	
SPECIFIC GRAVITY	0.560		0.666		0.634	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1a - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8197 SAMPLE 5918	INDEX 8198 SAMPLE 16451	INDEX 8199 SAMPLE 17590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	PETERS	RANCHO SOLO	REALITOS S
WELL NAME	W. R. PETERS NO. 1	FROST NAT. BANK&TRUST NO. 1	BARBARA SHAFFER BEACH NO. 1
LOCATION	T. A. CAVITT SUR. 34	G.&J. REYNOLDS 32 SUR.,A-1163	SANTOS GARGIA GRANT A-1985
OWNER	MONTERAY OIL CO.	TERRA RESOURCES, INC.	UNION TEXAS PETROLEUM CORP.
COMPLETED	04/13/55	03/04/82	02/07/85
SAMPLED	08/17/55	03/04/82	01/31/85
FORMATION	EOCE-WILCOX U	EOCE-WILCOX	EOCE-QUEEN CITY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8712	10263	9226
WELLHEAD PRESSURE,PSIG	4772	6450	5500
OPEN FLOW, MCFD	3600	1950	2000
COMPONENT, MOLE PCT			
METHANE	89.1	88.6	86.4
ETHANE	5.3	2.2	6.5
PROPANE	1.8	0.2	2.8
N-BUTANE	0.4	0.1	0.7
ISOBUTANE	0.1	TRACE	0.5
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.1	0.9	0.3
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	9.1	2.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1075	962	1135
SPECIFIC GRAVITY	0.640	0.659	0.681

	INDEX 8200 SAMPLE 9487	INDEX 8201 SAMPLE 12515	INDEX 8202 SAMPLE 12516
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	ROSITA W	SEVEN SISTERS	SEVEN SISTERS
WELL NAME	HOFFMAN NO. 1	WELDER G.U. NO. 4	WELDER G.U. NO. 4
LOCATION	SEC. 90, CHAS.W. PETRIE SUR.	J. POITEVENT SUR. NO.385	J. POITEVENT SUR. NO. 385
OWNER	J. M. HUBER CORP. & SHELL OI	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	11/26/63	12/28/68	12/28/68
SAMPLED	07/09/64	11/05/70	11/05/70
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10444	9524	9997
WELLHEAD PRESSURE,PSIG	7375	5496	6546
OPEN FLOW, MCFD	50500	15400	61000
COMPONENT, MOLE PCT			
METHANE	84.3	88.8	84.1
ETHANE	7.4	5.4	7.1
PROPANE	3.3	1.0	2.9
N-BUTANE	0.4	0.1	0.4
ISOBUTANE	0.1	0.3	0.5
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.0	2.2	0.9
OXYGEN	TRACE	0.5	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.3	3.5	3.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1098	1010	1099
SPECIFIC GRAVITY	0.678	0.635	0.681

	INDEX 8203 SAMPLE 4594	INDEX 8204 SAMPLE 4642	INDEX 8205 SAMPLE 4147
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	SEVENTY-SIX	SQUIRE	STRAKE
WELL NAME	DUVAL STATE SEC. 76 WELL 3	WELDER NO. E-2	JOHN D. YATES NO. 2-A
LOCATION	SEC. 76, CC SD&RG GN RR SUR.	M. G. ANDROSS SUR. NO. 24	JESSIE HARRIS SUR. NO. 5
OWNER	MAGNOLIA PETROLEUM CO.	JOHN F. CAMP & SONS	SANTA CLARA OIL CO., ET AL.
COMPLETED	05/--/48	01/03/48	06/29/46
SAMPLED	10/12/48	12/08/48	10/08/46
FORMATION	EOCE-MIRANDO	EOCE-YEGUA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2100	3805	2248
WELLHEAD PRESSURE,PSIG	738	1465	915
OPEN FLOW, MCFD	17000	10500	3400
COMPONENT, MOLE PCT			
METHANE	94.9	91.1	97.8
ETHANE	4.3	6.9	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	1.5	1.8
OXYGEN	0.0	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1034	1046	991
SPECIFIC GRAVITY	0.583	0.598	0.565

	INDEX 8206 SAMPLE 13109	INDEX 8207 SAMPLE 3895	INDEX 8208 SAMPLE 13880
STATE	TEXAS	TEXAS	TEXAS
COUNTY	DUVAL	DUVAL	DUVAL
FIELD	STRAKE N	THOMAS LOCKHART	VIGGO
WELL NAME	DRISCOLL ESTATE NO. 2	ELIZABETH PARR B NO. 2	D. V. KOHLER A NO. 970
LOCATION	SEC. 329, S&M SUR. A-581	8 MI. NW OF SAN DIEGO	BS&F SUR. 401, A100
OWNER	EDWIN L. COX	PAN AMERICAN PRODUCTION CO.	EXXON CO., U.S.A.
COMPLETED	12/18/69	--/--/43	08/02/72
SAMPLED	12/10/71	--/--/44	01/30/74
FORMATION	EOCE-COLE	MIOC-THOMAS	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3489	4000	3218
WELLHEAD PRESSURE,PSIG	607	NOT GIVEN	600
OPEN FLOW, MCFD	800	48000	50000
COMPONENT, MOLE PCT			
METHANE	98.7	96.3	94.0
ETHANE	0.1	2.5	3.7
PROPANE	TRACE	---	0.2
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.1
NITROGEN	0.8	0.0	0.5
OXYGEN	0.2	0.5	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.7	0.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1002	1020	1053
SPECIFIC GRAVITY	0.566	0.576	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8209 SAMPLE 5449		INDEX 8210 SAMPLE 4945		INDEX 8211 SAMPLE 4154	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	VIGGO E		WATER WELL		WILDCAT	
WELL NAME	V. KOHLER A-76		C. W. MARL NO. 1		LEILA PETERS 1199A NO. 1	
LOCATION	SK&K SUR. 165		E. RODRIQUEZ SUR. NO. A-1881		24 MI. NW OF BENEVIDES	
OWNER	HUMBLE OIL & REFINING CO.		FAIR-WOODWARD		EDWIN B. COX & JAKE L. HAMON	
COMPLETED	12/15/52		05/23/50		07/27/46	
SAMPLED	04/18/53		10/17/50		10/01/46	
FORMATION	EOCE-YEGUA		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3244		7575		2613	
WELLHEAD PRESSURE, PSIG	1100		NOT GIVEN		790	
OPEN FLOW, MCFD	4200		11200		11500	
COMPONENT, MOLE PCT						
METHANE	93.3		87.7		99.3	
ETHANE	5.2		5.8		0.0	
PROPANE	0.0		2.3		---	
N-BUTANE	0.1		0.6		---	
ISOBUTANE	0.0		0.4		---	
N-PENTANE	0.1		0.3		---	
ISOPENTANE	0.0		0.0		---	
CYCLOPENTANE	TRACE		0.1		---	
HEXANES PLUS	0.2		0.3		---	
NITROGEN	2.6		TRACE		0.0	
OXYGEN	0.3		0.1		0.3	
ARGON	TRACE		0.0		---	
HYDROGEN	TRACE		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.2		2.4		0.4	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1020		1118		1006	
SPECIFIC GRAVITY	0.593		0.660		0.560	

	INDEX 8212 SAMPLE 4624		INDEX 8213 SAMPLE 4625		INDEX 8214 SAMPLE 4745	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		DUVAL		DUVAL	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	LEILA PETERS NO. 1		AGENT NO. 2		DUVAL RANCH NO. 6	
LOCATION	SEC. 159		SEC. 159, J. POITEVENT SUR.		SEC. 196	
OWNER	COX & HAMON		EDWIN B. COX, ET AL.		MAGNOLIA PETROLEUM CO.	
COMPLETED	12/31/47		01/06/48		03/03/49	
SAMPLED	11/15/48		10/14/48		05/18/49	
FORMATION	NOT GIVEN		EOCE-GOVERNMENT WELLS SAND		EOCE-JACKSON	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	2485		2490		1403	
WELLHEAD PRESSURE, PSIG	NOT GIVEN		740		225	
OPEN FLOW, MCFD	NOT GIVEN		9500		17000	
COMPONENT, MOLE PCT						
METHANE	94.0		96.8		98.5	
ETHANE	4.8		2.5		0.1	
PROPANE	---		---		0.1	
N-BUTANE	---		---		TRACE	
ISOBUTANE	---		---		0.0	
N-PENTANE	---		---		0.1	
ISOPENTANE	---		---		0.0	
CYCLOPENTANE	---		---		0.0	
HEXANES PLUS	---		---		0.1	
NITROGEN	0.3		---		0.9	
OXYGEN	0.3		0.3		0.1	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.6		0.4		0.1	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1038		1025		1011	
SPECIFIC GRAVITY	0.587		0.572		0.566	

	INDEX 8215 SAMPLE 5121		INDEX 8216 SAMPLE 70		INDEX 8217 SAMPLE 1780	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	DUVAL		EASTLAND		EASTLAND	
FIELD	WILDCAT		CISCO		CISCO N	
WELL NAME	SINCLAIR HEIRS NO. 2		WARD NO. 1		WINCHELL NO. 1	
LOCATION	A&M SUR. NO. A-45		SEC. 101, J. HOXIE SUR.		SEC. 385	
OWNER	MAGNOLIA PETROLEUM CO.		GILMAN E SIMMONS		EASTLAND OIL CO.	
COMPLETED	06/29/51		12/07/19		11/30/29	
SAMPLED	10/29/51		02/23/20		05/18/29	
FORMATION	EOCE-TARANCAHUS		NOT GIVEN		PENN-RANGER	
GEOLOGIC PROVINCE CODE	220		425		425	
DEPTH, FEET	2165		3326		3736	
WELLHEAD PRESSURE, PSIG	770		1100		1575	
OPEN FLOW, MCFD	7125		6000		1480	
COMPONENT, MOLE PCT						
METHANE	97.1		71.7		64.3	
ETHANE	0.1		16.4		27.0	
PROPANE	0.1		---		---	
N-BUTANE	0.2		---		---	
ISOBUTANE	0.0		---		---	
N-PENTANE	0.2		---		---	
ISOPENTANE	0.0		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.1		---		---	
NITROGEN	1.3		12.6		7.8	
OXYGEN	0.1		0.7		0.2	
ARGON	TRACE		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.7		0.3		0.4	
HELIUM	0.01		0.19		0.25	
HEATING VALUE*	1010		984		1135	
SPECIFIC GRAVITY	0.580		0.683		0.724	

	INDEX 8218 SAMPLE 9592		INDEX 8219 SAMPLE 72		INDEX 8220 SAMPLE 89	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	EASTLAND		EASTLAND		EASTLAND	
FIELD	DOTMAN		EASTLAND		EASTLAND	
WELL NAME	C. E. PIPPEN NO. 1		HOLCOMB NO. 2		J. C. HARRELL NO. 1	
LOCATION	SEC. TE&L NO. 3171		M. E. HOLCOMB SUR.		NOT GIVEN	
OWNER	LONE STAR PRODUCING CO.		COSDEN OIL & GAS CO.		DUQUESNE OIL CORP.	
COMPLETED	01/16/63		08/11/19		01/11/20	
SAMPLED	10/08/64		02/25/20		03/01/20	
FORMATION	PENN-CADDO		NOT GIVEN		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	3042		1580		1871	
WELLHEAD PRESSURE, PSIG	1070		320		700	
OPEN FLOW, MCFD	1320		NOT GIVEN		75000	
COMPONENT, MOLE PCT						
METHANE	71.9		89.5		90.0	
ETHANE	9.0		0.0		4.7	
PROPANE	4.8		---		---	
N-BUTANE	1.2		---		---	
ISOBUTANE	0.7		---		---	
N-PENTANE	0.3		---		---	
ISOPENTANE	0.1		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.2		---		---	
NITROGEN	10.8		9.3		4.8	
OXYGEN	0.0		0.7		0.5	
ARGON	TRACE		---		---	
HYDROGEN	0.0		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.9		0.4		0.0	
HELIUM	0.25		TRACE		0.04	
HEATING VALUE*	1118		907		996	
SPECIFIC GRAVITY	0.741		0.600		0.600	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8221 SAMPLE 12718	INDEX 8222 SAMPLE 15710	INDEX 8223 SAMPLE 8194
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	EASTLAND COUNTY REGULAR	GAILEY-ALLEN	GORMAN N
WELL NAME	J. L. GRAY NO. 1	G. M. DELANO NO. 11-L	RUTH WILLIS NO. 1
LOCATION	SEC. 486, SPRR CO. SUR.	DELANO SUR.	SEC. 10, MTERR SUR.
OWNER	PETROLEUM CORP. OF TEXAS	TEXAS PACIFIC OIL CO., INC.	CALLIHAN INTEREST, INC.
COMPLETED	03/15/41	10/27/77	04/03/52
SAMPLED	03/--/71	07/23/79	09/11/61
FORMATION	PENN-LAKE	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3695	2964	2829
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1340	489
OPEN FLOW, MCFD	5	6069	4100
COMPONENT, MOLE PCT			
METHANE	70.0	77.3	73.9
ETHANE	11.9	9.7	9.5
PROPANE	6.0	4.4	5.1
N-BUTANE	1.7	1.1	1.3
ISOBUTANE	0.6	0.7	0.7
N-PENTANE	0.9	0.3	0.3
ISOPENTANE	0.6	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.3	0.3
NITROGEN	7.9	4.9	7.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.7	0.3
HELIUM	0.14	0.13	0.15
HEATING VALUE*	1223	1176	1168
SPECIFIC GRAVITY	0.776	0.727	0.740

	INDEX 8224 SAMPLE 10889	INDEX 8225 SAMPLE 5148	INDEX 8226 SAMPLE 4965
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	ISETT	LAUTERDALE	LEE RAY
WELL NAME	ARMSTRONG NO. 2	M. F. LAUTERDALE NO. 1	MITCHAM E-1
LOCATION	SAM DAMON SUR. NO. 754	SEC. 6	SL. P. RR SUR. NO. 491
OWNER	W. B. EVANS	MALCO REFINERIES, INC.	LONE STAR PRODUCING CO.
COMPLETED	--/--/00	01/09/52	09/05/47
SAMPLED	02/22/67	12/15/51	04/20/48
FORMATION	PENN-CADDO	PENN-CADDO	PENN---
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	7597	2710	3968
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1057	1446
OPEN FLOW, MCFD	NOT GIVEN	6	1860
COMPONENT, MOLE PCT			
METHANE	67.8	71.4	66.0
ETHANE	12.3	9.3	26.4
PROPANE	7.7	4.2	---
N-BUTANE	1.9	0.5	---
ISOBUTANE	0.8	0.1	---
N-PENTANE	0.5	0.1	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	8.3	13.8	6.8
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.15	0.30	0.30
HEATING VALUE*	1232	1034	1142
SPECIFIC GRAVITY	0.786	0.715	0.716

	INDEX 8227 SAMPLE 4670	INDEX 8228 SAMPLE 8147	INDEX 8229 SAMPLE 8149
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	LEE RAY	LEE RAY	LEE RAY
WELL NAME	G. P. MITCHAM F NO. 2	G. P. MITCHAM NO. 1-C	VAN PARMER NO. 2
LOCATION	SEC. 386, SP RR SUR.	SPRR SUR.	SPRR SUR.
OWNER	LONE STAR PRODUCING CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
COMPLETED	12/07/48	12/26/46	05/01/59
SAMPLED	09/12/49	08/10/61	08/10/61
FORMATION	PENN---	PENN-RANGER	PENN-STRAWN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3554	3828	2079
WELLHEAD PRESSURE,PSIG	1195	450	390
OPEN FLOW, MCFD	10000	1055	300
COMPONENT, MOLE PCT			
METHANE	68.7	72.9	77.8
ETHANE	11.9	11.3	7.5
PROPANE	8.1	4.9	2.1
N-BUTANE	1.2	1.5	0.3
ISOBUTANE	0.4	0.7	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	7.2	7.0	10.9
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.1
HELIUM	0.10	0.20	0.46
HEATING VALUE*	1148	1191	908
SPECIFIC GRAVITY	0.760	0.746	0.668

	INDEX 8230 SAMPLE 8148	INDEX 8231 SAMPLE 73	INDEX 8232 SAMPLE 74
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	LEE RAY-WARD	RANGER	RANGER
WELL NAME	E. J. WARD NO. 5	NASH NO. 3	G. E. NORWOOD NO. 1
LOCATION	BLK. 10, J. B. HONE SUR.	NASH LEASE	3.5 MI. SW RANGER
OWNER	LONE STAR GAS CO.	MAGNOLIA PETROLEUM CO.	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	06/30/48	09/20/19	02/25/20
SAMPLED	08/10/61	02/25/20	02/25/20
FORMATION	PENN-DUFFER	ORDO-ELLENBURGER	-GAS SAND
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3650	3326	3398
WELLHEAD PRESSURE,PSIG	300	200	220
OPEN FLOW, MCFD	398	1300	1500
COMPONENT, MOLE PCT			
METHANE	71.1	71.0	58.2
ETHANE	13.1	23.8	35.1
PROPANE	6.0	---	---
N-BUTANE	1.8	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.6	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	5.4	4.6	6.0
OXYGEN	TRACE	0.4	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.10	TRACE	0.00
HEATING VALUE*	1252	1146	1219
SPECIFIC GRAVITY	0.767	0.695	0.756

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8233 SAMPLE 15325	INDEX 8234 SAMPLE 8950	INDEX 8235 SAMPLE 9211
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	EASTLAND	EASTLAND
FIELD	SITTERLE	WILDCAT	WILDCAT
WELL NAME	PARMER HEIRS NO. 1	ADRA L. FOX NO. 1	NO. 2
LOCATION	SEC. 477, SPRR SUR.	LOT HH, LEAGUES 3 & 4	SEC. 26, TH&TC SUR.
OWNER	CHAPARRAL MINERALS, INC.	JERRY CUMMINGS, ET AL.	CUMCO OIL & GAS CORP.
COMPLETED	05/29/77	03/15/63	12/01/63
SAMPLED	07/25/78	05/13/63	12/16/63
FORMATION	PENN-LAKE	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3691	991	1192
WELLHEAD PRESSURE,PSIG	1427	500	90
OPEN FLOW, MCFD	5600	7500	250
COMPONENT, MOLE PCT			
METHANE	74.1	86.4	90.0
ETHANE	9.0	2.1	1.0
PROPANE	5.9	1.2	0.9
N-BUTANE	1.3	0.5	0.9
ISOBUTANE	0.2	TRACE	0.4
N-PENTANE	0.3	TRACE	0.3
ISOPENTANE	0.3	0.3	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.3
NITROGEN	7.3	9.0	5.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.186	0.30	0.20
HEATING VALUE*	1174	974	1046
SPECIFIC GRAVITY	0.737	0.627	0.634

	INDEX 8236 SAMPLE 15058	INDEX 8237 SAMPLE 2651	INDEX 8238 SAMPLE 1945
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	ECTOR	ECTOR
FIELD	WILDCAT	ECTOR	ECTOR COUNTY
WELL NAME	L. ABBOTT NO. 1	J. M. COWDEN NO. 3	UNIV. T-1
LOCATION	L. ABBOTT SUR., NO. A-2	SEC. 34, TIN, BLK. 43	SEC. 3, BLK. 35, UNIV. LANDS
OWNER	TEXAS PACIFIC OIL CO., INC.	STANOLIND OIL & GAS CO.	LANDRETH PRODUCTION CORP.
COMPLETED	04/24/76	--/--/33	02/01/30
SAMPLED	07/25/77	10/17/33	03/07/30
FORMATION	PENN-MARBLE FALLS	-LIME	PERM-
GEOLOGIC PROVINCE CODE	425	430	430
DEPTH, FEET	3421	4025	3138
WELLHEAD PRESSURE,PSIG	1450	NOT GIVEN	600
OPEN FLOW, MCFD	4726	NOT GIVEN	5020
COMPONENT, MOLE PCT			
METHANE	79.6	72.3	79.1
ETHANE	5.8	21.8	19.2
PROPANE	4.0	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	4.3	5.3	2.2
OXYGEN	0.0	0.4	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.12	0.08	0.06
HEATING VALUE*	1168	1123	1135
SPECIFIC GRAVITY	0.698	0.687	0.662

	INDEX 8239 SAMPLE 13637	INDEX 8240 SAMPLE 12738	INDEX 8241 SAMPLE 12730
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ECTOR	ECTOR	ECTOR
FIELD	GOLDSMITH	GOLDSMITH N	HEADLEE
WELL NAME	TXL "L" NO. 1	EMBAR NO. 35	MDU 2-B
LOCATION	SEC. 31, BLK. 43, T&P RR SUR	SEC. 17, BLK. TIN, T&P SUR.	SEC. 7, BLK. 41, T-2 SUR.
OWNER	FOREST OIL CORP.	PHILLIPS PETROLEUM CO.	GETTY OIL CO., ET AL.
COMPLETED	03/07/72	06/17/69	06/11/70
SAMPLED	07/05/73	03/25/71	03/23/71
FORMATION	PERM-CLEARFORK	PERM-SAN ANDRES	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6400	3982	11974
WELLHEAD PRESSURE,PSIG	1817	700	4471
OPEN FLOW, MCFD	2000	NOT GIVEN	9400
COMPONENT, MOLE PCT			
METHANE	78.2	77.5	76.8
ETHANE	9.2	8.5	12.7
PROPANE	5.0	3.8	5.6
N-BUTANE	1.4	0.7	0.9
ISOBUTANE	0.6	0.9	0.6
N-PENTANE	0.2	0.5	0.4
ISOPENTANE	0.4	TRACE	0.0
CYCLOPENTANE	0.1	0.6	0.1
HEXANES PLUS	0.1	2.0	1.3
NITROGEN	4.3	5.2	1.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.7
HELIUM	0.07	0.05	0.02
HEATING VALUE*	1189	1229	1232
SPECIFIC GRAVITY	0.719	0.751	0.714

	INDEX 8242 SAMPLE 2056	INDEX 8243 SAMPLE 7527	INDEX 8244 SAMPLE 12779
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ECTOR	ECTOR	ECTOR
FIELD	PENWELL	TXL	TXL
WELL NAME	UNIV. T NO. 2, OIL WELL	J. D. SLATOR NO. 1	TXL B NO. 7
LOCATION	SEC. 3, BLK. 35, UNIV. LAND	SEC. 4, BLK. 45, T&P SUR.	NOT GIVEN
OWNER	LANDRETH PRODUCTION CORP.	OHIO OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	03/20/30	05/06/47	--/--/00
SAMPLED	09/22/30	04/26/60	04/23/71
FORMATION	PERM-GRAYBURG	ORDO-ELLENBURGER	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3600	9282	4453
WELLHEAD PRESSURE,PSIG	NOT GIVEN	510	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	6.5	70.9	77.8
ETHANE	82.4	13.9	10.8
PROPANE	---	5.0	5.2
N-BUTANE	---	1.1	1.2
ISOBUTANE	---	0.3	0.7
N-PENTANE	---	0.3	0.3
ISOPENTANE	---	0.2	0.5
CYCLOPENTANE	---	TRACE	0.2
HEXANES PLUS	---	0.1	0.3
NITROGEN	7.8	6.9	2.8
OXYGEN	0.4	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	1.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.9	0.1	0.1
HELIUM	0.01	0.10	0.03
HEATING VALUE*	1542	1174	1238
SPECIFIC GRAVITY	1.025	0.730	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8245 SAMPLE 4087	INDEX 8246 SAMPLE 14580	INDEX 8247 SAMPLE 13159
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ECTOR	EDWARDS	EDWARDS
FIELD	WILDCAT	COMPANERO E	LULA
WELL NAME	M. E. CUMMINS NO. 1	PHILLIPS NO. 2	JOE PETERSON NO. 1
LOCATION	SEC. 11	SEC. 3, BLK 16, GC&SFRR SUR.	HE&WTRR SURVEY
OWNER	HUMBLE OIL & REFINING CO.	NORTH AMERICAN ROYALTIES INC	WAYNE PETROLEUM CO.
COMPLETED	--/--/00	04/12/74	07/20/71
SAMPLED	08/06/45	02/11/76	02/26/72
FORMATION	PERM-YATES	PENN-CANYON	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2650	3179	4100
WELLHEAD PRESSURE,PSIG	NOT GIVEN	680	1317
OPEN FLOW, MCFD	NOT GIVEN	2800	6200
COMPONENT, MOLE PCT			
METHANE	36.0	89.8	84.1
ETHANE	19.7	2.8	4.6
PROPANE	---	1.5	2.0
N-BUTANE	---	0.3	0.4
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	43.3	4.6	8.0
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.1
CARBON DIOXIDE	1.0	0.19	0.22
HELIUM	0.03	0.19	0.22
HEATING VALUE*	718	1036	1028
SPECIFIC GRAVITY	0.840	0.621	0.650

	INDEX 8248 SAMPLE 14404	INDEX 8249 SAMPLE 14304	INDEX 8250 SAMPLE 646
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EDWARDS	EDWARDS	ERATH
FIELD	PAN GIL RANCH	ROY BAKER	GARNER
WELL NAME	MORRIS NO. 13-1	ROY BAKER NO. 1	C. M. BARTOM NO. 1
LOCATION	SEC. 13, A&M SUR	SEC. 15, A-1352, WASH.CO. RR	NOT GIVEN
OWNER	MITCHELL ENERGY CORP.	NORTH AMERICAN ROYALTIES INC	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	01/23/73	09/01/73	03/--/20
SAMPLED	07/02/75	05/18/75	09/07/21
FORMATION	PENN-CANYON	PENN-CANYON	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	415
DEPTH, FEET	2262	3221	3226
WELLHEAD PRESSURE,PSIG	588	450	420
OPEN FLOW, MCFD	2200	3400	43
COMPONENT, MOLE PCT			
METHANE	88.9	88.8	69.6
ETHANE	2.3	2.2	29.6
PROPANE	1.1	1.2	---
N-BUTANE	0.3	0.2	---
ISOBUTANE	0.2	0.3	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	6.5	6.6	0.6
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.31	0.25	0.08
HEATING VALUE*	997	991	1235
SPECIFIC GRAVITY	0.614	0.613	0.702

	INDEX 8251 SAMPLE 15337	INDEX 8252 SAMPLE 4823	INDEX 8253 SAMPLE 12624
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ERATH	ERATH	ERATH
FIELD	MINNIE	NOT GIVEN	X-RAY
WELL NAME	MINNIE G. LOWE NO. 1	C. H. PACK NO. 1	C. C. RUSSELL NO. 1
LOCATION	JAMES MCCOY SUR. 29, A-563	G. WEST SUR. NO. A-808	N STEPHENVILLE
OWNER	TEXAS PACIFIC OIL CO., INC.	CONTINENTAL OIL CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	05/13/65	01/07/49	--/--/00
SAMPLED	08/01/78	12/28/49	01/11/71
FORMATION	PENN-STRAWN	PENN-	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	415	415	415
DEPTH, FEET	1374	3604	NOT GIVEN
WELLHEAD PRESSURE,PSIG	645	1600	315
OPEN FLOW, MCFD	6968	658	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.5	76.7	77.1
ETHANE	6.5	9.5	11.0
PROPANE	3.4	5.2	4.9
N-BUTANE	0.8	1.2	1.4
ISOBUTANE	0.5	0.4	0.8
N-PENTANE	0.2	0.4	0.5
ISOPENTANE	0.2	TRACE	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	4.3	5.4	2.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.3	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.18	0.12	0.06
HEATING VALUE*	1126	1171	1242
SPECIFIC GRAVITY	0.673	0.716	0.737

	INDEX 8254 SAMPLE 13379	INDEX 8255 SAMPLE 4348	INDEX 8256 SAMPLE 8155
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FALLS	FAYETTE	FISHER
FIELD	DENNY	NOT GIVEN	ROUND TOP
WELL NAME	EZELL NO. 3	AUGUST PIETSCH NO. 1	M. F. REDUS
LOCATION	A. POWELL SUR. A-52	8 MI. N OF LAGRANGE	GB&&CRR SUR.
OWNER	JAKE L. HAMON	SEABOARD OIL CO.	SOJOURNER DRILLING CO.
COMPLETED	04/26/71	01/18/47	09/10/60
SAMPLED	09/08/72	08/--/47	08/11/61
FORMATION	JURA-COTTON VALLEY	EOCE-	PENN-SWASTIKA L
GEOLOGIC PROVINCE CODE	260	220	430
DEPTH, FEET	9222	6521	3858
WELLHEAD PRESSURE,PSIG	3225	NOT GIVEN	1100
OPEN FLOW, MCFD	56000	2900	4250
COMPONENT, MOLE PCT			
METHANE	87.1	38.6	75.9
ETHANE	5.7	58.8	7.0
PROPANE	1.6	---	4.7
N-BUTANE	0.4	---	1.2
ISOBUTANE	0.3	---	0.7
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.1	---	0.3
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.1
NITROGEN	2.7	0.8	11.3
OXYGEN	0.4	0.7	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.2	1.3	0.1
HELIUM	0.01	0.01	0.29
HEATING VALUE*	1073	1443	1082
SPECIFIC GRAVITY	0.644	0.865	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8257 SAMPLE 8156	INDEX 8258 SAMPLE 5118	INDEX 8259 SAMPLE 10635
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FISHER	FISHER	FLOYD
FIELD	ROUND TOP	ROYSTON	WILDCAT
WELL NAME	W. O. STEPHENS NO. 1	J. L. SHARP NO. 1	R. M. BATTAY NO. 1
LOCATION	SEC. 78, BLK. 1, B&TC SUR.	SEC. 207, BLK. 1, B&B&C SUR.	J. W. PREWITT SUR. A-1372
OWNER	A. POLLARD SIMONS	MOUTRAY MOORE DRILLING CO.	ROY FURR
COMPLETED	11/25/58	03/10/51	06/15/66
SAMPLED	08/11/61	10/23/51	--/--/00
FORMATION	PENN-CANYON	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	435
DEPTH, FEET	4318	3814	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1200	1600	NOT GIVEN
OPEN FLOW, MCFD	2800	3775	5000
COMPONENT, MOLE PCT			
METHANE	69.3	56.4	0.3
ETHANE	10.9	16.5	0.0
PROPANE	7.8	15.5	0.0
N-BUTANE	1.7	3.9	0.0
ISOBUTANE	1.0	1.5	0.0
N-PENTANE	0.2	0.6	0.0
ISOPENTANE	0.4	0.7	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	8.2	4.0	99.3
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.4	TRACE
HELIUM	0.20	0.02	0.12
HEATING VALUE*	1221	1325	4
SPECIFIC GRAVITY	0.776	0.926	0.962

	INDEX 8260 SAMPLE 6544	INDEX 8261 SAMPLE 6539	INDEX 8262 SAMPLE 6540
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FOARD	FOARD	FOARD
FIELD	FOARD COUNTY REGULAR	THALIA	THALIA
WELL NAME	R. H. COOPER NO. 7	MATHEWS	NETTIE TARVER NO. 1
LOCATION	SEC. 3, GC&SF SUR.	NOT GIVEN	G.C.&S.F. RRCO SEC. 3
OWNER	LAMB & FORD DRILLING CO.	WELCH & WHITE DRILLING CO.	WELCH & WHITE DRILLING CO.
COMPLETED	03/19/56	--/--/00	--/--/55
SAMPLED	04/05/58	04/05/58	04/05/58
FORMATION	PENN-CANYON	PERM-WICHITA FALLS	PENN-FANNEHILL
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2007	900	800
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.6	57.3	56.8
ETHANE	11.1	1.9	3.1
PROPANE	6.7	0.8	1.5
N-BUTANE	1.9	0.3	0.6
ISOBUTANE	1.1	0.3	0.4
N-PENTANE	0.4	0.2	0.4
ISOPENTANE	0.4	0.1	0.1
CYCLOPENTANE	0.2	0.2	0.4
HEXANES PLUS	0.5	0.4	0.8
NITROGEN	11.7	37.4	35.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	1.00	0.80
HEATING VALUE*	1205	696	776
SPECIFIC GRAVITY	0.803	0.751	0.781

	INDEX 8263 SAMPLE 6541	INDEX 8264 SAMPLE 6543	INDEX 8265 SAMPLE 6609
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FOARD	FOARD	FOARD
FIELD	THALIA	THALIA	THALIA
WELL NAME	R. H. COOPER NO. 2	R. H. COOPER NO. 1	TARVER NO. A
LOCATION	SEC. 3, GC&SF SUR.	SEC. 3, GC&SF SUR.	NOT GIVEN
OWNER	LAMB & FORD DRILLING CO.	WESTERN NATURAL GAS & MAGNOL	L. B. SCOTT
COMPLETED	07/14/53	05/03/53	--/--/00
SAMPLED	04/05/58	04/05/58	05/31/58
FORMATION	PENN-CANYON	PENN-CANYON	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2048	2018	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	275
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.2	60.3	57.6
ETHANE	9.7	5.8	5.1
PROPANE	5.1	3.7	1.1
N-BUTANE	1.5	1.6	0.3
ISOBUTANE	0.7	0.9	0.2
N-PENTANE	0.5	0.5	0.1
ISOPENTANE	0.3	0.5	0.1
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.5	0.5	0.1
NITROGEN	23.3	25.1	34.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.1
HELIUM	0.70	0.50	0.80
HEATING VALUE*	896	972	701
SPECIFIC GRAVITY	0.793	0.795	0.745

	INDEX 8266 SAMPLE 6610	INDEX 8267 SAMPLE 6611	INDEX 8268 SAMPLE 6612
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FOARD	FOARD	FOARD
FIELD	THALIA	THALIA	THALIA
WELL NAME	NETTIE TARVER	MATHEWS	MAINS GAS WELL
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	L. B. SCOTT	L. B. SCOTT	L. B. SCOTT
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/31/58	05/31/58	05/31/58
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA FALLS
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	800	900	800
WELLHEAD PRESSURE,PSIG	325	300	300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.5	61.5	61.4
ETHANE	2.9	1.9	1.8
PROPANE	1.3	1.6	1.7
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	31.3	31.6	31.0
OXYGEN	0.3	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.90	0.90	0.90
HEATING VALUE*	760	764	771
SPECIFIC GRAVITY	0.726	0.733	0.732

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8269 SAMPLE 6613	INDEX 8270 SAMPLE 6614	INDEX 8271 SAMPLE 16566
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FOARD	FOARD	FORT BEND
FIELD	THALIA	THALIA	BOOTH
WELL NAME	T. L. WARD	NANNIE NO. 1	GEORGE FOUNDATION NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	WILEY MARTIN SUR., A-56
OWNER	L. B. SCOTT	L. B. SCOTT	ARCO OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	07/09/82
SAMPLED	--/--/00	08/31/58	07/09/82
FORMATION	NOT GIVEN	PERM-WICHITA FALLS	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	435	435	220
DEPTH, FEET	NOT GIVEN	800	10530
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	7200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8000
COMPONENT, MOLE PCT			
METHANE	61.8	57.7	87.7
ETHANE	3.8	3.2	6.0
PROPANE	1.8	1.2	2.9
N-BUTANE	0.4	0.4	0.8
ISOBUTANE	0.3	0.2	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	30.6	35.8	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.8
HELIUM	0.90	0.80	TRACE
HEATING VALUE*	778	715	1158
SPECIFIC GRAVITY	0.732	0.749	0.662

	INDEX 8272 SAMPLE 11134	INDEX 8273 SAMPLE 13051	INDEX 8274 SAMPLE 9678
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FORT BEND	FORT BEND	FORT BEND
FIELD	CLODINE	FULSHEAR	HUNGERFORD E
WELL NAME	J. R. FARMER EST. NO. 1	ROBINSON UNIT NO. 1	RAGSDALE UNIT NO. 1-T
LOCATION	SEC. 1, I&GNRR SUR. A353	G. W. CARTWRIGHT SUR. A-149	JOSEPH M. MCCORMICK SUR.A-57
OWNER	EDWIN L. COX	PENNZOIL PRODUCING CO.	SUN OIL CO.
COMPLETED	04/29/66	05/28/70	01/01/63
SAMPLED	09/26/67	09/29/71	12/27/64
FORMATION	-MATFIELD	EOCE-IIIO SAND	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7480	7421	5108
WELLHEAD PRESSURE,PSIG	2472	1550	1565
OPEN FLOW, MCFD	12500	968	47000
COMPONENT, MOLE PCT			
METHANE	91.1	90.8	97.0
ETHANE	4.6	4.5	1.6
PROPANE	1.7	2.1	0.3
N-BUTANE	0.5	0.4	0.1
ISOBUTANE	0.4	0.5	TRACE
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	0.4	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1107	1116	1022
SPECIFIC GRAVITY	0.626	0.633	0.573

	INDEX 8275 SAMPLE 15268	INDEX 8276 SAMPLE 16927	INDEX 8277 SAMPLE 5884
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FORT BEND	FORT BEND	FORT BEND
FIELD	HUNGERFORD E	KATY S	LONG POINT
WELL NAME	GORDON UNIT NO. 1-X	L. R. MORGAN NO. 1	GULF FEE NO. 1
LOCATION	ISAAC MCGARY SUR. A-58	JAMES CONNER SUR., AB-157	F. F. WARD SUR. NO. 462
OWNER	CADDO OIL CO., INC.	AMAX PETROLEUM CORP.	GOLDSTON OIL CORP.
COMPLETED	02/08/75	09/27/81	09/18/55
SAMPLED	04/19/78	05/11/83	07/26/55
FORMATION	MIOC-	EOCE-WILCOX 1ST	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2542	10270	5196
WELLHEAD PRESSURE,PSIG	1057	1400	1972
OPEN FLOW, MCFD	2002	14500	12000
COMPONENT, MOLE PCT			
METHANE	98.9	83.2	96.0
ETHANE	0.1	5.8	2.5
PROPANE	TRACE	2.9	0.5
N-BUTANE	0.0	0.5	0.2
ISOBUTANE	0.0	1.5	TRACE
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.8	0.1
CYCLOPENTANE	0.0	0.5	0.1
HEXANES PLUS	0.0	0.9	0.1
NITROGEN	0.8	0.4	0.4
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.8	0.1
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1004	1201	1050
SPECIFIC GRAVITY	0.559	0.723	0.584

	INDEX 8278 SAMPLE 13443	INDEX 8279 SAMPLE 15154	INDEX 8280 SAMPLE 15155
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FORT BEND	FORT BEND	FORT BEND
FIELD	MOORE'S DREWARD	NEEDVILLE	NEEDVILLE
WELL NAME	J. R. MOORE ET AL. NO. 93	NOWOTNY NO. 1	NOWOTNY NO. 1
LOCATION	MARK SMITH SUR. A-314	HETCRR SUR. 39, A-224	HETCRR SUR. 39, A-224
OWNER	GULF OIL CO.-- U.S.	GROVER J. GEISELMAN	GROVER J. GEISELMAN
COMPLETED	12/22/70	02/05/76	02/05/76
SAMPLED	09/21/72	11/14/77	11/14/77
FORMATION	EOCE-YEGUA EY-2	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6650	3303	3708
WELLHEAD PRESSURE,PSIG	1820	900	1000
OPEN FLOW, MCFD	28500	2000	6000
COMPONENT, MOLE PCT			
METHANE	84.6	99.1	99.4
ETHANE	6.0	0.1	0.1
PROPANE	3.8	TRACE	TRACE
N-BUTANE	1.3	TRACE	0.0
ISOBUTANE	1.4	TRACE	0.0
N-PENTANE	0.6	TRACE	0.0
ISOPENTANE	0.6	TRACE	0.0
CYCLOPENTANE	0.3	TRACE	0.0
HEXANES PLUS	0.9	TRACE	0.0
NITROGEN	0.3	0.5	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1253	1006	1009
SPECIFIC GRAVITY	0.717	0.565	0.556

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8281 SAMPLE 15946		INDEX 8282 SAMPLE 15954		INDEX 8283 SAMPLE 16126	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FORT BEND	
FIELD	PECAN GROVE		PECAN GROVE		PECAN GROVE	
WELL NAME	PECAN GROVE G.U. NO. 1		PECAN GROVE G.U. NO. 1		PECAN GROVE G.U. NO. 1	
LOCATION	RANDALL JONES SUR. A-42		RANDALL JONES SUR. A-42		RANDALL JONES SUR. A-42	
OWNER	EXXON CO., U.S.A.		EXXON CO., U.S.A.		EXXON CO., U.S.A.	
COMPLETED	09/05/79		09/05/79		11/08/79	
SAMPLED	04/22/80		04/22/80		10/29/80	
FORMATION	EOCE-COOK MOUNTAIN		EOCE-COOK MOUNTAIN		EOCE-COOK MOUNTAIN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8686		8686		8567	
WELLHEAD PRESSURE,PSIG	5442		5442		5457	
OPEN FLOW, MCFD	4998		4998		4998	
COMPONENT, MOLE PCT						
METHANE	90.5		85.6		88.3	
ETHANE	5.2		4.9		5.6	
PROPANE	1.8		3.8		2.3	
N-BUTANE	0.4		0.5		1.0	
ISOBUTANE	0.4		0.4		0.7	
N-PENTANE	0.1		0.1		0.3	
ISOPENTANE	0.3		0.3		0.7	
CYCLOPENTANE	0.1		0.2		0.2	
HEXANES PLUS	0.3		0.3		0.4	
NITROGEN	0.5		4.5		0.3	
OXYGEN	TRACE		1.1		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.4		0.3		0.3	
HELIUM	TRACE		0.01		0.01	
HEATING VALUE*	1128		1072		1183	
SPECIFIC GRAVITY	0.633		0.657		0.668	

	INDEX 8284 SAMPLE 10005		INDEX 8285 SAMPLE 13825		INDEX 8286 SAMPLE 15173	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FORT BEND	
FIELD	ROSENBERG N		SUGARLAND		SUGARLAND	
WELL NAME	FOSTER FARMS NO. 1		BANKERS MORTGAGE A NO. 2		HAMNER FEE NO. 14	
LOCATION	JOHN FOSTER LEAGUE A-25		WM. LITTLE SUR. A-54		W. LITTLE SUR. A-54	
OWNER	COASTAL STATES GAS PROD. CO.		EXXON CO., U.S.A.		EXXON CO., U.S.A.	
COMPLETED	01/27/63		09/14/73		03/11/76	
SAMPLED	06/15/65		11/21/73		12/21/77	
FORMATION	MIOC-3400 FT. SAND		MIOC-		MIOC---	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3414		2800		1920	
WELLHEAD PRESSURE,PSIG	1450		1215		185	
OPEN FLOW, MCFD	47000		NOT GIVEN		47185	
COMPONENT, MOLE PCT						
METHANE	98.9		95.3		98.7	
ETHANE	0.2		0.4		0.1	
PROPANE	0.1		0.4		TRACE	
N-BUTANE	0.0		0.3		0.0	
ISOBUTANE	0.0		0.2		0.0	
N-PENTANE	0.0		0.2		0.0	
ISOPENTANE	0.0		0.2		0.0	
CYCLOPENTANE	0.0		0.2		0.0	
HEXANES PLUS	0.0		0.4		0.0	
NITROGEN	0.7		0.6		0.6	
OXYGEN	0.0		0.1		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		1.7		0.5	
HELIUM	0.01		TRACE		TRACE	
HEATING VALUE*	1008		1045		1002	
SPECIFIC GRAVITY	0.560		0.609		0.562	

	INDEX 8287 SAMPLE 11982		INDEX 8288 SAMPLE 11983		INDEX 8289 SAMPLE 12049	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FORT BEND		FORT BEND		FRANKLIN	
FIELD	THOMPSONS		THOMPSONS		CHITSEY	
WELL NAME	A. P. GEORGE NO. 11-F		A. P. GEORGE NO. 11-H		CHITSEY NO. 1	
LOCATION	JOHN ABB SUR. A-73		JOHN ABB SUR. A-73		J. H. MILLIGAN SUR. A-309	
OWNER	HUMBLE OIL & REFINING CO.		HUMBLE OIL & REFINING CO.		JAKE L. HAMON	
COMPLETED	05/23/67		07/05/67		05/14/69	
SAMPLED	07/25/69		07/25/69		09/23/69	
FORMATION	MIOC-8 SEGMENT 6		MIOC-6 SEGMENT 6		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	220		220		260	
DEPTH, FEET	3435		3191		13134	
WELLHEAD PRESSURE,PSIG	1334		1073		3270	
OPEN FLOW, MCFD	13300		32500		16000	
COMPONENT, MOLE PCT						
METHANE	97.6		98.6		18.6	
ETHANE	0.1		0.1		5.5	
PROPANE	TRACE		TRACE		4.8	
N-BUTANE	0.0		0.0		1.6	
ISOBUTANE	0.0		0.0		2.1	
N-PENTANE	0.0		0.0		0.4	
ISOPENTANE	0.0		0.0		0.4	
CYCLOPENTANE	0.0		0.0		0.1	
HEXANES PLUS	0.0		0.0		0.4	
NITROGEN	1.2		0.4		62.5	
OXYGEN	0.3		TRACE		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.1		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.7		3.5	
HELIUM	TRACE		TRACE		0.09	
HEATING VALUE*	991		1001		595	
SPECIFIC GRAVITY	0.566		0.562		1.005	

	INDEX 8290 SAMPLE 12428		INDEX 8291 SAMPLE 6486		INDEX 8292 SAMPLE 6487	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FRANKLIN		FRANKLIN		FRANKLIN	
FIELD	MONCRIEF		NEW HOPE		NEW HOPE	
WELL NAME	MONCRIEF NO. 1		DEEP UNIT NO. 2-1-D		DEEP UNIT NO. 3-1-D	
LOCATION	J. P. MOSLEY SUR. A-309		C. F. MCKENZIE SUR.		C. F. MCKENZIE SUR.	
OWNER	W. A. MONCRIEF, JR.		TIDEWATER OIL CO.		TIDEWATER OIL CO.	
COMPLETED	07/11/64		09/21/54		10/17/55	
SAMPLED	10/02/70		01/28/58		01/28/58	
FORMATION	JURA-SMACKOVER		JURA-SMACKOVER		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	13300		11996		12126	
WELLHEAD PRESSURE,PSIG	3200		2862		2372	
OPEN FLOW, MCFD	9000		11900		6600	
COMPONENT, MOLE PCT						
METHANE	37.5		44.0		39.7	
ETHANE	6.1		10.6		12.4	
PROPANE	3.4		6.7		8.8	
N-BUTANE	0.9		3.6		5.5	
ISOBUTANE	1.0		2.9		4.4	
N-PENTANE	0.3		1.6		2.4	
ISOPENTANE	0.1		1.4		2.9	
CYCLOPENTANE	0.1		0.2		0.4	
HEXANES PLUS	0.2		1.4		2.5	
NITROGEN	46.6		7.1		6.5	
OXYGEN	0.0		0.2		0.2	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.1		TRACE	
HYDROGEN SULFIDE**	0.0		19.0		7.9	
CARBON DIOXIDE	3.6		0.3		6.2	
HELIUM	0.10		0.02		0.01	
HEATING VALUE*	672		1326		1609	
SPECIFIC GRAVITY	0.688		1.049		1.164	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8293 SAMPLE 12662		INDEX 8294 SAMPLE 12663		INDEX 8295 SAMPLE 16412	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FRANKLIN		FRANKLIN		FREESTONE	
FIELD	W. A. MONCRIEF		W. A. MONCRIEF		BEEI	
WELL NAME	WESTLAND SMACKOVER UNIT NO.2		WESTLAND SMACKOVER UNIT NO.1		BEEI NO. 1	
LOCATION	S. S. PAYNE SUR. A-763		W. B. JORDAN SUR. A-581		T. LOGAN SUR., A-694	
OWNER	WESTLAND OIL DEV. CORP.		WESTLAND OIL DEV. CORP.		TXO PRODUCTION CORP.	
COMPLETED	05/11/68		09/14/68		03/06/81	
SAMPLED	01/29/71		01/29/71		01/22/82	
FORMATION	JURA-SMACKOVER		JURA-SMACKOVER		JURA-BOSSIER	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	12200		12200		14000	
WELLHEAD PRESSURE,PSIG	2980		2808		1700	
OPEN FLOW, MCFD	63000		15000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	54.3		31.9		96.3	
ETHANE	6.3		5.8		0.3	
PROPANE	3.7		3.6		0.1	
N-BUTANE	1.5		1.3		0.1	
ISOBUTANE	1.4		1.3		TRACE	
N-PENTANE	0.6		0.5		TRACE	
ISOPENTANE	0.5		0.2		0.0	
CYCLOPENTANE	0.2		0.1		0.1	
HEXANES PLUS	0.8		0.4		0.2	
NITROGEN	47.4		51.8		0.1	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	3.2		3.2		2.6	
HELIUM	0.10		0.10		TRACE	
HEATING VALUE*	562		562		1001	
SPECIFIC GRAVITY	0.938		0.929		0.590	

	INDEX 8296 SAMPLE 12267		INDEX 8297 SAMPLE 12942		INDEX 8298 SAMPLE 17553	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FREESTONE		FREESTONE		FREESTONE	
FIELD	CARTER-BLOXOM		CARTER-BLOXOM		DEW	
WELL NAME	M. D. BLOXOM NO. 1		MADGE BLOXOM NO. 1		WILLIAM C. GLAZENER NO. 1	
LOCATION	J. MATTHEWS SUR. A-418		J. MATTHEWS SUR. A-418		DURHAM AVANT SUR. A-3	
OWNER	GETTY OIL CO.		GETTY OIL CO.		WAINOCO OIL & GAS CO.	
COMPLETED	05/18/70		02/23/70		12/--/82	
SAMPLED	05/18/70		--/--/00		12/26/84	
FORMATION	JURA-SMACKOVER		CRET-RODESSA		JURA-BOSSIER	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	11985		6541		13359	
WELLHEAD PRESSURE,PSIG	3980		2560		3500	
OPEN FLOW, MCFD	17500		6000		1827	
COMPONENT, MOLE PCT						
METHANE	59.3		91.8		95.3	
ETHANE	3.1		2.5		1.6	
PROPANE	1.2		0.8		0.2	
N-BUTANE	0.6		0.1		0.1	
ISOBUTANE	0.5		0.1		TRACE	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.5		TRACE		0.0	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	11.8		1.1		0.2	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.2		0.0	
HYDROGEN SULFIDE**	17.2		0.0		0.0	
CARBON DIOXIDE	5.5		0.0		2.4	
HELIUM	0.03		0.06		TRACE	
HEATING VALUE*	871		1032		1012	
SPECIFIC GRAVITY	0.827		0.570		0.594	

	INDEX 8299 SAMPLE 4118		INDEX 8300 SAMPLE 4120		INDEX 8301 SAMPLE 4999	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FREESTONE		FREESTONE		FREESTONE	
FIELD	FAIRFIELD		FAIRFIELD		FREESTONE	
WELL NAME	NANCY HAM NO. 1		A. L. MCKNIGHT NO. 1		FREESTONE GAS UNIT NO. 1	
LOCATION	6 MI. S OF FAIRFIELD		BETWEEN FAIRFIELD & TEAGUE		J. L. CHAVERT SUR. NO. A-10	
OWNER	TEXAS CO.		TEXAS CO.		HUMBLE OIL & REFINING CO.	
COMPLETED	09/21/45		02/24/45		09/13/50	
SAMPLED	10/02/46		10/02/46		02/05/51	
FORMATION	CRET-PETTIT		CRET-TRAVIS PEAK		CRET-PETTIT	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	7980		9330		8234	
WELLHEAD PRESSURE,PSIG	3050		3195		3878	
OPEN FLOW, MCFD	10000		14600		2100	
COMPONENT, MOLE PCT						
METHANE	87.6		89.8		96.0	
ETHANE	10.8		7.4		1.8	
PROPANE	---		---		0.4	
N-BUTANE	---		---		0.1	
ISOBUTANE	---		---		TRACE	
N-PENTANE	---		---		0.0	
ISOPENTANE	---		---		0.0	
CYCLOPENTANE	---		---		TRACE	
HEXANES PLUS	---		---		0.1	
NITROGEN	0.0		1.2		0.6	
OXYGEN	0.4		0.8		0.1	
ARGON	---		---		TRACE	
HYDROGEN	---		---		0.0	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	1.2		0.8		0.8	
HELIUM	0.01		0.02		0.01	
HEATING VALUE*	1081		1042		1027	
SPECIFIC GRAVITY	0.622		0.608		0.582	

	INDEX 8302 SAMPLE 5003		INDEX 8303 SAMPLE 15094		INDEX 8304 SAMPLE 15095	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	FREESTONE		FREESTONE		FREESTONE	
FIELD	FREESTONE		FREESTONE		FREESTONE	
WELL NAME	R. P. MCWATTERS NO. 1		C. A. NEWSOM NO. 1		C. A. NEWSOM NO. 1	
LOCATION	G. LAMB & F. M. HOWELL SUR.		JOEL NEWSOM SUR. A-420		JOEL NEWSOM SUR. A-420	
OWNER	HUMBLE OIL & REFINING CO.		ENSERCH EXPLORATION, INC.		ENSERCH EXPLORATION, INC.	
COMPLETED	01/29/49		03/19/76		03/19/76	
SAMPLED	02/05/51		09/02/77		09/02/77	
FORMATION	CRET-PETTIT		JURA-BOSSIER		CRET-TRAVIS PEAK	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	8315		11849		9787	
WELLHEAD PRESSURE,PSIG	3431		5640		3505	
OPEN FLOW, MCFD	6500		5709		4686	
COMPONENT, MOLE PCT						
METHANE	94.0		92.1		97.1	
ETHANE	2.5		4.0		0.8	
PROPANE	1.1		0.9		0.1	
N-BUTANE	0.4		0.2		0.0	
ISOBUTANE	0.2		0.2		0.0	
N-PENTANE	0.2		0.1		0.0	
ISOPENTANE	TRACE		0.1		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.3		0.1		0.0	
NITROGEN	0.3		0.3		0.8	
OXYGEN	0.1		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.9		2.0		1.2	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1067		1055		1001	
SPECIFIC GRAVITY	0.606		0.616		0.574	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8305 SAMPLE 17821	INDEX 8306 SAMPLE 17644	INDEX 8307 SAMPLE 15973
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	MICHAEL BIRCH	NAN-SU-GAIL	NEAL
WELL NAME	HILL "X" NO. 16	HILL GAS UNIT NO. 1	GLAYDENE NEAL NO. 1
LOCATION	J. H. EVANS SUR., A-220	M.R. PALACIOUS SUR. A-20	JOHN BRADLEY SUR. A-53
OWNER	SANTON PETROLEUM CORP.	EXXON CO., U.S.A.	GETTY OIL CO.
COMPLETED	04/--/85	05/17/84	03/14/79
SAMPLED	08/26/85	04/--/85	06/02/80
FORMATION	CRET-RODESSA	JURA-BOSSIER	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9334	12000	11599
WELLHEAD PRESSURE,PSIG	3600	3250	3826
OPEN FLOW, MCFD	20000	13000	13600
COMPONENT, MOLE PCT			
METHANE	91.6	95.0	49.7
ETHANE	2.9	1.9	8.0
PROPANE	0.9	0.2	3.2
N-BUTANE	0.4	0.1	1.2
ISOBUTANE	0.3	TRACE	1.2
N-PENTANE	0.2	TRACE	0.3
ISOPENTANE	0.1	TRACE	0.5
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.0	0.3	1.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	28.9
CARBON DIOXIDE	2.2	2.2	1.0
HELIUM	0.02	TRACE	0.01
HEATING VALUE	1059	1010	1040
SPECIFIC GRAVITY	0.629	0.591	0.922

	INDEX 8308 SAMPLE 15994	INDEX 8309 SAMPLE 3792	INDEX 8310 SAMPLE 10021
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	NEAL	NOT GIVEN	NOT GIVEN
WELL NAME	GLAYDENE NEAL NO. 1	M. L. STEWARD NO. 1	M. C. BROWN NO. 1
LOCATION	JOHN BRADLEY SUR. A-53	JAS. LEAGUE	G. BREWSTER SUR. NO. A-5
OWNER	GETTY OIL CO.	CARTER-GRAGG OIL CO.	CONTINENTAL OIL CO.
COMPLETED	03/14/79	03/01/43	09/01/65
SAMPLED	07/02/80	--/--/80	05/26/65
FORMATION	JURA-SMACKOVER	CRET-WOODBINE	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11599	4001	12000
WELLHEAD PRESSURE,PSIG	3826	NOT GIVEN	5500
OPEN FLOW, MCFD	13600	25000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.4	88.0	96.7
ETHANE	7.0	8.9	0.7
PROPANE	2.7	---	0.2
N-BUTANE	1.0	---	0.0
ISOBUTANE	0.9	---	0.0
N-PENTANE	0.2	---	0.0
ISOPENTANE	0.4	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.4	2.5	0.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE	44.4	---	0.0
CARBON DIOXIDE	4.3	0.5	2.1
HELIUM	0.01	TRACE	0.01
HEATING VALUE	964	1051	997
SPECIFIC GRAVITY	0.984	0.614	0.582

	INDEX 8311 SAMPLE 11619	INDEX 8312 SAMPLE 11620	INDEX 8313 SAMPLE 12519
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	REED	REED	REED
WELL NAME	RUBY MIDDLETON NO. 1	RUBY MIDDLETON NO. 1	NORTHERN G.U. NO. 1
LOCATION	A. ANGLIN SUR. A-46	A. ANGLIN SUR. A-46	NOT GIVEN
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	05/27/67	05/27/67	08/13/49
SAMPLED	08/06/68	08/06/68	11/04/76
FORMATION	CRET-RODESSA	JURA-HAYNESVILLE	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7255	11837	8208
WELLHEAD PRESSURE,PSIG	1815	6000	800
OPEN FLOW, MCFD	3355	1671	1500
COMPONENT, MOLE PCT			
METHANE	89.9	94.5	95.2
ETHANE	3.7	1.4	1.2
PROPANE	2.5	0.4	0.4
N-BUTANE	1.1	0.2	0.2
ISOBUTANE	0.5	TRACE	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.4	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.3	0.4	1.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	2.4	0.6
HELIUM	0.02	0.01	0.02
HEATING VALUE	1141	1026	1027
SPECIFIC GRAVITY	0.654	0.605	0.590

	INDEX 8314 SAMPLE 16678	INDEX 8315 SAMPLE 12472	INDEX 8316 SAMPLE 12473
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	REED NW	RISCHER'S STORE	RISCHER'S STORE
WELL NAME	HARRIETTE M. WHATLEY NO. 1	A. W. JACOBS NO. 1	A. W. JACOBS NO. 1
LOCATION	A-973, PULASKI NAVARRO SUR.	HENRY AWALT SUR. A-4	HENRY AWALT SUR. A-4
OWNER	ESTATE OIL & GAS CORP.	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	08/22/81	10/19/69	10/14/69
SAMPLED	10/03/82	10/21/70	10/21/70
FORMATION	JURA-BOSSIER	CRET-PETTIT	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11165	6904	6393
WELLHEAD PRESSURE,PSIG	4415	2435	2394
OPEN FLOW, MCFD	2600	7210	850
COMPONENT, MOLE PCT			
METHANE	86.7	87.8	89.2
ETHANE	7.3	5.6	5.6
PROPANE	2.0	2.8	3.6
N-BUTANE	0.5	0.8	0.9
ISOBUTANE	0.4	0.6	0.8
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.4	1.3	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.7	0.0
HELIUM	TRACE	0.01	0.02
HEATING VALUE	1115	1129	1097
SPECIFIC GRAVITY	0.655	0.652	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8317 SAMPLE 5236	INDEX 8318 SAMPLE 11603	INDEX 8319 SAMPLE 12506
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	STEWARDS MILL NE	TEAGUE	TEAGUE
WELL NAME	C. W. MARSTERS NO. 1	J. F. ROPER NO. 1	HAM GAS UNIT NO. 1-T
LOCATION	NOT GIVEN	D.C.CANNON SUR. A-130	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	NORTH CENTRAL OIL CORP.	TEXACO INC.
COMPLETED	06/05/52	01/25/67	--/--/00
SAMPLED	06/13/52	07/31/68	11/03/70
FORMATION	CRET-PETTIT	JURA-COTTON VALLEY	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7700	11965	7532
WELLHEAD PRESSURE,PSIG	3629	5150	965
OPEN FLOW, MCFD	3000	10500	3500
COMPONENT, MOLE PCT			
METHANE	92.1	95.7	92.5
ETHANE	3.4	1.0	1.8
PROPANE	1.8	TRACE	0.5
N-BUTANE	0.6	0.1	0.1
ISOBUTANE	0.2	TRACE	0.2
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.3	0.1
NITROGEN	1.3	0.4	2.5
OXYGEN	0.1	0.0	0.5
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	2.2	1.4
HELIUM	0.03	0.01	0.02
HEATING VALUE*	1059	1014	1002
SPECIFIC GRAVITY	0.612	0.594	0.602

	INDEX 8320 SAMPLE 15345	INDEX 8321 SAMPLE 12509	INDEX 8322 SAMPLE 12510
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FREESTONE
FIELD	TEAGUE TOWNSITE	TEAGUE W	TEAGUE W
WELL NAME	J. W. BROWN NO. 1	M. E. PRUIETT NO. 1-C	J. A. WRIGHT NO. 1-T
LOCATION	GEORGE BREWER SUR. A-5	15709	15721
OWNER	HIGHLAND RESOURCES, INC.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	10/28/76	12/03/60	01/22/52
SAMPLED	08/17/78	10/30/70	10/30/70
FORMATION	JURA-COTTON VALLEY	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11955	6664	7534
WELLHEAD PRESSURE,PSIG	6500	680	1160
OPEN FLOW, MCFD	11500	410	1330
COMPONENT, MOLE PCT			
METHANE	95.6	94.7	96.1
ETHANE	0.7	2.1	1.9
PROPANE	0.1	0.7	0.5
N-BUTANE	TRACE	0.2	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.3	0.6	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	0.9	0.5
HELIUM	TRACE	0.02	0.02
HEATING VALUE*	993	1043	1021
SPECIFIC GRAVITY	0.591	0.594	0.576

	INDEX 8323 SAMPLE 14151	INDEX 8324 SAMPLE 4441	INDEX 8325 SAMPLE 4848
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FREESTONE	FREESTONE	FRIO
FIELD	TEAS	WILDCAT	DIVOT
WELL NAME	HENRY WILLIAMS NO. 1	E. L. IRVIN NO. 1	SID KATZ NO. 1
LOCATION	CHARLES TEAS SUR. A-610	NOT GIVEN	D. D. HARRIGAN SUBD.
OWNER	GETTY OIL CO.	TEXAS TID.	HUMBLE OIL & REFINING CO.
COMPLETED	05/24/75	09/03/47	02/11/50
SAMPLED	09/20/74	01/14/48	02/21/50
FORMATION	CRET-PETTIT	CRET-GLEN ROSE L	CRET-NAVARRO
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	8898	8055	4088
WELLHEAD PRESSURE,PSIG	2334	3870	1629
OPEN FLOW, MCFD	8400	23000	16000
COMPONENT, MOLE PCT			
METHANE	88.5	89.6	90.4
ETHANE	5.7	8.8	5.3
PROPANE	2.8	---	1.6
N-BUTANE	0.5	---	0.5
ISOBUTANE	0.6	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.2	---	0.3
NITROGEN	1.2	0.0	2.9
OXYGEN	TRACE	0.3	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.7	1.3	0.3
HELIUM	0.03	0.01	0.03
HEATING VALUE*	1115	1065	1071
SPECIFIC GRAVITY	0.643	0.612	0.627

	INDEX 8326 SAMPLE 4796	INDEX 8327 SAMPLE 5088	INDEX 8328 SAMPLE 4140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FRIO	FRIO	FRIO
FIELD	DOERING RANCH	NOT GIVEN	PEARSALL
WELL NAME	FRANK DOERING NO. 2	HUMBLE-MARRS MCLEAN B-1	HALFF & OPPENHEIMER NO. 12
LOCATION	BBB&CRR SUR. NO. 1081	BS&F SUR. A-116	J. H. GIBSON SUR. NO. 15
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HIGHLAND OIL CO.
COMPLETED	06/01/49	--/--/00	07/09/46
SAMPLED	10/10/49	09/19/51	09/26/46
FORMATION	CRET-U	CRET-OLMOS	CRET-U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4079	NOT GIVEN	4274
WELLHEAD PRESSURE,PSIG	1823	NOT GIVEN	1875
OPEN FLOW, MCFD	8000	NOT GIVEN	36000
COMPONENT, MOLE PCT			
METHANE	90.5	90.2	84.2
ETHANE	3.1	2.9	12.7
PROPANE	1.9	1.4	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	3.9	4.1	2.2
OXYGEN	0.1	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.0	0.5
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1067	1050	1081
SPECIFIC GRAVITY	0.624	0.621	0.633

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8329 SAMPLE 2666	INDEX 8330 SAMPLE 12093	INDEX 8331 SAMPLE 8519
STATE	TEXAS	TEXAS	TEXAS
COUNTY	FRIO	GAINES	GAINES
FIELD	WILDCAT	SRUNLEY	FELMAT
WELL NAME	F. DOERING NO. 1	MODERS ESTATE NO. 1	MERRITT NO. 1
LOCATION	M. L. CARRANZA SUR. NO. 302	SEC. 12, BLK. A-12, PSL SUR.	SEC. 24, C&M SUR.
OWNER	AMERADA PET. CORP., ET AL.	BELL PETROLEUM CO.	MCGRATH & SMITH, INC.
COMPLETED	--/--/00	01/17/68	04/17/62
SAMPLED	03/28/34	11/01/69	05/07/62
FORMATION	CRET-L	PERM-DRINKARD	PERM-YATES
GEOLOGIC PROVINCE CODE	220	430	430
DEPTH, FEET	NOT GIVEN	7164	3337
WELLHEAD PRESSURE,PSIG	2000	1879	2400
OPEN FLOW, MCFD	1500	5100	2100
COMPONENT, MOLE PCT			
METHANE	73.2	69.5	50.5
ETHANE	8.8	6.8	7.5
PROPANE	---	4.1	2.7
N-BUTANE	---	1.7	0.7
ISOBUTANE	---	1.8	0.2
N-PENTANE	---	4.5	0.2
ISOPENTANE	---	2.2	TRACE
CYCLOPENTANE	---	0.7	TRACE
HEXANES PLUS	---	2.6	0.2
NITROGEN	9.1	1.0	37.8
OXYGEN	0.3	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.8	0.0
CARBON DIOXIDE	6.6	TRACE	0.1
HELIUM	0.03	0.06	0.06
HEATING VALUE*	960	1589	765
SPECIFIC GRAVITY	0.685	0.941	0.798

	INDEX 8332 SAMPLE 12698	INDEX 8333 SAMPLE 6799	INDEX 8334 SAMPLE 4046
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	G M K	MOMANN S	SEMINOLE
WELL NAME	S. D. C. C. NO. 1A	GE. M. NELSON	RILEY E NO. 3
LOCATION	SEC. 659, BLK. 6	SEC. 47, BLK. G, WTRR SUR.	SEC. 249, BLK. G, WTRR SUR.
OWNER	RESERVE OIL & GAS CO	TIDEWATER OIL CO.	ATLANTIC REFINING CO.
COMPLETED	--/--/00	07/02/58	04/24/40
SAMPLED	03/--/71	08/19/58	05/29/45
FORMATION	PERM-YATES	NOT GIVEN	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3475	3482	3190
WELLHEAD PRESSURE,PSIG	500	2510	1575
OPEN FLOW, MCFD	NOT GIVEN	3300	2008
COMPONENT, MOLE PCT			
METHANE	53.0	55.5	54.4
ETHANE	7.3	7.5	27.5
PROPANE	2.6	2.3	---
N-BUTANE	0.7	0.7	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.4	0.3	---
NITROGEN	33.3	33.1	17.9
OXYGEN	2.0	TRACE	0.1
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.05	0.04	0.05
HEATING VALUE*	799	845	1044
SPECIFIC GRAVITY	0.796	0.779	0.766

	INDEX 8335 SAMPLE 4165	INDEX 8336 SAMPLE 4166	INDEX 8337 SAMPLE 4167
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	RILEY C-3	TURLIN NO. 7	RILEY NO. 3
LOCATION	NOT GIVEN	SEC. 218	SEC. 229
OWNER	ATLANTIC REFINING CO.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/10/46	12/12/46	12/10/46
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3150	3150	3150
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.4	57.6	53.4
ETHANE	17.5	23.1	22.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	20.6	18.6	24.0
OXYGEN	0.2	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.04	0.04	0.05
HEATING VALUE*	936	997	935
SPECIFIC GRAVITY	0.730	0.750	0.765

	INDEX 8338 SAMPLE 4168	INDEX 8339 SAMPLE 4169	INDEX 8340 SAMPLE 4170
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	MANN NO. 3	MATTHEWS NO. 3	TIPPETT NO. 5
LOCATION	SEC. 220	SEC. 231, BLK. G, WTRR SUR.	SEC. 250
OWNER	AMERADA PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	OHIO OIL CO.
COMPLETED	--/--/00	03/30/41	--/--/00
SAMPLED	12/12/46	12/12/46	12/12/46
FORMATION	PERM-	PERM-	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3150	3150	3150
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.1	56.7	51.4
ETHANE	14.9	18.4	15.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	28.5	24.2	32.4
OXYGEN	0.3	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.3	0.1
HELIUM	0.05	0.04	0.04
HEATING VALUE*	825	904	806
SPECIFIC GRAVITY	0.758	0.751	0.769

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8341 SAMPLE 4200	INDEX 8342 SAMPLE 4201	INDEX 8343 SAMPLE 4204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	RILEY B NO. 7	RILEY E NO. 2	MATTHEWS A NO. 4
LOCATION	SEC. 229	SEC. 197	SEC. 231
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/19/47	02/19/47	02/20/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5110	5240	5132
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	75.7	29.9	66.0
ETHANE	15.2	52.3	23.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	0.3	1.8
OXYGEN	0.0	0.6	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	8.5	16.9	8.3
HELIUM	0.01	0.00	TRACE
HEATING VALUE*	1059	1240	1091
SPECIFIC GRAVITY	0.715	0.982	0.761

	INDEX 8344 SAMPLE 4205	INDEX 8345 SAMPLE 4206	INDEX 8346 SAMPLE 4208
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	LAMB NO. 3	TIPPETT NO. 5	ROBERTSON NO. 1
LOCATION	SEC. 250	SEC. 250	SEC. 196
OWNER	AMERADA PETROLEUM CORP.	OHIO OIL CO.	SKELLY OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/20/47	02/20/47	02/20/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5121	5124	5155
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	66.8	73.3	67.0
ETHANE	23.1	15.9	25.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.1	4.1	1.1
OXYGEN	0.2	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	7.8	6.4	6.6
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1091	1037	1127
SPECIFIC GRAVITY	0.755	0.714	0.749

	INDEX 8347 SAMPLE 4212	INDEX 8348 SAMPLE 4213	INDEX 8349 SAMPLE 4214
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	AUSTIN NO. 1	MANN NO. 5	MANN NO. 3
LOCATION	SEC. 194, BLK. G, WTRR SUR.	SEC. 220, BLK. G, WTRR SUR.	SEC. 220, BLK. G, WTRR SUR.
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5100	5038	5064
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	73.6	73.4
ETHANE	18.0	16.3	18.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.9	5.4	2.9
OXYGEN	0.0	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.02	4.7	5.0
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1081	1036	1075
SPECIFIC GRAVITY	0.709	0.703	0.708

	INDEX 8350 SAMPLE 4215	INDEX 8351 SAMPLE 4216	INDEX 8352 SAMPLE 4217
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	AVERITT NO. A-1	COFFEY NO. 2	COFFEY NO. 4
LOCATION	SEC. 226	SEC. 252	SEC. 252
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5187	5071	5166
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.8	71.1	64.9
ETHANE	19.1	17.2	24.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.9	3.7	1.7
OXYGEN	0.3	0.2	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	7.3	3.0	8.7
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1049	1028	1100
SPECIFIC GRAVITY	0.736	0.733	0.768

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8353 SAMPLE 4218	INDEX 8354 SAMPLE 4219	INDEX 8355 SAMPLE 4220
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	HAHN NO. 2	TURLIN NO. 4	TURLIN NO. 9
LOCATION	SEC. 236	SEC. 218	SEC. 218
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5145	5124	5215
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.3	67.7	65.7
ETHANE	22.5	23.6	28.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	2.6	0.2
OXYGEN	0.2	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.2	6.0	5.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1115	1109	1171
SPECIFIC GRAVITY	0.731	0.741	0.752

	INDEX 8356 SAMPLE 4229	INDEX 8357 SAMPLE 4230	INDEX 8358 SAMPLE 4231
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	LAMB NO. 4	MATTHEWS A NO. 7	MATTHEWS A NO. 1
LOCATION	SEC. 230	SEC. 231	SEC. 231
OWNER	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.	AMERADA PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5123	5152	5132
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.8	72.9	71.4
ETHANE	26.5	18.6	20.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.3	3.0	3.2
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	5.9	5.2	4.8
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1103	1072	1087
SPECIFIC GRAVITY	0.767	0.711	0.717

	INDEX 8359 SAMPLE 4232	INDEX 8360 SAMPLE 4233	INDEX 8361 SAMPLE 4234
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	SAWYER A NO. 1	BLAKEMORE NO. 7	BLAKEMORE NO. 3
LOCATION	SEC. 248	SEC. 232	SEC. 232
OWNER	AMERADA PETROLEUM CORP.	AMERADA PET. CORP. & HUMBLE	AMERADA PET. CORP. & HUMBLE
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5246	5262	5140
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.1	57.7	65.0
ETHANE	26.8	33.2	27.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.0	0.7	1.4
OXYGEN	0.3	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.8	8.2	5.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1130	1179	1158
SPECIFIC GRAVITY	0.763	0.803	0.753

	INDEX 8362 SAMPLE 4235	INDEX 8363 SAMPLE 4236	INDEX 8364 SAMPLE 4237
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	ANDREWS NO. 1	AUSTIN B NO. 2	AVERITT NO. 1
LOCATION	SEC. 232	SEC. 190	SEC. 228
OWNER	BAY PETROLEUM CORP.	BAY PETROLEUM CORP.	OHIO OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/17/47	02/17/47	02/17/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5155	5201	5000
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.4	19.1	72.1
ETHANE	23.8	74.4	17.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.5	2.4	0.6
OXYGEN	0.4	0.5	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	5.9	3.6	9.6
HELIUM	0.02	TRACE	0.04
HEATING VALUE*	1089	1527	1046
SPECIFIC GRAVITY	0.750	0.970	0.710

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8365 SAMPLE 4238	INDEX 8366 SAMPLE 4239	INDEX 8367 SAMPLE 4267
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	TIPPETT NO. 8	GIBBS NO. 5	RILEY B NO. 3
LOCATION	SEC. 250	SEC. 230	SEC. 229
OWNER	OHIO OIL CO.	OHIO OIL CO.	ATLANTIC REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/17/47	02/17/47	02/19/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5087	5160	5090
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.2	66.4	71.5
ETHANE	19.1	22.9	18.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.3	4.3	3.7
OXYGEN	0.3	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	5.1	6.2	6.3
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1074	1083	1054
SPECIFIC GRAVITY	0.714	0.747	0.723

	INDEX 8368 SAMPLE 4268	INDEX 8369 SAMPLE 4269	INDEX 8370 SAMPLE 4320
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	SEMINOLE
WELL NAME	TIPPETT B NO. 3	BRAND NO. 1	TIPPET NO. A-2
LOCATION	SEC. 266	SEC. 284	SEC. 266
OWNER	GENERAL AMERICAN OIL CO.	GENERAL AMERICAN OIL CO.	GENERAL AMERICAN OIL CO.
COMPLETED	--/--/00	--/--/00	10/19/39
SAMPLED	02/19/47	02/19/47	05/21/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5130	5120	5318
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	719
COMPONENT, MOLE PCT			
METHANE	70.7	73.2	43.9
ETHANE	21.9	17.1	15.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.8	4.2	40.5
OXYGEN	0.1	0.1	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.5	5.4	0.1
HELIUM	0.01	0.03	0.04
HEATING VALUE*	1109	1048	714
SPECIFIC GRAVITY	0.730	0.710	0.800

	INDEX 8371 SAMPLE 7787	INDEX 8372 SAMPLE 7788	INDEX 8373 SAMPLE 3923
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GAINES	GAINES
FIELD	SEMINOLE	SEMINOLE	WILDCAT
WELL NAME	S. F. MANN NO. 9	NO. 12	E. G. HOMANN NO. 1
LOCATION	SEC. 220, BLK. G, WT&RR SUR.	SEC. 251, WTRR SUR.	SEC. 96, BLK. GWTRR
OWNER	AMERADA PETROLEUM CORP.	MOBIL OIL CO.	HONOLULU OIL CORP.
COMPLETED	12/17/51	12/01/60	04/07/44
SAMPLED	12/06/60	12/06/60	06/13/44
FORMATION	PERM-YATES	PERM-YATES	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3110	3250	3330
WELLHEAD PRESSURE,PSIG	1750	1606	2380
OPEN FLOW, MCFD	1650	18000	5512
COMPONENT, MOLE PCT			
METHANE	66.2	66.0	0.0
ETHANE	8.9	9.4	94.0
PROPANE	3.4	5.1	---
N-BUTANE	1.0	0.9	---
ISOBUTANE	0.4	0.3	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	19.1	19.7	5.0
OXYGEN	TRACE	0.0	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.5
HELIUM	0.05	0.03	TRACE
HEATING VALUE*	997	986	1684
SPECIFIC GRAVITY	0.746	0.745	1.048

	INDEX 8374 SAMPLE 4662	INDEX 8375 SAMPLE 5877	INDEX 8376 SAMPLE 12298
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GAINES	GALVESTON	GALVESTON
FIELD	WILDCAT	ALGOA	ALGOA
WELL NAME	RILEY NO. 1-123	COOPER B UNIT NO. 1	ALLEN UNIT NO. 1
LOCATION	SEC. 123	T&N SUR. NO. 13 A-601	T&NA RR SUR. A-600
OWNER	HONOLULU OIL CORP.	SUPERIOR OIL CO.	GOODALE, BERTMAN & CO., INC.
COMPLETED	10/04/48	05/15/56	03/30/69
SAMPLED	02/10/49	07/13/56	--/--/00
FORMATION	PERM-YATES	OLIG-FRIO L	OLIG-FRIO
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	3436	11514	10240
WELLHEAD PRESSURE,PSIG	2200	8000	1600
OPEN FLOW, MCFD	1774	12800	110000
COMPONENT, MOLE PCT			
METHANE	53.3	91.1	93.7
ETHANE	6.7	4.2	2.3
PROPANE	1.8	2.0	0.7
N-BUTANE	0.6	0.6	0.1
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.4	0.3	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	34.8	0.3	1.5
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	---	0.9	0.9
HELIUM	0.05	0.01	TRACE
HEATING VALUE*	752	1111	1025
SPECIFIC GRAVITY	0.779	0.634	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8377 SAMPLE 13134	INDEX 8378 SAMPLE 14197	INDEX 8379 SAMPLE 15141
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	ALTA LOMA W	BLK. 176-S	CAPLEN
WELL NAME	MORTON SAYKO ET AL, NO. 1	STATE TRACT 176-S NO. 3	ZINN & FOREMAN NO. 5
LOCATION	SEC. 308; LEMUEL CRAWFORD A-47	OFFSHORE	S. F. HUGHES SUR. A-90
OWNER	MASSIE HUNT TRUST	MITCHELL ENERGY CORP.	SUN OIL CO.
COMPLETED	09/07/71	07/24/72	06/05/76
SAMPLED	01/12/72	10/--/74	11/03/77
FORMATION	EOCC-RYCADE	OLIG-FRIO L-1	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10466	8604	5798
WELLHEAD PRESSURE,PSIG	1615	3115	2313
OPEN FLOW, MCFD	19100	54000	13756
COMPONENT, MOLE PCT			
METHANE	92.8	94.5	95.8
ETHANE	3.2	3.3	1.4
PROPANE	1.1	0.9	0.3
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.5	0.3	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	0.4	1.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.2	0.4
HELIUM	0.06	TRACE	0.01
HEATING VALUE*	1070	1070	1019
SPECIFIC GRAVITY	0.617	0.598	0.581

	INDEX 8380 SAMPLE 17906	INDEX 8381 SAMPLE 13813	INDEX 8382 SAMPLE 15135
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	CLOUD	DICKINSON	DOLLAR POINT
WELL NAME	USNB OF GALVESTON TST. NO. 1	BAYOU DEVELOPMENT CO. NO. 13	STATE LEASE 119-A NO. 2
LOCATION	ASA BRIGHAM SUR.; A-5	JOHN SELLERS SUR. A-180	STATE TRACT 1154
OWNER	DE NOVO OIL & GAS, INC.	EXXON CO., U.S.A.	HOUSTON OIL & MINERALS CORP.
COMPLETED	08/04/85	07/21/72	08/03/76
SAMPLED	11/11/85	11/13/73	11/02/77
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14680	8611	9925
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1305	2290
OPEN FLOW, MCFD	4939	5300	73000
COMPONENT, MOLE PCT			
METHANE	56.5	90.1	81.0
ETHANE	16.4	3.5	7.5
PROPANE	13.8	1.5	4.3
N-BUTANE	3.9	0.4	1.5
ISOBUTANE	2.2	1.0	1.9
N-PENTANE	1.1	0.3	0.7
ISOPENTANE	1.0	0.2	0.7
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	0.9	0.7	0.8
NITROGEN	0.0	0.5	0.2
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.8	0.8	1.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1578	1144	1287
SPECIFIC GRAVITY	0.972	0.655	0.748

	INDEX 8383 SAMPLE 10084	INDEX 8384 SAMPLE 10150	INDEX 8385 SAMPLE 14985
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON ISLAND	GALVESTON
FIELD	GALVESTON BAY N	WM. OSTERMEYER NO. 1	GALVESTON ISLAND
WELL NAME	STATE TR. NO. 72, WELL NO. 1	HALL & JONES SUR. A-121	STATE OF TEXAS 70601 NO. 1
LOCATION	STATE TRACT NO. 72	HUMBLE OIL & REFINING CO.	SEC. 3; TRIMBLE&LINDSEY SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	12/03/64	CABOT CORP.
COMPLETED	07/05/64	09/16/65	03/12/76
SAMPLED	08/26/65	OLIG-DISCORBIS	04/28/77
FORMATION	MIOC-	220	OLIG-DISCORBIS
GEOLOGIC PROVINCE CODE	220	7762	955
DEPTH, FEET	7136	3510	7618
WELLHEAD PRESSURE,PSIG	2500	14300	3082
OPEN FLOW, MCFD	45700		51000
COMPONENT, MOLE PCT			
METHANE	92.9	96.1	95.0
ETHANE	3.5	2.3	2.9
PROPANE	1.1	0.5	0.7
N-BUTANE	0.4	0.1	0.2
ISOBUTANE	0.4	0.1	0.2
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.1	0.1
NITROGEN	0.5	0.4	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1115	1051	1060
SPECIFIC GRAVITY	0.624	0.584	0.592

	INDEX 8386 SAMPLE 11993	INDEX 8387 SAMPLE 15473	INDEX 8388 SAMPLE 4752
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	GILLOCK	GREEN LAKE	MANNA REEF
WELL NAME	LOUIS CRAIG NO. 5	CRESTON KING NO. 2	STATE-MANNA REEF NO. 1
LOCATION	W. K. WILSON SUR. A-28	WILLIAM SCOTT SUR. A-177	NOT GIVEN
OWNER	PAN AMERICAN PETROLEUM CORP.	BUTTES RESOURCES CO.	SUN OIL CO.
COMPLETED	10/01/68	03/16/77	02/09/49
SAMPLED	08/11/69	10/05/78	06/04/49
FORMATION	MIOC-KEN BEN	MIOC-	OLIG-NODOSARIA U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8074	8958	10670
WELLHEAD PRESSURE,PSIG	497	2612	5515
OPEN FLOW, MCFD	5040	80000	6600
COMPONENT, MOLE PCT			
METHANE	88.4	90.8	86.3
ETHANE	4.0	4.5	7.8
PROPANE	2.4	2.2	2.8
N-BUTANE	0.8	0.5	0.6
ISOBUTANE	1.1	0.7	0.8
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.4	0.3	TRACE
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.6	0.2	0.3
NITROGEN	0.9	0.8	0.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	----
CARBON DIOXIDE	0.5	0.1	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1170	1134	1150
SPECIFIC GRAVITY	0.670	0.636	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8389 SAMPLE 14879	INDEX 8390 SAMPLE 14880	INDEX 8391 SAMPLE 14977
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	MASTING SE	MASTING SE	MASTING SE
WELL NAME	A. J. EASTHAM NO. 1	A. J. EASTHAM NO. 1	EMMA RUEGE NO. 1
LOCATION	SEC. 5, I&GNRR SUR.A-622	SEC. 5, I&GNRR SUR. A-622	SEC. 5, BS&F SUR., A-625
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	CROWN CENTRAL PETROLEUM CORP
COMPLETED	04/07/76	04/07/76	06/05/75
SAMPLED	12/28/76	12/28/76	04/--/77
FORMATION	OLIG-F-46, SEG. A	OLIG-F-47, SEG. A	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9702	9837	9266
WELLHEAD PRESSURE,PSIG	3550	3150	3400
OPEN FLOW, MCFD	8000	8407	12000
COMPONENT, MOLE PCT			
METHANE	93.2	92.0	92.7
ETHANE	4.1	4.3	3.9
PROPANE	1.0	1.3	1.2
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.1	0.2	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.1	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1074	1077	1087
SPECIFIC GRAVITY	0.605	0.615	0.615

	INDEX 8392 SAMPLE 12376	INDEX 8393 SAMPLE 14204	INDEX 8394 SAMPLE 13804
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	MITCHCOCK	LAFFITES GOLD	POINT BOLIVAR N
WELL NAME	W. M. COON NO. 1	GALVESTON TOWNSITE NO. 5	STATE TRACT 342 NO. 1
LOCATION	THOMAS TOBY SUR. 16, A-194	BLK. 406 MB MENARD SUR.A-628	STATE TRACT 342
OWNER	WILLIAM F. FULLER	MITCHELL ENERGY CORP.	HOUSTON OIL & MINERALS CORP.
COMPLETED	11/09/69	03/24/73	09/23/72
SAMPLED	08/20/70	11/07/74	11/09/73
FORMATION	MIOC-5300 FT. SAND	MIOC-L-2 SAND	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5321	9716	12514
WELLHEAD PRESSURE,PSIG	2179	6215	7739
OPEN FLOW, MCFD	6500	63000	15068
COMPONENT, MOLE PCT			
METHANE	98.4	93.1	94.3
ETHANE	0.5	4.2	3.0
PROPANE	TRACE	1.3	0.8
N-BUTANE	0.0	0.3	0.1
ISOBUTANE	0.0	0.5	0.3
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.9	0.1	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.9
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1006	1098	1053
SPECIFIC GRAVITY	0.561	0.612	0.596

	INDEX 8395 SAMPLE 14279	INDEX 8396 SAMPLE 15472	INDEX 8397 SAMPLE 14895
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GALVESTON	GALVESTON	GALVESTON
FIELD	POINT BOLIVAR N	TEICHMAN POINT	TEXAS CITY
WELL NAME	NPBFSU NO. 3	GALVESTON TOWNSITE NO. 16-1	STATE TRACT 114A NO. 1
LOCATION	STATE TR. 342 GALVESTON BAY	LOT 10 BLK 523 GALVESTON TWP	GALVESTON BAY
OWNER	HOUSTON OIL & MINERALS CORP.	BUTTES RESOURCES CO.	HOUSTON OIL & MINERALS CORP.
COMPLETED	09/03/73	01/10/77	11/11/75
SAMPLED	03/03/75	10/06/78	01/24/77
FORMATION	OLIG-FRIO	MIOC-D3	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12281	7583	10200
WELLHEAD PRESSURE,PSIG	7470	2683	3100
OPEN FLOW, MCFD	636074	26075	132000
COMPONENT, MOLE PCT			
METHANE	83.3	94.6	88.8
ETHANE	8.2	2.5	5.9
PROPANE	1.6	1.0	2.2
N-BUTANE	0.8	0.3	0.6
ISOBUTANE	1.1	0.5	0.8
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.4
NITROGEN	0.0	0.4	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	0.2	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1185	1074	1150
SPECIFIC GRAVITY	0.701	0.600	0.654

	INDEX 8398 SAMPLE 7209	INDEX 8399 SAMPLE 11844	INDEX 8400 SAMPLE 2059
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GARZA	GLASSCOCK	GLASSCOCK
FIELD	TEAS	CREDO	GLASSCOCK
WELL NAME	SHELL SLAUGHTER C NO. 5	REED 1 NO. 4	BAKER NO. 1, OIL WELL
LOCATION	SEC. 33, BLK. 2, T&NO SUR.	SEC. 21,BLK.30, WENW RR SUR.	SEC. 23, BLK. 33, T&P SUR.
OWNER	SHELL OIL CO.	ODEN OIL CO.	CALIFORNIA CO.
COMPLETED	--/--/00	12/01/68	05/09/30
SAMPLED	08/--/59	04/28/69	06/17/30
FORMATION	PERM-YATES	PERM-WOLFCAMP	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1300	7714	2260
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.2	71.9	28.8
ETHANE	TRACE	11.0	52.2
PROPANE	0.4	9.3	---
N-BUTANE	0.0	2.9	---
ISOBUTANE	0.0	0.8	---
N-PENTANE	0.0	0.5	---
ISOPENTANE	0.0	0.9	---
CYCLOPENTANE	0.0	0.2	---
HEXANES PLUS	0.0	0.3	---
NITROGEN	98.7	1.7	9.1
OXYGEN	0.1	0.0	0.5
ARGON	TRACE	0.0	---
HYDROGEN	0.4	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.5	13.4
HELIUM	0.20	0.03	0.06
HEATING VALUE*	14	1374	1187
SPECIFIC GRAVITY	0.965	0.808	0.984

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8401 SAMPLE 12075	INDEX 8402 SAMPLE 12076	INDEX 8403 SAMPLE 12077
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	A-B-R	A-B-R	A-B-R
WELL NAME	Z. A. BOOTH NO. 2	RALPH W. RAMSEY NO. 1	RALPH W. RAMSEY NO. 1
LOCATION	JOSE MONTEZ SUR. A-204	M. DEJESUS BARVO GRANT A-51	M. DEJESUS BARVO GRANT A-51
OWNER	ABEL & BANCROFT	ABEL & BANCROFT	ABEL & BANCROFT
COMPLETED	11/30/68	02/14/68	02/14/68
SAMPLED	10/06/69	10/06/69	10/06/69
FORMATION	OLIG-WICKSBURG	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3037	8497	8740
WELLHEAD PRESSURE,PSIG	1220	2938	2850
OPEN FLOW, MCFD	5100	7200	3400
COMPONENT, MOLE PCT			
METHANE	94.2	80.6	83.2
ETHANE	0.1	7.4	7.1
PROPANE	TRACE	5.9	3.4
N-BUTANE	0.0	1.1	0.7
ISOBUTANE	0.0	1.0	0.5
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.6	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	4.4	0.8	1.4
OXYGEN	1.0	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.7	2.8
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	956	1204	1130
SPECIFIC GRAVITY	0.580	0.727	0.688

	INDEX 8404 SAMPLE 4868	INDEX 8405 SAMPLE 15464	INDEX 8406 SAMPLE 14577
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	ANGEL CITY	BIG OAK	CABEZA CREEK
WELL NAME	J. BLUHM NO. 1	W. P. PITTMAN NO. 1	PETTUS UNIT NO. 44
LOCATION	DEJESUS Y BARRO SUR. A-51	MARIA JESUS DELEON SUR. A-22	SEBASTINA VELA SUR. A-337
OWNER	STANOLIND OIL & GAS CO.	LIGHNING OIL CO.	CONTINENTAL OIL CO.
COMPLETED	11/08/49	09/20/77	08/29/74
SAMPLED	05/23/50	10/31/78	02/06/75
FORMATION	EOCE-SLICK	OLIG-FRIO	EOCE-PETTUS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8042	2585	4294
WELLHEAD PRESSURE,PSIG	2850	950	883
OPEN FLOW, MCFD	6800	5000	2080
COMPONENT, MOLE PCT			
METHANE	89.7	98.2	89.7
ETHANE	5.1	0.1	5.7
PROPANE	2.3	TRACE	2.3
N-BUTANE	0.6	0.0	0.4
ISOBUTANE	0.4	0.0	0.7
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.5	0.0	0.2
NITROGEN	0.4	1.3	0.5
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.2
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1132	997	1134
SPECIFIC GRAVITY	0.648	0.569	0.639

	INDEX 8407 SAMPLE 14578	INDEX 8408 SAMPLE 12031	INDEX 8409 SAMPLE 4661
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	CABEZA CREEK	CABEZA CREEK S	CHARCO N
WELL NAME	PETTUS UNIT NO. 48	HELEN BETHKE NO. 2	WILBERN NO. 1
LOCATION	SEBASTINA VELA SUR. A-337	T.S.N. NELSON SUR. A-223	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	W. L. HOLDSTON
COMPLETED	08/29/74	02/13/68	01/12/49
SAMPLED	02/06/76	09/09/69	04/04/49
FORMATION	EOCE-YEGUA	EOCE-WESER	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4903	5093	8650
WELLHEAD PRESSURE,PSIG	1623	1852	3925
OPEN FLOW, MCFD	3150	3083	18000
COMPONENT, MOLE PCT			
METHANE	89.4	87.6	80.3
ETHANE	5.8	5.3	6.6
PROPANE	2.3	2.8	5.1
N-BUTANE	0.9	0.5	1.7
ISOBUTANE	0.7	0.7	1.1
N-PENTANE	0.1	0.4	0.8
ISOPENTANE	0.2	TRACE	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	1.1
NITROGEN	0.5	0.8	0.8
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.3	1.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1113	1138	1273
SPECIFIC GRAVITY	0.640	0.636	0.753

	INDEX 8410 SAMPLE 7140	INDEX 8411 SAMPLE 12511	INDEX 8412 SAMPLE 12512
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	CHARCO SE	CLIP	CLIP
WELL NAME	REAGAN G.U. NO. 2C	B. B. GAYLE NO. 5-F	B. B. GAYLE NO. 5-H
LOCATION	RAMON MUSQUIZ SUR.	IGNACIO GUAJARDO SUR. A-127	IGNACIO GUAJARDO SUR. A-127
OWNER	NORTHERN PUMP CO.	DOW CHEMICAL CO.	DOW CHEMICAL CO.
COMPLETED	04/01/59	12/19/68	12/19/68
SAMPLED	07/10/59	11/03/70	11/03/70
FORMATION	EOCE-LULING	OLIG-FRIO	OLIG-FRIO U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7488	2684	2996
WELLHEAD PRESSURE,PSIG	2397	957	787
OPEN FLOW, MCFD	24500	4030	8400
COMPONENT, MOLE PCT			
METHANE	86.8	97.7	90.2
ETHANE	4.9	0.0	0.0
PROPANE	3.7	TRACE	TRACE
N-BUTANE	0.7	0.0	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.0	1.6	0.4
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.2	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1153	990	1005
SPECIFIC GRAVITY	0.671	0.562	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8413 SAMPLE 12514	INDEX 8414 SAMPLE 10695	INDEX 8415 SAMPLE 10696
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	CLIP	EMMA HAYNES	EMMA HAYNES
WELL NAME	B. B. GAYLE NO. 5-J	A. F. DOHMANN NO. 1	A. F. DOHMANN NO. 1
LOCATION	IGNACIO GUAJARDO SUR. A-127	M. T. CALLIHAN SUR. A-80	M. T. CALLIHAN SUR. A-80
OWNER	DOW CHEMICAL CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
COMPLETED	10/30/70	06/02/65	06/02/65
SAMPLED	11/03/70	07/27/66	07/27/66
FORMATION	MIOC-L	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1500	11300	12650
WELLHEAD PRESSURE,PSIG	590	7686	7050
OPEN FLOW, MCFD	1500	36000	2750
COMPONENT, MOLE PCT			
METHANE	97.0	88.8	87.6
ETHANE	0.2	4.7	5.6
PROPANE	TRACE	1.7	1.6
N-BUTANE	0.0	0.2	0.4
ISOBUTANE	0.0	0.5	0.3
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.4	0.3
CYCLOPENTANE	0.0	0.2	0.2
HEXANES PLUS	0.0	0.3	0.4
NITROGEN	2.8	0.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	2.7	3.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	983	1096	1099
SPECIFIC GRAVITY	0.565	0.650	0.660

	INDEX 8416 SAMPLE 5020	INDEX 8417 SAMPLE 5293	INDEX 8418 SAMPLE 4994
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	GLADYS POWELL	GOLIAD	GOTTSCHALT
WELL NAME	KAUFFMANN ESTATE NO. 1	GREUTZMACHER NO. 1-T	HUGO MCMILLEN NO. 1
LOCATION	ABSTRACT - 267	MATHEW G. CARICE SUR. A-90	T. H. CALLIHAN SUR.
OWNER	FRANK W. MICHAUX	GEORGE R. BROWN	HUMBLE OIL & REFINING CO.
COMPLETED	12/16/50	08/05/52	09/12/50
SAMPLED	03/26/51	10/01/52	02/13/51
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7675	8046	7480
WELLHEAD PRESSURE,PSIG	2827	3300	3254
OPEN FLOW, MCFD	29000	750	5000
COMPONENT, MOLE PCT			
METHANE	89.4	86.7	90.0
ETHANE	4.7	6.5	4.5
PROPANE	2.2	2.6	2.0
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.5
NITROGEN	0.6	0.3	0.1
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.1	2.4	1.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1102	1118	1122
SPECIFIC GRAVITY	0.647	0.662	0.649

	INDEX 8419 SAMPLE 15306	INDEX 8420 SAMPLE 4743	INDEX 8421 SAMPLE 8679
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	HORDES CREEK E	HORDES CREEK N	HORNEY
WELL NAME	W. BRINKOLTER NO. 1	G. T. POWELL NO. 1	ANNA HORNEY NO. 1
LOCATION	VINCENTE RAMOS SUR. A-241	W. D. SUTHERLAND SUR.	W. S. CAMPBELL SUR. A-92
OWNER	IKE LOVELADY, INC.	HUMBLE OIL & REFINING CO.	SINCLAIR OIL & GAS CO.
COMPLETED	01/07/76	01/25/49	05/31/62
SAMPLED	--/--/00	05/30/49	09/22/62
FORMATION	EOCE-WILCOX	EOCE-	-GAS SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8141	7646	2130
WELLHEAD PRESSURE,PSIG	2445	3358	891
OPEN FLOW, MCFD	9500	4400	22000
COMPONENT, MOLE PCT			
METHANE	85.1	89.2	99.0
ETHANE	5.2	5.1	TRACE
PROPANE	2.4	2.0	TRACE
N-BUTANE	0.6	0.4	0.0
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.2	0.1	0.0
HEXANES PLUS	0.4	0.3	0.0
NITROGEN	2.1	0.4	0.8
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.5	1.9	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1109	1098	1003
SPECIFIC GRAVITY	0.678	0.646	0.558

	INDEX 8422 SAMPLE 11170	INDEX 8423 SAMPLE 11171	INDEX 8424 SAMPLE 4771
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	LIVE OAK LAKE	LIVE OAK LAKE	MARSHALL
WELL NAME	L. W. OCONNOR ESTATE A NO.14	L. W. OCONNOR ESTATE A NO.1	J. B. DANFORTH NO. 1-C
LOCATION	JAMES MCCUNE SUR.	GALON N	SOLOMON GRIFFIN SUR. A-126
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	SUNRAY OIL CORP.
COMPLETED	04/22/66	02/19/65	06/05/49
SAMPLED	10/13/67	10/13/67	09/29/49
FORMATION	OLIG-FRIO	OLIG-FRIO	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4350	5230	8924
WELLHEAD PRESSURE,PSIG	1550	1715	3265
OPEN FLOW, MCFD	16750	2590	3300
COMPONENT, MOLE PCT			
METHANE	94.6	95.3	89.8
ETHANE	2.1	2.1	5.8
PROPANE	0.8	0.3	1.8
N-BUTANE	0.2	TRACE	0.5
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	0.9	0.4	0.3
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.6
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.5	0.1
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1067	1049	1123
SPECIFIC GRAVITY	0.604	0.589	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8425 SAMPLE 4631	INDEX 8426 SAMPLE 17649	INDEX 8427 SAMPLE 17935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	MELROSE	NOT GIVEN	SOL PARKS
WELL NAME	BLUNTZER NO. 8-1	W. T. NEYLAND NO. 1	WILLIAM T. DONOGHUE NO. 1
LOCATION	NOT GIVEN	DE JESUS & BARBRO SUR. A-51	MARIA DE JESUS BARBO SUR. A-
OWNER	ATLANTIC REFINING CO.	ROSEWOOD RESOURCES	PHYLKO ENERGY CORP.
COMPLETED	09/05/48	--/--/00	05/13/85
SAMPLED	11/17/48	04/18/85	--/--/00
FORMATION	EOCE-WILCOX	EOCE-WILCOX	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7845	14310	3385
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1770	1359
OPEN FLOW, MCFD	1280	2200	3760
COMPONENT, MOLE PCT			
METHANE	75.7	90.4	97.5
ETHANE	23.0	1.7	0.1
PROPANE	---	0.1	TRACE
N-BUTANE	---	0.1	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.1	0.0
NITROGEN	0.8	0.6	1.5
OXYGEN	0.3	TRACE	0.3
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	7.0	0.5
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1179	962	989
SPECIFIC GRAVITY	0.675	0.641	0.567

	INDEX 8428 SAMPLE 9713	INDEX 8429 SAMPLE 13540	INDEX 8430 SAMPLE 12079
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	SOLEBERG	SWICKHEIMER	TERRELL POINT E
WELL NAME	L. H. VON DOHLEN NO. 1	G. G. SWICKHEIMER NO. 2	STATE OF TEXAS NO. 1
LOCATION	JOHN SOLEBERG SUR. A-271	J. P. FERRELL SUR. A-356	G. MCKNIGHT SUR. A-24
OWNER	ASSOC. OIL & GAS CO.	INEXCO OIL CO.	MERIDIAN EXPLORATION CO.
COMPLETED	10/06/62	01/22/71	03/03/68
SAMPLED	01/24/65	02/20/73	10/02/69
FORMATION	EOCE-WILCOX	OLIG-FRIO	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10090	2759	2902
WELLHEAD PRESSURE,PSIG	5994	1005	1200
OPEN FLOW, MCFD	22500	1460	10000
COMPONENT, MOLE PCT			
METHANE	84.9	98.2	98.6
ETHANE	7.1	0.1	0.1
PROPANE	3.5	TRACE	TRACE
N-BUTANE	0.7	TRACE	0.0
ISOBUTANE	0.3	TRACE	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.0	1.4	0.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	0.2	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1130	997	1001
SPECIFIC GRAVITY	0.678	0.562	0.560

	INDEX 8431 SAMPLE 12080	INDEX 8432 SAMPLE 5275	INDEX 8433 SAMPLE 13544
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GOLIAD	GOLIAD	GOLIAD
FIELD	TERRELL POINT E	WILDCAT	WILDCAT
WELL NAME	STATE OF TEXAS NO. 1	BILL RODGERS NO. 1	J. F. MCCORD NO. 3
LOCATION	G. MCKNIGHT SUR. A-24	W. P. MILLER SUR. A-193	NOAH G. STEBBINS SUR. A-256
OWNER	MERIDIAN EXPLORATION CO.	MAGNOLIA PETROLEUM CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	03/03/68	12/1?/51	01/06/72
SAMPLED	10/02/69	04/17/52	02/--/73
FORMATION	OLIG-FRIO 4030	OLIG-FRIO 3200	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4030	3205	9872
WELLHEAD PRESSURE,PSIG	1300	1397	6335
OPEN FLOW, MCFD	390	1450	31500
COMPONENT, MOLE PCT			
METHANE	89.3	98.6	87.1
ETHANE	0.1	0.8	5.1
PROPANE	TRACE	0.3	1.7
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	8.2	0.3	TRACE
OXYGEN	1.9	TRACE	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.0	4.9
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	907	1021	1063
SPECIFIC GRAVITY	0.599	0.563	0.665

	INDEX 8434 SAMPLE 10241	INDEX 8435 SAMPLE 17867	INDEX 8436 SAMPLE 5307
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GONZALES	GONZALES	GRAY
FIELD	CHEAPSIDE	FULCHER	HOBART
WELL NAME	FRANK ULMAN NO. 1	SPIECKERMANN NO. 1	HOBART NO. 1
LOCATION	OTTO VON ROEDER SUR. A-462	ROBERT H. WYNN SUR., A-474	SEC. 26, BLK. 3, I&GN SUR.
OWNER	TENNECO OIL CO.	PRIMARY FUELS, INC.	PHILLIPS PETROLEUM CO.
COMPLETED	10/01/64	02/08/85	08/20/52
SAMPLED	--/--/00	10/10/85	09/15/52
FORMATION	CRET-EDWARDS	CRET-EDWARDS "A"	PENN-
GEOLOGIC PROVINCE CODE	220	220	440
DEPTH, FEET	11800	11834	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4100	3300	NOT GIVEN
OPEN FLOW, MCFD	14000	3666	3250
COMPONENT, MOLE PCT			
METHANE	83.8	75.6	90.0
ETHANE	5.0	4.3	4.8
PROPANE	3.0	1.6	1.6
N-BUTANE	0.6	0.7	0.3
ISOBUTANE	0.2	0.5	0.1
N-PENTANE	0.3	0.6	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	0.3	1.1	0.1
NITROGEN	0.9	7.4	2.5
OXYGEN	0.1	1.1	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.2	0.0	0.0
CARBON DIOXIDE	6.5	6.8	0.2
HELIUM	0.01	TRACE	0.16
HEATING VALUE*	1073	1018	1066
SPECIFIC GRAVITY	0.700	0.758	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8437 SAMPLE 11616	INDEX 8438 SAMPLE 11617	INDEX 8439 SAMPLE 6092
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	HOOVER NE	HOOVER NE	LAKETON
WELL NAME	SPEARMAN UNIT NO. 1-LI	SPEARMAN UNIT NO. 1-UT	WITMORE NO. 1
LOCATION	SEC. 23, BLK. 3, H&GN SUR.	SEC. 23, BLK. 3, I&GN SUR.	SEC. 109, BLK. M-2, BS&F SUR
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	PHILLIPS PETROLEUM CO.
COMPLETED	01/01/67	01/01/67	--/--/00
SAMPLED	08/05/68	08/05/68	06/25/56
FORMATION	ORDO-ELLENBURGER	PENN-VIRGIL	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	9028	5010	7967
WELLHEAD PRESSURE,PSIG	2340	1195	2313
OPEN FLOW, MCFD	7990	9648	19340
COMPONENT, MOLE PCT			
METHANE	90.6	87.5	89.5
ETHANE	3.6	4.2	3.9
PROPANE	1.3	1.9	1.5
N-BUTANE	0.5	0.6	0.7
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	2.9	4.8	2.8
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.08	0.13	0.08
HEATING VALUE*	1072	1069	1100
SPECIFIC GRAVITY	0.625	0.640	0.640

	INDEX 8440 SAMPLE 8420	INDEX 8441 SAMPLE 11758	INDEX 8442 SAMPLE 15838
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	LAKETON	LAKETON	LAKETON
WELL NAME	DELP NO. 2	M. M. BOSTON NO. 1	DELP NO. 1
LOCATION	SEC. 110, BLK. M-2, BS&F SUR	SEC. 62, BLK. A-6, H&GN SUR.	SEC. 110, BLK. M-2, BS&F SUR
OWNER	PHILLIPS PETROLEUM CO.	SUN OIL CO.	PAGE PETROLEUM, INC.
COMPLETED	10/02/61	01/25/67	06/30/79
SAMPLED	03/01/62	02/10/69	11/19/79
FORMATION	PERM-GRANITE WASH	CAMO-ARBUCKLE	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	9822	11440	10800
WELLHEAD PRESSURE,PSIG	2949	3270	2210
OPEN FLOW, MCFD	5200	56000	90000
COMPONENT, MOLE PCT			
METHANE	91.9	85.9	71.4
ETHANE	3.4	5.8	7.9
PROPANE	1.6	3.3	4.6
N-BUTANE	0.8	1.0	1.1
ISOBUTANE	0.3	0.6	0.6
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.9	2.1	13.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	TRACE
HELIUM	0.04	0.07	0.16
HEATING VALUE*	1109	1159	1072
SPECIFIC GRAVITY	0.629	0.673	0.734

	INDEX 8443 SAMPLE 7679	INDEX 8444 SAMPLE 2830	INDEX 8445 SAMPLE 3618
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	NOT GIVEN	PANHANDLE	PANHANDLE
WELL NAME	PARKER NO. A-2	URBANCZYK NO. 3	BAIRD & TALLEY NO. 1
LOCATION	NOT GIVEN	SEC. 109, BLK. 7, I&GN SUR.	SEC. 219, BLK. B-2, H&GN SUR
OWNER	JAMES E. & M. T. PARKER	HAGY, HARRINGTON & MARSH	NORTHERN NATURAL GAS CO.
COMPLETED	--/--/00	10/11/39	--/--/00
SAMPLED	--/--/00	11/02/39	03/01/43
FORMATION	NOT GIVEN	PERM---	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2889	2810	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	411	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	26017	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	67.9	73.6
ETHANE	9.2	14.6	20.2
PROPANE	6.8	---	---
N-BUTANE	2.2	---	---
ISOBUTANE	1.2	---	---
N-PENTANE	0.6	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	9.1	16.0	5.7
OXYGEN	TRACE	0.6	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.0
HELIUM	0.210	0.71	0.25
HEATING VALUE*	1127	949	1108
SPECIFIC GRAVITY	0.762	0.695	0.678

	INDEX 8446 SAMPLE 3970	INDEX 8447 SAMPLE 5318	INDEX 8448 SAMPLE 983
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE	PANHANDLE	PANHANDLE E
WELL NAME	OSBORNE NO. 1-T	ASH C WELL NO. 1	G. H. SAUNDERS NO. 1
LOCATION	SEC. 106, BLK. 3, I&GN SUR.	SEC. 32, BLK. 26, H&GN SUR.	SEC. 3, BLK. 5, ACH&B SUR.
OWNER	TEXAS NATURAL GAS CO.	KEWANEE OIL CO.	TEXAS CO.
COMPLETED	04/15/27	12/27/50	01/--/28
SAMPLED	12/21/49	11/18/53	01/09/28
FORMATION	PERM-WICHITA-ALBANY	PENN-CISCO L	-LIME
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2295	2495
WELLHEAD PRESSURE,PSIG	199	87	448
OPEN FLOW, MCFD	2430	5400	60000
COMPONENT, MOLE PCT			
METHANE	59.7	69.0	77.8
ETHANE	12.1	11.8	17.4
PROPANE	---	8.0	---
N-BUTANE	---	2.6	---
ISOBUTANE	---	1.3	---
N-PENTANE	---	0.6	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	---
NITROGEN	23.7	3.5	4.2
OXYGEN	0.0	0.1	0.5
ARGON	---	TRACE	---
HYDROGEN	---	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	3.7	0.1	0.1
HELIUM	0.18	0.05	0.11
HEATING VALUE*	832	1356	1100
SPECIFIC GRAVITY	0.750	0.811	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8449 SAMPLE 5225	INDEX 8450 SAMPLE 5226	INDEX 8451 SAMPLE 5228
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	GOLDSTON NO. 1	RICE NO. 1	YOES NO. B-1
LOCATION	BS&F SUR.	SEC. 32, BLK. 30	SEC. 9, BS&F SUR.
OWNER	T. J. WAGNER, JR.	T. J. WAGNER, JR.	T. J. WAGNER, JR.
COMPLETED	08/10/51	04/15/52	03/25/52
SAMPLED	06/11/52	06/11/52	06/11/52
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2378	2310	2279
WELLHEAD PRESSURE,PSIG	NOT GIVEN	270	402
OPEN FLOW, MCFD	2500	2000	1000
COMPONENT, MOLE PCT			
METHANE	82.1	82.7	83.2
ETHANE	5.6	4.8	5.4
PROPANE	2.9	2.4	2.6
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	7.7	7.9	7.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.20	0.23	0.20
HEATING VALUE*	1057	1067	1056
SPECIFIC GRAVITY	0.666	0.666	0.659

	INDEX 8452 SAMPLE 7142	INDEX 8453 SAMPLE 7359	INDEX 8454 SAMPLE 7653
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	R. E. DARSEY A-3	M. A. SHAW NO. 2	KAREN NO. 1
LOCATION	SEC. 13	SEC. 5, BLK. 1, ACH&B SUR.	SEC. 28, BLK. 1, ACH&B SUR.
OWNER	AMARILLO OIL CO.	TEXACO INC.	R. W. ADAMS & SON
COMPLETED	07/06/58	09/07/59	06/07/56
SAMPLED	07/15/59	01/26/60	08/25/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2492	2294	2904
WELLHEAD PRESSURE,PSIG	313	52	150
OPEN FLOW, MCFD	7800	900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.3	76.0	74.5
ETHANE	6.2	7.8	8.5
PROPANE	2.7	6.6	6.9
N-BUTANE	0.0	2.6	2.6
ISOBUTANE	1.2	1.1	0.7
N-PENTANE	0.3	0.4	0.8
ISOPENTANE	0.0	0.8	0.6
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.0	0.2	0.9
NITROGEN	5.1	3.1	3.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1092	1271	1322
SPECIFIC GRAVITY	0.660	0.762	0.791

	INDEX 8455 SAMPLE 7654	INDEX 8456 SAMPLE 7694	INDEX 8457 SAMPLE 834
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE W
WELL NAME	KAREN NO. A-1	JOHNSON-FED. NO. 1	TEXAS NO. 1 SAUNDERS
LOCATION	SEC. 28, BLK. 1, ACH&B SUR.	SEC. 9, ROCKWALL CTY. SCHOOL	SEC. 3, BLK. 1
OWNER	R. W. ADAMS & SON	KERR-MCGEE CORP.	TEXAS CO.
COMPLETED	01/01/57	08/23/60	04/01/23
SAMPLED	08/25/60	09/20/60	01/09/24
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2890	2615	2270
WELLHEAD PRESSURE,PSIG	150	340	50
OPEN FLOW, MCFD	NOT GIVEN	450	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.0	33.1	79.1
ETHANE	7.7	4.4	16.8
PROPANE	5.1	10.2	---
N-BUTANE	1.8	4.2	---
ISOBUTANE	0.5	2.5	---
N-PENTANE	0.4	0.9	---
ISOPENTANE	0.4	1.3	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.3	0.7	---
NITROGEN	4.3	41.5	3.6
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	0.1	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.10	0.70	0.12
HEATING VALUE*	1202	1043	1102
SPECIFIC GRAVITY	0.720	1.016	0.652

	INDEX 8458 SAMPLE 4443	INDEX 8459 SAMPLE 5280	INDEX 8460 SAMPLE 5613
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	LUCILE NO. 1	MCCRAKEN NO. 1	KROUCH NO. A-1
LOCATION	SEC. 103, BLK. 2, H&GN SUR.	SEC. 31, BLK. 25, H&GN SUR.	SEC. 187, BLK. E, D&P SUR.
OWNER	PHILLIPS PETROLEUM CO.	SHAMROCK OIL & GAS CORP.	PANOMA CORP.
COMPLETED	09/17/47	04/25/52	02/09/54
SAMPLED	01/19/48	10/02/52	04/30/54
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2810	2365	2350
WELLHEAD PRESSURE,PSIG	398	231	415
OPEN FLOW, MCFD	3550	560	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.4	82.1	79.9
ETHANE	20.1	6.8	5.6
PROPANE	---	3.8	2.6
N-BUTANE	---	1.0	0.8
ISOBUTANE	---	0.7	0.2
N-PENTANE	---	0.4	0.1
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	18.6	4.5	10.4
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	TRACE	0.0
HELIUM	0.55	0.12	0.27
HEATING VALUE*	972	1149	1014
SPECIFIC GRAVITY	0.732	0.689	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8461 SAMPLE 5690	INDEX 8462 SAMPLE 6300	INDEX 8463 SAMPLE 6301
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BAKER NO. 1	REEVES NO. 1	HIRLER NO. 1-A
LOCATION	SEC. 176, D&P SUR.	SEC. 48, BLK. E, D&P SUR.	SEC. 66, BLK. E, D&P SUR.
OWNER	CABOT CARBON CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	06/10/54	02/09/57	02/13/57
SAMPLED	09/20/54	04/10/57	04/10/57
FORMATION	PERM-WICHITA-ALBANY	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2569	2586	2502
WELLHEAD PRESSURE,PSIG	388	428	416
OPEN FLOW, MCFD	5300	3900	1400
COMPONENT, MOLE PCT			
METHANE	71.6	72.0	70.7
ETHANE	8.6	3.0	5.9
PROPANE	3.7	1.6	3.0
N-BUTANE	0.8	0.6	0.8
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.8	21.2	16.3
OXYGEN	TRACE	0.0	2.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.31	0.60	0.21
HEATING VALUE*	1041	885	955
SPECIFIC GRAVITY	0.720	0.698	0.716

	INDEX 8464 SAMPLE 6598	INDEX 8465 SAMPLE 7060	INDEX 8466 SAMPLE 7061
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	WORLEY NO. 31	ALLEN W. KNORPP NO. 1	BEAVERS NO. 1
LOCATION	SEC. 61, BLK. 3, H&GN SUR.	SEC. 181, BLK. B-3, H&GN SUR.	SEC. 124, BLK. B-2, H&GN SUR
OWNER	WILCOX OIL CO.	CABOT CARBON CO.	CABOT CARBON CO.
COMPLETED	--/--/29	04/29/51	02/24/26
SAMPLED	05/21/58	05/05/59	05/05/59
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3100	2855	2684
WELLHEAD PRESSURE,PSIG	60	253	173
OPEN FLOW, MCFD	600	294	1524
COMPONENT, MOLE PCT			
METHANE	75.6	59.8	81.8
ETHANE	7.9	3.0	6.5
PROPANE	5.4	2.5	3.8
N-BUTANE	2.1	0.9	1.2
ISOBUTANE	1.1	0.5	0.6
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.8	0.3	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	4.9	31.4	5.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	1.00	0.20
HEATING VALUE*	1241	810	1140
SPECIFIC GRAVITY	0.751	0.761	0.689

	INDEX 8467 SAMPLE 7147	INDEX 8468 SAMPLE 7479	INDEX 8469 SAMPLE 7480
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	W. M. TAYLOR C NO. 1	JOHNSON C NO. 1	JOHNSON A NO. 1
LOCATION	SEC. 39, BLK. B-2, H&GN SUR.	SEC. 6, BLK. E, B&S SUR.	SEC. 179, BLK. E, D&P SUR.
OWNER	TEXACO INC.	D. D. HARRINGTON	D. D. HARRINGTON
COMPLETED	12/15/58	09/--/59	09/--/59
SAMPLED	07/17/59	03/03/60	03/03/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2474	2678	2674
WELLHEAD PRESSURE,PSIG	286	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	8800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.0	65.0	67.1
ETHANE	5.9	9.2	8.6
PROPANE	2.6	6.3	4.5
N-BUTANE	0.7	1.8	1.3
ISOBUTANE	0.5	1.0	0.8
N-PENTANE	0.1	0.4	0.3
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.4
NITROGEN	5.5	13.1	16.0
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.30	0.40
HEATING VALUE*	1082	1146	1071
SPECIFIC GRAVITY	0.661	0.799	0.762

	INDEX 8470 SAMPLE 7622	INDEX 8471 SAMPLE 7712	INDEX 8472 SAMPLE 1536
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W/RED CAVE
WELL NAME	JACKSON NO. 1	YOES NO. 1-A	WALL NO. 1
LOCATION	SEC. 58, BLK. B-2, H&GN SUR.	SEC. 4, BLK. 3, B&B SUR.	SEC. 51, BLK. 3, I&GN SUR.
OWNER	PETROLEUM EXPLORATION, INC.	EL PASO NATURAL GAS CO.	EMPIRE GAS & FUEL CO.
COMPLETED	--/--/00	01/30/53	11/--/26
SAMPLED	07/23/60	10/08/60	11/01/27
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2753	NOT GIVEN	2300
WELLHEAD PRESSURE,PSIG	187	121	420
OPEN FLOW, MCFD	1062	611	35000
COMPONENT, MOLE PCT			
METHANE	79.8	81.5	70.9
ETHANE	7.7	6.6	21.5
PROPANE	5.2	3.1	---
N-BUTANE	1.8	0.8	---
ISOBUTANE	0.5	0.5	---
N-PENTANE	0.4	0.1	---
ISOPENTANE	0.5	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	3.6	6.7	1.2
OXYGEN	TRACE	TRACE	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	3.1	0.1
HELIUM	0.10	0.20	0.23
HEATING VALUE*	1212	1086	1104
SPECIFIC GRAVITY	0.717	0.673	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8485 SAMPLE 12553	INDEX 8486 SAMPLE 16772	INDEX 8487 SAMPLE 1731
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAYSON	GRAYSON	GRAYSON
FIELD	NEW MAG	PARADISE COVE	POTTSBORO
WELL NAME	NEW MAG UNIT NO. 12-1	W. STRICKLAND GAS UNIT NO.1	WALL NO. 1
LOCATION	NOT GIVEN	JOSEPH STRICKLAND, A1068	JAMES INGRAM SUR.
OWNER	CHEVRON OIL CO.	AMERICAN QUASAR PET. CO.	STIMPSON-FELL OIL CO.
COMPLETED	07/28/61	10/28/81	01/--/29
SAMPLED	11/27/70	02/17/83	04/05/29
FORMATION	ORDO-OIL CREEK	PENN-DORNICK HILLS L	CRET-TRINITY
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	12776	12747	870
WELLHEAD PRESSURE,PSIG	4200	2200	220
OPEN FLOW, MCFD	3860	8056	4
COMPONENT, MOLE PCT			
METHANE	84.3	79.0	87.2
ETHANE	8.2	11.1	6.8
PROPANE	4.3	4.6	---
N-BUTANE	0.8	1.3	---
ISOBUTANE	0.5	0.5	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	TRACE	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	1.1	1.4	5.5
OXYGEN	0.1	0.9	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.8	0.3
HELIUM	0.03	0.03	0.20
HEATING VALUE*	1179	1224	1005
SPECIFIC GRAVITY	0.672	0.715	0.615

	INDEX 8488 SAMPLE 11735	INDEX 8489 SAMPLE 12478	INDEX 8490 SAMPLE 12479
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAYSON	GREGG	GREGG
FIELD	SHERMAN	DANVILLE	DANVILLE
WELL NAME	ROY LOGSTON NO. 1	D. I. BALLENGER G.U. NO. 3-L	D. I. BALLENGER G.U. NO. 3-U
LOCATION	J. B. MCANAIR SUR., A-763	HADEN EDWARDS SUR.	HADEN EDWARDS SUR.
OWNER	STANDARD OIL CO. OF TEXAS	TEXACO INC.	TEXACO INC.
COMPLETED	04/11/67	11/08/62	11/09/62
SAMPLED	01/14/69	10/22/70	10/22/70
FORMATION	-CORDELL	CRET-TRAVIS PEAK	CRET-GLOYD
GEOLOGIC PROVINCE CODE	350	260	260
DEPTH, FEET	8590	7516	6791
WELLHEAD PRESSURE,PSIG	525	1245	355
OPEN FLOW, MCFD	1240	350	250
COMPONENT, MOLE PCT			
METHANE	83.2	90.9	90.7
ETHANE	7.1	3.9	4.8
PROPANE	4.6	1.3	1.8
N-BUTANE	1.4	0.4	0.4
ISOBUTANE	1.1	0.4	0.5
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.5	0.4
NITROGEN	1.1	0.9	1.4
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	0.8
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1224	1098	1088
SPECIFIC GRAVITY	0.704	0.631	0.630

	INDEX 8491 SAMPLE 3731	INDEX 8492 SAMPLE 5647	INDEX 8493 SAMPLE 12594
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GREGG	GREGG	GREGG
FIELD	WILLOW SPRINGS	WILLOW SPRINGS	WILLOW SPRINGS
WELL NAME	HORTON-DICKSON NO. 4	NORRIS ESTATE NO. 1	J. H. ROBERTSON NO. 3
LOCATION	H. G. HUDSON SUR.	G. W. GROCE SUR.	A. FERGUSON SUR. A-75
OWNER	LONE STAR PRODUCING CO.	MID-STATES OIL CORP.	LONE STAR PRODUCING CO.
COMPLETED	12/06/42	01/30/54	10/29/69
SAMPLED	03/--/44	06/28/54	12/18/70
FORMATION	CRET-PETTIT L	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7250	7606	7451
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2700	2938
OPEN FLOW, MCFD	3500	3100	4028
COMPONENT, MOLE PCT			
METHANE	49.4	90.1	91.9
ETHANE	46.9	5.0	3.8
PROPANE	---	1.2	0.9
N-BUTANE	---	0.3	0.2
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	TRACE	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.3
NITROGEN	0.8	1.1	1.3
OXYGEN	0.5	0.0	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.2	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.4	1.2	1.1
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1341	1076	1059
SPECIFIC GRAVITY	0.816	0.625	0.615

	INDEX 8494 SAMPLE 12595	INDEX 8495 SAMPLE 12596	INDEX 8496 SAMPLE 12621
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GREGG	GREGG	GREGG
FIELD	WILLOW SPRINGS	WILLOW SPRINGS	WILLOW SPRINGS
WELL NAME	E. D. ROBERTSON NO. A-2	B. A. SKIPPER NO. B-1	TMRAISHER NO. 2C
LOCATION	ALEXANDER-FERGUSON SUR. A-76	MARSHALL-MANN SUR. A-256	2 MI. NW LONGVIEW
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	DORFMAN PRODUCTION CO.
COMPLETED	02/23/59	--/--/00	11/30/55
SAMPLED	12/16/70	12/16/70	12/29/70
FORMATION	CRET-PETTIT	CRET-RODESSA	PLIO-HENDERSON
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7294	7326	6809
WELLHEAD PRESSURE,PSIG	560	476	270
OPEN FLOW, MCFD	1761	8500	296
COMPONENT, MOLE PCT			
METHANE	90.6	88.6	91.9
ETHANE	4.3	4.3	4.1
PROPANE	1.4	1.7	1.4
N-BUTANE	0.5	0.7	0.3
ISOBUTANE	0.5	0.8	0.6
N-PENTANE	0.2	0.5	0.1
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.6	0.3
NITROGEN	0.8	1.5	0.6
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	0.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1102	1129	1092
SPECIFIC GRAVITY	0.636	0.663	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8473 SAMPLE 5346	INDEX 8474 SAMPLE 5347	INDEX 8475 SAMPLE 5349
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PURSLEY RANCH	PURSLEY RANCH	PURSLEY RANCH
WELL NAME	DONA NO. 1	RACHEL NO. 1	MADELINE NO. 1
LOCATION	SEC. 9, BLK. 25, H&GN SUR.	SEC. 9, BLK. 25, H&GN SUR.	SEC. 20, BLK. 25, H&GN SUR.
OWNER	C. P. PURSLEY	C. P. PURSLEY	C. P. PURSLEY
COMPLETED	--/--/00	--/--/00	12/--/52
SAMPLED	01/14/53	12/09/52	12/09/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1700		
COMPONENT, MOLE PCT			
METHANE	84.7	84.6	85.1
ETHANE	5.8	5.7	5.0
PROPANE	3.1	3.0	2.3
N-BUTANE	0.8	0.8	0.6
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.4	4.7	6.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.13	0.13	0.16
HEATING VALUE*	1114	1097	1056
SPECIFIC GRAVITY	0.665	0.659	0.645

	INDEX 8476 SAMPLE 5350	INDEX 8477 SAMPLE 10509	INDEX 8478 SAMPLE 16077
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PURSLEY RANCH	WILDCAT	WILDCAT
WELL NAME	MOLLY RUTH NO. 1	R. & M. MATHERS 2 NO. 1	WM. D. STOCKSTILL NO. 1
LOCATION	SEC. 30, BLK. 30, H&GN SUR.	SEC. 1, BLK. S-W, J. STUMP SUR.	SEC. 185, BLK. M2, BS&F SUR.
OWNER	C. P. PURSLEY	STANDARD OIL CO. OF TEXAS	HUNT ENERGY CORP.
COMPLETED	--/--/00	02/13/65	05/06/80
SAMPLED	12/09/52	04/07/66	09/04/80
FORMATION	NOT GIVEN	PENN-ATOKA	-STRAY SAND
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	11690	5740
WELLHEAD PRESSURE, PSIG	NOT GIVEN	3200	3473
OPEN FLOW, MCFD	NOT GIVEN	4200	4650
COMPONENT, MOLE PCT			
METHANE	84.5	82.8	91.2
ETHANE	5.3	7.7	4.5
PROPANE	2.9	4.0	1.5
N-BUTANE	1.1	1.1	0.5
ISOBUTANE	0.8	0.5	0.1
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	5.0	2.2	2.3
OXYGEN	TRACE	0.3	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.7	0.2
HELIUM	1.19	0.02	0.05
HEATING VALUE*	1100	1161	1077
SPECIFIC GRAVITY	0.662	0.686	0.622

	INDEX 8479 SAMPLE 16444	INDEX 8480 SAMPLE 12937	INDEX 8481 SAMPLE 4137
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAYSON	GRAYSON	GRAYSON
FIELD	DORNICK HILLS	GORDONVILLE	HANDY
WELL NAME	W STRICKLAND GAS UNIT NO. 1	RR. RR. ROBBINS NO. 1	W. R. HANDY NO. 3
LOCATION	JOSEPH STRICKLAND SUR. A1068	THOMAS TOBY SUR. A-1240	25 MI. NE OF GAINESVILLE
OWNER	AMERICAN QUASAR PET. CO.	JAKE L. HAMON	TEXAS CO.
COMPLETED	02/--/82	03/07/70	09/04/46
SAMPLED	03/09/82	07/19/71	10/17/46
FORMATION	PENN-DORNICK HILLS L	ORDO-OIL CREEK	CRET-BASAL
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	12867	15445	398
WELLHEAD PRESSURE, PSIG	6133	7535	125
OPEN FLOW, MCFD	80200	24000	469
COMPONENT, MOLE PCT			
METHANE	80.5	90.2	88.2
ETHANE	10.9	5.2	5.7
PROPANE	4.3	2.3	---
N-BUTANE	1.1	0.6	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	0.2	0.0	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	1.4	0.7	5.1
OXYGEN	0.1	0.0	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.2	0.4
HELIUM	0.03	0.02	0.13
HEATING VALUE*	1208	1123	996
SPECIFIC GRAVITY	0.702	0.634	0.610

	INDEX 8482 SAMPLE 10650	INDEX 8483 SAMPLE 16060	INDEX 8484 SAMPLE 7889
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAYSON	GRAYSON	GRAYSON
FIELD	HANDY	MINERAL CREEK W	NEW MAG
WELL NAME	IDA B. THORN NO. 12	PETRO LEWIS-RUSCH GU NO. 1	MARY I. MCADAMS 3-2
LOCATION	SAMUEL STEWART SUR. A1069	1/2 MI. W OF POTTSBORO	W. B. CHILES A-317 SUR.
OWNER	TEXACO INC.	AMERICAN QUASAR PET. CO.	STANDARD OIL CO. OF TEXAS
COMPLETED	07/24/65	03/24/80	03/01/55
SAMPLED	07/14/66	09/04/80	03/08/61
FORMATION	-GRAY	PENN-DORNICK HILLS	ORDO-OIL CREEK
GEOLOGIC PROVINCE CODE	350	350	350
DEPTH, FEET	4639	12198	12813
WELLHEAD PRESSURE, PSIG	1982	5813	5229
OPEN FLOW, MCFD	3150	28500	78000
COMPONENT, MOLE PCT			
METHANE	86.1	84.1	86.4
ETHANE	6.0	9.2	7.8
PROPANE	1.4	3.4	3.1
N-BUTANE	1.1	0.9	0.9
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	1.8	0.8	0.7
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.2
HELIUM	0.06	0.02	0.03
HEATING VALUE*	1163	1168	1165
SPECIFIC GRAVITY	0.670	0.672	0.661

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8497 SAMPLE 12710	INDEX 8498 SAMPLE 16479	INDEX 8499 SAMPLE 9450
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GREGG	GRIMES	HALE
FIELD	WILLOW SPRINGS	NOT GIVEN	PLAINVIEW
WELL NAME	TOLAR UNIT NO. 1	CHANEY NO. 1	GRIFFITH PROD.-BIER NO. 1
LOCATION	NOT GIVEN	MORTIMER DONOHUE SUR. A-175	SEC. 1, BLK. D-A, GC&SF SUR.
OWNER	SOUTHERN UNION PRODUCTION CO	CASHCO OIL CO.	JOHN F. BIER
COMPLETED	07/31/68	11/02/81	10/--/50
SAMPLED	03/12/71	04/--/82	04/25/53
FORMATION	CRET-TRAVIS PEAK	CRET-BUDA	NOT GIVEN
GEOLOGIC PROVINCE CODE	260	220	435
DEPTH, FEET	NOT GIVEN	9927	3466
WELLHEAD PRESSURE,PSIG	2100	3773	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.5	85.2	0.6
ETHANE	4.5	4.4	0.0
PROPANE	1.1	1.1	0.5
N-BUTANE	0.3	0.5	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.4	3.6	98.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	4.7	0.0
HELIUM	0.03	0.02	0.13
HEATING VALUE*	1065	1010	29
SPECIFIC GRAVITY	0.623	0.666	0.970

	INDEX 8500 SAMPLE 8140	INDEX 8501 SAMPLE 12666	INDEX 8502 SAMPLE 4427
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	POTTSVILLE	POTTSVILLE	POTTSVILLE S
WELL NAME	T. K. REA WEIRS NO. 1	D. B. DAWSON NO. 1	CLARENCE REA NO. 1
LOCATION	DAVID COOK SUR.	BBBEC SUR. NO. 41	NOT GIVEN
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	03/25/36	07/08/36	10/10/47
SAMPLED	08/09/61	02/08/71	02/05/48
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	415	415	415
DEPTH, FEET	2412	2558	2720
WELLHEAD PRESSURE,PSIG	1160	308	1160
OPEN FLOW, MCFD	34000	4160	6800
COMPONENT, MOLE PCT			
METHANE	89.7	87.7	82.7
ETHANE	4.4	5.2	11.7
PROPANE	0.8	1.3	---
N-BUTANE	0.2	0.3	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	4.0	4.5	4.8
OXYGEN	TRACE	0.0	0.3
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.20	0.16	0.16
HEATING VALUE*	1043	1057	1047
SPECIFIC GRAVITY	0.617	0.632	0.636

	INDEX 8503 SAMPLE 4429	INDEX 8504 SAMPLE 8139	INDEX 8505 SAMPLE 5010
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HAMILTON	HAMILTON	HAMILTON
FIELD	POTTSVILLE S	POTTSVILLE S	WILDCAT
WELL NAME	E. L. RIEWE NO. 1	E. L. RIEWE NO. 1	ALICE D. COWLING NO. 1
LOCATION	NOT GIVEN	RICHARD BROWN SUR.	JOHN PERSON SUR.
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	AMERADA PETROLEUM CORP.
COMPLETED	08/30/47	08/--/47	12/13/50
SAMPLED	02/05/48	08/09/61	03/16/51
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	415	415	415
DEPTH, FEET	2590	2658	3164
WELLHEAD PRESSURE,PSIG	1160	1160	1735
OPEN FLOW, MCFD	13500	21000	3000
COMPONENT, MOLE PCT			
METHANE	84.3	88.3	81.7
ETHANE	8.9	4.4	5.9
PROPANE	---	1.0	1.7
N-BUTANE	---	0.2	0.4
ISOBUTANE	---	TRACE	0.2
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.5	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	TRACE	0.1
NITROGEN	5.7	4.7	9.4
OXYGEN	0.3	TRACE	0.1
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.6	0.1	0.4
HELIUM	0.15	0.10	0.08
HEATING VALUE*	1013	1040	1006
SPECIFIC GRAVITY	0.629	0.623	0.657

	INDEX 8506 SAMPLE 5955	INDEX 8507 SAMPLE 13923	INDEX 8508 SAMPLE 13927
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	BERNSTEIN	BERNSTEIN	BERNSTEIN E
WELL NAME	TOMLINSON NO. 1	THORNSEN NO. 1	BRAVO-HART NO. 1
LOCATION	SEC. 3, BLK. 2, S&MG SUR.	SEC. 29, BLK. 1, CIF SUR.	SEC. 32, BLK.1, CIF SUR.
OWNER	SHARPLES OIL CORP.	BASIN PETROLEUM CORP.	M & L OPERATING CO.
COMPLETED	05/--/58	07/04/74	06/01/73
SAMPLED	10/29/58	02/15/74	02/23/74
FORMATION	PENN-MORROW U	PENN-MORROW U	PENN-LANSING
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6914	6722	5893
WELLHEAD PRESSURE,PSIG	1700	1239	1851
OPEN FLOW, MCFD	NOT GIVEN	9500	3010
COMPONENT, MOLE PCT			
METHANE	93.6	81.1	82.2
ETHANE	0.1	7.3	7.6
PROPANE	0.1	4.7	4.7
N-BUTANE	TRACE	1.1	1.3
ISOBUTANE	0.0	0.5	0.6
N-PENTANE	0.0	0.3	0.3
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	5.7	3.9	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.31	0.20	0.13
HEATING VALUE*	953	1175	1195
SPECIFIC GRAVITY	0.579	0.701	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8509 SAMPLE 6774	INDEX 8510 SAMPLE 6777	INDEX 8511 SAMPLE 7066
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	BERNSTEIN S	BERNSTEIN S	BRILLHART
WELL NAME	A. M. FRAZIER NO. 1	A. M. FRAZIER NO. 1	C. D. ALEXANDER NO. 1-9
LOCATION	SEC. 14, BLK. 1, CIF SUR.	SEC. 14, BLK. 1, CIF SUR.	SEC. 9, BLK. 1, WCRR SUR.
OWNER	NATURAL GAS PIPELINE CO.	SHAMROCK OIL & GAS CORP.	GULF & BAKER & TAYLOR DRLG.
COMPLETED	05/08/58	05/08/58	05/01/59
SAMPLED	08/01/58	08/01/58	05/11/59
FORMATION	PENN-MORROW U	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6770	6096	6738
WELLHEAD PRESSURE,PSIG	1140	1475	1730
OPEN FLOW, MCFD	2850	8750	5270
COMPONENT, MOLE PCT			
METHANE	81.9	82.2	91.4
ETHANE	7.8	9.1	4.6
PROPANE	4.4	4.2	1.5
N-BUTANE	1.4	1.2	0.5
ISOBUTANE	0.6	0.5	0.2
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.6	1.7	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1186	1193	1098
SPECIFIC GRAVITY	0.697	0.688	0.621

	INDEX 8512 SAMPLE 11946	INDEX 8513 SAMPLE 9836	INDEX 8514 SAMPLE 11540
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	BRILLHART	CLEMENTINE	CLEMENTINE
WELL NAME	A. K. BURLESON NO. 1	CLEMENTINE NO. 1	VENNEMAN NO. 1
LOCATION	SEC. 27, BLK. 45, H&TC SUR.	SEC. 31, BLK 1, WCRR SUR.	SEC. 29, BLK. 1, WCRR SUR.
OWNER	FEDERAL PETROLEUM, INC.	GULF OIL CORP.	AIKMAN BROTHERS CORP.
COMPLETED	08/28/68	07/17/64	03/08/68
SAMPLED	06/26/69	04/05/65	06/13/68
FORMATION	PENN-DES MOINES	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6144	6760	6709
WELLHEAD PRESSURE,PSIG	1672	1657	1555
OPEN FLOW, MCFD	5400	9250	3300
COMPONENT, MOLE PCT			
METHANE	77.9	91.1	91.0
ETHANE	7.3	4.7	4.6
PROPANE	5.2	1.5	1.4
N-BUTANE	1.0	0.4	0.5
ISOBUTANE	0.6	0.3	0.0
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	7.0	0.9	1.3
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.4	0.5
HELIUM	0.19	0.10	0.10
HEATING VALUE*	1140	1096	1075
SPECIFIC GRAVITY	0.709	0.623	0.617

	INDEX 8515 SAMPLE 9898	INDEX 8516 SAMPLE 12853	INDEX 8517 SAMPLE 12702
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	COLLARD	COLLARD-WHITE	FARWELL CREEK
WELL NAME	H. T. COLLARD G. U. NO. 1-LC	HOOVER A NO. 2	BROOKS NO. 1
LOCATION	SEC. 189, BLK. 45, H&TC SUR.	SEC. 12, BLK. 3, SA&MG SUR.	SEC. 224, BLK.2,GH&H RR SUR.
OWNER	TEXACO INC.	PHILLIPS PETROLEUM CO.	SIDWELL OIL & GAS, INC.
COMPLETED	04/18/64	05/17/71	01/06/71
SAMPLED	05/11/65	06/16/71	03/28/71
FORMATION	PENN-VIRGIL & TONKAWA	PERM-WICHITA-ALBANY	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4882	3546	7121
WELLHEAD PRESSURE,PSIG	1106	544	1479
OPEN FLOW, MCFD	43000	2040	6450
COMPONENT, MOLE PCT			
METHANE	74.6	67.5	74.9
ETHANE	4.8	6.2	4.5
PROPANE	3.1	4.2	2.5
N-BUTANE	1.0	1.1	0.8
ISOBUTANE	0.5	0.8	0.5
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.3	0.0	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	14.7	18.9	13.8
OXYGEN	0.0	0.1	1.9
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.43	0.78	0.22
HEATING VALUE*	1008	999	977
SPECIFIC GRAVITY	0.708	0.748	0.703

	INDEX 8518 SAMPLE 11575	INDEX 8519 SAMPLE 11576	INDEX 8520 SAMPLE 13527
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	GRUVER N	GRUVER N	GRUVER NW
WELL NAME	RHODA HART NO. 1	RHODA HART NO. 1	MORRISON NO. 1
LOCATION	SEC. 17, BLK P, H&GNRR SUR.	SEC. 17, BLK P, H&GNRR SUR.	SEC. 253, BLK. 2, GH&H SUR.
OWNER	GULF OIL CORP.	GULF OIL CORP.	MESA PETROLEUM CO.
COMPLETED	07/06/68	07/06/68	06/27/72
SAMPLED	07/16/68	07/16/68	02/09/73
FORMATION	PENN-MORROW U	PENN-MEPLER	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6328	5770	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1676	1530	1625
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3600
COMPONENT, MOLE PCT			
METHANE	79.5	78.3	87.6
ETHANE	6.7	9.1	5.1
PROPANE	4.7	4.6	2.9
N-BUTANE	1.4	1.4	0.8
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.5	0.3	0.2
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.1	4.8	1.2
OXYGEN	0.0	0.4	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.20	0.18	0.14
HEATING VALUE*	1140	1167	1140
SPECIFIC GRAVITY	0.703	0.711	0.650

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8521 SAMPLE 14013	INDEX 8522 SAMPLE 14014	INDEX 8523 SAMPLE 14016
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANNAS DRAW	HANNAS DRAW	HANNAS DRAW
WELL NAME	CLUCK NO. C-1	HART NO. C-1	RACOL NO. 2
LOCATION	SEC. 117, BLK. 2, GH&H SUR.	SEC. 77, BLK. 2, GH&H SUR.	SEC. 116, BLK. 2, GH&H SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/27/74	08/27/73	08/14/73
SAMPLED	05/30/74	05/30/74	05/30/74
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4820	4728	4750
WELLHEAD PRESSURE,PSIG	990	999	999
OPEN FLOW, MCFD	2800	21000	20000
COMPONENT, MOLE PCT			
METHANE	79.1	80.1	79.8
ETHANE	5.9	6.2	6.1
PROPANE	3.9	4.0	4.1
N-BUTANE	1.2	1.3	1.3
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	8.0	6.7	6.9
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.38	0.36	0.35
HEATING VALUE*	1105	1118	1124
SPECIFIC GRAVITY	0.699	0.694	0.700

	INDEX 8524 SAMPLE 5583	INDEX 8525 SAMPLE 5785	INDEX 8526 SAMPLE 5919
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD	HANSFORD	HANSFORD
WELL NAME	S. P. & K. K. JACKSON NO. 1	MATHEWS UNIT II	S. P. MILLER NO. 1
LOCATION	SEC. 111, BLK. 45, H&TCRR SUR.	SEC. 104, BLK. 45, H&TC SUR.	SEC. 51, BLK. 2, PSL SUR.
OWNER	HUMBLE OIL & REFINING CO.	R. H. FULTON & CO.	STANOLIND OIL & GAS CO.
COMPLETED	12/29/53	09/04/54	04/26/55
SAMPLED	12/29/53	03/02/55	08/18/55
FORMATION	PENN-DOUGLAS	PENN-MORROW U	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4960	6879	6156
WELLHEAD PRESSURE,PSIG	1086	1916	1560
OPEN FLOW, MCFD	2680	16090	32000
COMPONENT, MOLE PCT			
METHANE	81.9	85.1	79.4
ETHANE	6.4	7.0	8.9
PROPANE	3.6	3.3	4.7
N-BUTANE	1.1	1.0	1.4
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.0	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	5.5	1.6	3.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.29	0.13	0.17
HEATING VALUE*	1110	1168	1189
SPECIFIC GRAVITY	0.678	0.674	0.710

	INDEX 8527 SAMPLE 6058	INDEX 8528 SAMPLE 6129	INDEX 8529 SAMPLE 7336
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD	HANSFORD	HANSFORD
WELL NAME	WELL NO. 1	HANSFORD GAS WELL NO. 1	E. M. CARMODY NO. 4
LOCATION	SEC. 108, BLK. 45, H&TC SUR.	SEC. 120, BLK. 45, H&TC SUR.	SEC. 34, BLK. 47, T&NO SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	02/21/56	03/20/56	06/28/59
SAMPLED	05/15/56	09/04/56	01/13/60
FORMATION	PENN-MORROW U	PENN-MORROW U	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7245	6942	7468
WELLHEAD PRESSURE,PSIG	1659	1859	1810
OPEN FLOW, MCFD	24000	33000	3
COMPONENT, MOLE PCT			
METHANE	97.9	89.6	76.9
ETHANE	TRACE	4.9	8.3
PROPANE	0.3	2.1	4.4
N-BUTANE	0.1	0.7	1.1
ISOBUTANE	0.0	0.3	0.3
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.0	0.3	1.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	1.2	1.2	5.5
OXYGEN	0.0	TRACE	0.8
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.3
HELIUM	0.17	0.12	0.20
HEATING VALUE*	1016	1124	1173
SPECIFIC GRAVITY	0.569	0.640	0.727

	INDEX 8530 SAMPLE 7476	INDEX 8531 SAMPLE 8681	INDEX 8532 SAMPLE 8682
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD	HANSFORD	HANSFORD
WELL NAME	V. MATHEWS A NO. 1	D. O. C. NO. 1	D. O. C. NO. 1
LOCATION	SEC. 56, BLK. R, AB&M SUR.	SEC. 101, BLK. 45, H&TC SUR.	SEC. 101, BLK. 45, H&TC SUR.
OWNER	GULF OIL CORP.	ROY FURR	ROY FURR
COMPLETED	--/--/00	07/20/62	07/20/62
SAMPLED	03/25/60	09/22/62	09/22/62
FORMATION	PENN-MORROW L	PENN-MORROW U	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8544	6924	7475
WELLHEAD PRESSURE,PSIG	2070	1623	2284
OPEN FLOW, MCFD	NOT GIVEN	10250	2400
COMPONENT, MOLE PCT			
METHANE	91.1	88.5	88.2
ETHANE	4.0	4.3	5.5
PROPANE	1.6	2.7	2.5
N-BUTANE	0.5	1.0	0.7
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.5	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.1	TRACE
NITROGEN	1.0	1.9	1.6
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.9
HELIUM	0.10	0.12	0.13
HEATING VALUE*	1112	1130	1108
SPECIFIC GRAVITY	0.633	0.651	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8533 SAMPLE 5873	INDEX 8534 SAMPLE 5874	INDEX 8535 SAMPLE 5875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	HENDERSON NO. 1	RALSTON NO. 1	O'DONNELL NO. 1
LOCATION	SEC. 95, BLK. 45, H&TC SUR.	SEC. 10, BLK. 2, SA&MG SUR.	SEC. 81, BLK. 45, H&TC SUR.
OWNER	SHARPLES OIL CORP.	SHARPLES OIL CORP.	SHARPLES OIL CORP.
COMPLETED	10/27/54	01/24/55	04/11/55
SAMPLED	--/--/00	07/14/55	07/14/55
FORMATION	PENN-HEPLER	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6253	7312	7186
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1800	1800
OPEN FLOW, MCFD	7700	12500	3500
COMPONENT, MOLE PCT			
METHANE	81.8	90.3	90.1
ETHANE	8.5	3.9	3.7
PROPANE	4.1	1.7	1.4
N-BUTANE	1.2	0.8	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	2.9	2.0	2.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.16	0.18	0.20
HEATING VALUE*	1174	1084	1083
SPECIFIC GRAVITY	0.690	0.625	0.628

	INDEX 8536 SAMPLE 5954	INDEX 8537 SAMPLE 5958	INDEX 8538 SAMPLE 5963
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	BECK NO. 1-B	BETTY NO. 1	STEELE NO. 1
LOCATION	SEC. 80, BLK. 45, H&TC SUR.	SEC. 24, BLK. 1, CIF SUR.	SEC. 78, H&TC SUR.
OWNER	SHARPLES OIL CORP.	SHARPLES OIL CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	06/--/55	04/--/55	07/21/55
SAMPLED	10/29/55	10/29/55	11/03/55
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6820	5870	5364
WELLHEAD PRESSURE,PSIG	1200	1700	1380
OPEN FLOW, MCFD	NOT GIVEN	8500	3350
COMPONENT, MOLE PCT			
METHANE	87.6	96.5	85.9
ETHANE	0.0	0.1	6.4
PROPANE	0.5	0.1	3.3
N-BUTANE	TRACE	0.1	1.0
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.2
NITROGEN	10.9	2.6	1.9
OXYGEN	0.9	TRACE	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.32	0.21	0.14
HEATING VALUE*	900	986	1150
SPECIFIC GRAVITY	0.603	0.567	0.663

	INDEX 8539 SAMPLE 6207	INDEX 8540 SAMPLE 7834	INDEX 8541 SAMPLE 11756
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	MILLER NO. 1	J. I. STEELE NO. 1	C. R. COX GAS UNIT NO. 1
LOCATION	SEC. 14, BLK. 22, SA&MG SUR.	SEC. 53, BLK. 45, H&TC SUR.	SEC. 9, BLK. 2, SA&MG SUR.
OWNER	SPICKNALL ENTERPRISES	GULF OIL CORP.	SHARPLES & CO. PROPERTIES
COMPLETED	11/27/56	10/10/59	05/25/55
SAMPLED	12/10/56	02/01/61	02/07/69
FORMATION	PENN-TONKAWA	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5324	5338	7374
WELLHEAD PRESSURE,PSIG	1336	1270	782
OPEN FLOW, MCFD	120000	14800	2460
COMPONENT, MOLE PCT			
METHANE	85.7	86.3	90.8
ETHANE	6.6	6.1	3.8
PROPANE	2.0	3.0	1.6
N-BUTANE	1.0	1.0	0.5
ISOBUTANE	0.7	0.5	0.3
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.7	0.3	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	2.4	1.8	1.7
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.13	0.10	0.16
HEATING VALUE*	1125	1151	1089
SPECIFIC GRAVITY	0.661	0.665	0.625

	INDEX 8542 SAMPLE 11757	INDEX 8543 SAMPLE 11767	INDEX 8544 SAMPLE 11771
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	HENDERSON GAS UNIT NO. 1	VIRGINIA MUDSON NO. 1	REX SANDERS G.U. NO. 1C
LOCATION	SEC. 82, BLK. 45, H&TC SUR.	SEC. 47, BLK. P, M&GN SUR.	SEC. 94, BLK. 45, H&TC SUR.
OWNER	SHARPLES & CO. PROPERTIES	MOBIL OIL CORP.	SUN OIL CO., DX DIVISION
COMPLETED	07/22/55	04/--/58	06/07/56
SAMPLED	02/07/69	02/--/69	--/--/00
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7804	7268	6981
WELLHEAD PRESSURE,PSIG	336	666	392
OPEN FLOW, MCFD	500	NOT GIVEN	161
COMPONENT, MOLE PCT			
METHANE	89.3	90.1	90.2
ETHANE	4.0	4.4	4.9
PROPANE	1.1	1.7	1.5
N-BUTANE	0.6	0.6	0.3
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	3.0	2.0	2.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.21	0.17	0.22
HEATING VALUE*	1075	1088	1059
SPECIFIC GRAVITY	0.633	0.628	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8545 SAMPLE 11772	INDEX 8546 SAMPLE 11841	INDEX 8547 SAMPLE 11842
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HANSFORD N	HANSFORD N
WELL NAME	REX SANDERS G.U. NO. 1T	W. E. RAUPINETEL NO. 1-C	GERTRUDE OGLE NO. 1-T
LOCATION	SEC. 94, BLK. 45, H&TC SUR.	W.D.C. HALL SUR.	SEC. 11, BLK. 2, SALMG SUR.
OWNER	SUN OIL CO., DX DIVISION	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	05/13/56	06/22/59	12/07/55
SAMPLED	02/25/69	05/01/69	05/01/69
FORMATION	PENN-MORROW L	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7264	7326	7733
WELLHEAD PRESSURE,PSIG	392	1625	1530
OPEN FLOW, MCFD	214	7100	2000
COMPONENT, MOLE PCT			
METHANE	90.0	89.4	89.4
ETHANE	4.0	4.5	4.2
PROPANE	1.7	1.8	1.8
N-BUTANE	0.5	0.8	0.6
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	2.7	1.9	2.4
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.21	0.16	0.19
HEATING VALUE*	1065	1100	1091
SPECIFIC GRAVITY	0.621	0.634	0.634

	INDEX 8548 SAMPLE 13986	INDEX 8549 SAMPLE 13917	INDEX 8550 SAMPLE 5608
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HANSFORD N	HART RANCH	HITCHLAND
WELL NAME	A. R. MENDERSON NO. 2	HART NO. 1	HITCHLAND GAS UNIT NO. 1
LOCATION	SEC. 82, BLK.45, H&TC SUR.	SEC. 5, BLK. S-T, T&NO SUR.	SEC. 35, BLK.1, WCRR CO.SUR.
OWNER	TUCCA PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	HUMBLE OIL & REFINING CO.
COMPLETED	03/07/74	--/--/00	02/04/54
SAMPLED	04/29/74	02/18/74	04/16/54
FORMATION	PENN-TONKAWA	PENN-CLEVELAND	PENN-4640'
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5352	5994	4586
WELLHEAD PRESSURE,PSIG	773	1390	1125
OPEN FLOW, MCFD	4350	3300	1400
COMPONENT, MOLE PCT			
METHANE	85.1	85.2	83.9
ETHANE	6.6	6.9	5.9
PROPANE	3.7	3.6	5.6
N-BUTANE	1.1	1.1	1.2
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.9	1.9	4.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.13	0.13	0.16
HEATING VALUE*	1157	1157	1134
SPECIFIC GRAVITY	0.669	0.669	0.677

	INDEX 8551 SAMPLE 6296	INDEX 8552 SAMPLE 7780	INDEX 8553 SAMPLE 13273
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HITCHLAND	HITCHLAND	HITCHLAND
WELL NAME	ATKINS "E" C-3	MCCUTCHEN A NO. 1	HITCHLAND GAS UNIT NO. 1
LOCATION	SEC. 17, BLK. 1, PSL SUR.	SEC. 3, BLK. 2, PSL SUR.	SEC. 35, BLK. 1, WCRR SUR.
OWNER	PHILLIPS PETROLEUM CO.	SKELLY OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/12/57	09/13/60	02/12/72
SAMPLED	04/04/57	11/23/60	06/21/72
FORMATION	PENN-ATOKA	PENN-4640'	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6469	4626	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1073	978	1530
OPEN FLOW, MCFD	480	5600	9700
COMPONENT, MOLE PCT			
METHANE	89.3	84.1	90.3
ETHANE	5.1	6.4	5.2
PROPANE	2.3	3.6	1.9
N-BUTANE	0.6	1.0	0.5
ISOBUTANE	0.3	0.5	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.6	3.7	0.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.17	0.20	0.10
HEATING VALUE*	1104	1129	1103
SPECIFIC GRAVITY	0.632	0.669	0.626

	INDEX 8554 SAMPLE 14651	INDEX 8555 SAMPLE 14653	INDEX 8556 SAMPLE 14655
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HITCHLAND	HITCHLAND W	HITCHLAND W
WELL NAME	MITCH NO. S-2	MITCH NO. F-2	MITCH NO. E-2
LOCATION	SEC. 98, BLK. P, H&GN SUR.	SEC. 9, BLK. 1, PSL SUR.	SEC. 10, BLK. 1, PSL SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/01/59	06/03/59	02/24/59
SAMPLED	04/27/76	04/27/76	04/27/76
FORMATION	PENN-4640 FT.	PENN-MORROW L	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4595	6832	6933
WELLHEAD PRESSURE,PSIG	270	760	530
OPEN FLOW, MCFD	68	1275	360
COMPONENT, MOLE PCT			
METHANE	82.4	82.4	82.2
ETHANE	6.6	5.0	4.9
PROPANE	4.0	4.6	4.7
N-BUTANE	1.2	1.9	1.9
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.3	0.5	0.5
ISOPENTANE	0.3	0.7	0.8
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	4.3	3.6	3.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.17	0.16	0.14
HEATING VALUE*	1150	1198	1207
SPECIFIC GRAVITY	0.688	0.732	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8557 SAMPLE 14657	INDEX 8558 SAMPLE 6402	INDEX 8559 SAMPLE 6505
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	MITCHLAND W	HORIZON	HORIZON
WELL NAME	MITCH NO. D-2	MEEK A NO. 1	C. W. MCHILTREE NO. 1-147
LOCATION	SEC. 1, BLK. P, M&GN SUR.	SEC. 145, BLK. 4-T, T&NO SUR	SEC. 147, BLK. 4-T, T&NO SUR
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	HORIZON OIL & GAS CO.
COMPLETED	09/18/59	07/20/57	09/06/57
SAMPLED	04/27/76	09/18/57	02/15/58
FORMATION	PENN-MORROW L	PENN-CLEVELAND	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6747	6335	7483
WELLHEAD PRESSURE,PSIG	575	1521	1820
OPEN FLOW, MCFD	753	7835	38500
COMPONENT, MOLE PCT			
METHANE	82.5	84.1	92.8
ETHANE	5.0	8.5	3.5
PROPANE	4.4	3.6	1.2
N-BUTANE	1.8	1.1	0.5
ISOBUTANE	0.6	0.5	0.2
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.9	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	3.7	0.8	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.9
HELIUM	0.16	0.10	0.10
HEATING VALUE*	1191	1192	1084
SPECIFIC GRAVITY	0.709	0.681	0.615

	INDEX 8560 SAMPLE 7450	INDEX 8561 SAMPLE 7501	INDEX 8562 SAMPLE 10821
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HORIZON	HORIZON	HORIZON
WELL NAME	V. MATHEWS A NO. 1	R. R. SMITH NO. 1	M. M. CROOK NO. 1
LOCATION	SEC. 56, BLK. R, AB&M SUR.	SEC. 142, BLK. 4-T, T&NO SUR	SEC. 39, BLK. R, B&B SUR.
OWNER	GULF OIL CORP.	TEXACO INC.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/80	02/11/60	08/18/66
SAMPLED	03/17/60	04/08/60	12/15/66
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6604	6421	6386
WELLHEAD PRESSURE,PSIG	1600	240	1317
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2490
COMPONENT, MOLE PCT			
METHANE	82.7	74.5	82.3
ETHANE	7.9	13.1	6.9
PROPANE	4.0	7.6	4.0
N-BUTANE	1.3	2.5	1.2
ISOBUTANE	0.5	0.7	0.5
N-PENTANE	0.3	0.5	0.4
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.3	0.2	3.6
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.10	0.10	0.18
HEATING VALUE*	1184	1347	1172
SPECIFIC GRAVITY	0.693	0.771	0.693

	INDEX 8563 SAMPLE 5328	INDEX 8564 SAMPLE 5371	INDEX 8565 SAMPLE 5427
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	NORTON NO. 1	SEALY & SMITH NO. 1	GETZ NO. 2
LOCATION	SEC. 81, BLK. 2, GH&H SUR.	SEC. 9, BLK. 3, GH&H SUR.	SEC. 2, BLK. P, M&GN SUR.
OWNER	TASCOSA GAS CO.	TEXAS CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/23/52	09/27/52	10/27/52
SAMPLED	11/19/52	12/31/52	03/24/53
FORMATION	PENN---	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3176	3101	2700
WELLHEAD PRESSURE,PSIG	415	416	329
OPEN FLOW, MCFD	621	379	4392
COMPONENT, MOLE PCT			
METHANE	70.7	77.6	76.0
ETHANE	6.3	6.4	6.0
PROPANE	3.6	3.3	3.7
N-BUTANE	0.9	1.6	1.2
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	16.6	10.6	11.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.93	0.69	0.40
HEATING VALUE*	989	1029	1067
SPECIFIC GRAVITY	0.718	0.680	0.711

	INDEX 8566 SAMPLE 11859	INDEX 8567 SAMPLE 11864	INDEX 8568 SAMPLE 11868
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	S. D. & K. K. JACKSON NO. 2	S. P. & K. K. JACKSON NO. 1	LOLA JACKSON NO. 1
LOCATION	SEC. 21, BLK. 2, H&OB SUR.	SEC. 58, BLK. 1, WCRR SUR.	SEC. 22, BLK. 2, H&BO SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	02/24/49	04/19/49	03/16/49
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2821	2838	2855
WELLHEAD PRESSURE,PSIG	168	199	173
OPEN FLOW, MCFD	396	595	116
COMPONENT, MOLE PCT			
METHANE	72.2	72.9	72.6
ETHANE	6.3	6.4	6.5
PROPANE	3.7	3.5	3.7
N-BUTANE	1.1	0.9	1.1
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.1	14.5	14.2
OXYGEN	0.0	0.0	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.57	0.59	0.61
HEATING VALUE*	1013	1013	1030
SPECIFIC GRAVITY	0.718	0.712	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8569 SAMPLE 14650	INDEX 8570 SAMPLE 14652	INDEX 8571 SAMPLE 14654
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	MITCH NO. E-1	EDGAR NO. 1	MITCH NO. 1
LOCATION	SEC. 10, BLK. 1, PFSL SUR.	SEC. 30, BLK. P, H&GN SUR.	SEC. 62, BLK. P, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	08/13/45	10/13/45	07/17/45
SAMPLED	04/27/76	04/27/76	04/27/76
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2620	2768	2792
WELLHEAD PRESSURE, PSIG	107	83	102
OPEN FLOW, MCFD	266	250	198
COMPONENT, MOLE PCT			
METHANE	75.4	75.2	73.5
ETHANE	6.4	6.4	6.1
PROPANE	3.7	3.7	3.5
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.8	12.1	14.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	TRACE	TRACE
CARBON DIOXIDE	TRACE	0.41	0.53
HELIUM	0.42	1049	1014
HEATING VALUE*	1047	0.706	0.708
SPECIFIC GRAVITY	0.701		

	INDEX 8572 SAMPLE 14656	INDEX 8573 SAMPLE 14658	INDEX 8574 SAMPLE 14659
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	MITCH NO. S-1	MITCH NO. A-1	MITCH NO. D-1
LOCATION	SEC. 58, BLK. P, H&GN SUR.	SEC. 289, BLK. 2, GH&H SUR.	SEC. 1, BLK. P, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	08/31/53	11/17/44	01/24/45
SAMPLED	04/27/76	04/27/76	04/27/76
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2825	2816	2647
WELLHEAD PRESSURE, PSIG	93	121	98
OPEN FLOW, MCFD	136	362	150
COMPONENT, MOLE PCT			
METHANE	73.3	75.2	75.4
ETHANE	6.2	6.5	6.5
PROPANE	3.6	4.0	3.9
N-BUTANE	1.0	1.2	1.2
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.3	11.4	11.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.53	0.40	0.41
HEATING VALUE*	1016	1070	1073
SPECIFIC GRAVITY	0.708	0.711	0.713

	INDEX 8575 SAMPLE 14660	INDEX 8576 SAMPLE 14661	INDEX 8577 SAMPLE 14662
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	MITCH NO. C-1	SAME NO. 1	MITCH NO. F-1
LOCATION	SEC. 8, BLK. 1, PFSL SUR.	SEC. 11, BLK. 1, PSL SUR.	SEC. 9, BLK. 1, PSL SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/12/45	09/21/45	05/26/45
SAMPLED	04/27/76	04/27/76	04/27/76
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2770	2745	2769
WELLHEAD PRESSURE, PSIG	108	103	120
OPEN FLOW, MCFD	301	481	408
COMPONENT, MOLE PCT			
METHANE	75.5	75.6	75.6
ETHANE	6.3	6.3	6.4
PROPANE	3.7	3.7	3.8
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	12.1	11.9	11.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.41	0.43	0.40
HEATING VALUE*	1047	1047	1052
SPECIFIC GRAVITY	0.704	0.703	0.702

	INDEX 8578 SAMPLE 15220	INDEX 8579 SAMPLE 10833	INDEX 8580 SAMPLE 14400
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUNTER	HUTCHINSON N	LANDIS
WELL NAME	HUNTER NO. 1	COLLARD A NO. 1	LANDIS NO. 1
LOCATION	SEC. 47, BLK. 45, H&TC SUR.	SEC. 1, BLK. 3, S&&M6 SUR.	SEC. 34, BLK. R-B-&B. SUR.
OWNER	ARGONAUT ENERGY CORP.	ANADARKO PRODUCTION CO.	R. L. BURNS CORP.
COMPLETED	01/21/77	03/08/66	--/--/74
SAMPLED	03/07/78	01/09/67	06/--/75
FORMATION	PERM-WICHITA-ALBANY	PERM-WHITE DOLOMITE	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3254	3408	6099
WELLHEAD PRESSURE, PSIG	576	603	1468
OPEN FLOW, MCFD	2350	3630	5600
COMPONENT, MOLE PCT			
METHANE	75.9	75.1	81.7
ETHANE	6.7	6.9	6.3
PROPANE	3.5	4.0	3.8
N-BUTANE	0.9	1.2	1.3
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	11.2	10.7	4.8
OXYGEN	0.0	0.1	0.9
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.82	0.69	0.20
HEATING VALUE*	1047	1074	1164
SPECIFIC GRAVITY	0.697	0.710	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8581 SAMPLE 14148	INDEX 8582 SAMPLE 5072	INDEX 8583 SAMPLE 5565
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	MORSE NE	NOT GIVEN	NOT GIVEN
WELL NAME	E. T. RAFFERTY NO. 1	MANN MOMBLE NO. 1	T. J. BLAKEMORE NO. 1
LOCATION	SEC. 1, BLK. 4, PSL SUR.	SEC. 27, BLK. 3-T, GH&H SUR.	SEC. 30, BLK. 4T, T&NO SUR.
OWNER	CIG EXPLORATION, INC.	J. M. HUBER CORP.	TEXAS CO.
COMPLETED	07/26/74	06/19/51	10/26/53
SAMPLED	09/17/74	06/21/51	11/20/53
FORMATION	PENN-DOUGLAS	PENN-	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4704	5314	7298
WELLHEAD PRESSURE,PSIG	1035	1225	1627
OPEN FLOW, MCFD	5900	2286	6850
COMPONENT, MOLE PCT			
METHANE	77.3	83.8	92.5
ETHANE	5.2	7.8	3.5
PROPANE	3.5	3.5	1.5
N-BUTANE	1.1	1.0	0.4
ISOBUTANE	0.6	0.5	0.2
N-PENTANE	0.5	0.5	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	11.8	2.3	1.1
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.45	0.13	0.14
HEATING VALUE*	1051	1165	1073
SPECIFIC GRAVITY	0.698	0.681	0.609

	INDEX 8584 SAMPLE 6090	INDEX 8585 SAMPLE 6088	INDEX 8586 SAMPLE 6165
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	NOT GIVEN	PRAIRIE	PRAIRIE
WELL NAME	NUSBAUM	COY HOLT NO. 2	T. E. JONES NO. 1
LOCATION	SEC. 39, BLK. 4, T&NO SUR.	SEC. 149, BLK. 45, H&TC SUR.	SEC. 309, BLK. 2, GH&H SUR.
OWNER	HONOLULU OIL CORP.	SUN OIL CO.	SUN OIL CO.
COMPLETED	--/--/00	04/18/56	09/21/56
SAMPLED	06/20/56	06/18/56	10/24/56
FORMATION	NOT GIVEN	PENN-MORROW U	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	7052	7190
WELLHEAD PRESSURE,PSIG	2370	2000	1475
OPEN FLOW, MCFD	16000	NOT GIVEN	2300
COMPONENT, MOLE PCT			
METHANE	92.1	91.8	88.9
ETHANE	3.6	4.0	4.4
PROPANE	1.6	1.1	1.8
N-BUTANE	0.6	0.1	0.5
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.4	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.6	1.7	3.1
OXYGEN	TRACE	TRACE	0.1
ARGON	0.2	0.0	0.0
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.08	0.15	0.17
HEATING VALUE*	1095	1065	1081
SPECIFIC GRAVITY	0.620	0.608	0.634

	INDEX 8587 SAMPLE 9633	INDEX 8588 SAMPLE 8947	INDEX 8589 SAMPLE 5790
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	SHAPLEY	SHAPLEY S	SPEARMAN
WELL NAME	HARRIET BRANDVIK NO. 1-XC	HARRIS UNIT B	DIL DEV. CO. OF TEX. NO. 1
LOCATION	SEC. 24, BLK. P, H&GN RR SUR	SEC. 9, BLK. P, H&GN SUR.	SEC. 2, BLK. 4-T, T&NO SUR.
OWNER	GULF OIL CORP.	PAN AMERICAN PETROLEUM CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	07/11/64	01/09/63	11/08/54
SAMPLED	11/09/64	04/26/63	03/10/55
FORMATION	PENN-MORROW B	PENN-MORROW	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6968	6802	7650
WELLHEAD PRESSURE,PSIG	1472	1580	2150
OPEN FLOW, MCFD	1500	2310	1500
COMPONENT, MOLE PCT			
METHANE	80.9	79.1	92.2
ETHANE	7.5	7.8	3.7
PROPANE	4.3	4.9	1.5
N-BUTANE	1.3	1.6	0.4
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.4	0.4	0.1
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	4.0	4.2	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.23	0.20	0.09
HEATING VALUE*	1167	1197	1090
SPECIFIC GRAVITY	0.699	0.720	0.616

	INDEX 8590 SAMPLE 6142	INDEX 8591 SAMPLE 7294	INDEX 8592 SAMPLE 7312
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	SPEARMAN E	SPEARMAN E	SPEARMAN E
WELL NAME	S. B. LASATER C-1-17	C. C. O'LOUGHLIN SR. TRUST 1	SISTERS OF ST. JOSEPH NO. 1
LOCATION	SEC. 17, BLK. 2, WCRR SUR.	SEC. 20, BLK. 2, WC-RR SUR.	SEC. 13, BLK. 2, WCRR SUR.
OWNER	UNION OIL CO. OF CALIF.	TEXACO INC.	TEXACO INC.
COMPLETED	08/18/56	11/29/56	12/10/56
SAMPLED	09/15/56	11/30/59	12/18/59
FORMATION	PENN-MORROW U	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7294	7081	7080
WELLHEAD PRESSURE,PSIG	1630	402	327
OPEN FLOW, MCFD	31700	675	910
COMPONENT, MOLE PCT			
METHANE	90.8	79.3	74.3
ETHANE	3.5	11.2	14.5
PROPANE	1.6	5.3	6.5
N-BUTANE	0.5	1.5	1.7
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.3	0.4	0.4
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.2	0.3
NITROGEN	1.7	0.2	0.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.2	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.9	0.4
HELIUM	0.16	0.10	0.05
HEATING VALUE*	1101	1245	1305
SPECIFIC GRAVITY	0.634	0.714	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8593 SAMPLE 14954	INDEX 8594 SAMPLE 5886	INDEX 8595 SAMPLE 6061
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	SPEARMAN E	TWIN	TWIN
WELL NAME	LASSTER NO. 1	STEELE NO. 57-1	STEELE NO. 1
LOCATION	SEC. 15, BLK. 2, WCRR SUR.	SEC. 57, BLK. 45P, H&TC SUR.	SEC. 56, BLK. 45, H&TC SUR.
OWNER	PARAMOUNT PRODUCING, INC.	PRODUCERS CHEMICAL SERVICE	FULTON DEVELOPMENT CO.
COMPLETED	--/--/00	02/13/55	03/03/55
SAMPLED	03/31/77	07/25/55	03/24/55
FORMATION	PENN-MORROW U	PENN-TONKAWA	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7334	5157	5081
WELLHEAD PRESSURE,PSIG	293	1490	1400
OPEN FLOW, MCFD	3900	3583	37500
COMPONENT, MOLE PCT			
METHANE	91.3	85.9	86.8
ETHANE	3.8	5.9	6.3
PROPANE	1.6	3.1	2.9
N-BUTANE	0.5	1.2	1.1
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.5	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.5	2.4	1.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.2
HELIUM	0.15	0.35	0.13
HEATING VALUE*	1081	1144	1159
SPECIFIC GRAVITY	0.621	0.664	0.663

	INDEX 8596 SAMPLE 6502	INDEX 8597 SAMPLE 9899	INDEX 8598 SAMPLE 5592
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	TWIN	UNNAMED	WILDCAT
WELL NAME	DIL DEVELOPMENT NO. 1-44	M. T. COLLARD G. U. NO. 1-UC	E. GRUVER GAS UNIT NO. 1
LOCATION	SEC. 44, BLK. 45, H&TC SUR.	SEC. 189, BLK. 45, H&TC SUR.	SEC. 111, BLK. 45, H&TC SUR.
OWNER	J. M. HUBER CORP. & C. AIKMA	TEXACO INC.	HUMBLE OIL & REFINING CO.
COMPLETED	01/02/58	11/28/64	12/08/53
SAMPLED	02/06/58	05/12/65	12/11/53
FORMATION	PENN-MARMATON	PERM-WICHITA-ALBANY	PENN-STRAWN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5884	3434	6216
WELLHEAD PRESSURE,PSIG	1507	603	2018
OPEN FLOW, MCFD	1350	3400	5700
COMPONENT, MOLE PCT			
METHANE	87.2	74.1	80.8
ETHANE	6.4	6.6	8.7
PROPANE	2.8	4.0	4.3
N-BUTANE	0.9	1.2	1.3
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.4	11.9	3.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.10	0.74	0.20
HEATING VALUE*	1139	1065	1175
SPECIFIC GRAVITY	0.652	0.716	0.694

	INDEX 8599 SAMPLE 5687	INDEX 8600 SAMPLE 5876	INDEX 8601 SAMPLE 15833
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	WILDCAT	WILDCAT	WILLIAMS
WELL NAME	LOLA K. JACKSON NO. 4	BOYD NO. 1	MINDA "A" NO. 2
LOCATION	SEC. 19, BLK. 2, SA&MG SUR.	SEC. 5, BLK. 2, SA&MG SUR.	SEC. 33, BLK. P, H&GN SUR.
OWNER	UNITED PRODUCING CO., INC.	SHARPLES OIL CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	07/19/54	03/05/55	09/08/79
SAMPLED	09/10/54	07/14/55	11/09/79
FORMATION	PENN-DOUGLAS	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6586	5324	6768
WELLHEAD PRESSURE,PSIG	1450	1402	765
OPEN FLOW, MCFD	14100	109000	4200
COMPONENT, MOLE PCT			
METHANE	84.5	89.8	87.8
ETHANE	7.0	5.6	3.7
PROPANE	3.5	2.1	2.3
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	2.8	2.3	4.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.13	0.14	0.21
HEATING VALUE*	1137	1102	1073
SPECIFIC GRAVITY	0.666	0.636	0.640

	INDEX 8602 SAMPLE 9084	INDEX 8603 SAMPLE 14375	INDEX 8604 SAMPLE 11177
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARDEMAN	HARDIN	HARDIN
FIELD	CONLEY	BATSON	BEECH CREEK
WELL NAME	CONLEY A NO. 6	C. G. HOOKS NO. 5	H & TC FEE SEC. 189 NO. 9
LOCATION	SEC. 82, BLK. H, W&NW RR SUR	JOSE C. LOPEZ SUR. A-360	H&TC FEE SEC. 189 NO. 9
OWNER	PHILLIPS PETROLEUM CO.	AMOCO PRODUCTION CO.	SINCLAIR OIL & GAS CO.
COMPLETED	06/24/63	04/24/73	05/27/66
SAMPLED	09/15/63	05/19/75	10/17/67
FORMATION	MISS-CHESTER	EOCE-YEGUA	EOCE-YEGUA 7-A
GEOLOGIC PROVINCE CODE	435	220	220
DEPTH, FEET	7600	9192	6615
WELLHEAD PRESSURE,PSIG	2225	1290	2343
OPEN FLOW, MCFD	3175	400	28500
COMPONENT, MOLE PCT			
METHANE	75.9	68.2	85.9
ETHANE	12.0	4.5	5.8
PROPANE	5.5	2.8	2.9
N-BUTANE	1.5	0.6	0.7
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.5	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	2.8	22.3	2.9
OXYGEN	TRACE	0.0	0.5
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.3
HELIUM	0.10	0.06	0.01
HEATING VALUE*	1245	898	1111
SPECIFIC GRAVITY	0.740	0.725	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H_2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8605 SAMPLE 11178	INDEX 8606 SAMPLE 14553	INDEX 8607 SAMPLE 16086
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARDIN	HARDIN	HARDIN
FIELD	BEECH CREEK	BEECH CREEK	BRADLEY S
WELL NAME	M & TC FEE SEC. 189 NO. 9	ARCO-FEE SEC. 189 NO. 1	ARCO BRADLEY FEE NO. 1
LOCATION	M&TC FEE SEC. 189 NO. 9	M&TC RR CO. SUR. A-300	1.05 MI. NE OF SETH
OWNER	SINCLAIR OIL & GAS CO.	ROBERT MOSBACHER	JAKE L. HAMON
COMPLETED	05/27/66	11/19/73	11/12/79
SAMPLED	10/17/67	12/18/75	09/29/80
FORMATION	EOCE-YEGUA 2	EOCE-WILCOX	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6285	9388	7773
WELLHEAD PRESSURE,PSIG	2338	2749	2700
OPEN FLOW, MCFD	11300	4650	2754
COMPONENT, MOLE PCT			
METHANE	89.1	81.0	84.5
ETHANE	5.1	7.7	4.3
PROPANE	2.2	6.0	2.3
N-BUTANE	0.7	1.2	0.6
ISOBUTANE	0.6	1.3	0.7
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.4
NITROGEN	1.2	0.7	6.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.4	0.3
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1131	1229	1082
SPECIFIC GRAVITY	0.646	0.721	0.668

	INDEX 8608 SAMPLE 13096	INDEX 8609 SAMPLE 12379	INDEX 8610 SAMPLE 16424
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARDIN	HARDIN	HARDIN
FIELD	DORSEY	ELLIOTT	LONG STATION
WELL NAME	STERNENBERG NO. 4	F. P. ELLIOTT FEE NO. 5-L	KIRBY-SANTA FE NO. 2-T
LOCATION	GREENBERG DORSEY SUR.	F. P. ELLIOTT LEAGUE A-18	KOUNCE
OWNER	WHITE SHIELD OIL & GAS CORP.	ATLANTIC RICHFIELD CO.	DAMSON OIL CORP.
COMPLETED	06/20/70	06/11/69	09/18/81
SAMPLED	10/23/71	08/19/70	02/05/82
FORMATION	EOCE-YEGUA	EOCE-YEGUA W	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7361	7318	10155
WELLHEAD PRESSURE,PSIG	2512	1606	4200
OPEN FLOW, MCFD	5300	3165	1760
COMPONENT, MOLE PCT			
METHANE	88.9	88.0	84.5
ETHANE	5.6	5.7	8.0
PROPANE	2.5	2.6	3.4
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.1	1.1	0.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	1.4
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1129	1169	1167
SPECIFIC GRAVITY	0.643	0.656	0.681

	INDEX 8611 SAMPLE 11176	INDEX 8612 SAMPLE 12380	INDEX 8613 SAMPLE 4928
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARDIN	HARDIN	HARDIN
FIELD	MCGILL	MCGILL	D. C. NELSON
WELL NAME	A. HAMPTON FEE B NO. 1	M. MCGILL FEE NO. 1-U	D. C. NELSON NO. 1
LOCATION	A. HAMPTON SUR. A-3	M. MCGILL SUR. A-38	D. C. NELSON LEAGUE NO. A-40
OWNER	SINCLAIR OIL & GAS CO.	ATLANTIC RICHFIELD CO.	AMERICAN REPUBLICS CORP.
COMPLETED	08/14/66	05/30/69	06/01/50
SAMPLED	10/17/67	08/19/70	09/08/50
FORMATION	OLIG-FRIO F-1	EOCE-YEGUA C-3	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7770	7250	7626
WELLHEAD PRESSURE,PSIG	2340	2488	3576
OPEN FLOW, MCFD	16400	12000	12000
COMPONENT, MOLE PCT			
METHANE	88.5	89.3	88.4
ETHANE	5.6	4.9	5.7
PROPANE	2.2	2.2	2.7
N-BUTANE	0.7	0.6	0.7
ISOBUTANE	0.5	0.6	0.7
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	1.1	1.2	0.6
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.3	0.4
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1135	1122	1146
SPECIFIC GRAVITY	0.649	0.641	0.653

	INDEX 8614 SAMPLE 12005	INDEX 8615 SAMPLE 13389	INDEX 8616 SAMPLE 14520
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARDIN	HARDIN	HARDIN
FIELD	PAVEY-KIRBY	SILSBEE N	SOUR LAKE
WELL NAME	KIRBY LBR. CO. TR. 104A NO.1	KIRBY LUMBER CO. NO. 1	DISHMAN-LUCAS NO. 1
LOCATION	F. HELFENSTEIN SUR. A-263	J. A. VICKERS SUR. A-52	ISAAC BRIDGE SUR. A-132
OWNER	SHELL OIL CO.	COLINE OIL CO.	SUN OIL CO.
COMPLETED	09/24/55	06/19/71	07/27/74
SAMPLED	08/20/69	09/19/72	10/31/75
FORMATION	EOCE-WILCOX	EOCE-YEGUA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8446	6969	9777
WELLHEAD PRESSURE,PSIG	4383	2357	1900
OPEN FLOW, MCFD	3250	340000	174
COMPONENT, MOLE PCT			
METHANE	84.8	88.0	87.0
ETHANE	7.2	5.6	6.2
PROPANE	3.1	3.0	3.5
N-BUTANE	0.7	0.7	0.7
ISOBUTANE	0.6	0.9	0.7
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.9	0.8	0.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.4	0.9
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1149	1146	1157
SPECIFIC GRAVITY	0.677	0.653	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8617 SAMPLE 5127	INDEX 8618 SAMPLE 13843	INDEX 8619 SAMPLE 4608
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARDIN	HARDIN	HARDIN
FIELD	VICKERS	VILLAGE MILLS N	VILLAGE MILLS W
WELL NAME	J. A. VICKERS NO. 1	KIRBY LUMBER CO. NO. 2	CHERRY FEE NO. 1
LOCATION	NOT GIVEN	THOMAS J. HATTON SUR. A-279	WILBUR CHERRY SUR.
OWNER	AMERICAN REPUBLICS CORP.	HOUSTON OIL & MINERALS CORP.	HOUSTON OIL CO. OF TEXAS
COMPLETED	05/26/51	03/03/72	07/28/48
SAMPLED	11/26/51	12/--/73	10/31/48
FORMATION	EOCE-YEGUA L	OLIG-FRIO 6500	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7203	6520	7026
WELLHEAD PRESSURE,PSIG	2540	2338	3105
OPEN FLOW, MCFD	1500	11007	440000
COMPONENT, MOLE PCT			
METHANE	86.9	72.9	31.9
ETHANE	5.6	6.2	61.5
PROPANE	3.1	5.3	---
N-BUTANE	0.7	1.6	---
ISOBUTANE	0.9	1.9	---
N-PENTANE	0.3	0.4	---
ISOPENTANE	TRACE	0.7	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	1.6	8.5	5.5
OXYGEN	0.1	1.6	0.5
ARGON	TRACE	0.1	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.5	0.6
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1148	1171	1425
SPECIFIC GRAVITY	0.665	0.772	0.890

	INDEX 8620 SAMPLE 15130	INDEX 8621 SAMPLE 14497	INDEX 8622 SAMPLE 4615
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	AMAREX	BARMEL S	CLINTON
WELL NAME	BROWN ESTATE NO. 3	JOHN EHRHARDT NO. 2	A. S. MOODY NO. 2
LOCATION	W.M. LLOYD SUR. A-1342	SEC. 6, BLK. 4, WC&RRCO. SUR	REELS & TROBOUGH SUR.
OWNER	AMAREX, INC.	PETROLEUM CORP. OF TEXAS	STANDLIND OIL & GAS CO.
COMPLETED	01/17/76	02/12/73	08/01/48
SAMPLED	10/26/77	10/21/75	11/08/48
FORMATION	EOCE-YEGUA	EOCE-YEGUA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6994	6727	8000
WELLHEAD PRESSURE,PSIG	1050	1400	4814
OPEN FLOW, MCFD	1000	10000	11500
COMPONENT, MOLE PCT			
METHANE	91.5	90.1	88.2
ETHANE	4.5	5.1	10.9
PROPANE	1.7	1.9	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.2	1.1	0.0
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.4	0.7
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1100	1098	1089
SPECIFIC GRAVITY	0.623	0.627	0.616

	INDEX 8623 SAMPLE 12173	INDEX 8624 SAMPLE 13453	INDEX 8625 SAMPLE 13454
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	CLINTON N	DECKERS PRAIRIE S	DECKERS PRAIRIE S
WELL NAME	GOODRICH NO. 1	OTTO SEIDEL NO. 4	OTTO SEIDEL NO. 4
LOCATION	REELS & TROBOUGH SUR. A-59	JOHN M. EDWARDS SUR. A-20	JOHN M. EDWARDS SUR. A-20
OWNER	SCURLOCK OIL CO.	SALMON CORP.	SALMON CORP.
COMPLETED	02/20/68	01/21/72	01/21/71
SAMPLED	12/08/69	10/19/72	10/19/72
FORMATION	EOCE-YEGUA	MIOC-	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8461	1442	1716
WELLHEAD PRESSURE,PSIG	3651	512	696
OPEN FLOW, MCFD	5800	3800	170000
COMPONENT, MOLE PCT			
METHANE	91.3	98.5	98.8
ETHANE	3.9	0.1	0.0
PROPANE	1.8	0.0	TRACE
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.2
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	0.8	1.3	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1104	1002	1001
SPECIFIC GRAVITY	0.628	0.561	0.559

	INDEX 8626 SAMPLE 4527	INDEX 8627 SAMPLE 4643	INDEX 8628 SAMPLE 4887
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	DURKEE	DURKEE	DURKEE
WELL NAME	H. J. MOORE NO. 1	HOFER ET AL. NO. 1	BASH NO. 1
LOCATION	SEC.17,BLK.4,J.E.DURKEE SUR.	BLK. 6, GEO. GREEN SUR.	GEOC E. GREEN SUR. NO. 281
OWNER	UNION PRODUCING CO.	HOUSTON OIL CO. OF TEXAS	UNION PRODUCING CO.
COMPLETED	09/03/47	10/10/48	12/22/49
SAMPLED	04/23/48	01/06/49	05/18/50
FORMATION	EOCE-	EOCE-YEGUA	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7680	7190	7708
WELLHEAD PRESSURE,PSIG	2729	3278	2744
OPEN FLOW, MCFD	40000	12000	16300
COMPONENT, MOLE PCT			
METHANE	82.4	86.3	90.5
ETHANE	16.5	12.9	4.9
PROPANE	---	---	2.1
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	0.1	0.2	0.0
OXYGEN	0.3	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.4	0.7
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1130	1105	1129
SPECIFIC GRAVITY	0.645	0.624	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8629 SAMPLE 11148	INDEX 8630 SAMPLE 16466	INDEX 8631 SAMPLE 4998
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	DURKEE N	FAIRBANKS	FINFROCK
WELL NAME	WENDEL NO. 1	R.L. BUSHNELL NO. 1	E. HOPE NORRIS
LOCATION	W. W. ANDERSON SUR. A-1630	GEORGE WILLIAMS SUR., A-858	T&NRR CO. SUR. NO. 4
OWNER	UNION PRODUCING CO.	KILROY CO. OF TEXAS, INC.	TEXAS CO.
COMPLETED	01/03/66	12/13/80	10/11/50
SAMPLED	10/06/67	03/26/82	01/23/51
FORMATION	EOCE-GOODYKOONTZ	EOCE-YEGUA & GOODYKOONTZ	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7355	7256	7576
WELLHEAD PRESSURE,PSIG	1950	2245	3325
OPEN FLOW, MCFD	9630	20500	7000
COMPONENT, MOLE PCT			
METHANE	90.5	89.9	91.8
ETHANE	5.2	5.4	4.0
PROPANE	1.8	2.1	1.8
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.4	0.6	0.2
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.3	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1113	1123	1099
SPECIFIC GRAVITY	0.630	0.636	0.625

	INDEX 8632 SAMPLE 13798	INDEX 8633 SAMPLE 11256	INDEX 8634 SAMPLE 11977
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	GREENS BAYOU	HIGHLANDS	HUFFSMITH
WELL NAME	MCHSC NAV. DSTR. NO. 1	MAGEE ET AL. NO. 1	W. T. JONES NO. 2
LOCATION	RICHARD&ROBERT VINCE SUR A76	JOS. T. HARRELL SUR. A-330	J. DONNELLY SUR. A-223
OWNER	INEXCO OIL CO.	GULF OIL CORP.	TENNECO OIL CO.
COMPLETED	02/20/72	12/22/66	12/11/67
SAMPLED	11/05/73	01/15/68	07/21/69
FORMATION	OLIG-FRIO & VICKSBURG	OLIG-VICKSBURG	EOCE-SID MOORE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7024	8046	5803
WELLHEAD PRESSURE,PSIG	2687	2904	1842
OPEN FLOW, MCFD	15000	20000	35000
COMPONENT, MOLE PCT			
METHANE	79.3	92.0	91.7
ETHANE	9.7	3.5	3.6
PROPANE	5.7	1.7	1.5
N-BUTANE	1.5	0.6	0.4
ISOBUTANE	1.6	0.5	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.8	0.3	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.3	0.8	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	TRACE	0.01	0.06
HEATING VALUE*	1304	1107	1088
SPECIFIC GRAVITY	0.746	0.627	0.620

	INDEX 8635 SAMPLE 2072	INDEX 8636 SAMPLE 11172	INDEX 8637 SAMPLE 12123
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	HUMBLE	MILTON N	MILTON N
WELL NAME	B. F. WILLIAMS NO. 3	BUSCH GAS UNIT NO. 1	LONGMEADOW COUNTRY CLUB NO.1
LOCATION	SEC. 20 MI NW HOUSTON	SEC. 5, WCRR CO. SUR. A-926	J. M. DEMENT SUR. A-228
OWNER	HUMBLE OIL & REFINING CO.	TEXACO INC.	ROBERT ROSBACHER
COMPLETED	08/28/29	06/01/66	04/21/69
SAMPLED	06/13/30	10/13/67	11/22/69
FORMATION	EOCE-YEGUA	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4162	13000	10630
WELLHEAD PRESSURE,PSIG	165	8780	950
OPEN FLOW, MCFD	NOT GIVEN	31500	2900
COMPONENT, MOLE PCT			
METHANE	76.6	86.8	89.9
ETHANE	22.0	5.9	4.2
PROPANE	---	1.8	1.8
N-BUTANE	---	0.4	0.5
ISOBUTANE	---	0.3	0.2
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.4	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.7	0.6	0.6
OXYGEN	0.4	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	3.5	2.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1170	1081	1083
SPECIFIC GRAVITY	0.671	0.660	0.638

	INDEX 8638 SAMPLE 13448	INDEX 8639 SAMPLE 5128	INDEX 8640 SAMPLE 5129
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	DICOTT	PARADISE	PARADISE
WELL NAME	FRIENDSWOOD GAS UNIT NO. 1	HURT NO. 1-C	HURT-NO. 1-C
LOCATION	WILLIAM K. SMITH SUR. A-735	NOT GIVEN	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	UNION PRODUCING CO.	UNION PRODUCING CO.
COMPLETED	03/02/71	07/10/51	07/10/51
SAMPLED	10/12/72	11/04/51	11/04/51
FORMATION	TERT-MIOCENE	EOCE-	EOCE-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2440	7237	7237
WELLHEAD PRESSURE,PSIG	930	1650	1650
OPEN FLOW, MCFD	4700	3000	3000
COMPONENT, MOLE PCT			
METHANE	99.0	92.5	89.9
ETHANE	0.1	3.7	5.6
PROPANE	TRACE	1.6	2.2
N-BUTANE	0.0	0.4	0.4
ISOBUTANE	0.0	0.4	0.4
N-PENTANE	0.0	0.3	0.3
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	0.8	0.6	0.4
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.3	0.5
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1005	1104	1128
SPECIFIC GRAVITY	0.559	0.628	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8641 SAMPLE 14251	INDEX 8642 SAMPLE 12392	INDEX 8643 SAMPLE 9591
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARRIS	HARRIS
FIELD	RENEE	TOMBALL	TOMBALL W
WELL NAME	KELLY BROCK B NO. 1	TOMBALL G.U. NO. 1	LILLIE TRESELER NO. 4
LOCATION	RICHARD & VINCE SUR. A-76	JOHN M. EDWARDS SUR.A-20	M. TEJERINA SUR.
OWNER	INEXCO OIL CO.	HUMBLE OIL & REFINING CO.	TEXAS PACIFIC OIL CO.
COMPLETED	07/30/74	06/19/69	05/19/61
SAMPLED	01/06/75	08/26/70	10/--/64
FORMATION	OLIG-VICKSBURG	EOCE-COCKFIELD	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8602	2392	5525
WELLHEAD PRESSURE,PSIG	2150	950	1592
OPEN FLOW, MCFD	8740	14500	45490
COMPONENT, MOLE PCT			
METHANE	94.2	99.0	92.5
ETHANE	3.1	0.0	4.3
PROPANE	1.1	TRACE	1.5
N-BUTANE	0.2	0.0	0.4
ISOBUTANE	0.3	0.0	0.3
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.5	0.6	0.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1073	1003	1099
SPECIFIC GRAVITY	0.599	0.559	0.615

	INDEX 8644 SAMPLE 4880	INDEX 8645 SAMPLE 12436	INDEX 8646 SAMPLE 15346
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	LANSING N	LANSING N	SCOTTSVILLE
WELL NAME	M. P. ISON NO. 1	ISAM GAS UNIT NO. 1	YOUNG B G.U. NO. 1
LOCATION	A. MERCHANT SUR. NO. A-430	E. A. MERCHANT SUR.	P. DAUGHERTY SUR. A-5
OWNER	ATLANTIC REFINING CO.	ATLANTIC RICHFIELD CO.	TEXAS OIL & GAS CORP.
COMPLETED	08/05/49	08/05/49	11/10/76
SAMPLED	02/23/50	10/13/70	08/15/78
FORMATION	CRET-RODESSA	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6734	6754	6274
WELLHEAD PRESSURE,PSIG	3196	300	950
OPEN FLOW, MCFD	16000	1100	2800
COMPONENT, MOLE PCT			
METHANE	92.5	91.1	91.3
ETHANE	4.1	4.2	4.8
PROPANE	1.1	1.1	1.0
N-BUTANE	0.2	0.3	0.3
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	0.5	0.7	0.7
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	1.1	1.0
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1076	1092	1077
SPECIFIC GRAVITY	0.613	0.629	0.618

	INDEX 8647 SAMPLE 4136	INDEX 8648 SAMPLE 4138	INDEX 8649 SAMPLE 4933
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	WASKOM	WASKOM	WASKOM
WELL NAME	J. M. BRYSON ET AL. NO. 1	J. M. BRYSON ET AL. NO. 1	M. DOWNS
LOCATION	3 MI. S OF WASKOM	2 MI. S OF WASKOM	EDWIN CARTER SUR.
OWNER	MID-STATES OIL CORP.	MID-STATES OIL CORP.	LA GLORIA CORP.
COMPLETED	03/13/46	03/13/46	01/11/50
SAMPLED	09/28/46	09/28/46	08/21/50
FORMATION	CRET-TRAVIS PEAK	CRET-PETTIT	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5826	5576	6223
WELLHEAD PRESSURE,PSIG	1875	1325	2880
OPEN FLOW, MCFD	52000	3700	6750
COMPONENT, MOLE PCT			
METHANE	87.9	90.4	90.2
ETHANE	9.0	8.9	5.0
PROPANE	---	---	1.3
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	1.7	0.0	1.7
OXYGEN	0.6	0.0	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.7	0.1
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1052	1075	1109
SPECIFIC GRAVITY	0.617	0.605	0.630

	INDEX 8650 SAMPLE 5442	INDEX 8651 SAMPLE 12460	INDEX 8652 SAMPLE 12486
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	WASKOM	WASKOM	WASKOM
WELL NAME	ARKANSAS-LOUISIANA GAS CO.	BRYSON UNIT A-1 NO. B-1	DAVIS B-1
LOCATION	D. C. MOORE SUR. A-455	NOT GIVEN	R. M. ADAMS SUR.
OWNER	ARKANSAS-LOUISIANA CO.	PENNZOIL PRODUCING CO.	ARKANSAS LOUISIANA GAS CO.
COMPLETED	09/27/51	01/11/56	12/24/40
SAMPLED	05/06/53	10/19/70	10/16/70
FORMATION	CRET-PETTIT U	CRET-MILL	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6050	4800	5870
WELLHEAD PRESSURE,PSIG	2292	322	866
OPEN FLOW, MCFD	12500	1399	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.2	87.9	90.3
ETHANE	5.2	3.7	4.6
PROPANE	1.6	1.5	1.4
N-BUTANE	0.5	0.4	0.6
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.7	0.4	0.3
NITROGEN	1.0	4.6	1.5
OXYGEN	0.1	0.5	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.7
HELIUM	0.02	0.04	0.07
HEATING VALUE*	1129	1051	1088
SPECIFIC GRAVITY	0.650	0.638	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8653 SAMPLE 11588	INDEX 8654 SAMPLE 10017	INDEX 8655 SAMPLE 10018
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	WHELAN	WOODLAWN	WOODLAWN
WELL NAME	H. A. DUNN NO. 1	LUCILLE W. MCELROY NO. 1	LUCILLE W. MCELROY NO. 1
LOCATION	B. HUMPHRIES SUR. A-306	JOEL B. CRAIN SUR. A-144	JOEL B. CRANE SUR. A-144
OWNER	SAN JUAN EXPLORATION CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	11/18/67	06/09/64	06/09/64
SAMPLED	07/23/68	07/28/65	07/28/65
FORMATION	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8046	6514	6762
WELLHEAD PRESSURE,PSIG	2922	2335	2653
OPEN FLOW, MCFD	7250	11800	6200
COMPONENT, MOLE PCT			
METHANE	89.4	91.4	91.8
ETHANE	4.1	3.5	3.4
PROPANE	0.9	0.8	0.6
N-BUTANE	0.2	0.4	0.3
ISOBUTANE	0.2	0.2	0.1
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.5	0.3
NITROGEN	2.6	1.9	2.1
OXYGEN	0.3	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.8	0.8
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1053	1072	1049
SPECIFIC GRAVITY	0.636	0.624	0.613

	INDEX 8656 SAMPLE 12498	INDEX 8657 SAMPLE 12502	INDEX 8658 SAMPLE 14918
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	WOODLAWN	WOODLAWN	WOODLAWN
WELL NAME	SANDERS G.U. NO. 2	SANDERS NO. 1	WINSTON BROWN NO. 1
LOCATION	G. H. SANDERS LEASE	S. F. SPARKS SUR.	F. W. PUGH SUR. A-559
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	DYCO PETROLEUM CORP.
COMPLETED	05/--/64	12/--/58	09/21/75
SAMPLED	10/26/70	10/26/70	02/25/77
FORMATION	CRET-RODESSA	CRET-PETTIT	CRET-RODHILL
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5614	6378	5798
WELLHEAD PRESSURE,PSIG	2350	2480	2105
OPEN FLOW, MCFD	273524	195000	3300
COMPONENT, MOLE PCT			
METHANE	91.7	79.0	92.2
ETHANE	4.8	5.5	4.2
PROPANE	1.3	3.5	1.0
N-BUTANE	0.3	2.0	0.3
ISOBUTANE	0.4	1.7	0.2
N-PENTANE	0.1	1.6	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.1	0.5	TRACE
HEXANES PLUS	0.4	2.2	0.2
NITROGEN	1.1	2.8	0.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.5	0.9	0.6
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1084	1315	1075
SPECIFIC GRAVITY	0.619	0.786	0.612

	INDEX 8659 SAMPLE 5766	INDEX 8660 SAMPLE 540	INDEX 8661 SAMPLE 1703
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-125	LYMAN & BALFOUR NO. 1	BIVINS A-7
LOCATION	SEC. 20, BLK. 21, CSS SUR.	SEC. 10, BLK. 2, G&M SUR.	SEC. 7, BLK.25, EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	PRAIRIE OIL & GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	12/29/54	10/--/28	--/--/00
SAMPLED	01/26/55	11/30/28	10/26/28
FORMATION	PERM-BIG LIME	PERM-WICHITA-ALBANY	-LIME
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3385	3302	2919
WELLHEAD PRESSURE,PSIG	266	440	NOT GIVEN
OPEN FLOW, MCFD	10300	18500	25800
COMPONENT, MOLE PCT			
METHANE	74.2	66.3	64.8
ETHANE	5.5	14.8	17.8
PROPANE	2.7	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.9	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	14.3	16.2	15.6
OXYGEN	TRACE	1.0	0.3
ARGON	0.1	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.8	0.8	0.7
HELIUM	0.80	0.70	0.94
HEATING VALUE*	979	937	975
SPECIFIC GRAVITY	0.698	0.704	0.712

	INDEX 8662 SAMPLE 1704	INDEX 8663 SAMPLE 1726	INDEX 8664 SAMPLE 1942
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-8	BIVINS A-9	BIVINS A-10
LOCATION	SEC. 9, BLK.25, EL&RR SUR.	SEC. 6, BLK. 21	SEC. 18, BLK. 2, G&M SUR
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	10/22/28	05/17/29
SAMPLED	10/26/28	03/29/29	03/06/30
FORMATION	-LIME	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2896	3602	3334
WELLHEAD PRESSURE,PSIG	150	422	426
OPEN FLOW, MCFD	47000	10500	2312
COMPONENT, MOLE PCT			
METHANE	66.2	59.8	63.2
ETHANE	17.9	19.5	15.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.8	18.3	19.1
OXYGEN	0.8	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	1.1	0.7
HELIUM	0.81	1.01	1.29
HEATING VALUE*	991	955	920
SPECIFIC GRAVITY	0.703	0.735	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8665 SAMPLE 2866	INDEX 8666 SAMPLE 2867	INDEX 8667 SAMPLE 2878
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	LEE BIVINS ND. A-9	BIVINS NO. A-10	BIVINS NO. A-22
LOCATION	SEC. 9, BLK. 21, CSS SUR.	SEC. 18, BLK. 2, G&M SUR.	SEC. 13, BLK. 2, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	10/01/28	05/17/29	12/12/37
SAMPLED	08/21/41	08/21/41	08/21/41
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3160	3285	3128
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	10500	2300	3550
COMPONENT, MOLE PCT			
METHANE	65.6	65.3	63.0
ETHANE	15.7	12.6	19.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.8	19.5	15.5
OXYGEN	0.9	0.6	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.7	0.5
HELIUM	1.06	1.28	0.85
HEATING VALUE*	946	887	991
SPECIFIC GRAVITY	0.706	0.702	0.719

	INDEX 8668 SAMPLE 2886	INDEX 8669 SAMPLE 4640	INDEX 8670 SAMPLE 5078
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	W. K. GORDON NO. 1	BIVINS ESTATE NO. A-34	BIVINS A-71
LOCATION	SEC. 2, BLK. 44, H&TC SUR.	SEC. 3, BLK 25, EL&RR SUR.	SEC. 9, BLK. 21
OWNER	PHILLIPS PETROLEUM CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	12/29/39	06/21/48	04/04/51
SAMPLED	08/22/41	12/08/48	07/17/51
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-L
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3260	3160	3200
WELLHEAD PRESSURE,PSIG	400	369	343
OPEN FLOW, MCFD	34300	5500	4300
COMPONENT, MOLE PCT			
METHANE	66.8	64.0	73.0
ETHANE	19.1	20.2	5.5
PROPANE	---	---	2.8
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.2
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.0
NITROGEN	12.7	14.6	15.6
OXYGEN	0.0	0.6	0.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.6	0.5
HELIUM	0.69	0.81	0.88
HEATING VALUE*	1019	1010	964
SPECIFIC GRAVITY	0.705	0.725	0.699

	INDEX 8671 SAMPLE 5093	INDEX 8672 SAMPLE 5102	INDEX 8673 SAMPLE 5409
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-72	BIVINS NO. A-78	BIVINS A-90
LOCATION	SEC. 14, BLK. 21, CSS	SEC. 30, B&NB SUR. NO. 2	SEC. 21, BLK. 21, CSS SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	--/--/00	01/15/53
SAMPLED	10/--/51	11/29/51	03/11/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3605
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	291
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	12900
COMPONENT, MOLE PCT			
METHANE	73.2	71.4	73.7
ETHANE	5.7	4.7	5.5
PROPANE	3.3	2.6	3.1
N-BUTANE	0.8	0.7	0.8
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	14.2	18.3	14.4
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.9	0.3	0.7
HELIUM	0.72	1.07	0.75
HEATING VALUE*	996	931	996
SPECIFIC GRAVITY	0.714	0.703	0.710

	INDEX 8674 SAMPLE 5426	INDEX 8675 SAMPLE 5467	INDEX 8676 SAMPLE 5470
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BAY NO. 2	BIVINS A-93	BIVINS A-97
LOCATION	SEC. 126, BLK. 44, H&TC SUR.	SEC. 15, BLK. 21, CSS SUR.	SEC. 19, BLK. 2, G&M SUR.
OWNER	PHILLIPS PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/11/52	05/07/53	04/25/53
SAMPLED	03/02/53	05/15/53	05/15/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3530	3312	3245
WELLHEAD PRESSURE,PSIG	233	312	325
OPEN FLOW, MCFD	4509	5200	4750
COMPONENT, MOLE PCT			
METHANE	75.3	73.8	70.6
ETHANE	6.2	5.5	4.9
PROPANE	3.8	3.0	2.6
N-BUTANE	1.1	1.1	0.8
ISOBUTANE	0.4	0.0	0.2
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	11.2	14.3	18.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.5
HELIUM	0.48	0.78	1.20
HEATING VALUE*	1054	987	932
SPECIFIC GRAVITY	0.712	0.705	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8677 SAMPLE 5759	INDEX 8678 SAMPLE 5761	INDEX 8679 SAMPLE 5768
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-10	BIVINS A-9	BIVINS A-8
LOCATION	SEC. 18, BLK. 2, G&M SUR.	SEC. 6, BLK. 21,CSS SUR.	SEC. 4, BLK. 2S,EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/17/29	10/01/28	07/31/28
SAMPLED	02/16/55	01/26/55	01/26/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3285	3160	2896
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	269
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	26756
COMPONENT, MOLE PCT			
METHANE	70.3	70.9	74.0
ETHANE	4.4	4.7	5.4
PROPANE	2.3	2.0	2.7
N-BUTANE	0.7	0.6	0.8
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.4	19.4	14.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.8
HELIUM	1.26	1.19	0.81
HEATING VALUE*	910	905	987
SPECIFIC GRAVITY	0.707	0.707	0.705

	INDEX 8680 SAMPLE 6230	INDEX 8681 SAMPLE 6233	INDEX 8682 SAMPLE 6234
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A NO. 131	BIVINS A NO. 144	BIVINS A NO. 145
LOCATION	SEC. 8, BLK. 21, CSS SUR.	SEC. 14, BLK. 2, G&M SUR.	SEC. 2, BLK. 21, CSS SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/23/56	07/09/56	07/13/56
SAMPLED	01/23/57	01/23/57	01/23/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3225	3250	3190
WELLHEAD PRESSURE,PSIG	304	265	261
OPEN FLOW, MCFD	760	3100	5500
COMPONENT, MOLE PCT			
METHANE	62.6	73.9	71.6
ETHANE	3.7	5.7	4.8
PROPANE	1.5	2.8	2.4
N-BUTANE	0.1	0.6	0.6
ISOBUTANE	0.3	0.5	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	29.1	14.2	18.0
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.7
HELIUM	1.87	0.85	1.05
HEATING VALUE*	762	982	922
SPECIFIC GRAVITY	0.716	0.701	0.703

	INDEX 8683 SAMPLE 6235	INDEX 8684 SAMPLE 6236	INDEX 8685 SAMPLE 6237
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A NO. 146	BIVINS A NO. 147	BIVINS A NO. 148
LOCATION	SEC. 16, BLK. 21, CSS SUR.	SEC. 8, BLK. 2S, EL&RR SUR.	SEC. 7, BLK. 21, CSS SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/09/56	07/28/56	08/17/56
SAMPLED	01/23/57	01/23/57	01/23/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3224	3367	3325
WELLHEAD PRESSURE,PSIG	281	270	270
OPEN FLOW, MCFD	6000	570	6700
COMPONENT, MOLE PCT			
METHANE	72.9	73.4	67.4
ETHANE	5.2	5.6	4.4
PROPANE	2.5	3.0	2.1
N-BUTANE	0.6	0.8	0.5
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.5	14.6	22.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.6
HELIUM	0.94	0.85	1.50
HEATING VALUE*	945	984	853
SPECIFIC GRAVITY	0.700	0.705	0.709

	INDEX 8686 SAMPLE 6457	INDEX 8687 SAMPLE 10669	INDEX 8688 SAMPLE 10670
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. 1	BIVINS A-8	BIVINS A-9
LOCATION	SEC. 27, BLK. 21, CSS SUR.	SEC. 4, BLK. 2S, EL&RR SUR.	SEC. 6, BLK. 21, CSS SUR.
OWNER	FRANK STORM	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/--/57	07/31/28	10/01/28
SAMPLED	12/26/57	07/21/66	07/21/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3667	2896	3160
WELLHEAD PRESSURE,PSIG	410	155	154
OPEN FLOW, MCFD	1000	11559	1741
COMPONENT, MOLE PCT			
METHANE	73.4	72.2	68.2
ETHANE	4.7	5.7	4.7
PROPANE	2.0	3.3	2.5
N-BUTANE	0.4	1.0	0.6
ISOBUTANE	0.3	0.8	0.4
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	17.4	14.8	20.9
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.9	0.8
HELIUM	1.20	0.84	1.37
HEATING VALUE*	930	1001	895
SPECIFIC GRAVITY	0.689	0.720	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8689 SAMPLE 10671	INDEX 8690 SAMPLE 10672	INDEX 8691 SAMPLE 11888
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-7	BIVINS A-10	BIVINS A-76
LOCATION	SEC. 7, BLK. 25, EL&RR SUR.	SEC. 18, BLK. 2, G&M SUR.	SEC. 13, BLK. 21, CSS SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/10/28	05/17/29	07/22/51
SAMPLED	07/21/66	07/21/66	05/21/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2919	3285	3250
WELLHEAD PRESSURE,PSIG	212	209	NOT GIVEN
OPEN FLOW, MCFD	19619	809	61148
COMPONENT, MOLE PCT			
METHANE	70.8	69.1	72.1
ETHANE	5.9	4.8	6.0
PROPANE	2.9	2.7	5.6
N-BUTANE	0.9	0.8	1.1
ISOBUTANE	0.4	0.4	0.7
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	17.4	19.6	14.0
OXYGEN	0.2	0.0	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.8
HELIUM	1.06	1.30	0.68
HEATING VALUE*	986	918	1032
SPECIFIC GRAVITY	0.720	0.720	0.729

	INDEX 8692 SAMPLE 11890	INDEX 8693 SAMPLE 11891	INDEX 8694 SAMPLE 11892
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-58	BIVINS A-59	BIVINS A-61
LOCATION	SEC. 12, BLK. 21, G&M SUR.	SEC. 6, BLK. 25, EL&RR SUR.	SEC. 2, BLK. 25, EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/14/69	07/06/50	04/03/50
SAMPLED	05/21/69	05/21/69	05/21/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	2943	3180	3155
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	14200	1470	27000
COMPONENT, MOLE PCT			
METHANE	71.2	66.3	72.6
ETHANE	5.8	5.1	6.2
PROPANE	3.6	3.3	5.5
N-BUTANE	1.1	1.3	1.3
ISOBUTANE	0.7	0.8	0.4
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.5	0.5	0.3
NITROGEN	15.1	14.0	13.3
OXYGEN	0.1	0.3	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	6.5	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.1	0.8
HELIUM	0.81	0.86	0.64
HEATING VALUE*	1006	995	1044
SPECIFIC GRAVITY	0.730	0.694	0.729

	INDEX 8695 SAMPLE 12670	INDEX 8696 SAMPLE 12671	INDEX 8697 SAMPLE 13263
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME		NO. 2	BIVINS A-174
LOCATION	E OF HARTLEY	6 MI. E OF HARTLEY	SEC. 6, BLK. 25, EL&RR SUR.
OWNER	PARADOX PETROLEUM CO.	PARADOX PETROLEUM CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	--/--/00	05/13/72
SAMPLED	02/13/71	02/13/71	05/13/72
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3000	3000	3155
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	735
COMPONENT, MOLE PCT			
METHANE	73.4	74.1	72.5
ETHANE	6.8	6.0	5.7
PROPANE	4.1	3.4	3.3
N-BUTANE	1.0	0.7	1.0
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.7	0.1	0.2
CYCLOPENTANE	0.2	0.0	0.1
HEXANES PLUS	0.3	0.0	0.2
NITROGEN	11.2	14.9	15.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.0	TRACE
HELIUM	0.48	0.02	0.99
HEATING VALUE*	1083	991	1005
SPECIFIC GRAVITY	0.733	0.701	0.712

	INDEX 8698 SAMPLE 13628	INDEX 8699 SAMPLE 6205	INDEX 8700 SAMPLE 16144
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HEMPHILL
FIELD	PANHANDLE W	WILDCAT	ALLISON-PARKS
WELL NAME	BIVINS A-175	J. H. JOHNSON NO. 1	L. L. JONES 14 LEASE NO. 1
LOCATION	SEC. 8, BLK. 25, EL&RR SUR.	SEC. 375, BLK. 44, H&TC SUR.	SEC. 14, BLK.Z1, ACH&B&HLW
OWNER	COLORADO INTERSTATE GAS CO.	STANDARD OIL CO. OF TEXAS	KERR-MCGEE CORP.
COMPLETED	--/--/00	12/31/56	03/31/80
SAMPLED	06/15/73	12/08/56	12/10/80
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PENN-MORROW
GEOLOGIC PROVINCE CODE	435	435	360
DEPTH, FEET	NOT GIVEN	3578	14918
WELLHEAD PRESSURE,PSIG	142	400	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	15	9500
COMPONENT, MOLE PCT			
METHANE	70.8	66.6	96.9
ETHANE	5.0	4.3	0.6
PROPANE	3.1	1.4	0.1
N-BUTANE	0.9	0.5	TRACE
ISOBUTANE	0.5	0.1	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	17.5	24.8	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	2.0
HELIUM	1.14	1.24	0.02
HEATING VALUE*	960	821	1000
SPECIFIC GRAVITY	0.719	0.705	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8701 SAMPLE 16170	INDEX 8702 SAMPLE 15942	INDEX 8703 SAMPLE 17528
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	ALLISON-PARKS	ALPAR	ALPAR
WELL NAME	KIKER NO. 15-1	FEE 1-111	MORRIS-SHELL 1-77
LOCATION	SEC. 15, BLK. Z-1, ACH&B SUR.	SEC. 111, BLK. 41, H&TC SUR.	SEC. 77 41 H AND TC SURVEY
OWNER	KERR-MCGEE CORP.	SHELL OIL CO.	POGO PRODUCING CO.
COMPLETED	08/--/80	04/01/79	04/--/83
SAMPLED	01/15/81	04/23/80	11/28/84
FORMATION	PENN-MORROW	PENN-TONKAWA	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14960	8000	NOT GIVEN
WELLHEAD PRESSURE,PSIG	8800	NOT GIVEN	5200
OPEN FLOW, MCFD	3442	NOT GIVEN	650
COMPONENT, MOLE PCT			
METHANE	96.7	81.4	92.3
ETHANE	0.6	7.5	0.1
PROPANE	0.1	5.0	TRACE
N-BUTANE	TRACE	1.5	0.0
ISOBUTANE	TRACE	0.7	0.0
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.3	2.4	2.1
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.4	5.3
HELIUM	0.02	0.09	0.03
HEATING VALUE*	1006	1207	937
SPECIFIC GRAVITY	0.585	0.709	0.615

	INDEX 8704 SAMPLE 15926	INDEX 8705 SAMPLE 16205	INDEX 8706 SAMPLE 11737
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	BRISCOE	BRISCOE	BUFFALO WALLOW
WELL NAME	S. G. SMITH NO. 1	PRATER NO. 1-39	HEFLEY NO. 1
LOCATION	SEC. 38, BLK. M1, H&GN SUR.	SEC. 39, BLK. M1, H&GN SUR.	SEC. 28, BLK. M-1, H&GN SUR.
OWNER	UNION OIL CO. OF CALIF.	INTERNORTH, INC.	GULF OIL CORP.
COMPLETED	08/24/79	02/25/80	01/14/69
SAMPLED	03/25/80	03/12/81	01/14/69
FORMATION	PENN-MORROW	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14438	14364	19620
WELLHEAD PRESSURE,PSIG	6303	7424	6556
OPEN FLOW, MCFD	16500	7538	390000
COMPONENT, MOLE PCT			
METHANE	95.6	95.8	89.8
ETHANE	1.4	1.5	0.1
PROPANE	0.2	0.2	TRACE
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.5	0.4	1.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	8.7
CARBON DIOXIDE	1.8	1.7	TRACE
HELIUM	0.02	0.02	
HEATING VALUE*	1015	1024	912
SPECIFIC GRAVITY	0.590	0.593	0.644

	INDEX 8707 SAMPLE 11787	INDEX 8708 SAMPLE 12627	INDEX 8709 SAMPLE 12701
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	BUFFALO WALLOW	BUFFALO WALLOW	BUFFALO WALLOW
WELL NAME	HEFLEY NO. 1A-90	HEFLEY NO. 1	CLIFFORD NO. 1
LOCATION	SEC. 90, BLK. M-1, H&GN SUR.	SEC. 41, BLK. M-1, H&GN SUR.	SEC. 30, BLK. M-1, H&GN RR SUR.
OWNER	UNION OIL CO. OF CALIF.	KANSAS-NEBRASKA NATURAL GAS	GULF OIL CO.- U.S.
COMPLETED	08/--/68	07/01/70	12/28/70
SAMPLED	03/04/69	01/13/71	03/05/71
FORMATION	DEVO-HUNTON	PENN-MORROW L	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	15910	13916
WELLHEAD PRESSURE,PSIG	6524	8382	8808
OPEN FLOW, MCFD	70000	2105	58500
COMPONENT, MOLE PCT			
METHANE	90.3	95.7	95.7
ETHANE	0.1	0.5	0.8
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.2	0.3	1.8
OXYGEN	0.1	TRACE	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	8.3	3.3	1.6
HELIUM	0.03	0.03	0.02
HEATING VALUE*	917	961	987
SPECIFIC GRAVITY	0.641	0.591	0.639

	INDEX 8710 SAMPLE 12711	INDEX 8711 SAMPLE 14668	INDEX 8712 SAMPLE 16018
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	BUFFALO WALLOW	BUFFALO WALLOW	CAMPBELL RANCH
WELL NAME	FILLINGIN NO. 2-20	MECKS NO. 1-54	CAMPBELL NO. 1-14
LOCATION	SEC. 20, BLK. M-1, H&TC SUR.	SEC. 54, BLK. M1, H&GN SUR.	SEC. 14, BLK I, I&GN SUR.
OWNER	UNION OIL CO. OF CALIF.	NORTHERN NATURAL GAS EXPL. C	HOOVER & BRACKEN ENERGIES, I
COMPLETED	03/10/71	03/11/76	--/--/00
SAMPLED	03/13/71	02/26/76	07/25/80
FORMATION	PENN-MORROW	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13496	11271	9734
WELLHEAD PRESSURE,PSIG	7546	NOT GIVEN	2425
OPEN FLOW, MCFD	9000	21000	1042
COMPONENT, MOLE PCT			
METHANE	91.6	85.2	88.8
ETHANE	0.7	8.6	6.3
PROPANE	TRACE	3.1	2.2
N-BUTANE	0.1	0.7	0.5
ISOBUTANE	0.0	0.5	0.4
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	4.6	0.8	0.4
OXYGEN	1.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.4	0.7
HELIUM	0.02	0.04	0.03
HEATING VALUE*	949	1161	1127
SPECIFIC GRAVITY	0.605	0.663	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8713 SAMPLE 12206	INDEX 8714 SAMPLE 12207	INDEX 8715 SAMPLE 12935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN	CANADIAN	CANADIAN
WELL NAME	E. S. F. BRAINARD N NO. 1-T	E. S. F. BRAINARD N NO. 1-C	DAVID QUENTIN ISAACS NO. 1
LOCATION	SEC. 2, W.W. LANGHAM SUR.	SEC. 2, W.W. LANGHAM SUR.	JAMES CURTIS SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	11/18/69	11/18/69	05/17/71
SAMPLED	02/20/70	02/20/70	07/18/71
FORMATION	PENN-MORROW L	PENN-MORROW U	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12375	11082	12702
WELLHEAD PRESSURE,PSIG	4320	3983	5946
OPEN FLOW, MCFD	420	4000	4900
COMPONENT, MOLE PCT			
METHANE	95.9	89.6	96.5
ETHANE	0.6	5.1	0.3
PROPANE	0.1	1.3	0.1
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	0.2	0.0
HEXANES PLUS	0.0	0.6	0.0
NITROGEN	0.4	1.0	0.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	1.1	2.3
HELIUM	0.02	0.04	0.03
HEATING VALUE*	985	1105	986
SPECIFIC GRAVITY	0.586	0.640	0.583

	INDEX 8716 SAMPLE 16232	INDEX 8717 SAMPLE 11623	INDEX 8718 SAMPLE 13408
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN E	CANADIAN NW	CANADIAN NW
WELL NAME	LINDLEY NO. 4	R. T. KELLY, ET AL. C NO. 1	WILLIAM D. NIX R NO. 1-89
LOCATION	M. MOODY SUR.	SEC. 106, BLK. 42, H&TC SUR.	SEC. 89, BLK. 42, H&TC SUR.
OWNER	PIONEER PRODUCTION CORP.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	01/07/81	05/04/67	08/07/72
SAMPLED	09/14/81	08/11/68	09/30/72
FORMATION	PENN-DOUGLAS	PENN-MORROW L	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6806	12235	6604
WELLHEAD PRESSURE,PSIG	1700	5904	1734
OPEN FLOW, MCFD	7400	14200	10550
COMPONENT, MOLE PCT			
METHANE	81.3	94.6	79.4
ETHANE	7.0	1.5	7.9
PROPANE	4.1	0.2	5.5
N-BUTANE	1.1	0.2	1.5
ISOBUTANE	0.6	0.0	0.9
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.3
NITROGEN	4.2	0.6	3.4
OXYGEN	0.5	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.8	0.3
HELIUM	0.16	0.03	0.18
HEATING VALUE*	1143	1043	1214
SPECIFIC GRAVITY	0.692	0.609	0.722

	INDEX 8719 SAMPLE 13460	INDEX 8720 SAMPLE 14288	INDEX 8721 SAMPLE 14289
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN SE	CANADIAN SE	CANADIAN SE
WELL NAME	MAY E. YOKLEY ET AL. D NO. 1	LOUISE HOOVER C NO. 1-229	LOUISE HOOVER C NO. 1-229
LOCATION	SEC. 98, BLK. 42, H&TC SUR.	SEC. 229, BLK. C, G&MRB&A SUR	SEC. 229, BLK. C, G&MRB&A SUR
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	07/17/72	12/02/74	12/02/74
SAMPLED	12/28/72	03/07/75	03/07/75
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7246	7606	10700
WELLHEAD PRESSURE,PSIG	1793	1782	2165
OPEN FLOW, MCFD	4250	5000	11500
COMPONENT, MOLE PCT			
METHANE	82.0	88.0	85.8
ETHANE	6.7	6.3	8.1
PROPANE	4.6	2.5	3.0
N-BUTANE	1.4	0.5	0.7
ISOBUTANE	0.9	0.4	0.6
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	3.1	1.3	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.8
HELIUM	0.18	0.08	0.03
HEATING VALUE*	1192	1117	1154
SPECIFIC GRAVITY	0.705	0.641	0.663

	INDEX 8722 SAMPLE 15376	INDEX 8723 SAMPLE 15864	INDEX 8724 SAMPLE 14610
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CANADIAN SE	CANADIAN SW	CANADIAN W
WELL NAME	DODD NO. 1	JENKIE CAMPBELL NO. 1	JOHN C. ISAACS JR. "J" NO. 2
LOCATION	SEC. 469, BLK. R1, H&GN SUR.	SEC. 1, G.M. FROGGE SUR.	SEC. 2, BLK. A, LOUT SUR.
OWNER	EARL L. SMITH & ASSOC.	GULF OIL CO.- U.S.	DIAMOND SHAMROCK CORP.
COMPLETED	06/25/78	11/29/76	02/04/76
SAMPLED	09/15/78	07/29/77	03/05/76
FORMATION	PENN-MORROW	PERM-GRANITE WASH	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14456	10081	13069
WELLHEAD PRESSURE,PSIG	7683	2512	4395
OPEN FLOW, MCFD	7000	12500	11800
COMPONENT, MOLE PCT			
METHANE	95.7	81.4	95.5
ETHANE	1.4	10.8	1.0
PROPANE	0.2	4.1	0.1
N-BUTANE	0.1	0.9	TRACE
ISOBUTANE	TRACE	0.4	TRACE
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	0.3	1.2	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.5	2.8
HELIUM	0.02	0.05	0.03
HEATING VALUE*	1026	1194	988
SPECIFIC GRAVITY	0.594	0.690	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8725 SAMPLE 16870	INDEX 8726 SAMPLE 15741	INDEX 8727 SAMPLE 6320
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	CAST	CIRCLE DOT	FELDMAN
WELL NAME	URSMEL EST. NO. 1	NAPECO LOCKE NO. 1	D. D. FELDMAN NO. 1
LOCATION	DAVID CROCKETT SUR.	SEC. 85, BLK. M1, H&GN SUR.	SEC. 43, BLK. 42, H&TC SUR.
OWNER	MOBIL PROD., TX & NM, INC.	NAPECO, INC.	MAGNOLIA PETROLEUM CO.
COMPLETED	04/14/83	--/--/00	04/27/57
SAMPLED	04/14/83	08/31/79	05/06/57
FORMATION	PENN-MORROW L	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12394	13982	7556
WELLHEAD PRESSURE,PSIG	4200	NOT GIVEN	2090
OPEN FLOW, MCFD	805	5700	8000
COMPONENT, MOLE PCT			
METHANE	95.6	95.3	82.6
ETHANE	0.6	1.9	9.4
PROPANE	0.1	0.4	4.1
N-BUTANE	0.0	0.1	0.9
ISOBUTANE	0.0	0.1	0.6
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.4	0.7	1.6
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	1.2	0.4
HELIUM	0.03	0.03	0.10
HEATING VALUE*	982	1026	1176
SPECIFIC GRAVITY	0.589	0.590	0.681

	INDEX 8728 SAMPLE 8760	INDEX 8729 SAMPLE 10356	INDEX 8730 SAMPLE 10847
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	FELDMAN	FELDMAN	FELDMAN
WELL NAME	CHARLES G. NEWCOMER NO. 1-UT	TEXFELL 1-7	MCQUIDDY B NO. 1
LOCATION	SEC. 44, BLK. 42, H&TC SUR.	SEC. 7, BLK. 42, HT&C SUR.	SEC. 3, BLK. 1, G&M SUR.
OWNER	MOBIL OIL CO.	SHELL OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/16/61	11/06/65	06/08/66
SAMPLED	11/07/62	01/13/66	01/23/67
FORMATION	PENN-DOUGLAS	PENN-TONKAWA	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6972	8086	7332
WELLHEAD PRESSURE,PSIG	1606	2332	1868
OPEN FLOW, MCFD	4150	12000	20500
COMPONENT, MOLE PCT			
METHANE	79.9	82.6	82.1
ETHANE	7.6	9.1	9.3
PROPANE	5.8	3.7	4.4
N-BUTANE	1.3	0.8	1.1
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	TRACE	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	4.1	1.6	1.4
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.18	0.10	0.08
HEATING VALUE*	1177	1189	1206
SPECIFIC GRAVITY	0.705	0.690	0.696

	INDEX 8731 SAMPLE 12713	INDEX 8732 SAMPLE 16983	INDEX 8733 SAMPLE 13646
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	FELDMAN	FELDMAN	FELDMAN N
WELL NAME	DETRIXME NO. 1	JONES ESTATE NO. 1-22	IMMEL "A" NO. 1
LOCATION	SEC. 52, BLK. 42, H&TC SUR.	SEC. 22, BLK. 1, G&M SUR.	SEC. 14, BLK. 1, G-M SUR.
OWNER	SAMEDAN OIL CORP.	PETROLEUM, INC.	DIAMOND SHAMROCK CORP.
COMPLETED	03/10/70	11/17/81	04/30/73
SAMPLED	03/12/71	07/13/83	07/14/73
FORMATION	DEVO-HUNTON	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14549	7391	7200
WELLHEAD PRESSURE,PSIG	3905	1245	1712
OPEN FLOW, MCFD	4900	422	2750
COMPONENT, MOLE PCT			
METHANE	95.4	79.7	80.7
ETHANE	0.1	8.9	7.8
PROPANE	0.1	4.3	4.9
N-BUTANE	0.0	1.1	1.1
ISOBUTANE	0.0	0.6	0.9
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.7	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	3.0	3.7	3.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.3	0.1
HELIUM	0.03	0.11	0.15
HEATING VALUE*	971	1185	1183
SPECIFIC GRAVITY	0.587	0.706	0.703

	INDEX 8734 SAMPLE 15481	INDEX 8735 SAMPLE 15550	INDEX 8736 SAMPLE 15941
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	GEM HEMPHILL	GEM HEMPHILL	GEM HEMPHILL
WELL NAME	ORA MORRIS NO. 4	FORGEY 112 NO. 1-112	FEE 1-111
LOCATION	SEC. 92, BLK 41, H&TC RR SUR	SEC. 112, BLK. 41, H&TC SUR.	SEC. 111, BLK.41,H&TC SUR.
OWNER	GULF OIL EXPL. & PROD. CO.	GULF OIL CORP.	SHELL OIL CO.
COMPLETED	08/03/78	08/27/78	04/01/79
SAMPLED	11/10/78	12/28/78	04/23/80
FORMATION	PENN-TONKAWA	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8299	?=;>;	7300
WELLHEAD PRESSURE,PSIG	1715	1842	NOT GIVEN
OPEN FLOW, MCFD	4000	23000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.9	83.5	83.1
ETHANE	7.7	7.8	7.9
PROPANE	4.2	3.8	4.2
N-BUTANE	1.0	0.9	1.1
ISOBUTANE	.5	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.9	2.2	2.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.10	0.15	0.19
HEATING VALUE*	1169	1163	1180
SPECIFIC GRAVITY	0.685	0.677	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8737 SAMPLE 16406	INDEX 8738 SAMPLE 17717	INDEX 8739 SAMPLE 12700
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	GER-DANDY (DOUGLAS)	GLAZIER NW	HAMON LOCKE
WELL NAME	DAVIDSON NO. 1	ELMER SPARKS NO. 2	LOCKE CATTLE CO. NO. 2
LOCATION	SEC. 46, BLK. 41, H&TC SUR.	SEC. 63, BLK. 42, H&TC SUR.	SEC.39,BLK.A-2,H&GN RR SUR.
OWNER	CAMBRIDGE & NAIL	DIAMOND SHAMROCK EXPL. CO.	JAKE L. HAMON
COMPLETED	10/23/80	02/04/85	02/12/71
SAMPLED	01/05/82	06/18/85	03/06/71
FORMATION	PENN-DOUGLAS "B" & "C"	PENN-MORROW U	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7860	11200	13080
WELLHEAD PRESSURE,PSIG	1760	2500	3888
OPEN FLOW, MCFD	2200	1806	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.6	85.4	88.6
ETHANE	7.5	7.7	4.1
PROPANE	3.8	2.9	1.9
N-BUTANE	1.0	0.7	0.7
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.4	0.2
NITROGEN	3.1	0.6	2.5
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.1	0.6
HELIUM	0.14	0.02	0.08
HEATING VALUE*	1165	1164	1095
SPECIFIC GRAVITY	0.687	0.674	0.643

	INDEX 8740 SAMPLE 9263	INDEX 8741 SAMPLE 13538	INDEX 8742 SAMPLE 13757
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HEMPHILL	HEMPHILL	HEMPHILL
WELL NAME	HOBART NO. 1-67	THORNE NO. 1	IOS-LITTLE NO. 1-30
LOCATION	SEC. 67, BLK. A-2, H&GN SUR.	SEC. 74, BLK. A-2, H&GN SUR.	SEC. 30, BLK.1, I&GN SUR.
OWNER	SHELL OIL CO.	KERR-MCGEE CORP.	MCCULLOCH OIL CORP.
COMPLETED	01/29/64	01/19/73	08/20/73
SAMPLED	03/19/64	02/21/73	10/11/73
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10907	10500	10470
WELLHEAD PRESSURE,PSIG	2985	2700	2750
OPEN FLOW, MCFD	23000	NOT GIVEN	2700
COMPONENT, MOLE PCT			
METHANE	87.3	70.3	81.3
ETHANE	7.3	15.3	10.8
PROPANE	2.6	7.6	4.2
N-BUTANE	0.8	2.3	0.9
ISOBUTANE	0.3	1.1	0.5
N-PENTANE	0.2	0.6	0.1
ISOPENTANE	0.3	0.6	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	0.4	0.8	1.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.4
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1146	1379	1200
SPECIFIC GRAVITY	0.652	0.802	0.691

	INDEX 8743 SAMPLE 14034	INDEX 8744 SAMPLE 14182	INDEX 8745 SAMPLE 14444
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HEMPHILL	HEMPHILL	HEMPHILL
WELL NAME	GEORGE "A" NO. 1-45	FLOWERS-B NO. 1	ABRAHAM B NO. 1
LOCATION	SEC. 45, BLK.1, I&GN SUR.	SEC. 47, BLK. 1, I&GN SUR.	SEC. 26, BLK. 1, I&GN SUR.
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	07/10/73	04/01/74	--/--/00
SAMPLED	06/26/74	10/23/74	08/26/75
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10681	10912	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2857	1200	1800
OPEN FLOW, MCFD	12800	1500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.3	86.1	82.0
ETHANE	9.0	7.8	9.9
PROPANE	3.2	3.0	4.2
N-BUTANE	0.8	0.7	0.9
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.9	0.7	1.1
OXYGEN	0.3	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.7
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1154	1156	1194
SPECIFIC GRAVITY	0.675	0.662	0.692

	INDEX 8746 SAMPLE 17632	INDEX 8747 SAMPLE 17292	INDEX 8748 SAMPLE 13803
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HEMPHILL	HEMPHILL (GRANITE WASH)	HEXT
WELL NAME	BETTY SAVAGE NO. A-1	LOCKE NO.2-60	W. R. HEXT NO. 1
LOCATION	SEC. 29, BLK. 1, I&GN SUR.	SEC. 60, BLK.A2, H&GN SUR.	SEC. 12, BLK. 43, H&TC SUR.
OWNER	KERR-MCGEE CORP.	WAGNER & BROWN	DIAMOND SHAMROCK CORP.
COMPLETED	09/29/72	11/15/83	08/30/73
SAMPLED	03/29/85	05/15/84	11/09/73
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10685	10198	7580
WELLHEAD PRESSURE,PSIG	777	2528	1713
OPEN FLOW, MCFD	586	31300	3400
COMPONENT, MOLE PCT			
METHANE	82.1	80.8	81.6
ETHANE	9.6	10.7	9.1
PROPANE	4.0	4.3	4.7
N-BUTANE	1.2	1.2	1.1
ISOBUTANE	0.7	0.6	0.7
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.7	0.7	1.8
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.1
HELIUM	0.03	0.04	0.11
HEATING VALUE*	1221	1222	1203
SPECIFIC GRAVITY	0.703	0.708	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8749 SAMPLE 14866	INDEX 8750 SAMPLE 13858	INDEX 8751 SAMPLE 13343
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MIGGINS S	MOWE RANCH	HUMPHREYS
WELL NAME	W.S.&E.C. JONES ESTATE NO. 1	GENE MOWE NO. 1	MARGUERITE HUMPHREYS NO. 1
LOCATION	SEC. 4, BLK. 43, H&TC SUR.	SEC. 5, BLK. 1, G&M SUR.	JAMES FORD SUR.
OWNER	ENSERCH EXPLORATION, INC.	EL PASO NATURAL GAS CO.	GULF OIL CO.- U.S.
COMPLETED	06/16/75	04/12/73	03/23/72
SAMPLED	12/07/76	01/07/74	08/02/72
FORMATION	PENN-MORROW	DEVO-HUNTON	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11864	17202	7284
WELLHEAD PRESSURE,PSIG	4480	5739	1775
OPEN FLOW, MCFD	5000	23000	4800
COMPONENT, MOLE PCT			
METHANE	93.5	92.9	80.6
ETHANE	3.0	0.2	9.9
PROPANE	0.6	TRACE	5.0
N-BUTANE	0.2	0.0	1.3
ISOBUTANE	0.1	0.0	0.8
N-PENTANE	0.1	0.0	0.4
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.3	1.2	1.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	5.5	0.2
HELIUM	0.03	0.03	0.12
HEATING VALUE*	1040	945	1226
SPECIFIC GRAVITY	0.609	0.613	0.706

	INDEX 8752 SAMPLE 15839	INDEX 8753 SAMPLE 17688	INDEX 8754 SAMPLE 17690
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	HUMPHREYS	JONES	JONES
WELL NAME	WRIGHT NO. 1	JONES TRUST NO. 25A	HUMPHREYS NO. 31A
LOCATION	SEC. 122, BLK. 41, H&TC SUR.	SEC. 25, BLK. 1, G&M SUR.	SEC. 31, BLK. 1, B&M SUR.
OWNER	MOODY ENERGY CO.	WOODS PETROLEUM CORP.	WOODS PETROLEUM CORP.
COMPLETED	05/29/79	10/18/84	12/15/84
SAMPLED	11/23/79	05/24/85	05/24/85
FORMATION	PENN-DOUGLAS	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7304	11518	11392
WELLHEAD PRESSURE,PSIG	1800	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	60000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.1	94.1	92.9
ETHANE	7.7	2.0	3.9
PROPANE	4.5	0.2	0.7
N-BUTANE	1.2	0.1	0.2
ISOBUTANE	0.6	0.0	0.1
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.5	1.3	0.6
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.7	1.3
HELIUM	0.14	0.03	0.02
HEATING VALUE*	1187	1015	1058
SPECIFIC GRAVITY	0.695	0.599	0.610

	INDEX 8755 SAMPLE 17692	INDEX 8756 SAMPLE 13517	INDEX 8757 SAMPLE 13518
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	JONES	LOCKE CATTLE CO.	LOCKE CATTLE CO.
WELL NAME	HUMPHREYS NO. 32-A	LOCKE CATTLE CO. NO. 1	LOCKE CATTLE CO. NO. 1
LOCATION	SEC. 32, BLK 1, G&M SUR.	SEC. 40, BLK. A-2, H&GN SUR.	SEC. 40, BLK. A-2, H&GN SUR.
OWNER	WOODS PETROLEUM CORP.	JAKE L. HAMON	JAKE L. HAMON
COMPLETED	06/07/84	11/30/72	11/20/72
SAMPLED	05/24/85	01/26/73	01/26/73
FORMATION	PENN-MORROW U	PENN-WICHITA-ALBANY	PENN-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11864	4500	10500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	2380
OPEN FLOW, MCFD	3522	11600	3600
COMPONENT, MOLE PCT			
METHANE	91.7	87.5	86.0
ETHANE	3.4	5.9	7.7
PROPANE	0.6	2.6	3.1
N-BUTANE	0.2	0.3	0.7
ISOBUTANE	TRACE	0.7	0.5
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	2.7	2.1	1.0
OXYGEN	0.5	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.1	0.3
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1036	1116	1152
SPECIFIC GRAVITY	0.615	0.646	0.658

	INDEX 8758 SAMPLE 7016	INDEX 8759 SAMPLE 13043	INDEX 8760 SAMPLE 14801
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MATHERS	MATHERS	MATHERS
WELL NAME	FELDMAN NO. 1-A	HUMPHREYS NO. 1	MATHERS NO. 1
LOCATION	SEC. 133, BLK. 42	SEC. 163, BLK. 41, T&TC SUR.	SEC. 132, BLK. 42, H&TC SUR.
OWNER	EL PASO NATURAL GAS CO.	PHILCON DEVELOPMENT CO.	NATURAL GAS ANADARKO, INC.
COMPLETED	12/11/58	03/--/71	02/12/76
SAMPLED	03/30/59	10/01/71	10/08/76
FORMATION	PENN-MORROW & MATHERS	PENN-DOUGLAS	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9883	7228	6249
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1875	1583
OPEN FLOW, MCFD	NOT GIVEN	2550	6900
COMPONENT, MOLE PCT			
METHANE	81.4	81.2	76.2
ETHANE	9.5	9.2	10.5
PROPANE	4.3	4.9	6.1
N-BUTANE	1.3	1.2	1.6
ISOBUTANE	0.8	0.8	0.5
N-PENTANE	0.4	0.2	0.5
ISOPENTANE	0.4	0.6	0.5
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.3	0.2
NITROGEN	0.2	0.4	3.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.2	0.2
HELIUM	0.03	0.11	0.17
HEATING VALUE*	1250	1235	1232
SPECIFIC GRAVITY	0.721	0.712	0.736

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8761 SAMPLE 13374	INDEX 8762 SAMPLE 13384	INDEX 8763 SAMPLE 13385
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MATHERS RANCH	MATHERS RANCH	MATHERS RANCH
WELL NAME	MATHERS NO. 9	HUMPHREYS NO. 2	HUMPHREYS NO. 2
LOCATION	SEC. 164, BLK. 41, H&TC SUR.	SEC. 163, BLK. 41, H&TC SUR.	SEC. 163, BLK. 41, H&TC SUR.
OWNER	MCCULLOCH OIL CORP.	PHILCON DEVELOPMENT CO.	PHILCON DEVELOPMENT CO.
COMPLETED	01/--/72	--/--/00	--/--/00
SAMPLED	08/17/72	--/--/00	09/08/72
FORMATION	PENN-DOUGLAS	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7176	17245	16809
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1800	NOT GIVEN
OPEN FLOW, MCFD	800	6100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.4	92.3	97.7
ETHANE	9.5	0.4	0.5
PROPANE	4.9	TRACE	0.1
N-BUTANE	1.2	0.0	TRACE
ISOBUTANE	0.8	0.0	0.0
N-PENTANE	0.4	0.0	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	1.9	1.2	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	6.1	1.0
HELIUM	0.12	0.03	0.03
HEATING VALUE*	1224	942	1001
SPECIFIC GRAVITY	0.711	0.621	0.571

	INDEX 8764 SAMPLE 9670	INDEX 8765 SAMPLE 9920	INDEX 8766 SAMPLE 10908
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MCQUIDDY	MCQUIDDY	MENDOTA
WELL NAME	MCQUIDDY A NO. 1	MCQUIDDY A NO. 2	CAMPBELL-SANTA FE NO. 1
LOCATION	JOHN GATES SUR.	JOHN GATES SUR.	SEC. 38, BLK. 1, I&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/12/64	02/02/65	12/19/66
SAMPLED	12/17/64	06/13/65	04/03/67
FORMATION	PENN-MORROW U	PENN-DOUGLAS	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11845	7228	11387
WELLHEAD PRESSURE,PSIG	6294	1781	4254
OPEN FLOW, MCFD	11400	5300	42000
COMPONENT, MOLE PCT			
METHANE	94.0	83.0	89.3
ETHANE	1.5	8.6	7.1
PROPANE	0.6	3.7	1.5
N-BUTANE	0.2	0.9	0.2
ISOBUTANE	TRACE	0.6	TRACE
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.1	TRACE
NITROGEN	1.4	1.8	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.8	1.3
HELIUM	0.02	0.09	0.04
HEATING VALUE*	1048	1164	1090
SPECIFIC GRAVITY	0.611	0.682	0.626

	INDEX 8767 SAMPLE 13607	INDEX 8768 SAMPLE 15556	INDEX 8769 SAMPLE 13978
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MENDOTA	MENDOTA	MENDOTA NW
WELL NAME	CAMPBELL NO. 2	CAMPBELL NO. 1-13	LESLIE WEBB ET AL. NO. 1
LOCATION	SEC. 9, BLK. 1 I&GN SUR.	SEC. 13, BLK. 1, I&GN SUR.	SEC. 189, BLK.C, GMNBA SUR.
OWNER	HOOVER & BRACKEN OIL PROP.	HOOVER & BRACKEN OIL PROP.	DIAMOND SHAMROCK CORP.
COMPLETED	02/01/73	11/13/77	01/23/78
SAMPLED	06/06/73	01/--/79	04/19/78
FORMATION	PENN-MORROW	PERM-GRANITE WASH	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10000	9810	10266
WELLHEAD PRESSURE,PSIG	4000	1870	2114
OPEN FLOW, MCFD	80000	7176	5000
COMPONENT, MOLE PCT			
METHANE	91.6	68.0	82.4
ETHANE	4.9	16.9	10.2
PROPANE	0.9	8.3	4.0
N-BUTANE	0.1	2.6	0.9
ISOBUTANE	0.1	1.1	0.6
N-PENTANE	TRACE	0.6	0.1
ISOPENTANE	TRACE	0.7	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	0.5	0.8	0.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.4	0.7
HELIUM	0.03	0.03	0.05
HEATING VALUE*	1051	1407	1190
SPECIFIC GRAVITY	0.611	0.818	0.684

	INDEX 8770 SAMPLE 15280	INDEX 8771 SAMPLE 15317	INDEX 8772 SAMPLE 8886
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	MENDOTA NW	MENDOTA SE	NOT GIVEN
WELL NAME	MYRTLE FLOWERS NO. 2	CAMPBELL NO. 1	HOBART NO. 1-21
LOCATION	SEC. 61, BLK. 81, H&GN SUR.	SEC. 32, BLK. 1, I&GN SUR.	SEC. 21, BLK. A-1, H&GN SUR.
OWNER	EXXON CO., U.S.A.	EDWIN L. COX	SHELL OIL CO.
COMPLETED	12/31/77	12/05/77	09/06/62
SAMPLED	05/16/78	07/05/78	03/11/63
FORMATION	PERM-GRANITE WASH	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10372	12263	15240
WELLHEAD PRESSURE,PSIG	2611	3664	7888
OPEN FLOW, MCFD	14700	8000	3200
COMPONENT, MOLE PCT			
METHANE	80.9	93.1	95.6
ETHANE	9.5	3.5	0.5
PROPANE	4.5	0.4	0.1
N-BUTANE	1.5	0.1	0.0
ISOBUTANE	0.7	TRACE	0.0
N-PENTANE	0.4	TRACE	0.0
ISOPENTANE	0.6	TRACE	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.5	0.1	0.0
NITROGEN	0.7	1.0	0.2
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.5	3.0
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1257	1025	980
SPECIFIC GRAVITY	0.721	0.598	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8773 SAMPLE 14421	INDEX 8774 SAMPLE 14906	INDEX 8775 SAMPLE 14936
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	NOT GIVEN	NOT GIVEN	PARSELL SE
WELL NAME	ARRINGTON B NO. 1	RAMP NO. 1	MITCHELL UNIT NO. 1
LOCATION	SEC. 45, BLK. A-2, H&GN SUR.	SEC. 26, BLK. 41, H&TC SUR.	SEC. 128, BLK. 42, H&TC SUR.
OWNER	MCCULLOCH OIL CORP.	WESSELY ENERGY CORP.	PETROLEUM, INC.
COMPLETED	--/--/00	10/25/75	06/11/75
SAMPLED	07/--/75	04/18/77	03/10/77
FORMATION	PERM-GRANITE WASH	NOT GIVEN	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10814	11729	10343
WELLHEAD PRESSURE,PSIG	NOT GIVEN	7321	3576
OPEN FLOW, MCFD	NOT GIVEN	6350	3100
COMPONENT, MOLE PCT			
METHANE	84.2	90.9	86.5
ETHANE	8.7	5.8	7.9
PROPANE	3.7	1.6	2.8
N-BUTANE	0.9	0.3	0.6
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.9	0.4	TRACE
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.9
HELIUM	0.03	0.02	0.04
HEATING VALUE*	1178	1094	1159
SPECIFIC GRAVITY	0.675	0.618	0.661

	INDEX 8776 SAMPLE 10866	INDEX 8777 SAMPLE 14969	INDEX 8778 SAMPLE 15150
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	RAMP	RAMP NE	RED DEER CREEK
WELL NAME	N. C. PTEATT NO. 1	RAMP NO. 1	ISAACS NO. 2-207
LOCATION	SEC. 51, BLK. A-1, H&GN SUR.	SEC. 26, BLK. 41, H&TC SUR.	SEC. 207, BLK. C, GMMBA SUR.
OWNER	SUN OIL CO.	WESSELY ENERGY CORP.	GULF ENERGY & MINERALS CO.
COMPLETED	11/22/66	10/--/75	10/02/77
SAMPLED	02/09/67	04/06/77	11/21/77
FORMATION	PENN-	PERM-GRANITE WASH	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11172	11725	11364
WELLHEAD PRESSURE,PSIG	3155	5865	3194
OPEN FLOW, MCFD	4396	6350	3086
COMPONENT, MOLE PCT			
METHANE	66.5	89.9	84.8
ETHANE	12.6	6.0	7.1
PROPANE	8.4	1.8	3.3
N-BUTANE	4.3	0.4	1.0
ISOBUTANE	2.1	0.3	0.6
N-PENTANE	1.0	0.2	0.5
ISOPENTANE	2.1	0.1	0.5
CYCLOPENTANE	0.4	TRACE	0.1
HEXANES PLUS	1.1	0.2	0.5
NITROGEN	1.2	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	1.1
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1137	1112	1198
SPECIFIC GRAVITY	0.905	0.630	0.693

	INDEX 8779 SAMPLE 17238	INDEX 8780 SAMPLE 15805	INDEX 8781 SAMPLE 16198
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	SMREIKY S	SNOOKS	TWISTER DOUGLAS
WELL NAME	MATHERS NO. 1-14	MATHERS NO. 1	URSCHEL NO. 1-49
LOCATION	SEC. 14, H&GN SURVEY, A2	SEC.152, BLK. 42, H&TC SUR.	SEC. 49, BLK. 1, G&M SUR.
OWNER	TOM F. MARSH, INC.	NATURAL GAS ANADARKO, INC.	JAKE L. HAMON
COMPLETED	10/31/83	03/25/79	03/04/80
SAMPLED	04/06/84	10/12/79	03/03/81
FORMATION	PENN-MORROW	PENN-MORROW	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11820	11188	7020
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5115	1800
OPEN FLOW, MCFD	1350	5300	18500
COMPONENT, MOLE PCT			
METHANE	90.3	96.8	82.2
ETHANE	4.1	0.8	7.8
PROPANE	1.5	0.2	4.4
N-BUTANE	0.5	0.0	1.2
ISOBUTANE	0.3	0.0	0.7
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.2	0.0	0.5
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.5	0.0	0.4
NITROGEN	1.3	0.4	2.1
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.9	0.2
HELIUM	0.03	0.03	0.15
HEATING VALUE*	1090	1000	1213
SPECIFIC GRAVITY	0.634	0.581	0.706

	INDEX 8782 SAMPLE 16366	INDEX 8783 SAMPLE 14807	INDEX 8784 SAMPLE 12329
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	TWISTER DOUGLAS	VIKING	WASHITA CREEK
WELL NAME	HUMPREYS 39 NO. 1	SUMPTER "10" NO. 1	BOWERS G NO. 1
LOCATION	SEC. 39, BLK. 1, G&M SUR.	SEC.10,BLK.Z-1,ACH&B&WEW SUR	SEC.253, BLK.C, G&MMB&A SUR.
OWNER	INTERNORTH, INC.	HNG OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	11/21/69
SAMPLED	12/27/81	10/--/76	07/10/70
FORMATION	PENN-DOUGLAS	NOT GIVEN	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7037	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1767	NOT GIVEN	7002
OPEN FLOW, MCFD	5933	NOT GIVEN	100000
COMPONENT, MOLE PCT			
METHANE	79.3	97.2	90.6
ETHANE	8.5	0.7	0.1
PROPANE	5.3	0.1	TRACE
N-BUTANE	1.4	0.1	0.0
ISOBUTANE	0.8	0.0	0.0
N-PENTANE	0.4	0.0	0.0
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	3.0	0.2	2.1
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.8	7.1
HELIUM	0.18	0.02	0.03
HEATING VALUE*	1221	1000	920
SPECIFIC GRAVITY	0.721	0.577	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8785 SAMPLE 16525	INDEX 8786 SAMPLE 17061	INDEX 8787 SAMPLE 11061
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	WASHITA CREEK	WASHITA CREEK	WASHITA RIVER PROSPECT
WELL NAME	GEORGE NO. 1-8	BOWERS NO. 5-A	BRADSTREET NO. 1-89
LOCATION	SEC. 8, BLK.M-1,H&GN RR SUR.	SEC.258, BLK.C, G&MBA SUR.	SEC. 89, BLK.M-1,H&GNRR SUR.
OWNER	HAMILTON BROTHERS OIL CO.	E.T.S. ENTERPRISES, INC.	UNION OIL CO. OF CALIF.
COMPLETED	09/04/80	07/23/82	08/11/67
SAMPLED	05/--/82	09/13/83	08/13/67
FORMATION	PERM-GRANITE WASH	PENN-MORROW U	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11354	14380	19746
WELLHEAD PRESSURE,PSIG	1775	8438	6600
OPEN FLOW, MCFD	1400	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	96.6	89.1
ETHANE	7.9	0.6	0.1
PROPANE	2.9	0.1	0.0
N-BUTANE	0.8	0.0	0.1
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	0.7	0.2	1.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.2	8.8
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1171	993	916
SPECIFIC GRAVITY	0.668	0.579	0.653

	INDEX 8788 SAMPLE 8191	INDEX 8789 SAMPLE 12523	INDEX 8790 SAMPLE 13741
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BEACH & PINION NO.1 BRAINARD	MATHERS RANCH NO. 1	HOBART RANCH NO. 4
LOCATION	SEC. 110, BLK. 42, H&TC SUR.	SEC. 1518, J. FLOWERS SUR.	SEC. 50, BLK. A-2 H&GN SUR.
OWNER	BEACH & PINION	MCCULLOCH OIL CORP.	EL PASO NATURAL GAS CO.
COMPLETED	--/--/00	03/04/70	08/07/73
SAMPLED	09/13/61	11/10/70	10/02/73
FORMATION	PENN-MORROW U	DEVO-HUNTON	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11000	16815	13234
WELLHEAD PRESSURE,PSIG	6370	5881	4533
OPEN FLOW, MCFD	600	104000	2887
COMPONENT, MOLE PCT			
METHANE	91.8	95.0	94.2
ETHANE	4.5	0.4	2.6
PROPANE	0.9	TRACE	0.3
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.3	0.0	0.2
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.5	0.9	0.6
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	3.6	1.8
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1070	970	1020
SPECIFIC GRAVITY	0.616	0.595	0.596

	INDEX 8791 SAMPLE 13782	INDEX 8792 SAMPLE 13965	INDEX 8793 SAMPLE 16242
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HEMPHILL	HEMPHILL	HEMPHILL
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BURTON NO. 1	HENDERSON NO. 1-64	THIERSTEIN NO. 75-1
LOCATION	SEC. 106, BLK. 41, H&TC SUR.	SEC. 64, BLK. 41, H&TC SUR.	SEC. 75, BLK. A1, H&TC SUR.
OWNER	AMARILLO OIL CO.	MESA PETROLEUM CO.	WOODS PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	12/09/80
SAMPLED	10/26/73	03/27/74	04/21/81
FORMATION	PENN-MORROW U	PENN-MORROW	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12994	NOT GIVEN	10918
WELLHEAD PRESSURE,PSIG	3000	9035	5400
OPEN FLOW, MCFD	3247	NOT GIVEN	4200
COMPONENT, MOLE PCT			
METHANE	96.7	94.7	81.9
ETHANE	0.7	0.8	6.7
PROPANE	0.1	TRACE	3.9
N-BUTANE	0.0	0.0	1.0
ISOBUTANE	0.0	0.0	1.0
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.8
CYCLOPENTANE	0.0	0.0	0.4
HEXANES PLUS	0.0	0.0	1.1
NITROGEN	0.4	0.3	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	4.6	0.3
HELIUM	0.02	0.02	0.02
HEATING VALUE*	995	966	1272
SPECIFIC GRAVITY	0.581	0.602	0.729

	INDEX 8794 SAMPLE 12467	INDEX 8795 SAMPLE 8389	INDEX 8796 SAMPLE 12614
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HENDERSON	HENDERSON	HENDERSON
FIELD	FRANKSTON	OPELIKA	OPELIKA
WELL NAME	HUGH WHITE J NO. 1	ALLYN ESTATE B NO. 1	C. H. ALLYN NO. 1-C
LOCATION	M. GOLTHER SUR. A-9	NOT GIVEN	ADRIAN ANGLIN S SUR.
OWNER	CITIES SERVICE OIL CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	01/--/68	08/11/61	--/--/00
SAMPLED	10/--/70	01/31/62	12/29/70
FORMATION	CRET-JAMES	JURA-COTTON VALLEY	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10026	10651	7850
WELLHEAD PRESSURE,PSIG	1000	5400	1500
OPEN FLOW, MCFD	9000	1080	37172
COMPONENT, MOLE PCT			
METHANE	57.0	96.0	82.9
ETHANE	16.4	1.3	4.3
PROPANE	11.9	0.3	1.7
N-BUTANE	3.6	0.1	0.5
ISOBUTANE	3.7	TRACE	0.5
N-PENTANE	0.9	TRACE	0.3
ISOPENTANE	1.2	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	1.0	TRACE	0.4
NITROGEN	0.1	0.7	6.6
OXYGEN	0.1	TRACE	1.3
ARGON	0.0	0.0	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.9	1.3	1.5
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1571	1011	1032
SPECIFIC GRAVITY	0.971	0.582	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8797 SAMPLE 12615	INDEX 8798 SAMPLE 12616	INDEX 8799 SAMPLE 12610
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HENDERSON	HENDERSON	HENDERSON
FIELD	OPELIKA	OPELIKA	TRI-CITIES
WELL NAME	G. W. HOFFORD NO. 1	J. S. EDWARDS NO. 1	TEXIE YOUNG B NO. 2
LOCATION	O. ACOSTA SUR.	J. GRAFF SUR.	JOSEPH RICE SUR.
OWNER	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.	LONE STAR PRODUCING CO.
COMPLETED	--/--/00	--/--/00	09/28/59
SAMPLED	12/29/70	12/29/70	12/28/70
FORMATION	CRET-TRAVIS PEAK	CRET-PETTIT	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9049	9574	9760
WELLHEAD PRESSURE,PSIG	1150	600	630
OPEN FLOW, MCFD	5400	400000	2503
COMPONENT, MOLE PCT			
METHANE	90.5	85.5	97.5
ETHANE	2.8	3.9	0.5
PROPANE	0.8	1.5	0.1
N-BUTANE	0.2	0.5	0.0
ISOBUTANE	0.4	0.5	0.0
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	5.2	5.4	0.9
OXYGEN	0.4	1.2	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.0	0.9
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1022	1037	999
SPECIFIC GRAVITY	0.619	0.656	0.571

	INDEX 8800 SAMPLE 15258	INDEX 8801 SAMPLE 4790	INDEX 8802 SAMPLE 12045
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDALGO	MIDALGO	MIDALGO
FIELD	ALAMO	ARROWHEAD	ARROWHEAD
WELL NAME	ELMER L. TYNER NO. 1	F. R. BARRERA NO. 1	BENTSEN BROTHERS B NO. 5
LOCATION	LABLANCA GRANT A-57	EL BENADITS&SAN JOSE GRANTS	EL BENADITO GRANT A-68
OWNER	AMOCO PRODUCTION CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	03/18/76	05/06/49	09/07/68
SAMPLED	04/13/78	06/16/49	09/19/69
FORMATION	OLIG-FRIO	NOT GIVEN	OLIG-ECHOLS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9333	4630	5919
WELLHEAD PRESSURE,PSIG	900	2109	1648
OPEN FLOW, MCFD	2034	4800	6050
COMPONENT, MOLE PCT			
METHANE	94.2	87.5	91.6
ETHANE	3.3	4.2	4.1
PROPANE	0.8	1.9	1.7
N-BUTANE	0.3	0.4	0.2
ISOBUTANE	0.4	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	0.4	4.3	1.0
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1081	1079	1097
SPECIFIC GRAVITY	0.604	0.643	0.618

	INDEX 8803 SAMPLE 12046	INDEX 8804 SAMPLE 4803	INDEX 8805 SAMPLE 4833
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDALGO	MIDALGO	MIDALGO
FIELD	ARROWHEAD	DONNA	DONNA
WELL NAME	BENTSEN BROTHERS C NO. 1	JOHN JANCIK NO. 1	THOMAS UNIT NO. 1
LOCATION	EL BENADITO GRANT A-68	SANTA ANA GRANT NO. 72	SEC. 19, LOT 12, ALAMO SUBD.
OWNER	SUN OIL CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	11/25/67	--/--/49	10/18/49
SAMPLED	09/19/69	11/24/49	01/04/50
FORMATION	OLIG-VICKSBURG	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11942	6556	6551
WELLHEAD PRESSURE,PSIG	7498	2542	3088
OPEN FLOW, MCFD	16000	68000	19300
COMPONENT, MOLE PCT			
METHANE	87.2	93.7	91.2
ETHANE	5.9	3.6	3.6
PROPANE	1.9	0.9	1.0
N-BUTANE	0.3	0.3	0.2
ISOBUTANE	0.5	0.3	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	1.6	0.5	2.5
OXYGEN	0.1	0.1	0.6
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	2.0	0.2	0.2
HELIUM	0.01	0.00	0.01
HEATING VALUE*	1084	1076	1047
SPECIFIC GRAVITY	0.650	0.607	0.615

	INDEX 8806 SAMPLE 10540	INDEX 8807 SAMPLE 13561	INDEX 8808 SAMPLE 14256
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	EDINBURG S	ELSA S	ELSA S
WELL NAME	WILLIAM E. BEANE NO. 1	HIDALGO-WILLACY NO. 1-U	DIETRICH NO. 1
LOCATION	1-1/2 MI. S OF EDINBURG	SEC. 456 LLANO GRANDE GRT A54	LLANO GRANDE GRANT A-54
OWNER	TENNECO OIL CO.	SUN OIL CO.	J. M. MUBER CORP.
COMPLETED	--/--/00	06/23/71	04/30/73
SAMPLED	04/26/66	03/05/73	02/09/75
FORMATION	NOT GIVEN	OLIG-FRIO	OLIG-FRIO F-7400
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	7170	7384
WELLHEAD PRESSURE,PSIG	7450	2866	3168
OPEN FLOW, MCFD	NOT GIVEN	5900	7600
COMPONENT, MOLE PCT			
METHANE	91.0	95.2	95.8
ETHANE	4.2	2.7	2.6
PROPANE	1.3	0.6	0.5
N-BUTANE	0.4	0.1	0.1
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	1.3	0.7	0.6
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1101	1053	1045
SPECIFIC GRAVITY	0.628	0.588	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8809 SAMPLE 14257		INDEX 8810 SAMPLE 16460		INDEX 8811 SAMPLE 15514	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HIDALGO		HIDALGO		HARGILL	
FIELD	ELSA S		GUADALUPE		RIO FARMS NO. 2	
WELL NAME	DIETRICH NO. 1		WOODS CHRISTIAN NO. 5		LOT 6; SEC. 13; MTL&I SUBD.	
LOCATION	LLANO GRANDE GRANT A-54		SAN RAMON GRANT, A-62		ENERGY RESERVES GROUP, INC.	
OWNER	J. M. HUBER CORP.		TENNECO OIL EXPL. & PROD. CO		09/24/77	
COMPLETED	04/30/73		03/11/82		11/24/78	
SAMPLED	02/09/75		03/02/82		OLIG-FRIO	
FORMATION	OLIG-FRIO 7250		OLIG-WICKSBURG		220	
GEOLOGIC PROVINCE CODE	220		220		8860	
DEPTH, FEET	7242		12137		3650	
WELLHEAD PRESSURE,PSIG	2550		7765		4000	
OPEN FLOW, MCFD	7600		2500			
COMPONENT, MOLE PCT						
METHANE	95.8		88.5		96.2	
ETHANE	2.6		6.7		2.2	
PROPANE	0.5		2.2		0.3	
N-BUTANE	0.1		0.6		0.0	
ISOBUTANE	0.2		0.6		0.0	
N-PENTANE	TRACE		0.3		0.0	
ISOPENTANE	TRACE		0.2		0.0	
CYCLOPENTANE	TRACE		0.1		0.0	
HEXANES PLUS	0.1		0.3		0.0	
NITROGEN	0.6		0.6		1.1	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.0		0.1	
HELIUM	0.01		TRACE		0.01	
HEATING VALUE*	1045		1155		1023	
SPECIFIC GRAVITY	0.583		0.650		0.578	

	INDEX 8812 SAMPLE 5055		INDEX 8813 SAMPLE 12000		INDEX 8814 SAMPLE 13864	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HIDALGO		HIDALGO		HIDALGO	
FIELD	HIDALGO		HIDALGO		JANELINA	
WELL NAME	EL TEXANO LAND CO. NO. 1		SAVAGE B UNIT NO. 2		LAND & TRUST CO. NO. 8	
LOCATION	PORCION 64, A-41		FRANCIS GUAJARDO PORCION A38		DAVID DAVIS SUR. A-135	
OWNER	TEXAS CO.		UNION PRODUCING CO.		SHELL OIL CO.	
COMPLETED	02/26/51		08/02/68		04/05/72	
SAMPLED	06/22/51		08/18/69		01/14/73	
FORMATION	OLIG-FRIO		EOCE-MACKNEY		OLIG-WICKSBURG	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	6240		6560		11282	
WELLHEAD PRESSURE,PSIG	2899		600		7875	
OPEN FLOW, MCFD	7200		400		53000	
COMPONENT, MOLE PCT						
METHANE	92.9		92.3		89.7	
ETHANE	3.8		3.5		6.0	
PROPANE	1.1		1.2		1.9	
N-BUTANE	0.2		0.3		0.4	
ISOBUTANE	0.5		0.6		0.7	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.0		0.0		0.2	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.2		0.7		0.3	
NITROGEN	0.8		0.6		0.3	
OXYGEN	0.1		0.0		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.2		TRACE	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.3	
HELIUM	0.02		0.01		TRACE	
HEATING VALUE*	1077		1112		1134	
SPECIFIC GRAVITY	0.609		0.624		0.639	

	INDEX 8815 SAMPLE 12587		INDEX 8816 SAMPLE 12588		INDEX 8817 SAMPLE 12589	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HIDALGO		HIDALGO		HIDALGO	
FIELD	JEFFRESS		JEFFRESS		JEFFRESS	
WELL NAME	J. D. JEFFRESS ESTATE NO. 1		G. G. ZAMORA ST. OF TEX NO.1		PETER VAN SCHERPE JR., NO. 2	
LOCATION	F. W. KIMBRIDE SUR. 488		W. D. PARCHMAN SUR. 883		OLIG&3300 FT. SAND	
OWNER	COASTAL STATES GAS PROD. CO.		COASTAL STATES GAS PROD. CO.		COASTAL STATES GAS PROD. CO.	
COMPLETED	04/19/69		09/15/69		05/15/69	
SAMPLED	--/--/00		12/--/70		12/--/70	
FORMATION	OLIG-VICKSBURG U		OLIG-VICKSBURG T		OLIG-6300 FT. SAND	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	11318		9694		6298	
WELLHEAD PRESSURE,PSIG	8298		6215		3540	
OPEN FLOW, MCFD	37800		14000		9400	
COMPONENT, MOLE PCT						
METHANE	88.6		90.6		54.5	
ETHANE	5.9		5.6		3.4	
PROPANE	1.8		1.8		1.2	
N-BUTANE	0.2		0.4		0.5	
ISOBUTANE	0.6		0.6		0.6	
N-PENTANE	0.0		0.1		0.3	
ISOPENTANE	0.1		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		0.3	
NITROGEN	0.9		0.6		20.0	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		0.2	
HYDROGEN	0.0		0.0		8.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.8		0.1		10.7	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1086		1117		749	
SPECIFIC GRAVITY	0.639		0.628		0.766	

	INDEX 8818 SAMPLE 12564		INDEX 8819 SAMPLE 12566		INDEX 8820 SAMPLE 14575	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	HIDALGO		HIDALGO		HIDALGO	
FIELD	LA BLANCA		LA BLANCA		LA REFORMA	
WELL NAME	LA BLANCA GAS UNIT NO. 26		LA BLANCA GAS UNIT H-26		A. GUERRA "B" NO. 5	
LOCATION	LA BLANCA SUBD.		LA BLANCA SUBD.		SAN JOSE GRANT A-575	
OWNER	PAN AMERICAN PETROLEUM CORP.		PAN AMERICAN PETROLEUM CORP.		CHAMPLIN PETROLEUM CO.	
COMPLETED	01/26/69		01/26/69		10/01/74	
SAMPLED	11/04/70		11/04/70		02/03/76	
FORMATION	OLIG-FRIO		OLIG-FRIO		OLIG-FRIO	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7184		6587		6800	
WELLHEAD PRESSURE,PSIG	1540		2628		1812	
OPEN FLOW, MCFD	3300		26500		4048	
COMPONENT, MOLE PCT						
METHANE	95.0		93.0		91.1	
ETHANE	2.9		3.7		5.2	
PROPANE	0.6		1.0		1.9	
N-BUTANE	0.1		0.1		0.4	
ISOBUTANE	0.3		0.5		0.6	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.0		TRACE		0.2	
CYCLOPENTANE	0.1		0.0		TRACE	
HEXANES PLUS	0.2		0.2		0.1	
NITROGEN	0.6		1.1		0.3	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.01		TRACE		TRACE	
HEATING VALUE*	1062		1073		1117	
SPECIFIC GRAVITY	0.593		0.605		0.626	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8821 SAMPLE 4374	INDEX 8822 SAMPLE 4609	INDEX 8823 SAMPLE 13127
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	LOS INDIOS	LOS INDIOS	LOS INDIOS
WELL NAME	RICHARD KING ESTATE NO. 3	GOLDSTON NO. 10	W. L. GOLDSTON NO. B-18
LOCATION	NOT GIVEN	NOT GIVEN	SANTA ANITA GRANT A-63
OWNER	CHICAGO CORP.	CHICAGO CORP., ET AL.	CHAMPLIN PETROLEUM CO.
COMPLETED	06/11/47	03/19/48	03/06/71
SAMPLED	11/11/47	10/05/48	12/21/71
FORMATION	OLIG-WICKSBURG	OLIG-FRIO	OLIG-FRIO UF-50
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8345	6486	4216
WELLHEAD PRESSURE,PSIG	3970	2735	1790
OPEN FLOW, MCFD	1325	2800	10000
COMPONENT, MOLE PCT			
METHANE	93.1	89.0	93.9
ETHANE	6.3	10.1	2.8
PROPANE	---	---	0.8
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	0.1	0.5	1.4
OXYGEN	0.3	0.3	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1056	1083	1062
SPECIFIC GRAVITY	0.590	0.609	0.604

	INDEX 8824 SAMPLE 5124	INDEX 8825 SAMPLE 5006	INDEX 8826 SAMPLE 10681
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	LOS TORRITOS	MCALLEN	MCALLEN
WELL NAME	WILLIAM BREWSTER NO. 1	PEARL KEIRN NO. 1	MCALLEN F.W. NO. 39
LOCATION	NOT GIVEN	LOT 12, BLK. 7, PORCION 64	LOT 2, BLK. 15, S&P SUBD.
OWNER	TAYLOR REFINING CO.	TAYLOR REFINING CO.	TENNECO OIL CO.
COMPLETED	05/16/51	10/05/50	09/27/65
SAMPLED	11/12/51	02/09/51	07/26/66
FORMATION	OLIG-	OLIG-FRIO M	EOCE-MARKS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6745	8750	10432
WELLHEAD PRESSURE,PSIG	3100	3625	7705
OPEN FLOW, MCFD	12000	15000	30500
COMPONENT, MOLE PCT			
METHANE	95.4	92.9	94.3
ETHANE	2.5	4.5	3.4
PROPANE	0.7	1.5	1.0
N-BUTANE	0.2	0.4	0.2
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.7	0.0	0.4
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.0	0.2	TRACE
HELIUM	0.01	TRACE	0.03
HEATING VALUE*	1056	1100	1074
SPECIFIC GRAVITY	0.590	0.612	0.600

	INDEX 8827 SAMPLE 13862	INDEX 8828 SAMPLE 16090	INDEX 8829 SAMPLE 13863
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	MCALLEN RANCH	MCALLEN RANCH	MCCOOK E
WELL NAME	A. A. MCALLEN NO. 32	A. M. BEAULINE NO. 3	T. H. THESIS NO. 1
LOCATION	SAN RAMON GRANT	SANTA ANITA GRANT A-63	SEC. 6, LGE. 2, NEWMAN'S SUB.
OWNER	SHELL OIL CO.	SUN GAS CO.	SHELL OIL CO.
COMPLETED	08/30/72	--/--/80	03/04/72
SAMPLED	01/14/73	10/13/80	01/14/74
FORMATION	OLIG-WICKSBURG	OLIG-WICKSBURG	OLIG-WICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2398	13125	12081
WELLHEAD PRESSURE,PSIG	9436	NOT GIVEN	9140
OPEN FLOW, MCFD	20500	7000	63000
COMPONENT, MOLE PCT			
METHANE	89.0	92.0	90.7
ETHANE	6.3	5.0	5.6
PROPANE	2.2	1.2	1.7
N-BUTANE	0.5	0.3	0.3
ISOBUTANE	0.8	0.3	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.5	0.6	0.3
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1148	1100	1117
SPECIFIC GRAVITY	0.646	0.618	0.626

	INDEX 8830 SAMPLE 5862	INDEX 8831 SAMPLE 14581	INDEX 8832 SAMPLE 10168
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	MISSION W	MONTE CHRISTO	MONTE CHRISTO E
WELL NAME	RUTH N. JARED, ET AL. NO. 1	HAMMAN RANCH NO. 5	HAMMAN RANCH NO. 1
LOCATION	NOT GIVEN	SAN SALVADOR DEL TULE GRANT	SALVADOR DELTULE GRANT A-290
OWNER	HOUSTON OIL CO. OF TEXAS	SHELL OIL CO.	TENNECO OIL CO.
COMPLETED	05/29/55	02/27/74	12/20/63
SAMPLED	06/14/55	02/07/76	09/28/65
FORMATION	OLIG-	OLIG-WICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8267	9061	9500
WELLHEAD PRESSURE,PSIG	3488	6425	2850
OPEN FLOW, MCFD	2350	12700	140500
COMPONENT, MOLE PCT			
METHANE	93.0	97.5	92.5
ETHANE	4.2	1.5	4.5
PROPANE	1.1	0.4	1.4
N-BUTANE	0.3	0.1	0.3
ISOBUTANE	0.5	0.2	0.4
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	0.2
NITROGEN	0.2	0.3	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1106	1035	1101
SPECIFIC GRAVITY	0.616	0.572	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8833 SAMPLE 5309	INDEX 8834 SAMPLE 5290	INDEX 8835 SAMPLE 13871
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	PENITAS	PHARR	SAL-DEL-REY
WELL NAME	TEMPLE W. WEST NO. 1	LESTER DAWLEY UNIT NO. 1	M. SCHALEBEN NO. 1
LOCATION	PORTIONS 73-74-75	LOT 9, BLK. 13	NOT GIVEN
OWNER	HOUSTON OIL CO. OF TEXAS	TAYLOR OIL & GAS CO.	GEORGE MITCHELL & ASSOC. INC
COMPLETED	05/04/52	05/25/52	09/16/71
SAMPLED	08/04/52	10/10/52	01/18/74
FORMATION	OLIG-	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5994	9734	8031
WELLHEAD PRESSURE,PSIG	2488	7815	2940
OPEN FLOW, MCFD	63000	43500	7800
COMPONENT, MOLE PCT			
METHANE	82.1	93.4	96.0
ETHANE	2.8	4.0	2.3
PROPANE	0.7	0.9	0.4
N-BUTANE	0.1	0.2	TRACE
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	10.7	0.4	0.9
OXYGEN	2.5	TRACE	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	919	1089	1036
SPECIFIC GRAVITY	0.646	0.608	0.579

	INDEX 8836 SAMPLE 7261	INDEX 8837 SAMPLE 13147	INDEX 8838 SAMPLE 13148
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	SANTA RITA	SANTELLANA S	SANTELLANA S
WELL NAME	STATE TRACT 10, NO. 1	A. E. GUERRA NO. 5U	A. E. GUERRA NO. 5L
LOCATION	NOT GIVEN	SANTA ANITA GRANT A-63	SANTA ANITA GRANT A-63
OWNER	MOODY PROPERTIES	TEXACO INC.	TEXACO INC.
COMPLETED	03/18/59	02/09/70	02/09/70
SAMPLED	10/21/59	02/10/72	02/10/72
FORMATION	OLIG-FRIO	OLIG-LF-3 SAND	OLIG-S-8
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6052	7000	8500
WELLHEAD PRESSURE,PSIG	2497	1350	3160
OPEN FLOW, MCFD	16200	5013	5852
COMPONENT, MOLE PCT			
METHANE	95.9	92.9	92.3
ETHANE	2.4	2.6	4.3
PROPANE	0.2	0.9	1.4
N-BUTANE	TRACE	0.4	0.4
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	0.7	1.7	0.6
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1039	1080	1105
SPECIFIC GRAVITY	0.581	0.618	0.620

	INDEX 8839 SAMPLE 11185	INDEX 8840 SAMPLE 15453	INDEX 8841 SAMPLE 15454
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	HIDALGO	HIDALGO
FIELD	SHEPHERD	SHEPHERD	SHEPHERD
WELL NAME	HUSBAND UNIT NO. 2-LT	WESSLING NO. 1	WESSLING NO. 1
LOCATION	NARCISCO CAVASOS SUR. A-30	LOT 260, KELLY'S SUBD.	LOT 260, KELLY'S SUBD.
OWNER	UNION PRODUCING CO.	EDWIN L. COX	EDWIN L. COX
COMPLETED	11/08/66	04/17/77	04/17/77
SAMPLED	10/23/67	10/25/78	10/25/78
FORMATION	EOCE-CRUTCHFIELD	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6919	7540	7307
WELLHEAD PRESSURE,PSIG	1015	2920	1550
OPEN FLOW, MCFD	1160	3100	1900
COMPONENT, MOLE PCT			
METHANE	93.5	93.1	92.9
ETHANE	3.6	3.8	3.6
PROPANE	0.9	1.2	1.4
N-BUTANE	0.2	0.3	0.3
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.5	0.6	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1089	1089	1089
SPECIFIC GRAVITY	0.609	0.612	0.611

	INDEX 8842 SAMPLE 17871	INDEX 8843 SAMPLE 14916	INDEX 8844 SAMPLE 9338
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HIDALGO	WHITTED	WILDCAT
FIELD	TEXAS GARDENS	CAMPBELL UNIT NO. 1	J. M. DOSS NO. 1
WELL NAME	ARCO CNG NO. 1	2 MI. N MCALLEN	SEC. 41; XAVIER ZAMORA A-77
LOCATION	T. RAMIREZ SUR. 79	MCCORMICK OIL & GAS CORP.	TEXAS CO.
OWNER	ARCO OIL & GAS CO.	10/20/75	05/25/47
COMPLETED	11/07/84	02/21/77	07/17/47
SAMPLED	10/15/85	OLIG-FRIO	NOT GIVEN
FORMATION	PERR-R SAND	220	220
GEOLOGIC PROVINCE CODE	220	7226	3830
DEPTH, FEET	8351	2232	1490
WELLHEAD PRESSURE,PSIG	1575	3600	18000
OPEN FLOW, MCFD	1102		
COMPONENT, MOLE PCT			
METHANE	95.4	93.7	90.6
ETHANE	2.8	3.3	6.2
PROPANE	0.5	1.0	---
N-BUTANE	0.1	0.3	---
ISOBUTANE	0.1	0.4	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	0.2	0.6	1.9
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.1	0.9
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1055	1081	1029
SPECIFIC GRAVITY	0.589	0.605	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8845 SAMPLE 4746	INDEX 8846 SAMPLE 15985	INDEX 8847 SAMPLE 9085
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDALGO	MIDALGO	HOCKLEY
FIELD	WILDCAT	WILDCAT	ANTON
WELL NAME	CARLSON UNIT NO. 1	BARBARA LIPS NO. 1	AARON COHEN NO. 1
LOCATION	LOT 7, BLK. 1, MCCALL SUR.	15 MI. S RACHAL	SEC.112,BLK.A, THOMPSON SUR.
OWNER	MAGNOLIA PETROLEUM CO.	MILLIARD OIL & GAS, INC.	AARON COHEN ESTATE
COMPLETED	01/04/49	05/16/78	--/--/60
SAMPLED	05/20/49	06/18/80	09/20/63
FORMATION	OLIG-FRIO	OLIG-VICKSBURG	TRIA-
GEOLOGIC PROVINCE CODE	220	220	430
DEPTH, FEET	7580	15163	490
WELLHEAD PRESSURE,PSIG	2954	12400	42
OPEN FLOW, MCFD	15	10500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.5	89.8	0.1
ETHANE	3.8	2.9	TRACE
PROPANE	1.1	1.4	0.1
N-BUTANE	0.3	0.7	0.0
ISOBUTANE	0.3	1.2	TRACE
N-PENTANE	0.1	0.6	0.0
ISOPENTANE	0.1	0.4	0.0
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.2	1.4	TRACE
NITROGEN	0.5	0.1	99.5
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	1.2	TRACE
HELIUM	TRACE	TRACE	0.04
HEATING VALUE*	1075	1164	4
SPECIFIC GRAVITY	0.606	0.680	0.966

	INDEX 8848 SAMPLE 9086	INDEX 8849 SAMPLE 10780	INDEX 8850 SAMPLE 10781
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOCKLEY	MOOD	MOOD
FIELD	ANTON	BLACK RANCH	BLACK RANCH
WELL NAME	AARON COHEN NO. 1	BLACK RANCH NO. 1	BLACK RANCH NO. 4
LOCATION	SEC.112,BLK. A, THOMPSON SUR	JOHN SEALY SUR.	J. W. ROBINSON SUR.
OWNER	AARON COHEN ESTATE	ESTATE OF JOHN R. BLACK	ESTATE OF JOHN R. BLACK
COMPLETED	09/01/60	06/14/66	08/18/66
SAMPLED	09/21/63	11/21/66	11/21/66
FORMATION	TRIA-	PENN-CONGLOMERATE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	430	415	415
DEPTH, FEET	490	1295	1370
WELLHEAD PRESSURE,PSIG	42	600	523
OPEN FLOW, MCFD	NOT GIVEN	12200	3100
COMPONENT, MOLE PCT			
METHANE	0.1	89.2	86.8
ETHANE	TRACE	3.9	5.0
PROPANE	0.0	1.8	2.5
N-BUTANE	0.0	0.6	0.6
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	98.9	4.0	4.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.7	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.22	0.34	0.22
HEATING VALUE*	1	1040	1080
SPECIFIC GRAVITY	0.969	0.618	0.646

	INDEX 8851 SAMPLE 10782	INDEX 8852 SAMPLE 10783	INDEX 8853 SAMPLE 15358
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOOD	MOOD	MOOD
FIELD	BLACK RANCH	BLACK RANCH	BRATTEN
WELL NAME	BLACK RANCH NO. 5	BLACK RANCH NO. 6	BRATTEN RANCH NO. 2
LOCATION	WM. MILLSPAUGH SUR.	WM. MILLSPAUGH SUR.	T. STANBURY SUR. A-498
OWNER	ESTATE OF JOHN R. BLACK	ESTATE OF JOHN R. BLACK	GULF OIL EXPL. & PROD. CO.
COMPLETED	08/25/66	09/24/66	01/16/77
SAMPLED	11/21/66	11/21/66	08/25/78
FORMATION	PENN-CONGLOMERATE	PENN-CONGLOMERATE	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	415	415	415
DEPTH, FEET	1304	802	4760
WELLHEAD PRESSURE,PSIG	310	330	1630
OPEN FLOW, MCFD	5200	2000	2375
COMPONENT, MOLE PCT			
METHANE	86.2	88.4	66.3
ETHANE	5.5	4.2	14.5
PROPANE	2.7	2.0	8.5
N-BUTANE	0.6	0.8	2.9
ISOBUTANE	0.9	0.0	1.7
N-PENTANE	0.2	0.0	1.0
ISOPENTANE	0.1	0.0	1.0
CYCLOPENTANE	TRACE	0.0	0.3
HEXANES PLUS	0.1	0.0	1.1
NITROGEN	3.8	4.1	2.2
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.24	0.25	0.12
HEATING VALUE*	1093	1050	1460
SPECIFIC GRAVITY	0.652	0.626	0.863

	INDEX 8854 SAMPLE 15359	INDEX 8855 SAMPLE 15361	INDEX 8856 SAMPLE 12432
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOOD	MCINTOSH	HOPKINS
FIELD	BRATTEN	W. D. WILKERSON NO. 1	COMO
WELL NAME	BRATTEN RANCH NO. 4	MCKINNEY&WILLIAMS SUR.A-411	DERMONT FOSTER NO. 5
LOCATION	J. DOANE SUR. A-145	GULF OIL EXPL. & PROD. CO.	5 1/2 MI. S OF COMO
OWNER	GULF OIL EXPL. & PROD. CO.	04/27/77	DELTA DRILLING CO.
COMPLETED	05/16/77	08/25/78	05/18/68
SAMPLED	08/25/78	PENN-BIG SALINE	10/--/70
FORMATION	PENN-BIG SALINE	415	CRET-GLORY
GEOLOGIC PROVINCE CODE	415	4864	260
DEPTH, FEET	4636	1657	8006
WELLHEAD PRESSURE,PSIG	1478	7500	1200
OPEN FLOW, MCFD	3650		460
COMPONENT, MOLE PCT			
METHANE	72.6	73.1	80.1
ETHANE	13.0	12.2	7.2
PROPANE	7.1	6.9	3.2
N-BUTANE	1.8	2.0	0.8
ISOBUTANE	1.1	1.2	1.0
N-PENTANE	0.5	0.5	0.2
ISOPENTANE	0.5	0.7	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.4	0.2
NITROGEN	2.2	2.5	5.9
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	1.0
HELIUM	0.09	0.09	0.03
HEATING VALUE*	1318	1322	1112
SPECIFIC GRAVITY	0.775	0.781	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8857 SAMPLE 6874	INDEX 8858 SAMPLE 11847	INDEX 8859 SAMPLE 14799
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOPKINS	HOPKINS	HOUSTON
FIELD	SULPHUR BLUFF	WILDCAT	DECKER SWITCH
WELL NAME	BASSHAM NO. 1	C. M. MAYES UNIT NO. 1	W. S. HOLCOMB NO. 1
LOCATION	CRAFT (A-156)	NW OF MT. VERNON	REFUGIO VALENZUELA SUR.
OWNER	GRELLING ESTATE, ET AL.	COUCH OIL CO.	TEXAS CRUDE, INC.
COMPLETED	03/29/58	--/--/00	10/30/74
SAMPLED	11/29/58	04/26/69	10/07/76
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9324	9098	10413
WELLHEAD PRESSURE,PSIG	2967	3148	5155
OPEN FLOW, MCFD	14	127500	7729
COMPONENT, MOLE PCT			
METHANE	54.4	37.8	97.2
ETHANE	5.7	3.2	0.2
PROPANE	2.1	1.3	TRACE
N-BUTANE	0.7	0.7	0.0
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.3	0.4	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	30.7	49.1	0.7
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.3	0.9	0.0
CARBON DIOXIDE	4.1	6.7	1.7
HELIUM	0.10	0.12	0.01
HEATING VALUE*	537	537	988
SPECIFIC GRAVITY	0.807	0.879	0.574

	INDEX 8860 SAMPLE 12959	INDEX 8861 SAMPLE 3762	INDEX 8862 SAMPLE 3665
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOUSTON	HOUSTON	HOUSTON
FIELD	FORT TRINIDAD	GRAPELAND	NAVARRO CROSSING
WELL NAME	CRAWLEY NO. 1	FORD NEWMAN NO. 1	M. M. DAILEY & F. E. TAYLOR
LOCATION	I. LOPEZ SUR. A-50	J. D. J. PROCELLE SUR.	J. C. THOMPSON LEAGUE
OWNER	MORAN CORP.	LONE STAR PRODUCING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/16/70	01/16/42	06/24/38
SAMPLED	08/18/71	04/24/44	09/11/43
FORMATION	CRET-GLEN ROSE	CRET-WOODBINE	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10454	5879	5851
WELLHEAD PRESSURE,PSIG	3725	2000	2240
OPEN FLOW, MCFD	6000	21000	24100
COMPONENT, MOLE PCT			
METHANE	68.2	67.6	92.8
ETHANE	13.6	27.8	6.3
PROPANE	8.7	---	---
N-BUTANE	2.5	---	---
ISOBUTANE	1.9	---	---
N-PENTANE	0.6	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	1.8	4.0	0.1
OXYGEN	TRACE	0.5	0.1
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.9	0.9	0.7
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1372	1169	1053
SPECIFIC GRAVITY	0.831	0.716	0.593

	INDEX 8863 SAMPLE 13462	INDEX 8864 SAMPLE 14786	INDEX 8865 SAMPLE 1319
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOUSTON	HOUSTON	HOWARD
FIELD	RUNNING DUKE	TRINITY	CHALK
WELL NAME	DALLAS O. PETERS NO. 1	SOUTHLAND PAPER MILLS NO. 1	G. O. CHALK NO. 1
LOCATION	STEPHEN ROGERS SUR. A-75	S. P. GLENN SUR. A-472	NOT GIVEN
OWNER	AMOCO PRODUCTION CO.	ARMOUR PROPERTIES	MAGNOLIA PETROLEUM CO.
COMPLETED	01/26/71	01/30/75	--/--/00
SAMPLED	10/31/72	09/--/76	11/11/26
FORMATION	CRET-RODESSA	CRET-WOODBINE	PERM-
GEOLOGIC PROVINCE CODE	260	260	430
DEPTH, FEET	9917	8562	1580
WELLHEAD PRESSURE,PSIG	4180	3262	NOT GIVEN
OPEN FLOW, MCFD	10300	15300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.7	79.6	25.2
ETHANE	1.3	3.4	65.1
PROPANE	0.4	0.9	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	0.2	0.1	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	TRACE	---
NITROGEN	0.6	12.3	9.0
OXYGEN	0.0	1.0	0.6
ARGON	0.0	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.4	2.2	0.1
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1012	905	1422
SPECIFIC GRAVITY	0.599	0.665	0.918

	INDEX 8866 SAMPLE 2062	INDEX 8867 SAMPLE 2060	INDEX 8868 SAMPLE 2061
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOWARD	HOWARD	HOWARD
FIELD	CHALK	ROBERTS	ROBERTS
WELL NAME	CHALK C. NO. 1	DORA ROBERTS NO. 7	DORA ROBERTS NO. 8
LOCATION	SEC. 140, BLK. 29, W&NB SUR.	SEC. 137, BLK. 29, W&NW SUR.	SEC. 137, BLK. 29, W&NW SUR.
OWNER	CONTINENTAL OIL CO.	CALIFORNIA CO.	CALIFORNIA CO.
COMPLETED	--/--/00	07/24/29	11/19/29
SAMPLED	06/18/30	06/14/30	06/16/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1800	1798	2930
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	39.1	60.1	65.3
ETHANE	52.5	28.2	21.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.5	11.6	11.6
OXYGEN	0.5	0.5	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.3	1.5
HELIUM	0.05	0.03	0.08
HEATING VALUE*	1337	1119	1050
SPECIFIC GRAVITY	0.853	0.746	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 8869 SAMPLE 2064	INDEX 8870 SAMPLE 11704	INDEX 8871 SAMPLE 17670
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOWARD	HOWARD	HOWARD
FIELD	SNYDER	SURFACE SAMPLE	WILDCAT
WELL NAME	M. M. DANIELS NO. 1	SAMPLE NO. 1	NELLIE SELLERS NO. 1
LOCATION	SEC. 34, BLK. 30 T&P SUR.	BIG SPRING, TEXAS	SEC. 146, BLK. 29, W&NW SUR.
OWNER	MAGNOLIA PETROLEUM CO.	PIONEER NATURAL GAS CO.	BELNORTH PETROLEUM CORP.
COMPLETED	08/20/25	--/--/00	--/--/84
SAMPLED	06/18/30	12/13/68	05/11/85
FORMATION	PENN-CLEARFORK	-SURFACE	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2640	NOT GIVEN	7415
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2741
COMPONENT, MOLE PCT			
METHANE	19.1	6.4	75.6
ETHANE	77.2	0.0	8.9
PROPANE	---	0.0	6.0
N-BUTANE	---	0.0	2.1
ISOBUTANE	---	0.0	0.6
N-PENTANE	---	0.0	0.6
ISOPENTANE	---	0.0	0.8
CYCLOPENTANE	---	0.0	0.3
HEXANES PLUS	---	0.0	0.6
NITROGEN	2.9	90.7	4.1
OXYGEN	0.3	1.0	TRACE
ARGON	---	1.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.4
HELIUM	0.02	TRACE	0.11
HEATING VALUE*	1577	66	1274
SPECIFIC GRAVITY	0.955	0.951	0.768

	INDEX 8872 SAMPLE 7910	INDEX 8873 SAMPLE 13537	INDEX 8874 SAMPLE 7969
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUNT	HUTCHINSON	HUTCHINSON
FIELD	QUINLAN	BAR NINE	MANSFORD
WELL NAME	P. B. PAUL NO. 1	W. D. PRICE NO. 2	MATHEWS UNIT NO. 1
LOCATION	NOT GIVEN	SEC. 11, BLK.3, B&F SUR.	SEC. 80, BLK. R, GB&CNG SUR.
OWNER	PAUL C. TEAS	GULF OIL CO.- U.S.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/20/61	12/30/71	08/14/60
SAMPLED	03/15/61	02/20/73	05/17/61
FORMATION	JURA-SMACKOVER	PERM-COUNCIL GROVE	PENN-MORROW L
GEOLOGIC PROVINCE CODE	260	440	440
DEPTH, FEET	9012	3900	8529
WELLHEAD PRESSURE,PSIG	9012	653	2017
OPEN FLOW, MCFD	19000	2700	6250
COMPONENT, MOLE PCT			
METHANE	40.2	66.3	91.1
ETHANE	2.6	6.9	4.0
PROPANE	1.2	4.6	1.7
N-BUTANE	0.7	1.3	0.5
ISOBUTANE	0.7	0.7	0.4
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	45.5	18.9	0.9
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	8.0	TRACE	0.5
HELIUM	0.10	0.24	0.10
HEATING VALUE*	578	1031	1097
SPECIFIC GRAVITY	0.888	0.765	0.625

	INDEX 8875 SAMPLE 7971	INDEX 8876 SAMPLE 7296	INDEX 8877 SAMPLE 17874
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	HORIZON	HUTCH	HUTCHINSON
WELL NAME	MATHEWS UNIT NO. 1	EFFIE MAE MEADOWS NO. 1	PRICE "D" NO. 2
LOCATION	SEC. 80, BLK. R, GB&CNG SUR.	SEC. 31, M-21, TCRR SUR.	SEC. 26, BLK. M21, TCRR SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	CABOT CARBON CO.	PHILLIPS PETROLEUM CO.
COMPLETED	08/19/60	09/22/59	08/16/85
SAMPLED	05/17/61	12/02/59	10/22/85
FORMATION	PENN-CLEVELAND	PERM-GRANITE	PERM-WHITE DOLOMITE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	6618	5444	3333
WELLHEAD PRESSURE,PSIG	1637	1331	425
OPEN FLOW, MCFD	10000	18200	1005
COMPONENT, MOLE PCT			
METHANE	91.2	63.8	77.0
ETHANE	3.9	6.9	7.7
PROPANE	1.7	2.8	3.9
N-BUTANE	0.5	0.7	1.3
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.4
NITROGEN	0.8	24.2	7.8
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.1	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.10	0.50	0.24
HEATING VALUE*	1110	899	1142
SPECIFIC GRAVITY	0.630	0.741	0.720

	INDEX 8878 SAMPLE 5856	INDEX 8879 SAMPLE 6648	INDEX 8880 SAMPLE 6709
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	HUTCHINSON N	HUTCHINSON N	HUTCHINSON N
WELL NAME	T. HARBOUR NO. 1	B. M. HOLT NO. 1	B. M. HOLT NO. 1
LOCATION	SEC. 53, BLK. 5, T&NO SUR.	SEC. 51, BLK. 5, T&NO SUR.	SEC. 51, BLK. 5, T&NO SUR.
OWNER	TEXAS CO.	TEXAS CO.	TEXACO INC.
COMPLETED	11/24/54	12/05/57	12/05/57
SAMPLED	06/10/55	06/19/58	--/--/00
FORMATION	PENN-LIME	PENN-CLEVELAND	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	6082	5875	4926
WELLHEAD PRESSURE,PSIG	1592	1501	959
OPEN FLOW, MCFD	3532	5783	1138
COMPONENT, MOLE PCT			
METHANE	90.3	86.8	81.5
ETHANE	4.2	6.0	3.2
PROPANE	1.6	2.8	2.0
N-BUTANE	0.6	0.8	0.7
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	2.0	2.5	11.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.13	0.10	0.49
HEATING VALUE*	1094	1118	998
SPECIFIC GRAVITY	0.628	0.650	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8881 SAMPLE 6556	INDEX 8882 SAMPLE 7215	INDEX 8883 SAMPLE 7871
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	JOHN CREEK	JOHN CREEK	JOHN CREEK
WELL NAME	D. B. KIRK NO. 1	K. L. WEST ET AL. UNIT NO. 1	JONES L NO. 1
LOCATION	SEC. 77, BLK. R, GB&CNG SUR.	SEC. 5	SEC. 1, BBB&C SUR.
OWNER	SUN OIL CO.	SINCLAIR OIL & GAS CO., ET A	PHILLIPS PETROLEUM CO.
COMPLETED	01/17/58	09/02/58	12/24/60
SAMPLED	04/15/58	03/15/59	02/23/61
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-MORROW U
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	8172	8130	7278
WELLHEAD PRESSURE,PSIG	1725	2073	2014
OPEN FLOW, MCFD	4400	3800	9995
COMPONENT, MOLE PCT			
METHANE	92.6	92.0	93.9
ETHANE	3.9	3.9	3.3
PROPANE	1.3	1.0	0.8
N-BUTANE	0.5	0.4	0.3
ISOBUTANE	0.1	0.3	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.6	1.4	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1089	1073	1072
SPECIFIC GRAVITY	0.613	0.614	0.607

	INDEX 8884 SAMPLE 15998	INDEX 8885 SAMPLE 13511	INDEX 8886 SAMPLE 13512
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	LIPS W	MORSE SW	MORSE SW
WELL NAME	PATTERSON 6.U. NO. 2	HADLEY NO. 4-3	RASCOE WORBLE NO. 1-7
LOCATION	SEC. 73, BLK. RG&NCNG SUR.	SEC. 3, BLK. M, H&GB SUR.	SEC. 7, BLK. 1, BBB&C RR SUR
OWNER	SUN OIL CO.	MCCULLOCH OIL CORP.	MCCULLOCH OIL CORP.
COMPLETED	12/21/79	10/07/72	07/25/71
SAMPLED	07/05/80	01/22/73	01/22/72
FORMATION	PENN-CLEVELAND	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	6560	2948	3056
WELLHEAD PRESSURE,PSIG	1532	400	400
OPEN FLOW, MCFD	8500	2300	3800
COMPONENT, MOLE PCT			
METHANE	82.7	71.8	67.4
ETHANE	7.9	8.2	8.5
PROPANE	4.3	5.0	4.7
N-BUTANE	1.3	1.0	0.8
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	2.4	12.4	16.9
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.13	0.56	0.90
HEATING VALUE*	1183	1065	1006
SPECIFIC GRAVITY	0.690	0.721	0.734

	INDEX 8887 SAMPLE 14009	INDEX 8888 SAMPLE 14039	INDEX 8889 SAMPLE 13577
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	MORSE SW	MORSE SW	NOT GIVEN
WELL NAME	CUNNINGHAM NO. 1	BARNES "B" NO. 4	JACKSON NO. A-1
LOCATION	SEC. 8, BLK. 1, BBB&C SUR.	SEC. 9, BLK. 1, BBB&C SUR.	SEC. 71, BLK.A, B&B SUR.
OWNER	MCCULLOCH OIL CORP.	PHILLIPS PETROLEUM CO.	LEAR PETROLEUM CORP.
COMPLETED	05/15/74	07/01/74	--/--/00
SAMPLED	05/15/74	07/08/74	04/16/75
FORMATION	PENN-MARMATON	PERM-WICHITA-ALBANY	PENN-MORROW L
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	5270	3012	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1200	1310	NOT GIVEN
OPEN FLOW, MCFD	2800	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.7	70.4	92.0
ETHANE	6.6	8.1	3.9
PROPANE	4.0	4.5	1.7
N-BUTANE	1.1	0.8	0.4
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.2	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	13.8	14.3	0.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.34	0.75	0.09
HEATING VALUE*	1039	1037	1091
SPECIFIC GRAVITY	0.720	0.725	0.619

	INDEX 8890 SAMPLE 1392	INDEX 8891 SAMPLE 1410	INDEX 8892 SAMPLE 1412
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	INGERTON NO. 1	BIVINS B-5	INGERTON NO. 1
LOCATION	SEC. 41, BLK. 47, H&TC SUR.	SEC. 88, BLK. 46, H&TC SUR.	SEC. 41, BLK. 47, H&TC SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	--/--/00	03/16/27	07/05/27
SAMPLED	05/19/27	06/24/27	07/12/27
FORMATION	PERM-	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1195	2000	2550
WELLHEAD PRESSURE,PSIG	NOT GIVEN	408	190
OPEN FLOW, MCFD	NOT GIVEN	70000	70000
COMPONENT, MOLE PCT			
METHANE	6.5	63.5	56.0
ETHANE	16.0	24.5	29.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	76.3	10.8	12.4
OXYGEN	0.9	0.0	1.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.8	0.5
HELIUM	0.22	0.38	0.43
HEATING VALUE*	353	1082	1094
SPECIFIC GRAVITY	0.957	0.726	0.762

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 8893 SAMPLE 1542	INDEX 8894 SAMPLE 1543	INDEX 8895 SAMPLE 1676
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS B-4	BIVINS B-6	SANFORD NO. 1
LOCATION	SEC. 13, BLK. Y-2, CB&CNG SUR.	SEC. 90, BLK. 46, H&TC SUR.	SEC. 82, BLK. 46, H&TC SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	CANADIAN RIVER GAS CO.
COMPLETED	10/--/25	09/16/27	--/--/00
SAMPLED	11/04/27	11/04/27	09/18/28
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2305	2175	NOT GIVEN
WELLHEAD PRESSURE,PSIG	425	150	330
OPEN FLOW, MCFD	81000	60000	60000
COMPONENT, MOLE PCT			
METHANE	68.6	68.3	72.7
ETHANE	20.9	21.2	19.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.5	9.6	6.9
OXYGEN	0.3	0.3	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.44	0.44	0.39
HEATING VALUE*	1069	1072	1077
SPECIFIC GRAVITY	0.700	0.701	0.681

	INDEX 8896 SAMPLE 1802	INDEX 8897 SAMPLE 1884	INDEX 8898 SAMPLE 1921
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	INGERTON A-2	BIVINS B-1	JOHNSON A-1
LOCATION	SEC. 91, BLK. 47, H&TC SUR.	SEC. 11, BLK. Y2, CB&CGN	SEC. 4, BLK. Y-2, TTRR SUR.
OWNER	AMARILLO OIL CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	03/18/24	05/10/24
SAMPLED	06/24/29	09/27/29	01/10/30
FORMATION	-SAND	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1280	2657	2265
WELLHEAD PRESSURE,PSIG	NOT GIVEN	429	415
OPEN FLOW, MCFD	NOT GIVEN	33770	11000
COMPONENT, MOLE PCT			
METHANE	7.7	73.5	71.2
ETHANE	15.2	15.2	19.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	76.7	9.6	8.7
OXYGEN	0.1	0.9	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	0.25	0.43	0.45
HEATING VALUE*	350	1017	1062
SPECIFIC GRAVITY	0.947	0.678	0.687

	INDEX 8899 SAMPLE 2081	INDEX 8900 SAMPLE 2238	INDEX 8901 SAMPLE 2590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	JOHNSON NO. 1	M. M. REED NO. 1	DUNAWAY A-2
LOCATION	SEC. 6, BLK. 1, B&B SUR.	MCDONALD SUR.	SEC. 5, BLK. Y-2, TTRR SUR.
OWNER	CONTINENTAL OIL CO.	PRAIRIE OIL & GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	10/19/26	11/01/30	10/18/32
SAMPLED	06/26/30	10/31/30	01/20/33
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3104	2465	2260
WELLHEAD PRESSURE,PSIG	390	NOT GIVEN	370
OPEN FLOW, MCFD	70000	14000	38000
COMPONENT, MOLE PCT			
METHANE	66.7	74.3	63.3
ETHANE	21.8	17.8	24.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.0	7.0	10.6
OXYGEN	0.6	0.1	0.9
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.4	0.5
HELIUM	0.39	0.44	0.45
HEATING VALUE*	1066	1072	1075
SPECIFIC GRAVITY	0.710	0.674	0.726

	INDEX 8902 SAMPLE 3364	INDEX 8903 SAMPLE 3375	INDEX 8904 SAMPLE 3376
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. F-1	BOST NO. B-1	DUNAWAY NO. B-1
LOCATION	SEC. 13, BLK. Y-2, TTRR SUR.	SEC. 9, BLK. Y-2, TTRR SUR.	SEC. 5, BLK. Y-2, TTRR SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.2	70.0	72.2
ETHANE	18.2	18.6	18.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.6	10.2	8.8
OXYGEN	0.3	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.48	0.49	0.39
HEATING VALUE*	1058	1042	1058
SPECIFIC GRAVITY	0.681	0.691	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8905 SAMPLE 3377	INDEX 8906 SAMPLE 3382	INDEX 8907 SAMPLE 3389
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. C-1	BOST NO. A-1	DUNAWAY NO. A-1
LOCATION	SEC. 10, BLK. Y-2, TTRR SUR.	SEC. 6, BLK. Y-2, TTRR SUR.	SEC. 5, BLK. Y-2, TTRR SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.4	70.6	71.6
ETHANE	18.2	19.5	18.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.2	8.9	8.8
OXYGEN	0.5	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.47	0.49	0.51
HEATING VALUE*	1039	1065	1053
SPECIFIC GRAVITY	0.689	0.689	0.685

	INDEX 8908 SAMPLE 3977	INDEX 8909 SAMPLE 5332	INDEX 8910 SAMPLE 5356
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	JOHNSON NO. A-1-6	STEWART NO. 29	C. C. WHITTENBURG A NO. 38
LOCATION	SEC. 1, BLK. Y-2, TTRR SUR.	SEC. 19, BLK. M-16, A&M SUR	LOT 43, BLK. 3, WM. MEIL SUR
OWNER	TEXOMA NATURAL GAS CO.	SHAMROCK OIL & GAS CORP.	CONTINENTAL OIL CO.
COMPLETED	10/02/30	09/05/52	10/01/52
SAMPLED	12/22/44	11/20/52	12/12/52
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2305	2870	2942
WELLHEAD PRESSURE,PSIG	400	262	241
OPEN FLOW, MCFD	18470	2317	758
COMPONENT, MOLE PCT			
METHANE	75.0	76.3	75.0
ETHANE	16.6	7.2	7.3
PROPANE	---	4.4	4.7
N-BUTANE	---	1.4	1.3
ISOBUTANE	---	0.9	0.6
N-PENTANE	---	0.4	0.3
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	7.6	8.8	9.9
OXYGEN	0.0	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.47	0.38	0.40
HEATING VALUE*	1057	1113	1104
SPECIFIC GRAVITY	0.669	0.717	0.719

	INDEX 8911 SAMPLE 5358	INDEX 8912 SAMPLE 5359	INDEX 8913 SAMPLE 5382
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	LOGAN NO. A-20	NORTH AMERICAN NO. 2	BURNETT NO. 6
LOCATION	SEC. 135, BLK. 5-T, T&NO SUR	SEC. 85, T4S, MITC SUR.	SEC. 127, BLK. 5, H&GN SUR.
OWNER	SHAMROCK OIL & GAS CORP.	FRANK C. HENDERSON TRUSTS	J. GORDON BURCH
COMPLETED	10/15/52	08/10/52	08/01/51
SAMPLED	12/13/52	12/17/52	02/03/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3120	2350	3160
WELLHEAD PRESSURE,PSIG	302	174	183
OPEN FLOW, MCFD	241	39000	1300
COMPONENT, MOLE PCT			
METHANE	78.7	77.2	77.0
ETHANE	8.3	5.9	6.6
PROPANE	4.6	3.6	4.5
N-BUTANE	0.9	1.1	1.4
ISOBUTANE	0.5	0.5	0.7
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	5.9	10.1	8.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.4
HELIUM	0.47	0.47	0.35
HEATING VALUE*	1099	1070	1121
SPECIFIC GRAVITY	0.716	0.704	0.716

	INDEX 8914 SAMPLE 5861	INDEX 8915 SAMPLE 7036	INDEX 8916 SAMPLE 7037
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	JOHNSON RANCH B NO. 24	DUKE MEIRS NO. 1	YAKE B NO. 1
LOCATION	SEC. 38, BLK. Y, A&B SUR.	SEC. 4, BLK. J, H&GN SUR.	SEC. 2, BLK. M-26, TC&RR SUR
OWNER	SINCLAIR OIL & GAS CO.	PANHANDLE PRODUCING CO.	PANHANDLE PRODUCING CO.
COMPLETED	02/08/55	12/04/53	01/01/58
SAMPLED	06/17/55	06/23/59	04/23/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2284	3038	2742
WELLHEAD PRESSURE,PSIG	145	131	131
OPEN FLOW, MCFD	12500	2162	855
COMPONENT, MOLE PCT			
METHANE	77.4	73.2	75.1
ETHANE	6.3	7.9	7.2
PROPANE	3.8	5.6	4.8
N-BUTANE	1.4	1.9	1.8
ISOBUTANE	0.7	1.0	0.9
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	0.2	0.4	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	8.7	8.5	8.2
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	0.41	0.30	0.30
HEATING VALUE*	1111	1176	1159
SPECIFIC GRAVITY	0.717	0.751	0.738

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8917 SAMPLE 7042	INDEX 8918 SAMPLE 7043	INDEX 8919 SAMPLE 7504
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CARVER A NO. 2	HERRING A NO. 8	JATEN NO. 3
LOCATION	SEC. 4, W. M. NEIL SUR.	E. ALMAGUEI SUR.	SEC. 12, BLK. Y, M&C SUR.
OWNER	J. M. HUBER CORP.	SKELLY OIL CO.	CREST OIL CO.
COMPLETED	07/--/50	--/--/00	09/10/59
SAMPLED	04/27/59	04/27/59	12/18/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2915	2785	2682
WELLHEAD PRESSURE,PSIG	119	163	97
OPEN FLOW, MCFD	1215	540	1800
COMPONENT, MOLE PCT			
METHANE	75.2	73.0	76.3
ETHANE	7.9	8.6	6.8
PROPANE	4.7	5.1	5.5
N-BUTANE	1.5	1.5	1.5
ISOBUTANE	0.7	0.7	0.5
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	8.6	9.9	7.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.40	0.30	0.40
HEATING VALUE*	1139	1141	1150
SPECIFIC GRAVITY	0.729	0.741	0.726

	INDEX 8920 SAMPLE 7768	INDEX 8921 SAMPLE 7769	INDEX 8922 SAMPLE 8196
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-160	BIVINS A-161	BOST NO. 3-R
LOCATION	SEC. 90, BLK. 46, H&TC SUR.	SEC. 13, BLK. Y-2, GB&CG SUR	SEC. 9, BLK. Y-2, TT&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/24/60	10/24/60	--/--/00
SAMPLED	11/14/60	11/08/60	09/13/61
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-TUBB
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2170	2280	NOT GIVEN
WELLHEAD PRESSURE,PSIG	160	196	8
OPEN FLOW, MCFD	16400	22300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.0	77.0	72.8
ETHANE	6.4	6.3	5.6
PROPANE	3.8	3.6	2.2
N-BUTANE	1.3	1.2	0.5
ISOBUTANE	0.8	0.8	0.2
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	8.9	9.3	17.1
OXYGEN	TRACE	TRACE	0.6
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.5
HELIUM	0.40	0.50	0.13
HEATING VALUE*	1108	1098	932
SPECIFIC GRAVITY	0.715	0.713	0.700

	INDEX 8923 SAMPLE 8199	INDEX 8924 SAMPLE 8861	INDEX 8925 SAMPLE 10029
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BOST NO. 1R	BOST NO. C-3	BOST D-2
LOCATION	SEC. 11, BLK. Y-2, TT&RR SUR	SEC. 10, BLK. Y-2, TTRR SUR.	SEC. 1, BS&F SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	10/09/62	07/25/65
SAMPLED	09/13/61	02/14/63	08/05/65
FORMATION	PERM-TUBB	PERM-GRANITE WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2340	2404
WELLHEAD PRESSURE,PSIG	27	149	149
OPEN FLOW, MCFD	NOT GIVEN	25200	55000
COMPONENT, MOLE PCT			
METHANE	80.7	76.8	76.1
ETHANE	6.4	6.2	6.4
PROPANE	2.6	3.6	4.0
N-BUTANE	0.6	1.3	1.4
ISOBUTANE	0.5	0.6	0.8
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.2	0.3	0.5
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.3	0.3
NITROGEN	8.7	9.5	9.4
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.15	0.50	0.44
HEATING VALUE*	1043	1096	1113
SPECIFIC GRAVITY	0.667	0.712	0.723

	INDEX 8926 SAMPLE 10756	INDEX 8927 SAMPLE 13135	INDEX 8928 SAMPLE 7341
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W/RED CAVE
WELL NAME	JOHNSON NO. A-3	FISCHER NO. 1	BIVINS NO. C-1
LOCATION	SEC. 4, Y-2, TTRR SUR.	SEC. 2, DL+CC SUR.	SEC. 13, 68&CNGRR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	REX FULLER	AMARILLO OIL CO.
COMPLETED	10/07/66	01/29/71	01/15/60
SAMPLED	10/10/66	01/11/72	01/19/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2265	3012	1602
WELLHEAD PRESSURE,PSIG	126	392	NOT GIVEN
OPEN FLOW, MCFD	30500	7100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.7	68.1	81.1
ETHANE	6.3	7.6	6.6
PROPANE	5.1	3.7	2.4
N-BUTANE	0.2	0.5	0.6
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.6	TRACE	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	TRACE	0.1
NITROGEN	9.3	18.3	8.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.44	0.91	0.10
HEATING VALUE*	1127	957	1048
SPECIFIC GRAVITY	0.727	0.721	0.664

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8929 SAMPLE 7448	INDEX 8930 SAMPLE 7748	INDEX 8931 SAMPLE 7749
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS B-2	EVELYN NO. 2	INGERTON A NO. 3
LOCATION	SEC. 90, BLK. 46, H&TC SUR.	SEC. 42, BLK. 47, H&TC SUR.	SEC. 41, BLK. 47, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/25	10/10/60	10/31/60
SAMPLED	03/17/60	11/01/60	11/01/60
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1470	1530	1552
WELLHEAD PRESSURE,PSIG	408	346	367
OPEN FLOW, MCFD	1500	13354	4400
COMPONENT, MOLE PCT			
METHANE	81.7	80.3	80.7
ETHANE	6.7	7.2	6.9
PROPANE	2.5	2.6	2.6
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.7	8.1	8.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.10	0.20	0.20
HEATING VALUE*	1057	1058	1059
SPECIFIC GRAVITY	0.663	0.670	0.670

	INDEX 8932 SAMPLE 7751	INDEX 8933 SAMPLE 7767	INDEX 8934 SAMPLE 7795
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	JAY NO. 2	BIVINS A-160	BOST A 1R
LOCATION	SEC. 40, BLK. 47, H&TC SUR.	SEC. 90, BLK. 46, H&TC SUR.	SEC. 14, BLK. T2, G&&CN& SUR
OWNER	PHILLIPS PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	ANADARKO PRODUCTION CO.
COMPLETED	10/31/60	--/--/00	11/--/60
SAMPLED	11/01/60	11/14/60	12/13/60
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1622	1483	1766
WELLHEAD PRESSURE,PSIG	376	405	365
OPEN FLOW, MCFD	5200	8100	12250
COMPONENT, MOLE PCT			
METHANE	79.9	82.0	81.5
ETHANE	7.0	6.6	6.8
PROPANE	3.0	2.3	2.6
N-BUTANE	0.8	0.5	0.6
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	8.3	7.5	7.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.20	0.10
HEATING VALUE*	1069	1053	1059
SPECIFIC GRAVITY	0.679	0.661	0.665

	INDEX 8935 SAMPLE 7800	INDEX 8936 SAMPLE 7801	INDEX 8937 SAMPLE 7878
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BOST A-1R	BIVINS B-1R	SNOW NO. 9
LOCATION	SEC. 9, BLK. Y-2, TTRR SUR.	SEC. 91, BLK. 46, H&TC SUR.	SEC.57, BLK. M-23, TC&RR SUR
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/12/60	12/12/60	12/08/60
SAMPLED	12/19/60	12/19/60	02/02/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1577	1524	1539
WELLHEAD PRESSURE,PSIG	377	483	391
OPEN FLOW, MCFD	4700	9800	12600
COMPONENT, MOLE PCT			
METHANE	82.6	81.6	80.5
ETHANE	6.7	6.9	7.0
PROPANE	1.7	2.6	2.6
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.5	7.5	8.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1044	1057	1053
SPECIFIC GRAVITY	0.656	0.662	0.667

	INDEX 8938 SAMPLE 7883	INDEX 8939 SAMPLE 7884	INDEX 8940 SAMPLE 7887
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	SNOW NO. 10	SNOW NO. 9	REDCAVE B NO. 1
LOCATION	SEC. 46, BLK. 47, H&TC SUR.	SEC. 57, BLK. M-23, TC&RR SUR	SEC. 80, BLK. 46, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/12/60	12/08/60	02/16/61
SAMPLED	03/02/61	03/02/61	03/09/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1537	1539	1569
WELLHEAD PRESSURE,PSIG	392	395	339
OPEN FLOW, MCFD	13700	12600	5420
COMPONENT, MOLE PCT			
METHANE	81.9	81.4	81.4
ETHANE	6.8	7.1	6.2
PROPANE	2.4	2.7	2.6
N-BUTANE	0.5	0.6	0.7
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	7.5	7.2	7.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.20	0.20
HEATING VALUE*	1053	1066	1063
SPECIFIC GRAVITY	0.661	0.666	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8941 SAMPLE 7888	INDEX 8942 SAMPLE 7903	INDEX 8943 SAMPLE 7904
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	JOHNSON EB NO. 1	SNOW NO. 12	SNOW NO. 11
LOCATION	SEC. 3, BLK. 1, B&B SUR.	SEC. 3, J. POITEVENT SUR.	E. L. SNOW SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	02/24/61	02/02/61	02/01/61
SAMPLED	03/09/61	03/16/61	03/16/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1579	1688	1737
WELLHEAD PRESSURE,PSIG	375	404	371
OPEN FLOW, MCFD	710	6000	3450
COMPONENT, MOLE PCT			
METHANE	83.3	81.3	82.0
ETHANE	5.5	7.0	6.7
PROPANE	1.9	2.4	2.5
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	7.6	7.8	7.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.20	0.10	0.20
HEATING VALUE*	1043	1048	1057
SPECIFIC GRAVITY	0.655	0.660	0.659

	INDEX 8944 SAMPLE 8232	INDEX 8945 SAMPLE 8426	INDEX 8946 SAMPLE 8427
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	KERMICLE NO. 2	BOST NO. 1R	BIVINS NO. 7R
LOCATION	LULA KERMICLE SUR.	SEC. 10, Y-2, TT&RR SUR.	SEC. 11, BLK. Y-2, GB&CNGSUR
OWNER	PHILLIPS PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/15/61	10/25/61	10/23/61
SAMPLED	10/10/61	03/02/62	03/02/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1256	1646	1628
WELLHEAD PRESSURE,PSIG	398	324	341
OPEN FLOW, MCFD	13425	1250	4350
COMPONENT, MOLE PCT			
METHANE	81.6	81.5	80.7
ETHANE	6.5	6.4	6.7
PROPANE	2.6	2.7	2.8
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	7.7	7.7	7.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.15	0.15	0.15
HEATING VALUE*	1055	1059	1076
SPECIFIC GRAVITY	0.662	0.665	0.676

	INDEX 8947 SAMPLE 8454	INDEX 8948 SAMPLE 8457	INDEX 8949 SAMPLE 8856
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BOST 3 R	BOST NO. 2-R	BIVINS NO. 8R
LOCATION	SEC. 9, BLK. Y-2, TTRR SUR.	SEC. 6, BLK. Y-2, TTRR SUR.	SEC. 88, BLK. 46, M&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/25/61	10/23/61	08/27/62
SAMPLED	03/14/62	03/14/62	02/14/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1606	1558	1580
WELLHEAD PRESSURE,PSIG	345	341	334
OPEN FLOW, MCFD	1800	4800	7500
COMPONENT, MOLE PCT			
METHANE	81.9	81.7	82.0
ETHANE	6.3	6.4	6.4
PROPANE	2.5	2.5	2.7
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.9	7.9	7.4
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.16	0.14	0.10
HEATING VALUE*	1052	1051	1060
SPECIFIC GRAVITY	0.664	0.664	0.664

	INDEX 8950 SAMPLE 9297	INDEX 8951 SAMPLE 9299	INDEX 8952 SAMPLE 9301
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 10R	DUNAWAY NO. 1R	JOHNSON NO. 1R
LOCATION	SEC. 13, BLK. Y-2, TTRR SUR.	SEC. 5, BLK. Y-2, TTRR SUR.	SEC. 3, BLK. Y-2, TTRR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/20/63	09/15/63	09/13/63
SAMPLED	04/14/64	04/14/64	04/14/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1610	1612	1611
WELLHEAD PRESSURE,PSIG	307	305	363
OPEN FLOW, MCFD	4700	4100	4900
COMPONENT, MOLE PCT			
METHANE	81.7	82.1	82.0
ETHANE	6.6	6.1	6.5
PROPANE	2.9	2.2	2.5
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.7	8.1	7.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.15	0.15	0.15
HEATING VALUE*	1053	1043	1053
SPECIFIC GRAVITY	0.663	0.661	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8953 SAMPLE 9312	INDEX 8954 SAMPLE 9800	INDEX 8955 SAMPLE 12273
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	SHIRLEY
WELL NAME	BIVINS NO. 17R	JOHNSON 2-R	JENKINS NO. 1
LOCATION	SEC. 90, BLK. 46, M&TC SUR.	SEC. 3, BLK Y-2, TTRR SUR.	SEC. 118, BLK. 5-T,T+NO SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	BLAIK OIL CO.
COMPLETED	11/18/63	08/20/64	10/04/68
SAMPLED	04/14/64	03/16/65	06/01/70
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1552	1612	6015
WELLHEAD PRESSURE,PSIG	310	321	770
OPEN FLOW, MCFD	5300	2750	1639
COMPONENT, MOLE PCT			
METHANE	82.2	81.8	88.4
ETHANE	6.4	6.2	4.3
PROPANE	2.4	2.4	2.3
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	7.6	8.0	3.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.35	0.35	0.13
HEATING VALUE*	1050	1046	1101
SPECIFIC GRAVITY	0.660	0.663	0.643

	INDEX 8956 SAMPLE 12274	INDEX 8957 SAMPLE 17527	INDEX 8958 SAMPLE 12690
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	IRION
FIELD	SHIRLEY	WILDCAT	BROOKS
WELL NAME	JARVIS NO. 1	MARTY NO. 1	BROOKS NO. 1
LOCATION	SEC. 83, BLK. S-T, T&NO SUR.	SEC. 219, BLK. 2, I&GN SUR.	NOT GIVEN
OWNER	BLAIK OIL CO.	FOLLETT OPERATING CO.	CENARD OIL & GAS CO.
COMPLETED	03/03/69	06/06/84	--/--/00
SAMPLED	06/01/70	11/29/84	02/--/71
FORMATION	PENN-TONKAWA	PERM-WICHITA-ALBANY	PENN-CANYON NO. 3
GEOLOGIC PROVINCE CODE	440	440	430
DEPTH, FEET	5392	3106	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1316	500	NOT GIVEN
OPEN FLOW, MCFD	4054	8000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	79.9	75.4
ETHANE	3.9	6.1	9.8
PROPANE	2.5	2.9	5.3
N-BUTANE	0.7	0.9	1.2
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.1	8.5	6.4
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.22	0.19	0.13
HEATING VALUE*	1065	1069	1177
SPECIFIC GRAVITY	0.652	0.684	0.731

	INDEX 8959 SAMPLE 15033	INDEX 8960 SAMPLE 11250	INDEX 8961 SAMPLE 11251
STATE	TEXAS	TEXAS	TEXAS
COUNTY	IRION	IRION	IRION
FIELD	BURNT ROCK	DOVE CREEK	DOVE CREEK
WELL NAME	SHEEN "3061" NO. 1	WINTERBOTHAM D NO. 1	WINTERBOTHAM D NO. 1
LOCATION	SEC.3061;BLK.28;H&TCRR SUR.	SEC. 27, BLK. 21, H&TC SUR.	SEC. 27, BLK. 21, H&TC SUR.
OWNER	UNION TEXAS PETROLEUM CORP.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	08/03/76	04/14/66	05/14/66
SAMPLED	06/23/77	12/28/67	12/28/67
FORMATION	PENN-CANYON	PENN-CANYON C	PENN-CANYON D
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6559	6432	6473
WELLHEAD PRESSURE,PSIG	1695	2320	2245
OPEN FLOW, MCFD	3512	3100	4600
COMPONENT, MOLE PCT			
METHANE	39.3	74.4	75.6
ETHANE	5.7	9.7	9.4
PROPANE	4.8	4.9	4.1
N-BUTANE	1.4	1.3	1.1
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.7	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	2.2	7.3	7.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	45.4	0.4	0.4
HELIUM	0.06	0.14	0.16
HEATING VALUE*	720	1177	1140
SPECIFIC GRAVITY	1.125	0.741	0.722

	INDEX 8962 SAMPLE 15076	INDEX 8963 SAMPLE 14886	INDEX 8964 SAMPLE 6010
STATE	TEXAS	TEXAS	TEXAS
COUNTY	IRION	IRION	IRION
FIELD	ELLA SUGG	SPRATBERRY	SUGG
WELL NAME	ELLA C. SUGG "G" NO. 6	ELLA C. SUGG G NO. 6	ELLA SUGG A-NO. 1
LOCATION	SEC.103;BLK. 14, M&TC SUR.	SEC.103, BLK. 14, M&TC SUR.	SEC. 95, BLK. 14, M&TC SUR.
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	SUNRAY MID-CONTINENT OIL CO.
COMPLETED	06/16/76	06/16/76	10/19/55
SAMPLED	07/08/77	01/25/77	01/31/56
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-CLEARFORK
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7814	7900	4535
WELLHEAD PRESSURE,PSIG	2160	2150	550
OPEN FLOW, MCFD	9100	9000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.8	71.4	74.6
ETHANE	12.2	12.3	8.7
PROPANE	4.6	6.6	7.7
N-BUTANE	1.2	1.8	2.4
ISOBUTANE	0.5	0.7	0.5
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.3	0.5	0.9
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	3.9	4.7	4.0
OXYGEN	0.3	0.6	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.4	0.2
HELIUM	0.07	0.07	0.08
HEATING VALUE*	1194	1257	1284
SPECIFIC GRAVITY	0.726	0.772	0.771

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8965 SAMPLE 4019	INDEX 8966 SAMPLE 17582	INDEX 8967 SAMPLE 1790
STATE	TEXAS	TEXAS	TEXAS
COUNTY	IRION	JACK	JACK
FIELD	TANKERSLEY	BOONSVILLE	BRYSON
WELL NAME	TANKERSLAY EST. NO. 2	BILLIE YATES NO. 14	BRYSON NO. 2
LOCATION	SEC. 10, BC&SF SUR.	JAMES SWEENEY SUR., A-527	ISAAC HUEMSON SUR.
OWNER	SHELL OIL CO.	GULF OIL EXPL. & PROD. CO.	PRAIRIE OIL & GAS CO.
COMPLETED	--/--/00	08/27/48	04/19/29
SAMPLED	05/08/45	01/31/85	06/07/29
FORMATION	PENN-STRAWN	PENN-CADDO	PENN-3150 FT. SAND
GEOLOGIC PROVINCE CODE	430	420	420
DEPTH, FEET	7198	4682	3150
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1400	800
OPEN FLOW, MCFD	NOT GIVEN	1700	12300
COMPONENT, MOLE PCT			
METHANE	54.2	77.0	70.9
ETHANE	28.5	7.1	20.1
PROPANE	---	6.8	---
N-BUTANE	---	2.1	---
ISOBUTANE	---	0.9	---
N-PENTANE	---	0.5	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	---
NITROGEN	15.5	4.1	8.6
OXYGEN	0.6	0.1	0.2
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	1.1	0.3	0.2
HELIUM	0.07	0.12	0.24
HEATING VALUE*	1060	1247	1078
SPECIFIC GRAVITY	0.773	0.751	0.693

	INDEX 8968 SAMPLE 5289	INDEX 8969 SAMPLE 5364	INDEX 8970 SAMPLE 11938
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	BRYSON S	BRYSON S	CAMPSEY
WELL NAME	CALLIE THOMASON NO. 1	MARY FIELDS NO. 1	WOOD CAMPSEY NO. 1
LOCATION	SMITH SUR.	BROWN SUR. NO. A72	W. BECK SUR. A2007
OWNER	BRYSON PIPELINE & REF. CO.	O. P. LEONARD	GEORGE MITCHELL & ASSOC. INC
COMPLETED	05/18/52	--/--/00	10/10/68
SAMPLED	10/06/52	07/14/52	06/13/69
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-ATOKA CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	1801	NOT GIVEN	5374
WELLHEAD PRESSURE,PSIG	700	630	1916
OPEN FLOW, MCFD	8000	15000	7000
COMPONENT, MOLE PCT			
METHANE	75.6	75.8	78.9
ETHANE	9.8	4.8	8.4
PROPANE	3.2	3.3	5.1
N-BUTANE	0.8	0.7	1.2
ISOBUTANE	0.5	0.4	0.7
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	10.2	14.1	4.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.33	0.34	0.15
HEATING VALUE*	1000	999	1284
SPECIFIC GRAVITY	0.698	0.695	0.721

	INDEX 8971 SAMPLE 4187	INDEX 8972 SAMPLE 12831	INDEX 8973 SAMPLE 12832
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	CHERRYHOMES	CRAFTON W	CRAFTON W
WELL NAME	T. H. CHERRYHOMES NO. C-1	ROY CHERRYHOMES NO. 7	ROY CHERRYHOMES NO. C-3
LOCATION	FLOYD A. PAYNE SUR. A-1564	3 MI. NE OF CUNDIFF	3 MI. NE OF CUNDIFF
OWNER	CONTINENTAL OIL CO.	AMERICAN DRILLING CORP.	AMERICAN DRILLING CORP.
COMPLETED	08/15/46	08/26/66	09/23/69
SAMPLED	12/05/46	05/17/71	05/17/71
FORMATION	PENN-CONGLOMERATE	PENN-CADDO	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4576	5358	5374
WELLHEAD PRESSURE,PSIG	1250	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	768	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.5	76.6	73.1
ETHANE	20.9	7.9	10.8
PROPANE	---	5.9	6.9
N-BUTANE	---	1.6	1.9
ISOBUTANE	---	0.9	0.9
N-PENTANE	---	0.8	0.5
ISOPENTANE	---	0.6	0.6
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	4.9	5.4	3.9
OXYGEN	0.1	0.3	0.4
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	0.22	0.09	0.11
HEATING VALUE*	1119	1207	1274
SPECIFIC GRAVITY	0.682	0.739	0.771

	INDEX 8974 SAMPLE 12656	INDEX 8975 SAMPLE 5885	INDEX 8976 SAMPLE 12292
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	DARNER-HAMMON	DEES	DUNES
WELL NAME	H. FRANKLIN	SHAWN NO. A-1	JOLLY A NO. 1
LOCATION	BLK. 41, HENDERSON SCH. LAND	PLEASANT FOLAND SUR. NO. A-497	SEC. 2 C.H. BONNER SUR. A1364
OWNER	HAMON PROPERTIES	FRANK JOHNSON	RIDDLE & GOTTLIEB
COMPLETED	00/--/60	03/28/55	03/25/69
SAMPLED	02/05/71	07/25/55	06/12/70
FORMATION	PENN-CADDO	PENN-MARBLE FALLS	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4253	5355	5804
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1900	830
OPEN FLOW, MCFD	95	10000	1920
COMPONENT, MOLE PCT			
METHANE	78.8	81.0	79.1
ETHANE	8.5	8.4	8.6
PROPANE	5.2	4.6	5.5
N-BUTANE	1.7	1.4	1.5
ISOBUTANE	0.7	0.6	0.8
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.3	0.5	0.2
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	2.6	2.2	3.5
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.10	0.09	0.15
HEATING VALUE*	1239	1215	1209
SPECIFIC GRAVITY	0.732	0.708	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8977 SAMPLE 16864	INDEX 8978 SAMPLE 16776	INDEX 8979 SAMPLE 12830
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	ELLIS	MENDERSON RANCH	JACK COUNTY REGULAR
WELL NAME	ELLIS NO. 3	VERA MENDERSON NO. 1	ROY CHERRYHOMES NO. C-5
LOCATION	JAMES J. WILLIAMS SUR.,A-877	G. THOMPSON SUR. A-612	3 MI. NE OF CUNDIFF
OWNER	CORDOVA RESOURCES, INC.	MITCHELL ENERGY CORP.	AMERICAN DRILLING CORP.
COMPLETED	09/01/82	11/24/80	01/31/65
SAMPLED	04/05/83	02/25/83	05/17/71
FORMATION	PENN-CADDO	PENN-MARBLE FALLS	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4724	5256	5311
WELLHEAD PRESSURE,PSIG	217	600	NOT GIVEN
OPEN FLOW, MCFD	2400	300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.5	75.9	72.8
ETHANE	9.0	8.9	8.3
PROPANE	9.9	5.4	4.5
N-BUTANE	3.4	1.7	4.6
ISOBUTANE	1.2	0.8	0.0
N-PENTANE	2.5	0.4	0.0
ISOPENTANE	1.3	1.0	2.4
CYCLOPENTANE	0.2	0.2	0.2
HEXANES PLUS	0.4	0.5	0.3
NITROGEN	6.9	4.4	6.0
OXYGEN	0.1	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.8
HELIUM	0.11	0.13	0.09
HEATING VALUE*	1353	1246	1285
SPECIFIC GRAVITY	0.848	0.753	0.805

	INDEX 8980 SAMPLE 13074	INDEX 8981 SAMPLE 14185	INDEX 8982 SAMPLE 15066
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	JACK COUNTY REGULAR	JACK COUNTY REGULAR	JACKSBORO S
WELL NAME	RIDDLE NO. 1	E. M. CROFT NO. 1	W. R. RICHARDS "16" NO. 1
LOCATION	BLK. 29, WOOD CSL SUR.	SEC. 2731, TEEL SUR. A-649	JAMES ANDERS SUR. A-16
OWNER	NATOL PETROLEUM CORP.	MCMAHON-BULLINGTON	SOUTHWESTERN GAS PIPELINE, I
COMPLETED	07/10/70	11/16/73	01/15/76
SAMPLED	10/09/71	10/23/74	07/--/77
FORMATION	PENN-BEND CONGLOMERATE	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	5680	4490	5224
WELLHEAD PRESSURE,PSIG	865	1600	2005
OPEN FLOW, MCFD	8000	3400	2600
COMPONENT, MOLE PCT			
METHANE	73.1	77.2	79.1
ETHANE	9.5	8.3	8.7
PROPANE	6.3	6.1	4.8
N-BUTANE	1.3	1.8	1.4
ISOBUTANE	0.8	0.9	0.5
N-PENTANE	0.3	0.4	0.4
ISOPENTANE	0.1	0.5	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	7.3	3.9	4.4
OXYGEN	0.3	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.11	0.14	0.14
HEATING VALUE*	1176	1238	1185
SPECIFIC GRAVITY	0.747	0.742	0.713

	INDEX 8983 SAMPLE 12607	INDEX 8984 SAMPLE 13719	INDEX 8985 SAMPLE 12557
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	KEN-RICH	KRAMBERGER	MEANDER W
WELL NAME	L. A. WORTHINGTON NO. 12	MARY E. LINDSEY NO. 1	DAVIS C NO. 3
LOCATION	J. W. BUCKNER SUR. A-33	I. N. WRIGHT SUR. A-898	NOT GIVEN
OWNER	GEORGE MITCHELL & ASSOC. INC	GEORGE MITCHELL & ASSOC. INC	BURK ROYALTY CO.
COMPLETED	06/13/65	12/13/72	01/08/61
SAMPLED	12/22/70	09/17/73	12/01/70
FORMATION	PENN-CADDO	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	5050	5239	5600
WELLHEAD PRESSURE,PSIG	537	1915	1260
OPEN FLOW, MCFD	33	11750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.1	80.2	78.9
ETHANE	9.4	8.4	8.2
PROPANE	6.6	4.6	5.1
N-BUTANE	1.8	1.2	1.2
ISOBUTANE	0.8	0.6	0.6
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.7	0.4	0.3
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.4	0.4	0.3
NITROGEN	3.4	3.3	3.3
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.10	0.14	0.17
HEATING VALUE*	1269	1201	1196
SPECIFIC GRAVITY	0.756	0.711	0.710

	INDEX 8986 SAMPLE 4863	INDEX 8987 SAMPLE 12555	INDEX 8988 SAMPLE 4829
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	NEW	NEWPORT SE	NOT GIVEN
WELL NAME	S. CASTLEBERRY	S. B. FLINT NO. 1	G. W. FOWLER NO. 1
LOCATION	J. J. STEPHENS SUR. ABS. 535	1 MI. SE OF NEWPORT	NOT GIVEN
OWNER	K B OIL CO. & L.H. SIMPSON	E. C. JOHNSTON CO.	MID-CONTINENT PETROLEUM CORP
COMPLETED	11/19/49	--/--/00	11/--/49
SAMPLED	03/16/50	11/29/70	12/29/49
FORMATION	NOT GIVEN	PENN-ATOKA	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	5316	NOT GIVEN	5500
WELLHEAD PRESSURE,PSIG	1500	600	2500
OPEN FLOW, MCFD	NOT GIVEN	200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.1	74.8	80.8
ETHANE	8.2	9.7	7.8
PROPANE	4.3	5.6	4.2
N-BUTANE	1.1	1.8	1.4
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.3	0.4	0.6
ISOPENTANE	TRACE	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.5
NITROGEN	3.4	3.6	3.1
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	1.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.3	0.6
HELIUM	0.16	0.16	0.12
HEATING VALUE*	1169	1244	1192
SPECIFIC GRAVITY	0.695	0.743	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 8989 SAMPLE 16337	INDEX 8990 SAMPLE 12570	INDEX 8991 SAMPLE 12559
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	NOT GIVEN	PERRIN N	RIGGS N
WELL NAME	ANNA C. STREET NO. 1	KEITH-TURNER NO. 1	NORTH RIGGS TRACT 1 NO. 2
LOCATION	J. L. MOLLARS SUR. A-1916	T. C. ARGO SUR. A-1899	F. SANDERS SUR. A-1001
OWNER	THRESHOLD DEVELOPMENT CO.	PETROLEUM CORP. OF TEXAS	GULF OIL CO.- U.S.
COMPLETED	--/--/80	--/--/00	04/14/53
SAMPLED	09/15/81	12/01/70	11/30/70
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	5362	5034	5054
WELLHEAD PRESSURE,PSIG	1200	685	NOT GIVEN
OPEN FLOW, MCFD	2198	180	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.5	80.3	75.9
ETHANE	15.1	8.0	8.5
PROPANE	15.4	4.7	6.6
N-BUTANE	3.3	1.1	2.3
ISOBUTANE	1.4	0.7	1.4
N-PENTANE	0.5	0.3	0.9
ISOPENTANE	0.3	0.4	0.5
CYCLOPENTANE	0.1	0.1	0.6
HEXANES PLUS	0.2	0.2	1.3
NITROGEN	4.8	3.0	1.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.08	0.12	0.09
HEATING VALUE*	1469	1198	1358
SPECIFIC GRAVITY	0.899	0.706	0.794

	INDEX 8992 SAMPLE 12561	INDEX 8993 SAMPLE 4128	INDEX 8994 SAMPLE 4889
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	RISOM SE	WILDCAT	WILDCAT
WELL NAME	C. G. WORKMAN	W. H. HEATH NO. 1	HATTIE MAE WRIGHT NO. 1
LOCATION	SEC.49,BLK.1,HENDERSON SUR.	4 MI. ENE OF PERRIN	J. W. BATES SUR. A-47
OWNER	PETROLEUM CORP. OF TEXAS	CONTINENTAL OIL CO.	ROSESER & PENDLE,INC., ET AL
COMPLETED	--/--/00	--/--/46	02/18/50
SAMPLED	12/01/70	10/07/46	05/19/50
FORMATION	PENN-CADDO	PENN-	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4349	4432	4674
WELLHEAD PRESSURE,PSIG	450	1740	1560
OPEN FLOW, MCFD	364	1450	7500
COMPONENT, MOLE PCT			
METHANE	67.8	64.9	84.3
ETHANE	12.2	30.5	6.7
PROPANE	9.9	---	4.0
N-BUTANE	3.0	---	1.1
ISOBUTANE	2.0	---	0.4
N-PENTANE	0.9	---	0.3
ISOPENTANE	0.7	---	TRACE
CYCLOPENTANE	0.3	---	0.1
HEXANES PLUS	0.8	---	0.4
NITROGEN	2.1	3.6	2.3
OXYGEN	TRACE	0.5	0.1
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.07	0.14	0.18
HEATING VALUE*	1451	1204	1164
SPECIFIC GRAVITY	0.858	0.727	0.679

	INDEX 8995 SAMPLE 5018	INDEX 8996 SAMPLE 5407	INDEX 8997 SAMPLE 16245
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	W. W. CAMPBELL A NO. 2	CHERRY-HOLMES F-1	MATLOCK NO. 1
LOCATION	NOT GIVEN	T. WAMPLER SUR. A-2180	J. J. WALKER SUR. A-1892
OWNER	MID-CONTINENT PETROLEUM CORP	RUSSELL MAGUIRE	WORLD PRODUCERS, INC.
COMPLETED	09/10/50	12/22/52	10/29/80
SAMPLED	03/07/51	03/04/53	04/27/81
FORMATION	PENN-CONGLOMERATE	PENN-ATOKA	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	5300	5033	4874
WELLHEAD PRESSURE,PSIG	2700	1500	1880
OPEN FLOW, MCFD	4700	4500	4000
COMPONENT, MOLE PCT			
METHANE	83.3	83.0	78.5
ETHANE	7.9	6.4	8.0
PROPANE	3.7	3.9	5.1
N-BUTANE	1.0	0.9	1.4
ISOBUTANE	0.4	0.7	0.6
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	TRACE	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.6	3.3	5.0
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.13	0.19	0.14
HEATING VALUE*	1151	1137	1182
SPECIFIC GRAVITY	0.676	0.681	0.718

	INDEX 8998 SAMPLE 3700	INDEX 8999 SAMPLE 3804	INDEX 9000 SAMPLE 12560
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACK	JACK	JACK
FIELD	WOLFE	WOLFE	WORSHAM-STEED
WELL NAME	L. N. WOLFE NO. 1	L. N. WOLFE NO. 2	GRACE-KELSAY NO. 1
LOCATION	SEC. 3391, T&L SUR.	G. S. NEWMAN SUR. A-1148	B. F. TERRY SUR. A-611
OWNER	SHELL OIL CO.	SHELL OIL CO.	PETROLEUM CORP. OF TEXAS
COMPLETED	02/18/43	03/03/44	--/--/00
SAMPLED	11/24/43	04/21/44	12/01/70
FORMATION	PENN-CADDO	PENN-ATOKA	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4345	4828	4356
WELLHEAD PRESSURE,PSIG	1975	1979	90
OPEN FLOW, MCFD	500	8000	80
COMPONENT, MOLE PCT			
METHANE	61.8	66.8	76.7
ETHANE	33.9	26.8	9.2
PROPANE	---	---	7.2
N-BUTANE	---	---	1.7
ISOBUTANE	---	---	1.0
N-PENTANE	---	---	0.6
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.4
NITROGEN	3.5	5.7	2.8
OXYGEN	0.4	0.4	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.4
HELIUM	0.13	0.10	0.11
HEATING VALUE*	1234	1157	1274
SPECIFIC GRAVITY	0.741	0.714	0.751

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9001 SAMPLE 12006	INDEX 9002 SAMPLE 16025	INDEX 9003 SAMPLE 15446
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	APPLING	APPLING	CARANCAHUA E
WELL NAME	STATE TRACT 225 NO. 1	FLOYD APPLING NO. 1	R. B. TRULL NO. 2
LOCATION	CARANCAHUA BAY	JOHN R. WICKHAM SUR. A-274	PATRICK GREEN SUR. A-25
OWNER	CROWN CENTRAL PETROLEUM CORP	DAVIS OIL CO.	DOW CHEMICAL CO.
COMPLETED	02/05/68	06/--/78	10/22/76
SAMPLED	08/20/69	08/01/80	10/19/78
FORMATION	EOCE-PETERSON	OLIG-FRIO	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8307	9332	1873
WELLHEAD PRESSURE,PSIG	1700	1800	810
OPEN FLOW, MCFD	6400	2060	8600
COMPONENT, MOLE PCT			
METHANE	82.1	82.4	91.6
ETHANE	6.7	4.4	3.6
PROPANE	3.1	1.9	1.7
N-BUTANE	0.7	0.5	0.4
ISOBUTANE	0.9	1.0	0.7
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.3	0.5
NITROGEN	4.2	6.5	0.7
OXYGEN	0.8	1.6	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1132	1054	1128
SPECIFIC GRAVITY	0.689	0.682	0.635

	INDEX 9004 SAMPLE 4748	INDEX 9005 SAMPLE 12618	INDEX 9006 SAMPLE 12619
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	CORDELE E	CORDELE W	CORDELE W
WELL NAME	E. CIHAL NO. 1	YAUSSI B NO. 7	KERN ACKLEY NO. 4
LOCATION	SEC. 5, BLK. 2, I&GN SUR.	J. G. WHITE SUR. A-278	A. BAKER SUR. A-96
OWNER	P. R. MUTHERFORD	CORDELE OPERATING CO.	CORDELE OPERATING CO.
COMPLETED	03/13/49	12/02/70	02/20/70
SAMPLED	05/23/49	12/30/70	12/30/70
FORMATION	MIOC-CATAHOULA	MIOC-KERN	MIOC-2250 FT. STRAY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2763	3123	2259
WELLHEAD PRESSURE,PSIG	1400	1228	970
OPEN FLOW, MCFD	93000	17000	880
COMPONENT, MOLE PCT			
METHANE	98.7	99.2	99.5
ETHANE	0.2	0.0	0.0
PROPANE	0.2	TRACE	TRACE
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.4	0.4	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	TRACE
CARBON DIOXIDE	0.0	0.4	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1028	1005	1008
SPECIFIC GRAVITY	0.569	0.560	0.556

	INDEX 9007 SAMPLE 12549	INDEX 9008 SAMPLE 13929	INDEX 9009 SAMPLE 15186
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	GANADO	GANADO	GANADO NW
WELL NAME	ROSS G.U. NO. 3	BERTHA COPSEY NO. 3	C. F. SPENCER ESTATE NO. 4
LOCATION	NOT GIVEN	GEORGE SOUTHERLAND SUR. A-75	A. B. WILLIAMS SUR. A-270
OWNER	TEXACO INC.	R. H. ENGELKE	MILLICAN OIL CO.
COMPLETED	02/08/62	12/20/72	08/05/75
SAMPLED	11/19/70	02/26/74	01/09/78
FORMATION	MIOC-3800 FT. SAND	OLIG-FRIO	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3838	5678	3160
WELLHEAD PRESSURE,PSIG	1105	1943	1248
OPEN FLOW, MCFD	54200	8500	34000
COMPONENT, MOLE PCT			
METHANE	98.8	98.9	98.8
ETHANE	0.0	0.1	0.1
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.0	1.0	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1006	1006	1018
SPECIFIC GRAVITY	0.559	0.561	0.567

	INDEX 9010 SAMPLE 13876	INDEX 9011 SAMPLE 14751	INDEX 9012 SAMPLE 4996
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	GANADO W	HARMONY	KOOP BEND
WELL NAME	MINTA DOLESH B NO. 4	MAGGIE BRANCH NO. 26-H	FRANCIS-KOOP NO. 1
LOCATION	A. ROGERS SUR. A-65	G.F.&M.T. SIMONS SUR. A-291	NOT GIVEN
OWNER	CLINTON OIL CO.	INTERCOASTAL OPERATING CO.	J. M. HUBER CORP.
COMPLETED	08/31/73	07/07/73	01/05/50
SAMPLED	01/28/74	09/07/76	02/01/51
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4756	6490	6260
WELLHEAD PRESSURE,PSIG	440	905	NOT GIVEN
OPEN FLOW, MCFD	3600	1200	9000
COMPONENT, MOLE PCT			
METHANE	95.2	94.1	94.3
ETHANE	2.8	3.1	3.2
PROPANE	0.7	1.1	1.2
N-BUTANE	0.1	0.4	0.3
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.2	0.3	0.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.3	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1047	1078	1070
SPECIFIC GRAVITY	0.588	0.604	0.595

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9013 SAMPLE 15581	INDEX 9014 SAMPLE 15582	INDEX 9015 SAMPLE 3811
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	LA WARD N	LA WARD N	LAWARD N
WELL NAME	T. A. GRAVES NO. 5	T. A. GRAVES NO. 5	J. A. GRAVES
LOCATION	PATRICK SCOTT SUR. A-69	PATRICK SCOTT SUR. A-69	NOT GIVEN
OWNER	PETRO-LEWIS CORP.	PETRO-LEWIS CORP.	BARNSDALL OIL CO.
COMPLETED	03/03/77	03/03/77	02/10/43
SAMPLED	03/19/79	--/--/00	04/14/44
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5856	6092	5091
WELLHEAD PRESSURE,PSIG	2000	2125	2125
OPEN FLOW, MCFD	9400	19500	20000
COMPONENT, MOLE PCT			
METHANE	94.2	93.8	93.0
ETHANE	3.2	2.9	3.1
PROPANE	0.8	1.2	----
N-BUTANE	0.3	0.3	----
ISOBUTANE	0.3	0.3	----
N-PENTANE	0.1	0.1	----
ISOPENTANE	0.1	0.2	----
CYCLOPENTANE	0.1	0.1	----
HEXANES PLUS	0.2	0.1	----
NITROGEN	0.3	0.6	3.5
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	TRACE	----
HYDROGEN	TRACE	0.1	----
HYDROGEN SULFIDE**	0.0	0.0	----
CARBON DIOXIDE	0.2	0.3	0.0
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1084	1076	998
SPECIFIC GRAVITY	0.605	0.605	0.586

	INDEX 9016 SAMPLE 3997	INDEX 9017 SAMPLE 10125	INDEX 9018 SAMPLE 3877
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	LOLITA	MAUDE B. TRAYLOR N	MATO
WELL NAME	T. J. MAYS NO. 1	W. L. TRAYLOR NO. 2	LELA STONER NO. 2
LOCATION	NOT GIVEN	HUGH MCGUFFIN SUR. A-43	W. H. ROBERTSON SUR.
OWNER	LOUIS CROUCH	SUPERIOR OIL CO.	LOUIS CROUCH
COMPLETED	04/06/44	11/12/63	01/06/44
SAMPLED	03/20/45	09/16/65	06/24/44
FORMATION	OLIG-FRIO	OLIG-FRIO JO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5830	9210	5500
WELLHEAD PRESSURE,PSIG	2065	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	6500	7904	17000
COMPONENT, MOLE PCT			
METHANE	89.9	87.5	96.3
ETHANE	9.4	6.9	3.2
PROPANE	----	2.2	----
N-BUTANE	----	0.5	----
ISOBUTANE	----	0.6	----
N-PENTANE	----	0.2	----
ISOPENTANE	----	0.1	----
CYCLOPENTANE	----	0.1	----
HEXANES PLUS	----	0.4	----
NITROGEN	0.2	0.7	0.0
OXYGEN	0.4	0.0	0.0
ARGON	----	TRACE	----
HYDROGEN	----	0.0	----
HYDROGEN SULFIDE**	----	0.0	----
CARBON DIOXIDE	0.1	0.8	0.5
HELIUM	0.00	0.01	TRACE
HEATING VALUE*	1079	1141	1033
SPECIFIC GRAVITY	0.605	0.655	0.575

	INDEX 9019 SAMPLE 15400	INDEX 9020 SAMPLE 15401	INDEX 9021 SAMPLE 15402
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MCDANIEL	MCDANIEL	MCDANIEL
WELL NAME	WILLIAM BORCHERS NO. 3	WILLIAM BORCHERS NO. 2	WILLIAM BORCHERS NO. 1-C
LOCATION	20 MI. E OF VICTORIA	THOMAS BRIDGES SUR. A-94	THOMAS BRIDGES SUR. A-94
OWNER	DIXEL RESOURCES, INC.	DIXEL RESOURCES, INC.	DIXEL RESOURCES, INC.
COMPLETED	--/--/00	06/28/77	03/23/77
SAMPLED	10/05/78	10/05/78	10/05/78
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3600	2833	2900
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1250	1240
OPEN FLOW, MCFD	320	23000	310
COMPONENT, MOLE PCT			
METHANE	97.8	96.7	98.5
ETHANE	0.2	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.2	2.2	0.8
OXYGEN	0.2	0.3	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1004	986	1000
SPECIFIC GRAVITY	0.568	0.571	0.562

	INDEX 9022 SAMPLE 15403	INDEX 9023 SAMPLE 12571	INDEX 9024 SAMPLE 12572
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MCDANIEL	MOODY RANCH	MOODY RANCH
WELL NAME	WILLIAM BORCHERS NO. 1-T	W. L. MOODY, JR. NO. 10	W. L. MOODY JR. NO. 10
LOCATION	THOMAS BRIDGES SUR. A-94	NANCY A. MCFARLAND SUR. A-42	NANCY A. MCFARLAND SUR. A-42
OWNER	DIXEL RESOURCES, INC.	CROWN CENTRAL PETROLEUM CORP	CROWN CENTRAL PETROLEUM CORP
COMPLETED	03/23/77	11/09/69	11/09/69
SAMPLED	10/05/78	12/--/70	12/--/70
FORMATION	OLIG-FRIO	OLIG-FRIO 7500	OLIG-FRIO 7500
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3330	7230	7230
WELLHEAD PRESSURE,PSIG	1200	2600	2600
OPEN FLOW, MCFD	1800	43000	43000
COMPONENT, MOLE PCT			
METHANE	97.4	88.5	90.3
ETHANE	0.1	3.6	3.5
PROPANE	TRACE	1.9	1.8
N-BUTANE	TRACE	0.6	0.6
ISOBUTANE	0.0	0.9	0.8
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	1.6	3.5	1.8
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	994	1092	1108
SPECIFIC GRAVITY	0.568	0.736	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9025 SAMPLE 15181	INDEX 9026 SAMPLE 9577	INDEX 9027 SAMPLE 3886
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	SANDY CREEK	SWAN LAKE	TEXANA
WELL NAME	W. B. FOWLER NO. 5	G. T. BROOKING NO. 20	M. K. SIMONS NO. 2
LOCATION	S. C. A. ROGERS SUR. A-65	JOSIAH T. BELL SUR. A-7	NOT GIVEN
OWNER	FRED W. SHIELD	SOUTHERN MINERALS CORP.	GULF OIL CORP.
COMPLETED	07/06/75	08/12/51	06/12/42
SAMPLED	01/05/78	10/01/64	08/17/44
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4705	8630	5705
WELLHEAD PRESSURE,PSIG	1800	1950	NOT GIVEN
OPEN FLOW, MCFD	13500	7310	700
COMPONENT, MOLE PCT			
METHANE	97.5	90.3	89.3
ETHANE	1.1	4.2	9.3
PROPANE	0.3	2.1	---
N-BUTANE	0.1	0.8	---
ISOBUTANE	0.0	0.8	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.1	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	0.2	0.3	1.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.5	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1036	1143	1071
SPECIFIC GRAVITY	0.577	0.647	0.608

	INDEX 9028 SAMPLE 17610	INDEX 9029 SAMPLE 9590	INDEX 9030 SAMPLE 14576
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	TORO GRANDE	WEST RANCH	WEST RANCH
WELL NAME	A.T. DINCANS GAS UNIT NO. 1	WEST RANCH A NO. 383-U	WEST RANCH UNIT 2 NO. 1
LOCATION	J.C. SISNEROS SUR., A-70	RAMOS MUSQUEZ SUR. A-59	R. MOSQUEZ GRANT A-59
OWNER	CITIES SERVICE OIL & GAS COR	MOBIL OIL CORP.	MOBIL OIL CO.
COMPLETED	08/11/84	06/08/63	12/11/73
SAMPLED	03/05/85	10/05/64	02/02/76
FORMATION	EOCE-YEGUA	OLIG-FRIO	MIOC-H
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8696	6024	4175
WELLHEAD PRESSURE,PSIG	5913	2187	1360
OPEN FLOW, MCFD	29000	NOT GIVEN	2200
COMPONENT, MOLE PCT			
METHANE	94.3	87.8	98.9
ETHANE	2.3	4.7	0.1
PROPANE	0.9	2.6	TRACE
N-BUTANE	0.2	1.1	0.0
ISOBUTANE	0.2	1.1	0.0
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.1	0.8	0.0
CYCLOPENTANE	0.1	0.3	0.0
HEXANES PLUS	0.1	0.7	0.0
NITROGEN	0.4	0.3	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.3	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1051	1209	1004
SPECIFIC GRAVITY	0.603	0.685	0.559

	INDEX 9031 SAMPLE 12014	INDEX 9032 SAMPLE 12015	INDEX 9033 SAMPLE 13114
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	WEST RANCH S	WEST RANCH S	WEST RANCH S
WELL NAME	WEST RANCH NO. 464-C	WEST RANCH NO. 464-T	WEST RANCH UNIT 2 NO.1
LOCATION	RAMON MUSQUEZ GRANT A-59	RAMON MUSQUEZ GRANT A-59	R. MUSQUEZ GRANT A-59
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CO.
COMPLETED	10/10/68	09/26/68	12/16/71
SAMPLED	08/28/69	08/28/69	12/20/71
FORMATION	OLIG-GRETA	OLIG-FRIO	MIOC-E
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5307	7054	3820
WELLHEAD PRESSURE,PSIG	1969	1000	1319
OPEN FLOW, MCFD	21000	NOT GIVEN	46000
COMPONENT, MOLE PCT			
METHANE	95.0	90.8	99.1
ETHANE	2.6	4.6	0.1
PROPANE	0.5	2.1	0.1
N-BUTANE	0.5	0.4	0.0
ISOBUTANE	0.0	0.5	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.3	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	0.5	0.8	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1062	1114	1008
SPECIFIC GRAVITY	0.595	0.628	0.559

	INDEX 9034 SAMPLE 13115	INDEX 9035 SAMPLE 13860	INDEX 9036 SAMPLE 15489
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	WEST RANCH S	WESTHOFF RANCH	WESTHOFF RANCH
WELL NAME	WEST RANCH UNIT 2 NO. 1	A. E. WESTHOFF NO. 6	MCDOWELL NO. 2
LOCATION	R. MUSQUEZ GRANT A-59	THOMAS MENEFEE SUR. A-52	THOMAS MENEFEE LEAGUE, A-52
OWNER	MOBIL OIL CORP.	MASSIE HUNT TRUST	HOLLY ENERGY, INC.
COMPLETED	12/16/71	05/25/72	07/24/77
SAMPLED	12/16/71	01/14/74	11/08/78
FORMATION	MIOC-D	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3759	6728	4943
WELLHEAD PRESSURE,PSIG	1315	2400	1528
OPEN FLOW, MCFD	19800	6546	3200
COMPONENT, MOLE PCT			
METHANE	99.2	94.1	98.2
ETHANE	0.1	3.3	1.0
PROPANE	TRACE	1.2	0.1
N-BUTANE	0.0	0.2	TRACE
ISOBUTANE	0.0	0.3	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.7	0.2	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	TRACE
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1007	1074	1021
SPECIFIC GRAVITY	0.558	0.600	0.562

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9037 SAMPLE 4958	INDEX 9038 SAMPLE 4959	INDEX 9039 SAMPLE 9148
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JACKSON	JACKSON	JASPER
FIELD	WILDCAT	WILDCAT	BUNA
WELL NAME	VIRGINIA B. WILEY	VIRGINIA B. WILEY	NO. 1
LOCATION	NESTOR CLAY SUR. NO. 13	NESTOR CLAY SUR. NO. 13	SEC. 82, H&TC RR SUR.
OWNER	JAKE L. HAMON & EDWIN L. COX	JAKE L. HAMON & EDWIN L. COX	SINCLAIR OIL & GAS CO.
COMPLETED	08/19/50	08/19/50	05/08/62
SAMPLED	11/07/50	11/07/50	10/24/63
FORMATION	NOT GIVEN	OLIG-FRIO	EOCE-WILCOX 1ST
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5450	5450	11089
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1375	5522
OPEN FLOW, MCFD	5500	5500	35700
COMPONENT, MOLE PCT			
METHANE	97.0	94.8	82.7
ETHANE	1.9	2.8	8.4
PROPANE	0.3	0.7	4.3
N-BUTANE	0.1	0.2	1.3
ISOBUTANE	0.1	0.1	0.6
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	TRACE	0.0	0.5
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.3	0.6	0.4
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.4	1.3
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1035	1049	1208
SPECIFIC GRAVITY	0.578	0.594	0.703

	INDEX 9040 SAMPLE 11305	INDEX 9041 SAMPLE 12354	INDEX 9042 SAMPLE 12356
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	AMELIA	ANGELINA	ANGELINA
WELL NAME	R. J. PEVETO NO. 15-H	W. J. CRAWFORD NO. 3	BELCO FEE NO. 1 (L.T.)
LOCATION	C. WILLIAMS SUR. A-59	SEC. 161, T&NO SUR. A-373	L. A. CASEY SUR. A-942
OWNER	HUMBLE OIL & REFINING CO.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	09/16/66	04/08/69	06/14/69
SAMPLED	02/21/68	08/11/70	08/11/70
FORMATION	MIOC-	OLIG-MARGINULINA TEX	OLIG-NODOSARIA 3RD
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3279	10670	13010
WELLHEAD PRESSURE,PSIG	1235	900	5500
OPEN FLOW, MCFD	22300	1000	2968
COMPONENT, MOLE PCT			
METHANE	94.3	95.1	88.8
ETHANE	3.1	2.3	4.4
PROPANE	0.6	0.5	2.0
N-BUTANE	0.2	TRACE	0.5
ISOBUTANE	TRACE	0.2	0.6
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.4	0.0	TRACE
CYCLOPENTANE	0.4	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.7	0.8	1.7
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	1.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1076	1034	1100
SPECIFIC GRAVITY	0.603	0.587	0.646

	INDEX 9043 SAMPLE 12357	INDEX 9044 SAMPLE 13081	INDEX 9045 SAMPLE 11960
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	ANGELINA	BEAUMONT W	BIG HILL
WELL NAME	BELCO FEE NO. 1 (U.T.)	KEITH & DOWLEN NO. 24U	GEORGE L. ANDERSON NO. 3
LOCATION	L. A. CASEY SUR. A-942	M. WILLIAMS SUR. A-80	SEC. 173, T&NO RR SUR. A-341
OWNER	BELCO PETROLEUM CORP.	AMOCO PRODUCTION CO.	U.S. BUREAU OF MINES
COMPLETED	06/14/69	10/20/70	12/22/67
SAMPLED	08/11/70	10/--/71	07/08/69
FORMATION	OLIG-NODOSARIA 2ND	OLIG-NODOSARIA	OLIG-HACKBERRY NO. 7
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12200	7257	8674
WELLHEAD PRESSURE,PSIG	3500	2523	1539
OPEN FLOW, MCFD	2019	3600	1150
COMPONENT, MOLE PCT			
METHANE	87.9	92.8	96.3
ETHANE	4.3	2.1	2.0
PROPANE	2.2	1.8	0.4
N-BUTANE	0.6	0.6	0.1
ISOBUTANE	0.7	0.8	0.1
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.5	0.1
NITROGEN	2.1	0.6	0.3
OXYGEN	0.3	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.1	0.5
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1106	1131	1038
SPECIFIC GRAVITY	0.653	0.636	0.581

	INDEX 9046 SAMPLE 11961	INDEX 9047 SAMPLE 4765	INDEX 9048 SAMPLE 16752
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	BIG HILL	BIG HILL N	DEVIL
WELL NAME	GEORGE L. ANDERSON NO. 1	C. E. BYRNE NO. 1	WINZER UNIT NO. 1
LOCATION	SEC. 173, T&NO RR SUR. A-341	SEC. 147, T&NO SUR.	W. H. BALDWIN SUR., A-652
OWNER	HOUSTON NATURAL GAS PROD. CO	MCCARTHY OIL & GAS CORP.	MCCORMICK OPERATING CO.
COMPLETED	12/13/64	07/18/49	07/27/82
SAMPLED	07/08/69	10/17/49	01/17/83
FORMATION	OLIG-HACKBERRY NO. 5	OLIG-MARGINULINA	OLIG-DISCORBIS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8562	8108	12516
WELLHEAD PRESSURE,PSIG	1220	3121	9000
OPEN FLOW, MCFD	446	122000	45500
COMPONENT, MOLE PCT			
METHANE	94.5	94.0	93.4
ETHANE	2.9	3.6	1.7
PROPANE	0.6	1.1	0.3
N-BUTANE	0.1	0.3	0.1
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.6	0.5	0.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.1	3.9
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1042	1075	997
SPECIFIC GRAVITY	0.592	0.599	0.609

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9049 SAMPLE 14225	INDEX 9050 SAMPLE 14893	INDEX 9051 SAMPLE 14894
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	FANNETT	GILBERT RANCH	GILBERT RANCH
WELL NAME	JUNKER SPENCER "A" NO. 58	GILBERT ESTATE NO. 1	GILBERT ESTATE NO. 1
LOCATION	W. H. SMITH SUR. A-198	JOHN RICORD SUR. A-189	JOHN RICORD SUR. A-189
OWNER	GULF OIL CO.- U.S.	KILROY CO. OF TEXAS, INC.	KILROY CO. OF TEXAS, INC.
COMPLETED	05/04/73	11/15/74	11/15/74
SAMPLED	11/14/74	01/30/77	01/30/77
FORMATION	OLIG-FRIO	OLIG-NODOSARIA	OLIG-NODOSARIA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7234	8754	8632
WELLHEAD PRESSURE,PSIG	703	2501	2251
OPEN FLOW, MCFD	5032	10406	25304
COMPONENT, MOLE PCT			
METHANE	93.3	93.4	93.3
ETHANE	3.5	3.4	3.4
PROPANE	1.2	1.3	1.3
N-BUTANE	0.5	0.4	0.4
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.4	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1086	1087	1089
SPECIFIC GRAVITY	0.611	0.609	0.611

	INDEX 9052 SAMPLE 13104	INDEX 9053 SAMPLE 15829	INDEX 9054 SAMPLE 11990
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	GOLDEN TRIANGLE	GUM ISLAND W	HIGH ISLAND BLK. 10-L
WELL NAME	PAN AMERICAN FEE NO. 1	HERBERT BROUSSARD "A" NO. 2	TEXAS GULF TRACT 10 NO. A-5
LOCATION	ELIZA WILLIAMS SUR. A-498	A. MOTCHKISS SUR. A-31	STATE TRACT 10-L
OWNER	PRUDENTIAL DRILLING CO.	DOW CHEMICAL CO. U.S.A.	MOBIL OIL CORP.
COMPLETED	03/25/70	07/--/77	01/07/68
SAMPLED	09/25/71	11/06/79	08/01/69
FORMATION	OLIG-HACKBERRY	OLIG-HACKBERRY	MIOC-A-2 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10952	10211	6239
WELLHEAD PRESSURE,PSIG	4500	6487	3000
OPEN FLOW, MCFD	23000	9500	15180
COMPONENT, MOLE PCT			
METHANE	97.3	86.4	96.7
ETHANE	1.2	7.5	2.9
PROPANE	0.3	3.2	0.2
N-BUTANE	0.0	0.7	0.1
ISOBUTANE	0.0	0.8	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.4	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1015	1170	1023
SPECIFIC GRAVITY	0.573	0.664	0.572

	INDEX 9055 SAMPLE 12358	INDEX 9056 SAMPLE 13801	INDEX 9057 SAMPLE 13802
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	HIGH ISLAND BLK. 24-L	HIGH ISLAND BLK. 24-L	HIGH ISLAND BLK. 24-L
WELL NAME	BLK. 24-L NO. 5	STATE LEASE 59456 NO. C-3	STATE LEASE 59456 NO. C-3U
LOCATION	STATE LEASE NO. 59455	BLK. 24L, HIGH ISLAND	BLK. 24L, HIGH ISLAND
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	04/30/69	05/22/73	05/22/73
SAMPLED	08/13/70	11/05/73	11/05/73
FORMATION	MIOC-	MIOC-J SERIES	MIOC-JS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8048	10965	10810
WELLHEAD PRESSURE,PSIG	3165	6015	6260
OPEN FLOW, MCFD	33000	31700	37300
COMPONENT, MOLE PCT			
METHANE	94.3	96.0	96.1
ETHANE	3.0	1.5	1.6
PROPANE	0.9	0.4	0.4
N-BUTANE	0.2	TRACE	TRACE
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	0.1
NITROGEN	0.4	0.5	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.4	1.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1082	1017	1029
SPECIFIC GRAVITY	0.603	0.585	0.587

	INDEX 9058 SAMPLE 5007	INDEX 9059 SAMPLE 11191	INDEX 9060 SAMPLE 12577
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	HILDEBRANDT BAYOU	HILDEBRANDT BAYOU	HILDEBRANDT BAYOU
WELL NAME	AUBET NO. 1	BORDAGES-STATE GAS UNIT NO.1	BROUSSARD TRUST ET AL. NO. 1
LOCATION	JOHN J. FRENCH SUR.	E. D. CHINNETH SUR. A-104	BLK. 5, JOHN MCNABB SUR. A-174
OWNER	SUN OIL CO.	TEXACO INC.	JAMES F. MORSE & CO.
COMPLETED	--/--/00	03/24/66	11/17/48
SAMPLED	01/24/51	10/27/67	12/12/70
FORMATION	OLIG-FRIO	OLIG-HILDEBRANDT BAYOU	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8370	9630	7719
WELLHEAD PRESSURE,PSIG	2863	4900	2350
OPEN FLOW, MCFD	27000	20665	74580
COMPONENT, MOLE PCT			
METHANE	89.8	89.5	86.9
ETHANE	4.4	5.8	5.1
PROPANE	2.5	2.1	2.6
N-BUTANE	0.7	0.6	0.8
ISOBUTANE	0.9	0.4	1.1
N-PENTANE	0.3	0.1	0.4
ISOPENTANE	0.1	0.3	0.7
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.3	0.2	1.1
NITROGEN	0.5	0.5	0.8
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1142	1130	1221
SPECIFIC GRAVITY	0.649	0.640	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9061 SAMPLE 16388	INDEX 9062 SAMPLE 13626	INDEX 9063 SAMPLE 10107
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	M-HALF CIRCLE RANCH	MARRS MCLEAN	MCFADDIN RANCH
WELL NAME	M-HALF CIRCLE RANCH NO. 2	J. E. PATE NO. 1	MCFADDEN RANCH NO. 1
LOCATION	W. B. BURTON SUR., A-8	HENRY WILLIAMS SUR. A-662	NANCY E. ROGERS SUR. A-803
OWNER	GULF OIL CORP.	CHEVRON OIL CO.	SHELL OIL CO.
COMPLETED	01/21/81	04/12/71	11/18/64
SAMPLED	11/19/81	06/08/73	09/02/65
FORMATION	OLIG-FRIO	OLIG-NODOSARIA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10200	11158	8422
WELLHEAD PRESSURE,PSIG	6951	1500	3285
OPEN FLOW, MCFD	290000	1500	160000
COMPONENT, MOLE PCT			
METHANE	95.9	92.6	97.1
ETHANE	2.1	3.2	1.6
PROPANE	0.6	1.5	0.3
N-BUTANE	0.2	0.3	TRACE
ISOBUTANE	0.1	0.5	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.5	0.8	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1049	1084	1020
SPECIFIC GRAVITY	0.588	0.616	0.570

	INDEX 9064 SAMPLE 12003	INDEX 9065 SAMPLE 12004	INDEX 9066 SAMPLE 16292
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	NOME	NOME	NOME NE
WELL NAME	ED PAGGI NO. 3-U	ED PAGGI NO. 3-L	PICA INVESTMENT CO. NO. 1
LOCATION	J. W. KIRBY SUR. A-584	J. W. KIRBY SUR. A-584	3.6 MI. SSE SOUR LAKE
OWNER	SHELL OIL CO.	SHELL OIL CO.	TEXACO INC.
COMPLETED	10/03/68	10/03/69	11/14/80
SAMPLED	08/20/69	08/20/69	07/10/81
FORMATION	OLIG-NOME	OLIG-FRIO	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6908	6933	10500
WELLHEAD PRESSURE,PSIG	2458	2305	6827
OPEN FLOW, MCFD	16800	8600	12444
COMPONENT, MOLE PCT			
METHANE	90.2	90.7	83.5
ETHANE	3.6	3.8	6.9
PROPANE	1.6	1.5	5.2
N-BUTANE	0.7	0.5	0.9
ISOBUTANE	1.5	1.3	0.9
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.3	0.3
NITROGEN	1.1	1.0	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	1.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1149	1132	1209
SPECIFIC GRAVITY	0.652	0.641	0.703

	INDEX 9067 SAMPLE 7564	INDEX 9068 SAMPLE 14615	INDEX 9069 SAMPLE 7428
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JEFFERSON	JEFFERSON	JEFFERSON
FIELD	PORT ARTHUR	STOWELL	TAYLOR BAYOU S
WELL NAME	DOORNBOS NO. 1	W. M. STOEGER NO. 2	J. WILFERT NO. 1
LOCATION	NOT GIVEN	E. LOPEZ SUR. A-37	NOT GIVEN
OWNER	KILROY CO. OF TEXAS, INC.	MNG OIL CO.	TENNESSEE GAS TRANSMISSION C
COMPLETED	04/--/59	08/14/74	04/02/59
SAMPLED	05/27/60	03/19/76	03/01/60
FORMATION	OLIG-HACKBERRY	OLIG-FRIO	OLIG-MARGINULINA & FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11058	8104	8006
WELLHEAD PRESSURE,PSIG	6500	2730	2500
OPEN FLOW, MCFD	210000	2930	11200
COMPONENT, MOLE PCT			
METHANE	89.5	94.6	95.3
ETHANE	6.5	3.2	2.5
PROPANE	2.3	0.8	0.9
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.5	0.5	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1114	1063	1077
SPECIFIC GRAVITY	0.627	0.596	0.599

	INDEX 9070 SAMPLE 4437	INDEX 9071 SAMPLE 4346	INDEX 9072 SAMPLE 3728
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM HOGG	JIM HOGG	JIM HOGG
FIELD	A. K. EAST	ALLEN	ARMSTRONG
WELL NAME	A. K. EAST NO. 1	JOHN ALLEN NO. 1	ROY YAEGER NO. 3
LOCATION	SEC. 14, ANTONIO YSAQUINO GR.	BLK. 10, SEC. 29, H&GNRR SUR	SEC. 222
OWNER	TEXAS CO.	CAM CORP.	TEXAS CO.
COMPLETED	07/29/47	05/13/47	01/15/44
SAMPLED	01/16/48	08/29/47	03/16/44
FORMATION	EOCE-JACKSON	TERT-2900 FT. SAND	-STRAND LINE STRUCTURE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3953	2937	2869
WELLHEAD PRESSURE,PSIG	1420	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2900	6000
COMPONENT, MOLE PCT			
METHANE	82.2	90.8	98.6
ETHANE	16.6	5.5	---
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	2.6	0.0
OXYGEN	0.5	0.8	1.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.8	0.3
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1150	1018	999
SPECIFIC GRAVITY	0.644	0.602	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9073 SAMPLE 17577	INDEX 9074 SAMPLE 5162	INDEX 9075 SAMPLE 15525
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM HOGG	JIM HOGG	JIM HOGG
FIELD	CHARCO LARGO CREEK (3330)	JONES E	KELSEY DEEP
WELL NAME	KING RANCH COLD B. NO. 94	A. C. JONES NO. 47	MRS. A. M. K. BASS NO. 32-F
LOCATION	LAS MORITAS GRANT	AGUA NUEVO DE ABAJO GRANT	LA BLANCA GRANT
OWNER	EXXON CO., U.S.A.	SUN OIL CO.	EXXON CO., U.S.A.
COMPLETED	07/--/84	05/05/51	12/04/77
SAMPLED	01/24/85	01/21/52	11/21/78
FORMATION	EOCE-JACKSON	NOT GIVEN	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3326	4990	5910
WELLHEAD PRESSURE,PSIG	1200	1969	2337
OPEN FLOW, MCFD	1447	5650	2528
COMPONENT, MOLE PCT			
METHANE	91.3	95.0	89.7
ETHANE	4.1	2.5	4.6
PROPANE	1.2	0.9	2.0
N-BUTANE	0.3	0.2	0.8
ISOBUTANE	0.5	0.2	1.0
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.2	0.0	0.5
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.4
NITROGEN	1.3	0.6	0.2
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.2	TRACE
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1092	1057	1167
SPECIFIC GRAVITY	0.625	0.593	0.653

	INDEX 9076 SAMPLE 15526	INDEX 9077 SAMPLE 6483	INDEX 9078 SAMPLE 7921
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM HOGG	JIM HOGG	JIM HOGG
FIELD	KELSEY DEEP	STROMAN	THOMPSONVILLE NE
WELL NAME	MRS. A. M. K. BASS NO. 32-D	NO. 3	YEAGER-ARMSTRONG NO. 1
LOCATION	LA BLANCA GRANT	SUR. NO. 299	NOT GIVEN
OWNER	EXXON CO., U.S.A.	W. L. COTTON	COASTAL STATES GAS PROD. CO.
COMPLETED	02/02/77	04/06/57	10/22/60
SAMPLED	11/21/78	01/26/58	03/20/61
FORMATION	OLIG-FRIO	EOCE-JACKSON L	EOCE-MINNANT 1ST
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6638	3578	9670
WELLHEAD PRESSURE,PSIG	3688	1100	5910
OPEN FLOW, MCFD	5308	3000	95000
COMPONENT, MOLE PCT			
METHANE	92.7	96.6	90.2
ETHANE	3.9	1.8	3.1
PROPANE	1.5	0.1	1.1
N-BUTANE	0.4	TRACE	0.1
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	0.2	0.5	TRACE
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	3.3
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1099	1038	1005
SPECIFIC GRAVITY	0.614	0.580	0.635

	INDEX 9079 SAMPLE 7922	INDEX 9080 SAMPLE 17502	INDEX 9081 SAMPLE 4975
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM HOGG	JIM HOGG	JIM WELLS
FIELD	THOMPSONVILLE NE	TRAVIS WARD	ALFRED
WELL NAME	R. LOPEZ NO. 1	F. L. TREVINO NO. 1-A	ED C. ADAMS NO. 1
LOCATION	NOT GIVEN	SEC. 17, ABSTRACT 181, H&GN	JUAN HERNANDEZ SUR. 18
OWNER	COASTAL STATES GAS PROD. CO.	PAN AMERICAN SALES CORP.	TEXAS CO.
COMPLETED	07/22/60	10/--/83	05/27/50
SAMPLED	03/20/61	10/16/84	12/05/50
FORMATION	EOCE-MINNANT 1ST	EOCE-WILCOX	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9724	13960	2500
WELLHEAD PRESSURE,PSIG	5900	8900	1150
OPEN FLOW, MCFD	55000	6281800	8300
COMPONENT, MOLE PCT			
METHANE	91.2	81.7	97.7
ETHANE	3.3	0.1	0.1
PROPANE	0.6	TRACE	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.0	0.2	1.8
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	4.4	17.9	0.0
HELIUM	0.10	TRACE	0.01
HEATING VALUE*	1013	830	996
SPECIFIC GRAVITY	0.626	0.730	0.564

	INDEX 9082 SAMPLE 6498	INDEX 9083 SAMPLE 6499	INDEX 9084 SAMPLE 14295
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	AMARGOSA	AMARGOSA	EL PAR
WELL NAME	SHAEFFER RANCH A NO. 6	SHAEFFER RANCH A NO. 3	KING RANCH MORGAN NO. M-34
LOCATION	SAENGRR A-478 SUR.	J. WELLS A-527 SUR.	SANTA GERTRUDIS GRANT
OWNER	TIDEWATER OIL CO.	TIDEWATER OIL CO.	EXXON CO., U.S.A.
COMPLETED	09/17/57	01/10/57	05/27/73
SAMPLED	02/07/58	02/07/58	03/14/75
FORMATION	OLIG-FRIO	OLIG-MARGINULINA	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2745	2266	4449
WELLHEAD PRESSURE,PSIG	1140	735	NOT GIVEN
OPEN FLOW, MCFD	5700	39500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.0	96.0	93.3
ETHANE	4.0	0.5	4.0
PROPANE	TRACE	TRACE	1.4
N-BUTANE	0.1	TRACE	0.2
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.2	3.1	0.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1064	990	1079
SPECIFIC GRAVITY	0.590	0.573	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9085 SAMPLE 5100	INDEX 9086 SAMPLE 6497	INDEX 9087 SAMPLE 4802
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	EMBLETON	FREEBORN	HALDEMAN S
WELL NAME	R. V. EMBLETON NO. 1	FREEBORN TRUSTEE NO. 3	A. H. HENDERSON NO. 1
LOCATION	NOT GIVEN	J. T. WHITE A-529 SUR.	LOTS 5&12, HALDEMAN SUBD. 43
OWNER	W. EARL ROWE	GETTY OIL CO.	SINCLAIR OIL & GAS CO.
COMPLETED	05/23/51	04/06/57	--/--/00
SAMPLED	11/03/51	02/07/58	11/23/49
FORMATION	OLIG-HETEROSTEGINA	EOCE-PETTUS	OLIG-ZONE 21-B
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3400	5344	5521
WELLHEAD PRESSURE,PSIG	1430	2600	2077
OPEN FLOW, MCFD	9800	6600	12000
COMPONENT, MOLE PCT			
METHANE	98.0	89.3	92.9
ETHANE	0.5	5.2	3.5
PROPANE	0.2	2.6	1.5
N-BUTANE	TRACE	0.7	0.5
ISOBUTANE	0.0	0.8	0.4
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.1	0.3	0.3
NITROGEN	0.9	0.1	0.4
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1016	1157	1102
SPECIFIC GRAVITY	0.568	0.651	0.619

	INDEX 9088 SAMPLE 15441	INDEX 9089 SAMPLE 10555	INDEX 9090 SAMPLE 4922
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	HOELSCHER	LA GLORIA N	MAGNOLIA CITY
WELL NAME	HOELSCHER NO. 1	SEELIGSON UNIT NO. 1	REYNOLDS & RICHARDSON NO. 1
LOCATION	10 MI. NE ALICE	SEC. 11, SEELIGSON RANCH	SEC. 210
OWNER	DINERO OIL CO.	SAMEDAN OIL CORP.	MICKOK & REYNOLDS ROYALTY CO
COMPLETED	12/31/76	11/27/65	06/19/50
SAMPLED	10/13/78	05/09/66	09/14/50
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5500	6900	3927
WELLHEAD PRESSURE,PSIG	1050	3150	NOT GIVEN
OPEN FLOW, MCFD	8000	88	12
COMPONENT, MOLE PCT			
METHANE	91.5	96.0	97.3
ETHANE	4.5	1.8	0.6
PROPANE	1.7	0.7	0.4
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.4	0.1	0.8
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.3	0.6	0.6
OXYGEN	TRACE	0.2	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	TRACE	0.0
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1105	1050	1049
SPECIFIC GRAVITY	0.622	0.587	0.584

	INDEX 9091 SAMPLE 4894	INDEX 9092 SAMPLE 12487	INDEX 9093 SAMPLE 12488
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	MAGNOLIA CITY N	MAGNOLIA CITY N	MAGNOLIA CITY N
WELL NAME	V. A. BERGH NO. 2	NINA ADAMS NO. 25F	NINA ADAMS NO. 19
LOCATION	LOT 7, ADAMS&STAPLES SUBD.	MARCELLINO LOPEZ SUR. A-281	MARCELLINO LOPEZ SUR. A-281
OWNER	FRANK W. MICHAUX	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/06/49	07/08/69	11/27/68
SAMPLED	05/29/50	10/27/70	10/27/70
FORMATION	OLIG-FRIO	OLIG-D-60	OLIG-D-80
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3433	3607	3801
WELLHEAD PRESSURE,PSIG	1429	795	1550
OPEN FLOW, MCFD	26000	1700	2180
COMPONENT, MOLE PCT			
METHANE	98.3	99.4	98.9
ETHANE	0.3	0.1	0.2
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.7	0.3	0.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1019	1009	1008
SPECIFIC GRAVITY	0.567	0.555	0.559

	INDEX 9094 SAMPLE 12489	INDEX 9095 SAMPLE 4115	INDEX 9096 SAMPLE 4329
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	MAGNOLIA CITY N	MAGNOLIA CITY N	NOT GIVEN
WELL NAME	NINA ADAMS NO. 25D	WM. F. FILTER NO. 1	S. B. ALLEY NO. 1
LOCATION	MARCELLINO LOPEZ SUR. A-281	6 MI. SE OF ALICE	5 MI. S OF ALICE
OWNER	HUMBLE OIL & REFINING CO.	RALPH E. FAIR, INC.	SOUTHERN MINERALS CORP.
COMPLETED	02/04/69	06/23/46	03/21/47
SAMPLED	10/27/70	10/02/46	08/06/47
FORMATION	OLIG-E-25	OLIG-FRIO U	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4252	3745	3577
WELLHEAD PRESSURE,PSIG	960	NOT GIVEN	1590
OPEN FLOW, MCFD	11600	6230	12500
COMPONENT, MOLE PCT			
METHANE	93.1	98.0	98.9
ETHANE	0.5	0.2	0.3
PROPANE	0.0	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	3.8	1.2	0.5
OXYGEN	0.9	0.2	0.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.4	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1006	996	1007
SPECIFIC GRAVITY	0.604	0.565	0.560

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9097 SAMPLE 12078	INDEX 9098 SAMPLE 4083	INDEX 9099 SAMPLE 4692
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	NOT GIVEN	ORANGE GROVE	PALITO BLANCO
WELL NAME	INGRAM-CLEMENSEN UNIT NO. 1	SCHUENEMANN NO. 1	ZELLA C. FOSTER NO. 1
LOCATION	BENTONVILLE AREA	NOT GIVEN	NOT GIVEN
OWNER	MERIDIAN EXPLORATION CO.	ATLANTIC REFINING CO.	TEXAS CO.
COMPLETED	08/05/69	09/28/44	10/04/48
SAMPLED	10/07/69	05/30/45	01/27/49
FORMATION	OLIG-FRIO	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5445	5060	4450
WELLHEAD PRESSURE,PSIG	1750	1715	1860
OPEN FLOW, MCFD	25000	5800	11800
COMPONENT, MOLE PCT			
METHANE	91.6	93.3	92.2
ETHANE	3.8	6.4	4.5
PROPANE	1.5	---	1.8
N-BUTANE	0.5	---	0.4
ISOBUTANE	0.5	---	0.3
N-PENTANE	0.3	---	0.3
ISOPENTANE	0.3	---	TRACE
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.4	---	0.2
NITROGEN	0.8	0.0	TRACE
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	---	0.0
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.3	TRACE
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1119	1060	1112
SPECIFIC GRAVITY	0.629	0.589	0.615

	INDEX 9100 SAMPLE 17679	INDEX 9101 SAMPLE 4565	INDEX 9102 SAMPLE 6500
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	PAUL WHITE N	PREMONT	ROWENA
WELL NAME	HUNTER D NO. 1	THIRKELL NO. 1	SHAEFFER RANCH A NO. 2
LOCATION	MANUEL BARRERA A-36 SUR.	SEC. 77, S&K SUR. A-457	THOMAS GARCIA SUR. A-167
OWNER	TXO PRODUCTION CO.	BARNSDALL OIL CO.	TIDEWATER OIL CO.
COMPLETED	--/--/00	02/10/48	08/15/56
SAMPLED	05/23/85	10/01/48	02/07/58
FORMATION	EOCE-YEGUA	OLIG-FRIO	EOCE-MOCKLEY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7181	4421	4975
WELLHEAD PRESSURE,PSIG	2100	2048	1900
OPEN FLOW, MCFD	350	13200	4150
COMPONENT, MOLE PCT			
METHANE	89.0	87.4	86.9
ETHANE	5.6	11.6	5.2
PROPANE	2.2	---	2.6
N-BUTANE	0.7	---	0.7
ISOBUTANE	0.4	---	1.0
N-PENTANE	0.2	---	0.4
ISOPENTANE	0.4	---	0.6
CYCLOPENTANE	0.1	---	0.4
HEXANES PLUS	0.3	---	1.1
NITROGEN	0.3	0.6	0.0
OXYGEN	TRACE	0.3	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.1	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1141	1093	1230
SPECIFIC GRAVITY	0.651	0.617	0.693

	INDEX 9103 SAMPLE 2478	INDEX 9104 SAMPLE 3822	INDEX 9105 SAMPLE 3823
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	SANDIA	SEELIGSON	SEELIGSON
WELL NAME	WADE NO. 1	P. CANALES NO. 22	J. W. MILLER NO. 16
LOCATION	LOT 2, W. H. BODE SUBD.	NOT GIVEN	SEC. 66, R.P. MALDEMAN SUBD.
OWNER	LARCO GAS & PETROLEUM CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	11/26/30	12/07/43	11/21/43
SAMPLED	02/19/32	04/25/44	04/25/44
FORMATION	OLIG-MARINE U	OLIG-ZONE 15	OLIG-ZONE 16
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2910	5375	4750
WELLHEAD PRESSURE,PSIG	1350	2195	1970
OPEN FLOW, MCFD	NOT GIVEN	30000	8000
COMPONENT, MOLE PCT			
METHANE	95.0	84.0	84.8
ETHANE	0.0	12.5	9.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.9	3.1	5.8
OXYGEN	1.1	0.4	0.4
ARGON	---	---	0.0
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	---	0.0
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	962	1075	1020
SPECIFIC GRAVITY	0.577	0.631	0.625

	INDEX 9106 SAMPLE 13120	INDEX 9107 SAMPLE 15230	INDEX 9108 SAMPLE 15241
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	SEELIGSON	SEELIGSON	SEELIGSON
WELL NAME	P. CANALES NO. 57	SELLIGSON UNIT NO. 1-241	SEELIGSON UNIT NO. 1-241
LOCATION	BS&F SUR. NO. 63	5 MI. NE OF PREMONT	5 MI. NE OF PREMONT
OWNER	SUN OIL CO.	SUN PRODUCTION CO.	SUN PRODUCTION CO.
COMPLETED	09/04/70	09/03/76	09/03/76
SAMPLED	12/21/71	03/15/78	03/15/78
FORMATION	OLIG-SEG 2,22-G-4	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7400	4276	4788
WELLHEAD PRESSURE,PSIG	4000	1495	1490
OPEN FLOW, MCFD	65854	3977	3444
COMPONENT, MOLE PCT			
METHANE	89.8	89.2	96.0
ETHANE	5.1	4.5	2.8
PROPANE	2.0	2.0	0.3
N-BUTANE	0.6	0.5	0.1
ISOBUTANE	0.6	0.9	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.2	0.7	0.1
CYCLOPENTANE	TRACE	0.6	0.1
HEXANES PLUS	0.3	1.1	0.1
NITROGEN	0.7	0.2	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.0	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1119	1201	1050
SPECIFIC GRAVITY	0.638	0.673	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9109 SAMPLE 3860	INDEX 9110 SAMPLE 17685	INDEX 9111 SAMPLE 12024
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	SELLER	SOLO MUERTO	STRATTON
WELL NAME	JOE SELLER NO. 1	GONZALES NO. 1	KING RANCH STRATTON A-17F
LOCATION	2 1/2 MI. SW OF ALICE	LA TINA JA DE LARA A-36	PASO ANCHO DE ARRIBA GRANT
OWNER	HIGHLAND OIL CO.	AMERICAN PETROFINA CO. OF TE	HUMBLE OIL & REFINING CO.
COMPLETED	05/--/44	11/16/84	01/17/68
SAMPLED	08/07/44	05/24/84	08/31/69
FORMATION	NOT GIVEN	EOCE-YEGUA	OLIG-4300 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4994	7057	4320
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3684	1648
OPEN FLOW, MCFD	5400	23500	9170
COMPONENT, MOLE PCT			
METHANE	87.4	60.7	95.1
ETHANE	8.9	16.7	2.5
PROPANE	---	12.0	0.7
N-BUTANE	---	3.9	0.2
ISOBUTANE	---	2.3	0.2
N-PENTANE	---	0.5	TRACE
ISOPENTANE	---	1.8	0.2
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.6	0.2
NITROGEN	2.1	0.3	1.0
OXYGEN	0.9	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	1.0	TRACE
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1045	1571	1057
SPECIFIC GRAVITY	0.619	0.925	0.593

	INDEX 9112 SAMPLE 12025	INDEX 9113 SAMPLE 12026	INDEX 9114 SAMPLE 13146
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	STRATTON	STRATTON	T. C. B.
WELL NAME	KING RANCH STRATTON A-17H	KING RANCH STRATTON A-17	H. C. TIJERINA NO. 82
LOCATION	PASO ANCHO DE ARRIBA GRANT	PASO ANCHO DE ARRIBA GRANT	ABSM SUR. NO. 359
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	TEXACO INC.
COMPLETED	01/13/68	06/13/61	09/04/70
SAMPLED	08/31/69	08/31/69	02/04/72
FORMATION	OLIG-D-35 SAND	OLIG-5300 FT. SAND	OLIG-TIJERINA 2-A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5521	5224	7188
WELLHEAD PRESSURE,PSIG	1434	1440	1500
OPEN FLOW, MCFD	2300	13600	2080
COMPONENT, MOLE PCT			
METHANE	90.0	90.8	90.6
ETHANE	4.3	4.5	4.8
PROPANE	2.0	2.0	2.1
N-BUTANE	0.6	0.4	0.7
ISOBUTANE	0.6	0.7	0.7
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	0.7	0.7	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1141	1126	1137
SPECIFIC GRAVITY	0.642	0.633	0.639

	INDEX 9115 SAMPLE 14292	INDEX 9116 SAMPLE 14297	INDEX 9117 SAMPLE 14590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	JIM WELLS
FIELD	T. C. B.	T. C. B.	TOM GRAHAM
WELL NAME	TIJERINA NO. J-120	TIJERINA NO. J-120	KULCMAK NO. 1
LOCATION	ALICE, KING SUR. 240	A. C. KING SUR. 240, A-267	LA VACA GRANT A-166
OWNER	EXXON CO., U.S.A.	EXXON CO., U.S.A.	CAYMAN EXPLORATION CORP.
COMPLETED	12/16/72	12/16/72	02/05/74
SAMPLED	03/14/75	03/14/75	02/24/76
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8375	7970	5136
WELLHEAD PRESSURE,PSIG	5191	5092	870
OPEN FLOW, MCFD	12200	11000	2650
COMPONENT, MOLE PCT			
METHANE	68.7	90.0	93.1
ETHANE	13.3	5.4	3.5
PROPANE	8.4	2.1	1.5
N-BUTANE	2.0	0.4	0.4
ISOBUTANE	2.2	0.6	0.4
N-PENTANE	0.4	0.1	TRACE
ISOPENTANE	0.5	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	2.6	0.2	0.5
OXYGEN	0.6	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1356	1123	1090
SPECIFIC GRAVITY	0.816	0.634	0.610

	INDEX 9118 SAMPLE 3742	INDEX 9119 SAMPLE 3831	INDEX 9120 SAMPLE 3820
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	JIM WELLS	WILSON
FIELD	WADE CITY	WILDCAT	WILSON
WELL NAME	STRAUBE NO. 1	ALMOND NO. 1	M. DE GARZA NO. 1-A
LOCATION	WADE CITY	SEC. 13, S.A.M.G., A-471	NOT GIVEN
OWNER	REPUBLIC NATURAL GAS CO.	M. F. WILCOX OIL & GAS CO.	SAM E. WILSON, JR.
COMPLETED	01/12/43	01/08/44	03/21/43
SAMPLED	03/28/44	05/06/44	04/30/44
FORMATION	OLIG-FRIO BASAL	NOT GIVEN	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4799	3222	7921
WELLHEAD PRESSURE,PSIG	1550	1300	4450
OPEN FLOW, MCFD	32000	5000	100
COMPONENT, MOLE PCT			
METHANE	94.4	93.2	76.2
ETHANE	3.5	2.2	20.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.5	4.1	1.9
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.0	0.6
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1019	984	1146
SPECIFIC GRAVITY	0.582	0.585	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9121 SAMPLE 3825	INDEX 9122 SAMPLE 13132	INDEX 9123 SAMPLE 3761
STATE	TEXAS	TEXAS	TEXAS
COUNTY	JIM WELLS	KARNES	KARNES
FIELD	WILSON	ATKINSON	BURNELL
WELL NAME	MINTEN NO. 1	ATKINSON GU NO. 2-2	VON ROEDER NO. 1-W
LOCATION	NOT GIVEN	KARNES CO. LAND SUR. A-169	NOT GIVEN
OWNER	SAM E. WILSON, JR.	HUMBLE OIL & REFINING CO.	AMERICAN LIBERTY OIL CO.
COMPLETED	02/25/44	06/22/71	02/06/43
SAMPLED	04/30/44	01/--/72	--/--/00
FORMATION	OLIG-FRIO	EOCE-CARIZZO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7300	4250	6740
WELLHEAD PRESSURE,PSIG	3500	300	2500
OPEN FLOW, MCFD	20	4761	45000
COMPONENT, MOLE PCT			
METHANE	86.0	90.5	81.6
ETHANE	10.6	4.2	15.4
PROPANE	0.0	2.1	---
N-BUTANE	---	0.4	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	---	0.2	---
NITROGEN	2.9	1.1	1.1
OXYGEN	0.4	0.1	0.0
ARGON	---	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	0.6	1.5
HELIUM	0.00	TRACE	0.00
HEATING VALUE*	1061	1103	1105
SPECIFIC GRAVITY	0.622	0.633	0.648

	INDEX 9124 SAMPLE 3887	INDEX 9125 SAMPLE 11592	INDEX 9126 SAMPLE 8561
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KARNES	KARNES	KARNES
FIELD	BURNELL	HONDO CREEK W	MYSAW
WELL NAME	T. I. SPIELHAGEN NO. 1	J. W. NICHOLS ET AL. NO. 1	TOM CLARK NO. 1
LOCATION	1/2 MI. NE OF BURNELL	CARLOS MARTINEZ SUR. A-6	M. W. BUTLER A-438 SUR.
OWNER	STANOLIND OIL & GAS CO.	DIAMOND SHAMROCK CORP.	VIKING DRILLING CO., ET AL.
COMPLETED	04/07/44	03/15/67	10/09/61
SAMPLED	07/06/44	07/27/68	05/11/62
FORMATION	EOCE-WILCOX	EOCE-LULING	CRET-EDWARDS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6750	6201	11068
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1825	3750
OPEN FLOW, MCFD	36000	13600	3700
COMPONENT, MOLE PCT			
METHANE	59.4	86.0	98.6
ETHANE	38.4	5.4	0.1
PROPANE	---	2.3	TRACE
N-BUTANE	---	0.6	TRACE
ISOBUTANE	---	0.4	TRACE
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	0.2	TRACE
HEXANES PLUS	---	0.3	TRACE
NITROGEN	0.0	0.6	0.9
OXYGEN	0.5	0.1	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.7	1.4	0.2
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1290	1130	1001
SPECIFIC GRAVITY	0.764	0.658	0.559

	INDEX 9127 SAMPLE 14911	INDEX 9128 SAMPLE 14570	INDEX 9129 SAMPLE 5158
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KARNES	KARNES	KARNES
FIELD	KENEDY	KENEDY SW	PARGMANN
WELL NAME	ESTELLE ROLF NO. 1	MCDOWELL NO. 1	MARY PARGMANN NO. 1
LOCATION	CARLOS MARTINEZ GRANT A-6	CARLOS MARTINEZ GRANT A-6	VICTOR BLANCO SUR. A-3
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	HARRIGAN & FOHS
COMPLETED	10/18/74	05/10/74	08/29/51
SAMPLED	02/15/77	01/27/76	01/29/52
FORMATION	CRET-EDWARDS	CRET-SLIGO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13065	15655	7158
WELLHEAD PRESSURE,PSIG	4957	11010	2500
OPEN FLOW, MCFD	8850	16500	32400
COMPONENT, MOLE PCT			
METHANE	89.8	91.5	87.0
ETHANE	1.6	0.1	5.6
PROPANE	0.9	TRACE	3.1
N-BUTANE	0.2	0.0	0.7
ISOBUTANE	0.1	0.0	0.6
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.3
NITROGEN	0.4	0.9	0.9
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	7.4	7.4	0.9
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	973	929	1141
SPECIFIC GRAVITY	0.652	0.630	0.660

	INDEX 9130 SAMPLE 15456	INDEX 9131 SAMPLE 14910	INDEX 9132 SAMPLE 15178
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KARNES	KARNES	KENEDY
FIELD	RUNGE E	SPEAKMAN	CABAZAS
WELL NAME	GAUS A NO. 1	B. B. TIPS NO. 1	YTURRIA L & C CO. NO. 37
LOCATION	VICTOR BLANCO SUR. A-3	CARLOS MARTINEZ SUR. A-6	SAN JUAN DE CARRICITOS GRANT
OWNER	CITIES SERVICE CO.	GENERAL CRUDE OIL CO.	TEXACO INC.
COMPLETED	06/20/76	10/18/75	04/06/76
SAMPLED	10/19/76	02/15/77	--/--/00
FORMATION	OLIG-HACKNEY	CRET-EDWARDS	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9710	13450	6040
WELLHEAD PRESSURE,PSIG	3450	5865	2397
OPEN FLOW, MCFD	5400	5800	15147
COMPONENT, MOLE PCT			
METHANE	85.1	87.8	95.8
ETHANE	5.8	5.3	1.4
PROPANE	3.4	0.9	0.2
N-BUTANE	1.1	0.4	0.1
ISOBUTANE	0.8	0.2	TRACE
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.4	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.4	TRACE	2.0
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	6.9	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1162	1015	1014
SPECIFIC GRAVITY	0.691	0.667	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. [2] SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9133 SAMPLE 14294	INDEX 9134 SAMPLE 13111	INDEX 9135 SAMPLE 4930
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	CALAMORIA	EL PAISTLE DEEP	JULIAN
WELL NAME	SAN JOSE DELA PARRA NO. 2	JOHN F. KENNEDY, JR. NO. 7	SANTAFE RANCH, PASTURE NO. 1
LOCATION	SAN JUAN DE CARRICITOS GRANT	LA PARRA GRANT, A-37	SAN SALVADOR DEL TULE GRANT
OWNER	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	03/27/72	06/23/70	04/28/50
SAMPLED	03/13/75	12/10/71	05/25/50
FORMATION	OLIG-FRIO	OLIG-FRIO C	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8603	13622	8270
WELLHEAD PRESSURE,PSIG	4226	9500	3815
OPEN FLOW, MCFD	12000	26000	5100
COMPONENT, MOLE PCT			
METHANE	93.8	89.4	87.0
ETHANE	1.1	5.6	5.2
PROPANE	0.2	2.1	3.5
N-BUTANE	TRACE	0.5	1.1
ISOBUTANE	0.1	0.8	1.3
N-PENTANE	TRACE	0.2	0.3
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	TRACE	0.5	0.3
NITROGEN	2.3	0.6	0.8
OXYGEN	0.2	TRACE	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	2.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	986	1146	1184
SPECIFIC GRAVITY	0.563	0.646	0.673

	INDEX 9136 SAMPLE 12028	INDEX 9137 SAMPLE 12029	INDEX 9138 SAMPLE 12211
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	JULIAN	JULIAN	MURDOCK PASS
WELL NAME	JULIAN PASTURE NO. 5	JULIAN PASTURE NO. 5	STATE TRACT 230 NO. 1
LOCATION	SAN SALVADOR DEL TULE GRANT	SAN SALVADOR DEL TULE GRANT	TRACT 230, LAGUNDA MADRE
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	SAMEDAN OIL CORP.
COMPLETED	09/04/69	09/15/68	02/20/69
SAMPLED	09/04/69	09/04/69	02/22/70
FORMATION	OLIG-22-A SAND	OLIG-21-A SAND	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8230	8160	7279
WELLHEAD PRESSURE,PSIG	2683	2409	2708
OPEN FLOW, MCFD	10500	4200	8200
COMPONENT, MOLE PCT			
METHANE	85.0	82.9	95.8
ETHANE	5.2	5.3	1.3
PROPANE	4.5	4.9	0.2
N-BUTANE	1.9	1.2	0.2
ISOBUTANE	2.0	2.3	0.0
N-PENTANE	0.2	0.5	0.2
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.7	0.1
NITROGEN	1.3	1.6	1.9
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1201	1254	1020
SPECIFIC GRAVITY	0.687	0.723	0.581

	INDEX 9139 SAMPLE 5234	INDEX 9140 SAMPLE 17169	INDEX 9141 SAMPLE 13605
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	PENASCAL	POTRERO FARIAS	POTRERO LOPENO
WELL NAME	KENEDY RANCH NO. A-1	MRS. S. K. EAST EST. NO. 8-4	STATE TRACT 318 NO. 1
LOCATION	RINCON DEL PENASCAL	LAS MOTAS DE LA BARRETA A-77	EL TORO ISLAND
OWNER	LA GLORIA CORP.	S. K. EAST ESTATE	HUGHES & HUGHES
COMPLETED	01/30/52	02/03/84	--/--/00
SAMPLED	05/05/52	02/03/84	06/04/73
FORMATION	OLIG-MARGINULINA	MIOC-G-90 SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7040	6950	6288
WELLHEAD PRESSURE,PSIG	3241	2640	2534
OPEN FLOW, MCFD	42000	70	12000
COMPONENT, MOLE PCT			
METHANE	95.2	96.3	96.4
ETHANE	1.9	1.3	1.3
PROPANE	0.5	0.1	0.2
N-BUTANE	0.1	0.1	TRACE
ISOBUTANE	0.2	TRACE	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	1.8	1.9	1.8
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1031	1010	1008
SPECIFIC GRAVITY	0.586	0.575	0.572

	INDEX 9142 SAMPLE 13149	INDEX 9143 SAMPLE 10259	INDEX 9144 SAMPLE 14293
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	RAYMONDVILLE	RITA	RITA
WELL NAME	TIURRIA L & C CO. NO. 35-H	MRS. S.K. EAST NO. 21	S. K. EAST NO. 59
LOCATION	7 MI. SE RUDOLPH	LOS FINADOS GRANT A-36	LOS FINADOS GRANT A-36
OWNER	TEXACO INC.	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.
COMPLETED	01/22/71	07/21/64	02/06/73
SAMPLED	02/10/72	10/29/65	03/13/75
FORMATION	OLIG-F-14 SAND	OLIG-M-85	-A-36
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7900	12898	3707
WELLHEAD PRESSURE,PSIG	2515	8545	1508
OPEN FLOW, MCFD	1550	5600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.8	95.5	93.4
ETHANE	1.0	1.9	2.9
PROPANE	0.1	0.4	0.8
N-BUTANE	TRACE	0.1	0.2
ISOBUTANE	TRACE	0.1	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.3	0.2
NITROGEN	4.1	1.3	1.8
OXYGEN	0.7	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	975	1042	1054
SPECIFIC GRAVITY	0.583	0.586	0.602

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9145 SAMPLE 14296	INDEX 9146 SAMPLE 4667	INDEX 9147 SAMPLE 5140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENEDY
FIELD	RITA	SARITA	SARITA
WELL NAME	MRS. S. K. EAST NO. 59	J. G. KENEDY B-5	JOHN G. KENEDY, JR. NO. 1-E
LOCATION	LOS FINADOS GRANT A-36	EL PAISTLE GRANT	EL PAISTLE GRANT
OWNER	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/06/73	10/28/48	--/--/00
SAMPLED	03/13/75	03/23/49	11/29/51
FORMATION	OLIG-FRIO	MIOC-FLEMING	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4650	2420	7057
WELLHEAD PRESSURE,PSIG	1384	1016	2730
OPEN FLOW, MCFD	5348	8200	9000
COMPONENT, MOLE PCT			
METHANE	94.2	97.6	92.1
ETHANE	3.8	0.1	3.4
PROPANE	0.8	0.0	1.4
N-BUTANE	0.2	0.0	0.5
ISOBUTANE	0.3	0.0	0.2
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	1.2	1.9	1.4
OXYGEN	0.0	0.2	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1059	990	1061
SPECIFIC GRAVITY	0.596	0.566	0.617

	INDEX 9148 SAMPLE 12037	INDEX 9149 SAMPLE 16861	INDEX 9150 SAMPLE 5972
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENEDY	KENEDY	KENT
FIELD	SARITA E	WILDCAT	CHAPARRAL
WELL NAME	MRS. S. K. EAST NO. 18-B	SANTA FE RCH J PASTURE NO.27	J. W. YOUNG NO. 118-1
LOCATION	LAPARRA GRANT A-37	SAN SALVADOR DEL TULE GRT.A1	W & W RR SUR. BLK. 6
OWNER	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.	GENERAL CRUDE OIL CO.
COMPLETED	07/23/68	07/--/82	08/08/55
SAMPLED	09/15/69	03/28/83	11/10/55
FORMATION	OLIG-FRIO M-02	OLIG-FRIO 9400	PENN-L
GEOLOGIC PROVINCE CODE	220	220	430
DEPTH, FEET	11626	9404	6752
WELLHEAD PRESSURE,PSIG	10825	1800	300
OPEN FLOW, MCFD	68000	1044	30
COMPONENT, MOLE PCT			
METHANE	91.5	91.7	81.4
ETHANE	4.6	2.9	10.0
PROPANE	1.5	1.5	16.6
N-BUTANE	0.2	0.6	6.1
ISOBUTANE	0.4	0.6	3.4
N-PENTANE	0.2	0.2	0.9
ISOPENTANE	TRACE	0.3	1.8
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.3	0.3	0.5
NITROGEN	0.8	1.3	8.6
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	TRACE	TRACE	0.04
HEATING VALUE*	1096	1098	1600
SPECIFIC GRAVITY	0.617	0.623	1.020

	INDEX 9151 SAMPLE 3663	INDEX 9152 SAMPLE 8598	INDEX 9153 SAMPLE 9607
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KENT	KIMBLE	KIMBLE
FIELD	NOT GIVEN	BOLT NW	NOT GIVEN
WELL NAME	NO. 1	M. B. MURR	J. O. COWSERT NO. 1-A
LOCATION	SEC. 73, BLK. 1	SEC. 7, TWNG SUR.	SEC. 19, BLK. 16, TWNG SUR.
OWNER	GIRARD TRUST CO., ET AL.	LOW DRILLING CO., INC.	TUCKER DRILLING CO., INC.
COMPLETED	--/--/00	04/04/62	10/18/63
SAMPLED	09/17/43	06/26/62	10/18/64
FORMATION	NOT GIVEN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	410	410
DEPTH, FEET	233	1976	3532
WELLHEAD PRESSURE,PSIG	NOT GIVEN	603	1200
OPEN FLOW, MCFD	NOT GIVEN	6000	24000
COMPONENT, MOLE PCT			
METHANE	0.0	83.8	91.2
ETHANE	1.4	1.6	2.3
PROPANE	---	0.6	1.0
N-BUTANE	---	0.2	0.2
ISOBUTANE	---	0.2	0.2
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.1	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	98.1	13.0	3.7
OXYGEN	0.4	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.9
HELIUM	0.09	0.43	0.16
HEATING VALUE*	25	916	1018
SPECIFIC GRAVITY	0.968	0.632	0.611

	INDEX 9154 SAMPLE 6847	INDEX 9155 SAMPLE 7216	INDEX 9156 SAMPLE 13879
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KING	KING	KLEBERG
FIELD	JUNIPER	JUNIPER	ALAZAN
WELL NAME	R. B. MASTERSON NO. 13	R. B. MASTERSON NO. 16	K. R. ALAZAN NO. 275
LOCATION	SEC.152,BLK.A,MONTGOMERY SUR	SEC. 41, ABAM SUR.	EL ALAZAN GRANT A-241
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	EXXON CO., U.S.A.
COMPLETED	--/--/00	05/09/59	11/09/72
SAMPLED	10/28/58	09/15/59	02/01/74
FORMATION	PENN-STRAWN	PENN-BEND CONGLOMERATE	MIOC-DS2 SAND
GEOLOGIC PROVINCE CODE	430	430	220
DEPTH, FEET	5275	5710	3515
WELLHEAD PRESSURE,PSIG	1892	2028	1485
OPEN FLOW, MCFD	7000	900	8036
COMPONENT, MOLE PCT			
METHANE	55.1	74.0	95.6
ETHANE	10.4	0.0	1.4
PROPANE	9.8	4.7	0.1
N-BUTANE	5.0	1.3	0.0
ISOBUTANE	3.2	0.7	0.1
N-PENTANE	2.4	0.1	0.0
ISOPENTANE	2.6	0.9	0.1
CYCLOPENTANE	0.5	0.1	TRACE
HEXANES PLUS	1.7	0.3	TRACE
NITROGEN	9.8	17.3	2.2
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.12	0.10	0.01
HEATING VALUE*	1552	1002	1004
SPECIFIC GRAVITY	0.996	0.750	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9157 SAMPLE 10258	INDEX 9158 SAMPLE 4285	INDEX 9159 SAMPLE 14270
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	ALAZAN N	BORREGOS	DUNN MCCAMPBELL
WELL NAME	KING RANCH ALAZAN NO. 164	KING RANCH-BORREGAS NO. 1	GULF STATE C NO. 937-1
LOCATION	LOS COMITAS GRANT A-231	SANTA GERTRUDIS GRANT	STATE TRACT 937-S
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	SUN OIL CO.
COMPLETED	10/12/64	12/13/45	10/03/72
SAMPLED	10/29/65	03/20/47	02/19/75
FORMATION	OLIG-J-06	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9444	6720	7757
WELLHEAD PRESSURE,PSIG	3501	3247	1550
OPEN FLOW, MCFD	4500	18000	5200
COMPONENT, MOLE PCT			
METHANE	91.5	73.5	94.0
ETHANE	4.0	25.0	2.9
PROPANE	1.2	---	0.8
N-BUTANE	0.4	---	0.2
ISOBUTANE	0.5	---	0.4
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.6	---	0.1
NITROGEN	1.1	0.6	1.0
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.6	0.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1107	1193	1059
SPECIFIC GRAVITY	0.629	0.688	0.600

	INDEX 9160 SAMPLE 4825	INDEX 9161 SAMPLE 10260	INDEX 9162 SAMPLE 15026
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	LAGUNA LARGA	MADERO	NAY SE
WELL NAME	KING RANCH NO. G-1	KING RANCH MADERO NO. 2	V. T. COLLINS NO. 1
LOCATION	RINCON DE LOS LAURELES, T123	SEC. 610, ALEX WHITAKER SUR.	G. TREVINO GRANT A-232
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	TEXAS OIL & GAS CORP.
COMPLETED	08/26/49	10/06/63	02/25/75
SAMPLED	11/28/49	10/29/65	06/16/77
FORMATION	OLIG-MARGINULINA	OLIG-J-58	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6495	9586	8222
WELLHEAD PRESSURE,PSIG	2867	3672	3700
OPEN FLOW, MCFD	35000	4400	470
COMPONENT, MOLE PCT			
METHANE	94.1	91.8	92.3
ETHANE	2.7	4.5	4.1
PROPANE	0.8	1.5	1.8
N-BUTANE	0.2	0.5	0.4
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	1.3	0.3	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1058	1123	1095
SPECIFIC GRAVITY	0.603	0.628	0.616

	INDEX 9163 SAMPLE 12090	INDEX 9164 SAMPLE 15097	INDEX 9165 SAMPLE 14026
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	MURDOCK PASS N	PADRE ISLAND N	PADRE N
WELL NAME	DUNN MCCAMPBELL A NO. 3	STATE TRACT 924-S NO. 1	STATE TRACT 924-S NO. 1
LOCATION	PADRE ISLAND	6 MI. SE CORPUS CHRISTI	STATE TRACT 924-S
OWNER	SUN OIL CO.	MCMORAN EXPLORATION CO.	MCMORAN EXPLORATION CO.
COMPLETED	12/12/68	03/02/72	03/07/72
SAMPLED	10/21/69	09/07/77	06/12/74
FORMATION	OLIG-MARGINULINA	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7318	8450	8450
WELLHEAD PRESSURE,PSIG	2798	900	3240
OPEN FLOW, MCFD	152272	15300	15300
COMPONENT, MOLE PCT			
METHANE	95.3	94.6	94.9
ETHANE	2.1	2.7	2.6
PROPANE	0.4	0.7	0.7
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.2	0.7	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1034	1052	1057
SPECIFIC GRAVITY	0.583	0.596	0.595

	INDEX 9166 SAMPLE 14027	INDEX 9167 SAMPLE 12567	INDEX 9168 SAMPLE 13861
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	PADRE N	SPRINT S	SPRINT S
WELL NAME	STATE TRACT 924-S NO. 1	STATE TRACT 980-S NO. 1	SOUTH SPRINT G.U. NO. 2
LOCATION	STATE TRACT 924-S	OFFSHORE	STATE TRACT 981-S
OWNER	MCMORAN EXPLORATION CO.	PAN AMERICAN PETROLEUM CORP.	AMOCO PRODUCTION CO.
COMPLETED	03/07/72	09/02/68	10/17/72
SAMPLED	06/12/74	11/02/70	01/09/74
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO A
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7625	9915	7880
WELLHEAD PRESSURE,PSIG	2865	2975	2700
OPEN FLOW, MCFD	59000	45450	6700
COMPONENT, MOLE PCT			
METHANE	93.3	94.8	95.2
ETHANE	3.3	2.3	2.1
PROPANE	1.1	0.7	0.6
N-BUTANE	0.2	TRACE	0.1
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.0	1.3	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1070	1042	1049
SPECIFIC GRAVITY	0.606	0.591	0.591

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9169 SAMPLE 10142	INDEX 9170 SAMPLE 8672	INDEX 9171 SAMPLE 15289
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	KLEBERG
FIELD	STRATTON	TIO PANCHO	WILDCAT
WELL NAME	G. P. WARDNER 83-MT	K. D. RINCON NO. 1	G. P. WARDNER NO. 127
LOCATION	PASA ANCHO DE ARRIBA GT.A-93	A. C. L. KING SUR. NO. 282	PASO ANCHO DE ABAJO GRANT
OWNER	CHAMPLIN PETROLEUM CO.	HUMBLE OIL & REFINING CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	05/10/64	05/31/62	10/16/76
SAMPLED	09/22/65	09/11/62	05/--/78
FORMATION	OLIG-SAND	OLIG-FRIO J-55	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6766	9540	8662
WELLHEAD PRESSURE,PSIG	1305	3652	5330
OPEN FLOW, MCFD	5870	39000	82000
COMPONENT, MOLE PCT			
METHANE	91.6	90.0	89.0
ETHANE	4.5	4.5	4.5
PROPANE	1.7	1.7	2.2
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.5	0.8	0.9
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.3	0.0	0.4
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.4	0.9	0.5
NITROGEN	0.2	0.8	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1128	1147	1156
SPECIFIC GRAVITY	0.630	0.649	0.663

	INDEX 9172 SAMPLE 15290	INDEX 9173 SAMPLE 16254	INDEX 9174 SAMPLE 5660
STATE	TEXAS	TEXAS	TEXAS
COUNTY	KLEBERG	KLEBERG	LA SALLE
FIELD	WILDCAT	TEARY W	STUART CITY
WELL NAME	G. P. WARDNER NO. 127	L. L. HUFF ESTATE NO. 1	ALBERT MARTIN NO. 1
LOCATION	PASO ANCHO DE ABAJO GRANT	DE LA BOVIDA GRANT, A-232	J. W. MARTIN SUR.
OWNER	CHAMPLIN PETROLEUM CO.	MAINCO OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	10/16/76	10/08/80	02/02/54
SAMPLED	05/--/78	05/11/81	07/29/54
FORMATION	OLIG-VICKSBURG	MIOC-HUFF	CRET-EDWARDS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8662	10702	10022
WELLHEAD PRESSURE,PSIG	5330	5866	4772
OPEN FLOW, MCFD	82000	21000	5500
COMPONENT, MOLE PCT			
METHANE	92.3	92.5	91.5
ETHANE	4.1	4.0	3.3
PROPANE	1.4	1.6	0.6
N-BUTANE	0.4	0.4	0.2
ISOBUTANE	0.3	0.4	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.2	0.4	0.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	4.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1086	1091	1000
SPECIFIC GRAVITY	0.617	0.613	0.621

	INDEX 9175 SAMPLE 3776	INDEX 9176 SAMPLE 3777	INDEX 9177 SAMPLE 3778
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LA SALLE	LA SALLE	LA SALLE
FIELD	WASHBURN	WASHBURN	WASHBURN S
WELL NAME	S. T. S. "A" LSE. NO. 13	S. T. S. "A" LSE. NO. 31	S. T. "SD" LSE. NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	QUINTANA PETROLEUM CORP.	QUINTANA PETROLEUM CORP.	QUINTANA PETROLEUM CORP.
COMPLETED	08/24/62	03/13/64	03/30/43
SAMPLED	04/08/44	04/08/44	04/08/44
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4820	5092	6030
WELLHEAD PRESSURE,PSIG	1100	1750	800
OPEN FLOW, MCFD	537	2190	606
COMPONENT, MOLE PCT			
METHANE	87.8	84.0	79.6
ETHANE	11.1	14.7	19.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	0.4	0.3
OXYGEN	0.4	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.4	0.5
HELIUM	0.00	0.00	0.00
HEATING VALUE*	1088	1114	1150
SPECIFIC GRAVITY	0.617	0.635	0.658

	INDEX 9178 SAMPLE 9100	INDEX 9179 SAMPLE 10827	INDEX 9180 SAMPLE 14568
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAMB	LAMB	LAVACA
FIELD	ANTON N	WILDCAT	BORCHERS
WELL NAME	H. L. CAIN & W.S. MOSS NO. 1	EVA WELLS NO. 1	WILLIAM BORCHERS NO. 4
LOCATION	SEC. 6, BLK. 1, THOMPSON SUR	STATE CAPITOL LANDS	A. ELGIN ABSTRACT 156
OWNER	W. S. MOSS	VAUGHN PETROLEUM, INC.	MURPHY H. BAXTER
COMPLETED	--/--/57	--/--/00	01/30/75
SAMPLED	09/28/63	--/--/00	01/28/76
FORMATION	TRIA-CHINLE	NOT GIVEN	MIOC-BORCHERS
GEOLOGIC PROVINCE CODE	435	435	220
DEPTH, FEET	500	2615	1900
WELLHEAD PRESSURE,PSIG	32	NOT GIVEN	816
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	270
COMPONENT, MOLE PCT			
METHANE	TRACE	0.2	97.8
ETHANE	0.0	0.0	0.1
PROPANE	0.0	0.0	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	98.6	99.2	1.8
OXYGEN	TRACE	0.2	0.0
ARGON	1.0	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.4
HELIUM	0.31	0.00	0.01
HEATING VALUE*	0	2	993
SPECIFIC GRAVITY	0.968	0.969	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9181 SAMPLE 15190	INDEX 9182 SAMPLE 15191	INDEX 9183 SAMPLE 3696
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	BORCHERS	BORCHERS	BRUSHY CREEK
WELL NAME	D. B. PLOEGER NO. 1	D. B. PLOEGER NO. 1	D. G. MCMANUS NO. 1
LOCATION	ELLEN FAGAN SUR. A-571	ELLEN FAGAN SUR. A-571	C. P. DALMUS SUR.
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	SHELL OIL CO.
COMPLETED	08/04/74	08/04/74	03/21/42
SAMPLED	01/14/78	01/14/78	10/27/43
FORMATION	MIOC-	MIOC-	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1894	1894	7680
WELLHEAD PRESSURE,PSIG	645	645	3311
OPEN FLOW, MCFD	47200	47200	11250
COMPONENT, MOLE PCT			
METHANE	98.9	99.0	77.0
ETHANE	0.1	TRACE	20.9
PROPANE	TRACE	TRACE	---
N-BUTANE	TRACE	TRACE	---
ISOBUTANE	TRACE	TRACE	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.5	0.5	0.1
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	1.8
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1017	1012	1155
SPECIFIC GRAVITY	0.565	0.562	0.677

	INDEX 9184 SAMPLE 14900	INDEX 9185 SAMPLE 15169	INDEX 9186 SAMPLE 12099
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	HALLETTSVILLE NW	JANSKY	KINKLER
WELL NAME	JULIUS TECHNIK UNIT NO. 1	W. V. JANSKY NO. 1	ELLA ZAPALAC NO. 1
LOCATION	JAMES CAMPBELL SUR. A-6	N E HALLETTVILLE 3 MI.	SAMUEL FULLER SUR. A-18
OWNER	HOWELL DRILLING, INC.	HNG OIL CO.	SHELL OIL CO.
COMPLETED	06/30/75	--/--/00	09/03/68
SAMPLED	02/11/77	03/16/72	11/09/69
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8735	9620	8814
WELLHEAD PRESSURE,PSIG	2865	2579	2875
OPEN FLOW, MCFD	5600	82000	10500
COMPONENT, MOLE PCT			
METHANE	82.7	61.5	80.4
ETHANE	6.6	7.3	7.4
PROPANE	4.9	12.3	5.4
N-BUTANE	1.1	5.8	0.9
ISOBUTANE	0.9	4.7	1.1
N-PENTANE	0.2	1.8	0.3
ISOPENTANE	0.4	2.0	0.4
CYCLOPENTANE	0.1	0.4	0.1
HEXANES PLUS	0.2	1.5	0.4
NITROGEN	0.6	0.9	1.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	1.7	2.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1192	1681	1209
SPECIFIC GRAVITY	0.708	1.010	0.726

	INDEX 9187 SAMPLE 12101	INDEX 9188 SAMPLE 4697	INDEX 9189 SAMPLE 3694
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	MORALES N	MORALES W	PROVIDENT CITY
WELL NAME	WM. BORCHERS NO. 4	WM. BORCHERS NO. 1-A	F. W. NEUMAUS NO. 1
LOCATION	JAMES CHESHER SUR. A-114	WM. MOSFORD SUR. ABST. 232	JOHN D. RAGSDALE SUR.
OWNER	SHELL OIL CO.	UNION PRODUCING CO.	SHELL OIL CO.
COMPLETED	10/03/68	04/24/48	09/23/43
SAMPLED	11/09/69	09/--/48	11/03/43
FORMATION	MIOC-	MIOC-	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1880	2030	8540
WELLHEAD PRESSURE,PSIG	1495	864	3560
OPEN FLOW, MCFD	4000	4400	40000
COMPONENT, MOLE PCT			
METHANE	99.3	98.3	91.0
ETHANE	0.0	0.1	14.8
PROPANE	0.1	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.4	1.4	1.3
OXYGEN	0.0	0.1	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	2.5
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1009	997	1086
SPECIFIC GRAVITY	0.558	0.562	0.660

	INDEX 9190 SAMPLE 4832	INDEX 9191 SAMPLE 12100	INDEX 9192 SAMPLE 12102
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAVACA	LAVACA	LAVACA
FIELD	PROVIDENT CITY	PROVIDENT CITY	PROVIDENT CITY
WELL NAME	FAY ROUSE NO. 1	A. W. TRAYLOR NO. 6	A. W. TRAYLOR NO. 6
LOCATION	AARON MONROE SUR.	DAVID DAVIS SUR. A-135	DAVID DAVIS SUR. A-135
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	08/28/49	11/09/68	11/09/68
SAMPLED	12/09/69	11/09/69	11/09/69
FORMATION	EOCE-WILCOX	OLIG-FRIO	EOCE-YEGUA M-1
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8890	3176	5837
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1330	1500
OPEN FLOW, MCFD	8800	26000	6000
COMPONENT, MOLE PCT			
METHANE	88.1	99.1	88.0
ETHANE	4.8	0.0	6.5
PROPANE	1.9	TRACE	2.8
N-BUTANE	0.5	0.0	0.5
ISOBUTANE	0.4	0.0	0.7
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.4	0.0	0.1
NITROGEN	1.2	0.5	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.1	0.2	0.3
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1100	1004	1138
SPECIFIC GRAVITY	0.659	0.557	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9193 SAMPLE 13911		INDEX 9194 SAMPLE 15179		INDEX 9195 SAMPLE 15438	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LAVACA		LAVACA		LAVACA	
FIELD	PROVIDENT CITY		RAGSDALE RANCH		SPEAKS SW	
WELL NAME	PROVIDENT CITY G.U. NO. 9		J. B. RAGSDALE NO. 1		I. S. EAVES NO. 1	
LOCATION	DAVID DAVIS SUR. A-135		JAMES RYAN SUR. A-42		JAMES CHESHER SR. SUR. A-114	
OWNER	SHELL OIL CO.		HUGHES & HUGHES OIL & GAS		WAINOCO OIL & GAS CO.	
COMPLETED	01/04/72		02/04/75		04/19/77	
SAMPLED	02/06/74		01/06/78		10/16/78	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8895		8364		5450	
WELLHEAD PRESSURE,PSIG	3100		2885		2051	
OPEN FLOW, MCFD	16500		13000		3700	
COMPONENT, MOLE PCT						
METHANE	88.6		89.7		91.6	
ETHANE	4.9		4.4		5.1	
PROPANE	2.0		1.6		1.6	
N-BUTANE	0.5		0.5		0.3	
ISOBUTANE	0.5		0.2		0.3	
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.3		0.2		0.2	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	0.1		0.3		0.3	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.7		2.7		0.3	
HELIUM	TRACE		0.01		0.01	
HEATING VALUE*	1093		1071		1108	
SPECIFIC GRAVITY	0.650		0.638		0.622	

	INDEX 9196 SAMPLE 13872		INDEX 9197 SAMPLE 12582		INDEX 9198 SAMPLE 13857	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LAVACA		LAVACA		LAVACA	
FIELD	VIENNA		VIENNA N		WORD N	
WELL NAME	JOE KAHANEK NO. 3		R. L. ZINN, ET AL. NO. 1		ANNIE BROWN ET AL. NO. 1	
LOCATION	W. MALDOON SUR. A-34		J. B. P. JANUARY SUR. A-552		NOT GIVEN	
OWNER	GEORGE MITCHELL & ASSOC. INC		CONTINENTAL OIL CO.		SUPERIOR OIL CO.	
COMPLETED	03/28/73		08/03/70		06/09/72	
SAMPLED	01/18/74		12/17/70		12/27/73	
FORMATION	OLIG-FRIO		EOCE-WILCOX		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	3243		8296		8115	
WELLHEAD PRESSURE,PSIG	1385		2913		2818	
OPEN FLOW, MCFD	16000		5600		14800	
COMPONENT, MOLE PCT						
METHANE	99.2		90.0		85.4	
ETHANE	0.1		4.3		6.4	
PROPANE	TRACE		1.8		3.5	
N-BUTANE	0.0		0.5		0.8	
ISOBUTANE	0.0		0.4		0.8	
N-PENTANE	0.0		0.2		0.1	
ISOPENTANE	0.0		0.0		0.3	
CYCLOPENTANE	0.0		0.1		TRACE	
HEXANES PLUS	0.0		0.2		0.1	
NITROGEN	0.3		0.7		0.3	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		1.9		2.1	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1007		1088		1147	
SPECIFIC GRAVITY	0.559		0.640		0.676	

	INDEX 9199 SAMPLE 14268		INDEX 9200 SAMPLE 14269		INDEX 9201 SAMPLE 16174	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LAVACA		LAVACA		LAVACA	
FIELD	WORD N		WORD N		WORD N	
WELL NAME	NEUMAUS UNIT NO. 2		NEUMAUS UNIT NO. 2		WOYTEK NO. 1-E	
LOCATION	J. SMOTHERS SUR. A-47		J. SMOTHERS SUR. A-47		JAMES CAMPBELL SUR.2, A-6	
OWNER	BASS ENTERPRISES PROD. CO.		BASS ENTERPRISES PROD. CO.		HOWELL DRILLING, INC.	
COMPLETED	05/15/73		04/20/74		04/22/80	
SAMPLED	02/19/75		02/19/75		01/22/81	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		CRET-EDWARDS	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7506		7100		13000	
WELLHEAD PRESSURE,PSIG	2569		2369		2700	
OPEN FLOW, MCFD	13500		12000		4000	
COMPONENT, MOLE PCT						
METHANE	84.8		86.4		87.9	
ETHANE	6.0		5.9		2.9	
PROPANE	3.3		2.9		0.7	
N-BUTANE	0.8		0.8		0.2	
ISOBUTANE	0.9		0.6		0.3	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.6		0.6		0.1	
CYCLOPENTANE	0.2		0.1		TRACE	
HEXANES PLUS	0.4		0.3		0.1	
NITROGEN	0.9		0.5		0.3	
OXYGEN	TRACE		0.0		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.0		1.7		7.3	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1167		1157		991	
SPECIFIC GRAVITY	0.693		0.677		0.661	

	INDEX 9202 SAMPLE 14298		INDEX 9203 SAMPLE 6475		INDEX 9204 SAMPLE 12576	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LAVACA		LEE		LEON	
FIELD	YOAKUM		TANGLEWOOD		BUFFALO	
WELL NAME	TURNER UNIT NO. 2		JAMES JOHNSON NO. 1		EMMA B. PAGE NO. 1	
LOCATION	2 MI. SE OF YOAKUM		JOHN FULCHER SUR.		NOT GIVEN	
OWNER	ENTERPRISE RESOURCES INC.		WICK ASSOC. & J. E. PEDERSON		LONE STAR PRODUCING CO.	
COMPLETED	04/11/75		03/--/58		--/--/00	
SAMPLED	05/27/75		01/15/58		12/08/78	
FORMATION	EOCE-WILCOX		CRET-BUDA		CRET-WOODBINE	
GEOLOGIC PROVINCE CODE	220		220		260	
DEPTH, FEET	8812		6060		5496	
WELLHEAD PRESSURE,PSIG	1860		2700		1400	
OPEN FLOW, MCFD	9844		5400		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	85.5		91.6		97.6	
ETHANE	6.3		2.4		0.7	
PROPANE	3.8		0.8		0.4	
N-BUTANE	0.8		0.2		0.0	
ISOBUTANE	0.6		0.1		0.0	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	0.2		TRACE		0.0	
CYCLOPENTANE	TRACE		TRACE		0.0	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	0.3		1.6		0.6	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.8		2.9		0.6	
HELIUM	TRACE		0.02		0.01	
HEATING VALUE*	1122		1016		1012	
SPECIFIC GRAVITY	0.672		0.620		0.570	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9205 SAMPLE 11848	INDEX 9206 SAMPLE 14775	INDEX 9207 SAMPLE 13838
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LEON	LEON
FIELD	BUFFALO S	CENTERVILLE N	JEWETT
WELL NAME	MARY HOWARD NO. 1	T. R. RODELL NO. 1	M. G. CLUTE NO. 1
LOCATION	RALPH CAMPBELL SUR. A-191	B. CARAKER SUR.	J. W. TOMLINSON SUR. A-863
OWNER	PAN AMERICAN PETROLEUM CORP.	LAKE ROMEL OIL CO.	DOW CHEMICAL CO.
COMPLETED	10/09/68	06/04/76	11/08/71
SAMPLED	05/07/69	09/--/76	12/22/73
FORMATION	CRET-WOODBINE	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5830	10151	9446
WELLHEAD PRESSURE,PSIG	1865	4515	1500
OPEN FLOW, MCFD	11180	7600	6500
COMPONENT, MOLE PCT			
METHANE	96.3	94.7	94.9
ETHANE	0.6	1.6	1.3
PROPANE	0.1	0.5	0.6
N-BUTANE	0.0	0.2	0.3
ISOBUTANE	0.0	0.1	0.3
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	0.5	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	2.2	2.0
HELIUM	0.02	0.01	TRACE
HEATING VALUE*	989	1025	1034
SPECIFIC GRAVITY	0.583	0.602	0.602

	INDEX 9208 SAMPLE 12575	INDEX 9209 SAMPLE 12629	INDEX 9210 SAMPLE 12604
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LEON	LEON
FIELD	LEON	MCBEE	NAVARRO CROSSING
WELL NAME	PAGE ESTATE NO. C-1	BARKLEY NO. 1	E. F. SWIFT HEIRS NO. 1
LOCATION	NOT GIVEN	JEWETT, TEXAS	OAKWOOD
OWNER	LONE STAR PRODUCING CO.	SUN OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/13/51	08/13/55	--/--/00
SAMPLED	12/08/70	10/07/70	12/22/70
FORMATION	CRET-RODESSA	CRET-RODESSA	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8799	8740	5700
WELLHEAD PRESSURE,PSIG	1240	925	NOT GIVEN
OPEN FLOW, MCFD	1476	1670	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.6	86.6	90.8
ETHANE	0.8	2.1	1.6
PROPANE	0.2	2.0	0.6
N-BUTANE	0.0	1.0	0.2
ISOBUTANE	0.0	1.5	0.2
N-PENTANE	0.0	0.8	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	0.0	0.3	0.1
HEXANES PLUS	0.0	1.6	0.2
NITROGEN	4.3	1.6	4.6
OXYGEN	0.9	0.0	0.9
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	2.3	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	947	1187	996
SPECIFIC GRAVITY	0.603	0.716	0.611

	INDEX 9211 SAMPLE 12574	INDEX 9212 SAMPLE 17835	INDEX 9213 SAMPLE 8996
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LEON	LEON
FIELD	OAKWOOD	PETEY WISENBAKER	RED OAK
WELL NAME	C. M. HALEY	LOIS VAUGHN NO. 1	P. E. HARCROW NO. 2
LOCATION	NOT GIVEN	OFL WALLE SUR. A-29	JOSEPH BEATTY SUR. A-59
OWNER	LONE STAR PRODUCING CO.	WISENBAKER PROD. CO.	LONE STAR PRODUCING CO.
COMPLETED	12/07/61	05/21/85	05/26/63
SAMPLED	12/08/70	09/17/85	05/30/63
FORMATION	CRET-WOODBINE	CRET-GLEN ROSE G	CRET-SUB-CLARKSVILLE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5814	10234	5767
WELLHEAD PRESSURE,PSIG	1400	3200	1810
OPEN FLOW, MCFD	2840	1380	1070
COMPONENT, MOLE PCT			
METHANE	95.3	81.4	85.8
ETHANE	1.8	6.2	8.0
PROPANE	0.7	3.7	2.5
N-BUTANE	0.2	1.7	0.9
ISOBUTANE	0.3	1.3	0.4
N-PENTANE	TRACE	0.8	0.2
ISOPENTANE	TRACE	0.8	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	1.0	0.2
NITROGEN	0.8	0.8	1.2
OXYGEN	0.1	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.9	0.6
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1047	1260	1152
SPECIFIC GRAVITY	0.594	0.748	0.665

	INDEX 9214 SAMPLE 16437	INDEX 9215 SAMPLE 15392	INDEX 9216 SAMPLE 17351
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LEON	LIBERTY	LIBERTY
FIELD	SILVER CREEK	CLEVELAND S	COLONEL
WELL NAME	E-N- VANN UNIT NO. 1	WILMA D. GASKAMP NO. 1	B. E. QUINN NO. 1
LOCATION	M. JOHNSON SUR., A-1027	MAURICE SMITH SUR. A-105	JAMES HUMPHRIES SUR. A-212
OWNER	SUN GAS CO.	ATAPCO	WESTLAND OIL DEV. CORP.
COMPLETED	01/31/81	09/19/76	11/02/83
SAMPLED	02/23/82	09/26/78	01/09/84
FORMATION	JURA-COTTON VALLEY	EOCE-YEGUA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	260	220	220
DEPTH, FEET	14533	6625	14000
WELLHEAD PRESSURE,PSIG	750	2493	11000
OPEN FLOW, MCFD	900	5900	1900
COMPONENT, MOLE PCT			
METHANE	97.1	86.9	88.9
ETHANE	0.2	6.6	4.7
PROPANE	0.1	2.9	0.9
N-BUTANE	0.0	0.6	0.2
ISOBUTANE	0.0	0.4	0.2
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	0.1	0.9	0.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	1.0	4.8
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	990	1129	1036
SPECIFIC GRAVITY	0.583	0.654	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9217 SAMPLE 16465		INDEX 9218 SAMPLE 4694		INDEX 9219 SAMPLE 5000	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LIBERTY		LIBERTY		LIBERTY	
FIELD	COTTONWOOD SE		DAYTON N		DAYTON N	
WELL NAME	BOYT HEIRS NO. 1		J. A. DEERING NCT-1, NO. 2		J. D. WILLIAMS NO. 3	
LOCATION	C. F. STEVENS NO. 10 SUR.		BLK. 134, H&TC RY CO. SUR.		H&TC SUR. 123, A-262	
OWNER	TEXACO U.S.A.		TEXAS CO.		TEXAS CO.	
COMPLETED	08/--/81		06/04/48		10/31/50	
SAMPLED	03/26/82		03/05/49		01/24/50	
FORMATION	EOCE-YEGUA		EOCE-YEGUA		MIOC-NOT GIVEN	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	16119		7474		2136	
WELLHEAD PRESSURE,PSIG	13000		3742		NOT GIVEN	
OPEN FLOW, MCFD	2100		18000		20000	
COMPONENT, MOLE PCT						
METHANE	64.8		87.3		90.4	
ETHANE	16.2		7.0		0.9	
PROPANE	7.3		2.9		0.2	
N-BUTANE	1.5		0.7		0.1	
ISOBUTANE	1.6		0.4		0.0	
N-PENTANE	0.3		0.1		0.1	
ISOPENTANE	0.8		0.3		TRACE	
CYCLOPENTANE	0.2		TRACE		TRACE	
HEXANES PLUS	0.5		0.0		0.0	
NITROGEN	0.9		0.6		8.5	
OXYGEN	0.1		0.1		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	5.7		0.3		0.2	
HELIUM	TRACE		0.01		0.02	
HEATING VALUE*	1321		1145		936	
SPECIFIC GRAVITY	0.851		0.647		0.599	

	INDEX 9220 SAMPLE 14184		INDEX 9221 SAMPLE 12023		INDEX 9222 SAMPLE 5133	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LIBERTY		LIBERTY		LIBERTY	
FIELD	ESPERSON DOME		GUM BAYOU		GUM ISLAND	
WELL NAME	MOORE'S BLUFF NO. A-207		MOORE BLUFF NO. M-1		ESPERSON NO. C.I.	
LOCATION	C. W. FISHER SUR. A-657		LOUIS DAVIS SUR. A-18		NOT GIVEN	
OWNER	GENERAL CRUDE OIL CO.		GENERAL CRUDE OIL CO.		GENERAL CRUDE OIL CO.	
COMPLETED	04/20/73		04/04/68		03/05/51	
SAMPLED	10/23/74		08/29/69		09/28/51	
FORMATION	EOCE-COOK MOUNTAIN		EOCE-COOK MOUNTAIN L		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7610		11922		8915	
WELLHEAD PRESSURE,PSIG	3000		1600		4102	
OPEN FLOW, MCFD	NOT GIVEN		2000		14000	
COMPONENT, MOLE PCT						
METHANE	88.4		87.7		90.0	
ETHANE	5.5		6.1		5.3	
PROPANE	2.6		2.7		2.0	
N-BUTANE	0.6		0.6		0.6	
ISOBUTANE	0.6		0.3		0.3	
N-PENTANE	0.1		TRACE		0.1	
ISOPENTANE	0.4		0.3		TRACE	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.3		0.1		0.2	
NITROGEN	0.5		0.6		0.2	
OXYGEN	TRACE		0.0		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.7		1.3		0.8	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1143		1116		1112	
SPECIFIC GRAVITY	0.653		0.647		0.635	

	INDEX 9223 SAMPLE 4047		INDEX 9224 SAMPLE 4049		INDEX 9225 SAMPLE 2500	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LIBERTY		LIBERTY		LIBERTY	
FIELD	HARDIN		HARDIN		HULL	
WELL NAME	PARTLOW NO. 1-C		PARTLOW NO. 1-T		NO. 63-A	
LOCATION	NOT GIVEN		NOT GIVEN		JESSE DEVORE LEAGUE	
OWNER	ATLANTIC REFINING CO.		ATLANTIC REFINING CO.		REPUBLIC PRODUCTION CO.	
COMPLETED	07/--/44		12/06/38		04/23/32	
SAMPLED	07/26/45		07/26/45		05/19/32	
FORMATION	EOCE-MCMURTRY		EOCE-DAVIS		MIOC-	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	7580		7547		2366	
WELLHEAD PRESSURE,PSIG	1000		1100		NOT GIVEN	
OPEN FLOW, MCFD	9700		19600		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	82.2		75.6		58.5	
ETHANE	17.3		23.9		38.8	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	0.0		0.0		0.0	
OXYGEN	0.0		0.0		0.4	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.5		0.5		2.3	
HELIUM	TRACE		0.00		0.00	
HEATING VALUE*	1143		1194		1288	
SPECIFIC GRAVITY	0.645		0.678		0.771	

	INDEX 9226 SAMPLE 14872		INDEX 9227 SAMPLE 11997		INDEX 9228 SAMPLE 13404	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	LIBERTY		LIBERTY		LIBERTY	
FIELD	HULL S		MCCOY		QUINN	
WELL NAME	HANNAH CARR NO. 1		MABEL OTT HOWARD NO. 1		U.S. PLYWOOD ET AL. NO. 1	
LOCATION	NICHOLAS LYNCH SUR. A-308		DANIEL DONAHOE SUR. A-24		REUBIN BARROW SUR. A-136	
OWNER	GENERAL CRUDE OIL CO.		PAN AMERICAN PETROLEUM CORP.		MCCORMICK OIL & GAS CORP.	
COMPLETED	10/16/76		03/12/68		06/30/71	
SAMPLED	12/14/76		08/11/69		09/26/72	
FORMATION	EOCE-YEGUA		EOCE-WILCOX		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	8976		14392		7524	
WELLHEAD PRESSURE,PSIG	3850		9510		1270	
OPEN FLOW, MCFD	21669		3449		13000	
COMPONENT, MOLE PCT						
METHANE	89.9		79.4		88.0	
ETHANE	5.7		8.4		5.7	
PROPANE	2.1		2.4		2.2	
N-BUTANE	0.5		0.3		0.5	
ISOBUTANE	0.4		0.4		0.4	
N-PENTANE	0.2		0.1		0.1	
ISOPENTANE	0.2		0.2		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	0.2		3.7		1.6	
OXYGEN	0.0		0.7		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		4.2		1.1	
HELIUM	TRACE		0.01		0.01	
HEATING VALUE*	1129		1059		1095	
SPECIFIC GRAVITY	0.639		0.698		0.641	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9229 SAMPLE 14871	INDEX 9230 SAMPLE 15145	INDEX 9231 SAMPLE 11748
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIBERTY	LIBERTY	LIMESTONE
FIELD	RAYWOOD W	RAYWOOD W	BOX CHURCH
WELL NAME	MALLET UNIT NO. 1	MALLET MITCHELL NO. 1	WHITE NO. 1
LOCATION	WILLIAM FIELDS SUR. A-194	URIAH ANDERSON SUR. A-1	JUAN D. ACOSTA SUR. A-1
OWNER	GENERAL CRUDE OIL CO.	GENERAL CRUDE OIL CO.	JAKE L. HAMON
COMPLETED	06/01/75	05/04/76	01/08/69
SAMPLED	12/14/76	05/15/77	01/12/69
FORMATION	EOCE-COOK MOUNTAIN	EOCE-COOK MOUNTAIN	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	220	220	260
DEPTH, FEET	12002	11904	10690
WELLHEAD PRESSURE,PSIG	4500	1550	4082
OPEN FLOW, MCFD	6800	5000	24000
COMPONENT, MOLE PCT			
METHANE	89.9	90.2	60.8
ETHANE	5.3	4.4	2.2
PROPANE	1.9	1.4	0.5
N-BUTANE	0.5	0.4	0.5
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	0.3	1.4	28.2
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.1	6.2
HELIUM	TRACE	TRACE	0.07
HEATING VALUE*	1108	1084	741
SPECIFIC GRAVITY	0.637	0.635	0.779

	INDEX 9232 SAMPLE 12465	INDEX 9233 SAMPLE 10916	INDEX 9234 SAMPLE 17926
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIMESTONE
FIELD	FALLON	HEADSVILLE	NAVASOTA
WELL NAME	FLOYD DUKE NO. 1	R. L. BROWN NO. 1	COLLIE SIMS NO. 1
LOCATION	JUAN N. ACOSTA SUR. A-1	J. G. GARDNER SUR. A217	JUAN L. CHAVERT SUR., A-4
OWNER	GEORGE MITCHELL & ASSOC. INC	MOBIL OIL CORP.	TXO PRODUCTION CORP.
COMPLETED	05/10/69	--/--/--	03/07/85
SAMPLED	10/22/70	04/06/67	12/06/85
FORMATION	JURA-COTTON VALLEY	JURA-COTTON VALLEY	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11212	9664	7504
WELLHEAD PRESSURE,PSIG	3500	3940	2600
OPEN FLOW, MCFD	10000	21700	155
COMPONENT, MOLE PCT			
METHANE	96.2	95.3	92.1
ETHANE	1.0	1.8	3.2
PROPANE	0.1	0.3	1.3
N-BUTANE	0.2	0.0	0.7
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.6
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.6
NITROGEN	0.3	0.3	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	2.3	1.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1002	1005	1115
SPECIFIC GRAVITY	0.586	0.590	0.637

	INDEX 9235 SAMPLE 5064	INDEX 9236 SAMPLE 12507	INDEX 9237 SAMPLE 10820
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIMESTONE
FIELD	OLETHA	OLETHA	OLETHA SW
WELL NAME	LULA MASON NO. 1	J. B. BATTLE G.U. NO. 1-C	CRYSTAL D. JONES NO. 1
LOCATION	JUAN LUIS CHAVERT SUR.	NOT GIVEN	M. C. REJON SUR. A-26
OWNER	TEXAS CO.	TEXACO INC.	WATBURN OIL CO., ET AL.
COMPLETED	04/01/51	--/--/52	10/14/60
SAMPLED	06/18/51	11/03/70	12/12/66
FORMATION	CRET-GLEN ROSE L	CRET-RODESSA	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6788	6734	6728
WELLHEAD PRESSURE,PSIG	3151	2358	1866
OPEN FLOW, MCFD	22000	2042	10000
COMPONENT, MOLE PCT			
METHANE	89.7	93.7	91.8
ETHANE	4.6	2.6	3.0
PROPANE	1.7	1.0	1.6
N-BUTANE	0.5	0.3	0.6
ISOBUTANE	0.2	0.3	0.6
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.4
NITROGEN	1.4	0.7	0.6
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.2	0.9	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1080	1061	1111
SPECIFIC GRAVITY	0.636	0.606	0.637

	INDEX 9238 SAMPLE 10774	INDEX 9239 SAMPLE 10776	INDEX 9240 SAMPLE 10777
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIMESTONE
FIELD	POKEY	POKEY	POKEY
WELL NAME	LULLENE REGAN NO. 1	JOHN C. MCCLARAN NO. 1	JESSIE P. WRIGHT NO. 1-T
LOCATION	J. D. BROWN SUR. A-51	M. RIVA PALACIOUS SUR. A-21	JUAN LUIS CHAVERT SUR. A-4
OWNER	J. BURNS BROWN, ET AL.	J. BURNS BROWN, ET AL.	J. BURNS BROWN, ET AL.
COMPLETED	07/29/66	04/10/65	08/28/65
SAMPLED	11/10/66	11/10/66	11/10/66
FORMATION	CRET-TRAVIS PEAK	CRET-RODESSA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6852	6415	7414
WELLHEAD PRESSURE,PSIG	2700	2300	1600
OPEN FLOW, MCFD	4000	4000	4000
COMPONENT, MOLE PCT			
METHANE	88.6	90.3	96.7
ETHANE	1.1	3.2	1.3
PROPANE	0.2	1.8	0.2
N-BUTANE	0.0	0.8	0.0
ISOBUTANE	0.0	0.7	0.0
N-PENTANE	0.0	0.4	0.0
ISOPENTANE	0.0	0.3	0.0
CYCLOPENTANE	0.0	0.2	0.0
HEXANES PLUS	0.0	0.8	0.0
NITROGEN	9.6	0.7	1.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.6
HELIUM	0.02	0.02	0.01
HEATING VALUE*	922	1148	1008
SPECIFIC GRAVITY	0.611	0.655	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9241 SAMPLE 12040	INDEX 9242 SAMPLE 4906	INDEX 9243 SAMPLE 11640
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIMESTONE	LIMESTONE	LIMESTONE
FIELD	TILLMON	WILDCAT	WILDCAT
WELL NAME	TILLMON NO. 1	KEY NO. 1	EASTERLING NO. 1
LOCATION	P. JOHNSON SUR. A-295	ROZELIA & SCOTT SUR.	7 MI. SE MEXIA
OWNER	UNION PRODUCTION CO.	GREAT EXPECTATION OIL CO.	VAUGHN PETROLEUM, INC.
COMPLETED	02/22/69	05/16/50	04/07/68
SAMPLED	09/15/69	05/17/50	09/12/68
FORMATION	CRET-TRAVIS PEAK	NOT GIVEN	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8822	2705	11329
WELLHEAD PRESSURE,PSIG	3280	350	5775
OPEN FLOW, MCFD	3800	3150	8000
COMPONENT, MOLE PCT			
METHANE	97.6	98.3	96.2
ETHANE	0.3	0.7	0.7
PROPANE	0.1	0.4	0.1
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.8	---	0.3
OXYGEN	TRACE	---	0.0
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.1	---	2.6
HELIUM	0.01	0.06	0.01
HEATING VALUE*	997	1042	990
SPECIFIC GRAVITY	0.570	0.572	0.585

	INDEX 9244 SAMPLE 12188	INDEX 9245 SAMPLE 13209	INDEX 9246 SAMPLE 15685
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BEAL	BEAL	BOOKER S
WELL NAME	PORTER A NO. 1	ALEXANDER NO. 1	SCOTT NO. 1
LOCATION	SEC. 413, BLK. 43, H&TC SUR.	SEC. 467, BLK. 43, H&TC SUR.	SEC. 1117, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	PHILCON DEVELOPMENT CO.	LEAR PETROLEUM CORP.
COMPLETED	12/16/69	04/03/72	10/07/78
SAMPLED	02/09/70	05/15/72	07/05/79
FORMATION	PENN-MORROW U	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9543	10222	9350
WELLHEAD PRESSURE,PSIG	2400	3782	2600
OPEN FLOW, MCFD	3500	3750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.6	90.8	84.8
ETHANE	7.3	4.8	7.9
PROPANE	2.9	1.7	3.7
N-BUTANE	0.6	0.3	0.9
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.1	0.5	0.9
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	0.6
HELIUM	0.06	0.04	0.08
HEATING VALUE*	1124	1092	1172
SPECIFIC GRAVITY	0.649	0.627	0.675

	INDEX 9247 SAMPLE 7636	INDEX 9248 SAMPLE 7721	INDEX 9249 SAMPLE 9530
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	C. L. KING NO. 1	PERRY A NO. 1	J. B. MARTIN NO. 1
LOCATION	SEC. 642, BLK. 43, H&TC SUR.	SEC. 730, BLK. 43, H&TC SUR.	SEC. 809, BLK. 43, H&TC SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	PHILLIPS PETROLEUM CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	01/25/60	08/09/60	06/09/64
SAMPLED	08/08/60	10/13/60	08/06/64
FORMATION	PENN-TONKAWA	PENN-MORROW U	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6474	9049	7623
WELLHEAD PRESSURE,PSIG	1650	2541	1800
OPEN FLOW, MCFD	21300	14250	6650
COMPONENT, MOLE PCT			
METHANE	80.2	86.0	78.1
ETHANE	8.5	7.3	7.1
PROPANE	5.3	3.3	5.8
N-BUTANE	1.6	0.8	2.3
ISOBUTANE	0.2	0.6	0.5
N-PENTANE	0.3	TRACE	0.6
ISOPENTANE	0.7	0.5	0.6
CYCLOPENTANE	0.3	0.2	0.3
HEXANES PLUS	0.5	0.2	0.6
NITROGEN	2.0	0.4	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	2.7
HELIUM	0.10	0.10	0.07
HEATING VALUE*	1203	1174	1257
SPECIFIC GRAVITY	0.725	0.670	0.765

	INDEX 9250 SAMPLE 9947	INDEX 9251 SAMPLE 10020	INDEX 9252 SAMPLE 10376
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	HAMKER NO. 1	A. BECKER, JR. ET AL. NO. 1	G. JERGENSON NO. 1
LOCATION	SEC. 590, BLK. 43, H&TC SUR.	SEC. 774, BLK. 43, H&TC SUR.	SEC. 895, BLK. 43, H&TC SUR.
OWNER	GULF OIL CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	06/05/64	04/27/64	12/10/65
SAMPLED	07/01/65	08/02/65	01/29/66
FORMATION	PENN-TONKAWA	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6475	7461	7655
WELLHEAD PRESSURE,PSIG	1758	2344	2350
OPEN FLOW, MCFD	11750	3080	7300
COMPONENT, MOLE PCT			
METHANE	78.7	87.2	88.6
ETHANE	8.4	5.0	6.3
PROPANE	5.2	2.3	2.3
N-BUTANE	1.5	0.8	0.6
ISOBUTANE	0.8	0.3	0.2
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	0.3	TRACE	TRACE
HEXANES PLUS	0.6	0.2	0.1
NITROGEN	3.3	2.2	1.4
OXYGEN	0.1	0.2	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.14	0.08	0.10
HEATING VALUE*	1236	1108	1109
SPECIFIC GRAVITY	0.734	0.648	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9253 SAMPLE 13584	INDEX 9254 SAMPLE 13788	INDEX 9255 SAMPLE 14983
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	BRADFORD B NO. 1	REDELSPERGER NO. 1	OLA O. PIPER NO. 3
LOCATION	SEC. 687, BLK. 43, H-TC SUR.	SEC. 900, BLK. 43, H&TC SUR.	SEC. 688, BLK. 43, H&TC SUR.
OWNER	COTTON PETROLEUM CORP.	COTTON PETROLEUM CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	10/18/72	04/17/73	02/02/77
SAMPLED	04/12/73	10/30/73	05/01/77
FORMATION	PENN-MORROW	PENN-CLEVELAND	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9618	7516	9859
WELLHEAD PRESSURE,PSIG	1200	1802	3090
OPEN FLOW, MCFD	750	2700	1800
COMPONENT, MOLE PCT			
METHANE	87.8	85.7	96.3
ETHANE	6.5	6.1	1.1
PROPANE	2.8	4.2	0.2
N-BUTANE	0.6	1.1	0.1
ISOBUTANE	0.5	0.5	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.5	1.1	0.4
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.8	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.3	1.6
HELIUM	0.04	0.11	0.06
HEATING VALUE*	1138	1167	1007
SPECIFIC GRAVITY	0.651	0.670	0.581

	INDEX 9256 SAMPLE 14984	INDEX 9257 SAMPLE 15932	INDEX 9258 SAMPLE 16291
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	BRADFORD	BRADFORD
WELL NAME	OLA O. PIPER NO. 3	FRED LOESCH NO. 2	SIM PAINE NO. 3
LOCATION	SEC. 688, BLK. 43, H&TC SUR.	SEC. 945, BLK. 43, H&TC SUR.	SEC. 943, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.
COMPLETED	02/02/77	11/26/79	05/13/80
SAMPLED	05/01/77	04/09/80	07/13/81
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7646	7334	7354
WELLHEAD PRESSURE,PSIG	2075	1885	1760
OPEN FLOW, MCFD	6000	11500	3200
COMPONENT, MOLE PCT			
METHANE	90.4	86.1	83.8
ETHANE	5.8	5.8	4.8
PROPANE	1.6	4.8	4.8
N-BUTANE	0.4	1.2	1.8
ISOBUTANE	TRACE	0.4	0.7
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	0.1	0.4	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	0.8	1.3	2.3
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.3
HELIUM	0.05	0.12	0.15
HEATING VALUE*	1088	1173	1206
SPECIFIC GRAVITY	0.620	0.674	0.705

	INDEX 9259 SAMPLE 16968	INDEX 9260 SAMPLE 15916	INDEX 9261 SAMPLE 10183
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	BRADFORD	CAMBRIDGE	COBURN
WELL NAME	CRUISE "E" NO. 2	MERYDITH NO. 1	CIT-NATL.BANK TRUSTEE D NO.2
LOCATION	SEC.768, BLK.43, H&TC SUR.	SEC. 499, BLK3,H&TC SUR.	SEC. 257, BLK. 43, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	MAY PETROLEUM, INC.	SHAMROCK OIL & GAS CORP.
COMPLETED	03/03/83	--/--/00	09/03/65
SAMPLED	05/31/83	03/09/80	10/05/65
FORMATION	PENN-CLEVELAND	PENN-ATOKA & NOVA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7390	8700	11204
WELLHEAD PRESSURE,PSIG	2049	NOT GIVEN	3944
OPEN FLOW, MCFD	4100	9500	3100
COMPONENT, MOLE PCT			
METHANE	87.9	86.5	96.7
ETHANE	6.2	9.0	0.7
PROPANE	2.7	2.6	0.2
N-BUTANE	0.7	0.6	0.0
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.5	0.1	0.0
NITROGEN	0.5	0.1	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.4	1.9
HELIUM	0.06	0.07	0.04
HEATING VALUE*	1148	1150	997
SPECIFIC GRAVITY	0.654	0.649	0.581

	INDEX 9262 SAMPLE 9391	INDEX 9263 SAMPLE 9709	INDEX 9264 SAMPLE 16405
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	COBURN N	COBURN SW	COWAN
WELL NAME	GILBERT HILL NO. 1	CITIZENS NATL.BK. TR. A NO.2	V. SCHOENHALS "C" ET AL NO.1
LOCATION	SEC. 433, BLK. 43, H&TC SUR.	SEC. 166, BLK 43, H&TC SUR.	SEC. 510, BLK. 43, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	03/18/64	11/10/64	11/13/81
SAMPLED	06/18/64	01/21/65	12/23/81
FORMATION	PENN-MORROW L	PENN-MORROW	PENN-CLEVELAND & ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10974	11587	7938
WELLHEAD PRESSURE,PSIG	3380	4792	NOT GIVEN
OPEN FLOW, MCFD	5200	1430	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.6	94.3	89.1
ETHANE	3.0	2.4	5.7
PROPANE	1.2	0.7	2.3
N-BUTANE	0.1	0.1	0.6
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.5	0.2
NITROGEN	0.4	0.3	0.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.3	0.3
HELIUM	0.04	0.05	0.06
HEATING VALUE*	1053	1057	1126
SPECIFIC GRAVITY	0.603	0.606	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9265 SAMPLE 12235	INDEX 9266 SAMPLE 10829	INDEX 9267 SAMPLE 15754
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	FOLLETT	FOLLETT S	FOLLETT S
WELL NAME	TRAVIS NO. 1-V	MAUD 1 HAINES NO. 1	BORN NO. 1
LOCATION	SEC. 92, BLK. 10, HT&B SUR.	SEC. 1138, BLK. 43, H&TC SUR.	SEC. 969, BLK. 43, H&TC SUR.
OWNER	CLINTON OIL CO.	SHAMROCK OIL & GAS CORP.	HOME PETROLEUM CORP.
COMPLETED	01/24/70	11/01/66	04/12/79
SAMPLED	--/--/00	01/04/67	09/17/79
FORMATION	PENN-MORROW M	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8717	9066	9244
WELLHEAD PRESSURE,PSIG	2700	2503	2800
OPEN FLOW, MCFD	24500	4750	3000
COMPONENT, MOLE PCT			
METHANE	89.7	84.0	94.2
ETHANE	4.9	6.6	3.0
PROPANE	2.3	3.5	0.9
N-BUTANE	0.6	1.1	0.2
ISOBUTANE	0.3	0.6	0.1
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.1	0.6	0.1
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	0.9	1.1	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.4	0.8
HELIUM	0.05	0.08	0.04
HEATING VALUE*	1100	1134	1051
SPECIFIC GRAVITY	0.631	0.702	0.596

	INDEX 9268 SAMPLE 17785	INDEX 9269 SAMPLE 7506	INDEX 9270 SAMPLE 7537
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	FOLLETT S	FRASS	FRASS
WELL NAME	TRAVIS "A" NO. 3	HENRY FRASS, JR. B-1-LC	ANNA FRASS G NO. 1
LOCATION	SEC. 1134 BLK. 43, H&TC SUR.	SEC. 70, BLK. 10, HT&B SUR.	SEC. 109, BLK. 10, H&TB SUR.
OWNER	TXO PRODUCTION CORP.	HUMBLE OIL & REFINING CO.	TEXACO INC.
COMPLETED	01/23/85	01/29/60	10/30/59
SAMPLED	07/24/85	04/15/60	05/03/60
FORMATION	PENN-TONKAWA	PENN-MORROW L	MISS-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6420	8778	8839
WELLHEAD PRESSURE,PSIG	1780	2391	2418
OPEN FLOW, MCFD	5600	3700	3350
COMPONENT, MOLE PCT			
METHANE	85.5	96.5	81.1
ETHANE	6.9	1.9	6.9
PROPANE	3.0	0.7	4.0
N-BUTANE	1.0	0.1	1.9
ISOBUTANE	0.3	0.1	0.9
N-PENTANE	0.4	TRACE	1.5
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.2	TRACE	0.6
HEXANES PLUS	0.6	0.1	1.9
NITROGEN	1.4	0.2	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.6
HELIUM	0.08	0.10	0.10
HEATING VALUE*	1180	1033	1327
SPECIFIC GRAVITY	0.677	0.582	0.765

	INDEX 9271 SAMPLE 17094	INDEX 9272 SAMPLE 12764	INDEX 9273 SAMPLE 9900
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	FRASS SE	GHEEN	HIGGINS S
WELL NAME	THREE SISTERS NO. 1	GHEEN NO. 1	ROY SANSING NO. 1
LOCATION	SEC. 72, BLK.10, H&TB SUR.	SEC. 468, BLK. 43, H&TC SUR.	SEC. 88, BLK. 43, H&TC SUR.
OWNER	GEODYNE RESOURCES, INC.	PHILCON DEVELOPMENT CO.	HUMBLE OIL & REFINING CO.
COMPLETED	04/15/83	11/03/69	03/22/65
SAMPLED	10/17/83	04/27/71	05/19/65
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8887	10203	7584
WELLHEAD PRESSURE,PSIG	2200	3638	NOT GIVEN
OPEN FLOW, MCFD	13500	4900	7500
COMPONENT, MOLE PCT			
METHANE	87.0	89.6	83.4
ETHANE	6.1	5.0	5.6
PROPANE	3.4	1.9	4.5
N-BUTANE	1.0	0.4	1.0
ISOBUTANE	0.5	0.6	0.7
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.3	TRACE	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	TRACE
NITROGEN	0.4	0.8	3.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.4
HELIUM	0.05	0.04	0.11
HEATING VALUE*	1165	1109	1132
SPECIFIC GRAVITY	0.666	0.639	0.678

	INDEX 9274 SAMPLE 8691	INDEX 9275 SAMPLE 8951	INDEX 9276 SAMPLE 14235
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	HIGGINS W	HIGGINS W	HIGGINS W
WELL NAME	LILLIAN M. ADDIE NO. 1	JESS R. BUSSARD NO. 1	MAY M. WRIGHT E NO. 1-163
LOCATION	SEC. 161, BLK. 43, H&TC SUR.	SEC. 162, BLK. 43, H&TC SUR.	SEC. 163, BLK. 43, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	DIAMOND SHAMROCK CORP.
COMPLETED	04/10/62	01/31/63	10/01/74
SAMPLED	10/03/62	05/01/63	11/24/74
FORMATION	MISS-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11539	10564	10660
WELLHEAD PRESSURE,PSIG	3986	3776	3950
OPEN FLOW, MCFD	8300	23500	5200
COMPONENT, MOLE PCT			
METHANE	96.6	90.2	88.8
ETHANE	0.7	5.9	6.1
PROPANE	0.1	1.5	1.8
N-BUTANE	0.1	0.4	0.2
ISOBUTANE	TRACE	TRACE	0.4
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	0.3	0.6
CYCLOPENTANE	0.0	0.1	0.3
HEXANES PLUS	0.0	0.1	0.4
NITROGEN	0.3	0.8	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.9	0.9
HELIUM	TRACE	0.05	0.04
HEATING VALUE*	997	1094	1133
SPECIFIC GRAVITY	0.583	0.625	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9277 SAMPLE 14738	INDEX 9278 SAMPLE 15617	INDEX 9279 SAMPLE 9925
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	HORSE CREEK NW	HORSE CREEK NW	KELLN
WELL NAME	BRADDUS NO. 1	KELLN 206 NO. 1	KELLN NO. 3
LOCATION	SEC. 293, BLK. 43, H&TC SUR.	SEC. 206, BLK. 43, H&TC SUR.	SEC. 153, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	DORCHESTER EXPLORATION, INC.	EL PASO NATURAL GAS CO.
COMPLETED	04/13/36	05/04/79	03/31/65
SAMPLED	08/19/76	05/04/79	06/09/65
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10920	11042	7239
WELLHEAD PRESSURE,PSIG	3580	9410	166
OPEN FLOW, MCFD	4500	6600	3300
COMPONENT, MOLE PCT			
METHANE	96.9	97.3	81.5
ETHANE	1.2	0.8	8.6
PROPANE	0.3	0.1	4.5
N-BUTANE	0.0	0.0	1.0
ISOBUTANE	0.0	0.0	0.8
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.5	0.3	2.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.4	0.3
HELIUM	0.04	0.04	0.10
HEATING VALUE*	1011	1003	1188
SPECIFIC GRAVITY	0.573	0.574	0.697

	INDEX 9280 SAMPLE 7536	INDEX 9281 SAMPLE 7797	INDEX 9282 SAMPLE 11709
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	KIOWA CREEK	KIOWA CREEK	KIOWA CREEK
WELL NAME	CRUISE A NO. 1	BLAU NO. 1	BRILLHART NO. 2-852
LOCATION	SEC. 856, BLK. 43, H&TC SUR.	SEC. 941, BLK. 43, H&TC SUR.	SEC. 852, BL. 43, H&TC SUR.
OWNER	PHILLIPS PETROLEUM CO.	AMBASSADOR OIL CORP.	KERR-MCGEE CORP.
COMPLETED	03/16/60	01/26/61	03/07/68
SAMPLED	05/04/60	12/19/60	12/17/68
FORMATION	PENN-TONKAWA	PENN-DOUGLAS	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6389	5900	9134
WELLHEAD PRESSURE,PSIG	1811	1500	2242
OPEN FLOW, MCFD	20099	5402	4160
COMPONENT, MOLE PCT			
METHANE	86.6	82.9	85.8
ETHANE	6.9	6.6	7.1
PROPANE	2.7	3.2	3.7
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	1.0	4.5	0.7
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	0.10	0.20	0.06
HEATING VALUE*	1159	1138	1163
SPECIFIC GRAVITY	0.666	0.680	0.668

	INDEX 9283 SAMPLE 12407	INDEX 9284 SAMPLE 17478	INDEX 9285 SAMPLE 16137
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	KIOWA CREEK	KIOWA CREEK	KIOWA CREEK N
WELL NAME	R. PAINE NO. 1-944	BRILLHART "D" NO. 2	PARKER "F" NO. 1
LOCATION	SEC. 944, BLK. 43, H&TC SUR.	SEC. 851, BLK 43, H&TC SUR.	SEC. 1031, BLK. 43, H&TC SUR
OWNER	YUCCA PETROLEUM CO.	PHILLIPS PETROLEUM CO.	TEXAS OIL & GAS CORP.
COMPLETED	04/23/70	10/11/84	08/20/80
SAMPLED	09/--/70	10/11/84	12/04/80
FORMATION	PENN-DOUGLAS	PENN-CLEVELAND	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5873	7520	8654
WELLHEAD PRESSURE,PSIG	1463	2430	2900
OPEN FLOW, MCFD	16500	7500	38000
COMPONENT, MOLE PCT			
METHANE	83.0	87.7	84.4
ETHANE	5.7	6.9	7.4
PROPANE	3.0	2.4	3.5
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.0	0.9	1.8
OXYGEN	0.2	TRACE	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.6
HELIUM	0.19	0.06	0.07
HEATING VALUE*	1093	1147	1147
SPECIFIC GRAVITY	0.670	0.651	0.672

	INDEX 9286 SAMPLE 16640	INDEX 9287 SAMPLE 16471	INDEX 9288 SAMPLE 6258
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	LADY	LEAR	LIPSCOMB
WELL NAME	GADBERRY NO. 1	ALLEN ESTATE NO. 2-1118	R. M. COWAN NO. 1
LOCATION	SEC. 175, BLK. 10, H&GN SUR.	SEC. 1118, BLK 43, H&TC SUR.	SEC. 545, BLK. 43, H&TC SUR.
OWNER	WILLIFORD ENERGY CO.	NATURAL GAS &NADARKO, INC.	HUMBLE OIL & REFINING CO.
COMPLETED	09/10/82	06/09/81	01/19/57
SAMPLED	09/--/82	03/31/82	03/08/57
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8484	8548	10164
WELLHEAD PRESSURE,PSIG	1725	2413	2972
OPEN FLOW, MCFD	1800	89000	10800
COMPONENT, MOLE PCT			
METHANE	77.4	85.1	93.1
ETHANE	11.8	8.1	3.5
PROPANE	5.8	3.7	1.3
N-BUTANE	1.4	0.9	0.5
ISOBUTANE	0.7	0.3	0.1
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.8	0.8	0.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.4	1.3
HELIUM	0.07	0.08	0.06
HEATING VALUE*	1261	1170	1062
SPECIFIC GRAVITY	0.734	0.669	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9289 SAMPLE 6263	INDEX 9290 SAMPLE 6341	INDEX 9291 SAMPLE 7715
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	LIPSCOMB	LIPSCOMB	LIPSCOMB
WELL NAME	REBA N. MILLER NO. 1	SCHULTZ BROS. NO. 1	C. C. DUKE NO. 1
LOCATION	SEC. 715, BLK. 43, H&TC SUR.	SEC. 694, BLK. 43, H&TC SUR.	SEC. 781, BLK. 43, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	01/20/57	03/19/57	05/02/57
SAMPLED	03/08/57	06/12/57	10/10/60
FORMATION	PENN-MORROW	PENN-MORROW	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9764	9736	6610
WELLHEAD PRESSURE,PSIG	3258	3374	1876
OPEN FLOW, MCFD	2300	13200	5900
COMPONENT, MOLE PCT			
METHANE	87.2	84.7	85.3
ETHANE	7.0	7.0	6.3
PROPANE	2.4	2.6	3.1
N-BUTANE	0.6	1.0	1.2
ISOBUTANE	0.5	0.8	0.7
N-PENTANE	0.2	0.8	0.4
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	0.1	0.4	0.1
HEXANES PLUS	0.2	1.5	0.4
NITROGEN	0.2	0.1	1.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.0	0.1
HELIUM	0.08	0.04	0.10
HEATING VALUE*	1149	1238	1176
SPECIFIC GRAVITY	0.659	0.711	0.678

	INDEX 9292 SAMPLE 13583	INDEX 9293 SAMPLE 15568	INDEX 9294 SAMPLE 13647
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	LIPSCOMB	LIPSCOMB S	LIPSCOMB SE
WELL NAME	JAMES ROLAND WHEAT NO. 1	VALENTINE SCHOENHALS & NO. 1	ROSE C. TURNER NO. 1
LOCATION	SEC. 455, BLK. 43, H&TC SUR.	SEC.457, BLK. 43, H&TC SUR.	SEC. 541, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	03/13/73	01/11/79	04/24/73
SAMPLED	04/17/73	02/20/79	07/14/73
FORMATION	PENN-CLEVELAND	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8096	9758	10134
WELLHEAD PRESSURE,PSIG	2424	2495	3516
OPEN FLOW, MCFD	2900	5200	3100
COMPONENT, MOLE PCT			
METHANE	89.0	88.2	96.4
ETHANE	5.8	6.9	1.0
PROPANE	2.4	2.2	0.2
N-BUTANE	0.6	0.4	TRACE
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.8	0.5	0.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	1.7
HELIUM	0.06	0.06	0.03
HEATING VALUE*	1120	1113	1000
SPECIFIC GRAVITY	0.639	0.637	0.579

	INDEX 9295 SAMPLE 13657	INDEX 9296 SAMPLE 14533	INDEX 9297 SAMPLE 16142
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	LIPSCOMB SE	LIPSCOMB SW	LIPSCOMB SW
WELL NAME	PUNDT	ANITA B. ANTHONY NO. 1	OWEN NO. 1-544
LOCATION	SEC. 516, BLK. 43, H&TC SUR.	SEC. 372, BLK. 43, H&TC SUR.	SEC. 544, BLK. 43, H&TC SUR.
OWNER	COTTON PETROLEUM CORP.	DIAMOND SHAMROCK CORP.	NATURAL GAS ANADARKO, INC.
COMPLETED	09/28/72	09/17/75	03/25/80
SAMPLED	07/25/73	11/14/75	12/05/80
FORMATION	PENN-MORROW	PENN-CLEVELAND	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10243	8194	9211
WELLHEAD PRESSURE,PSIG	3323	2020	2791
OPEN FLOW, MCFD	25700	2800	5900
COMPONENT, MOLE PCT			
METHANE	95.7	85.3	87.7
ETHANE	1.5	7.6	7.9
PROPANE	0.5	3.6	2.1
N-BUTANE	0.1	0.9	0.5
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	1.2	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.3	0.5
HELIUM	0.04	0.10	0.05
HEATING VALUE*	1025	1160	1125
SPECIFIC GRAVITY	0.590	0.665	0.640

	INDEX 9298 SAMPLE 7984	INDEX 9299 SAMPLE 10384	INDEX 9300 SAMPLE 16285
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	MAMMOTH CREEK	MAMMOTH CREEK N	MAMMOTH CREEK N
WELL NAME	BROYLES NO. 1	EHRLICH NO. 1	GEX NO. 1
LOCATION	SEC. 978, BLK. 43, H&TC SUR.	SEC. 1051, BLK.43, H&TC SUR.	SEC. 873, BLK.43, H&TC SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	MAY PETROLEUM, INC.
COMPLETED	03/30/61	11/01/65	04/22/81
SAMPLED	05/21/61	02/07/66	06/17/81
FORMATION	PENN-CLEVELAND	PENN-COTTAGE GROVE	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7347	7500	7731
WELLHEAD PRESSURE,PSIG	2580	2359	2368
OPEN FLOW, MCFD	7000	3000	6500
COMPONENT, MOLE PCT			
METHANE	88.6	89.3	83.6
ETHANE	5.8	6.0	7.2
PROPANE	1.9	1.9	5.8
N-BUTANE	0.5	0.7	1.2
ISOBUTANE	0.2	0.2	0.5
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.1	TRACE	0.3
CYCLOPENTANE	TRACE	0.2	0.2
HEXANES PLUS	0.2	0.7	0.4
NITROGEN	1.6	0.2	1.3
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	1.1
HELIUM	0.10	0.06	0.07
HEATING VALUE*	1097	1148	1190
SPECIFIC GRAVITY	0.637	0.648	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9301 SAMPLE 16570	INDEX 9302 SAMPLE 10524	INDEX 9303 SAMPLE 15680
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	MAMMOTH CREEK N	MAMMOTH CREEK S	MAY
WELL NAME	HERMAN SCHULTZ NO. 2	YAUCK NO. 1	DUKE NO. 1
LOCATION	SEC.1048, BLK. 43, H&TC SUR.	SEC. 782, BLK 43, H&TC SUR.	SEC.1038, BLK.43, H&TC SUR.
OWNER	PIONEER PRODUCTION CORP.	APACHE CORP.	MAY PETROLEUM, INC.
COMPLETED	08/11/81	02/12/66	11/16/78
SAMPLED	07/08/82	04/11/66	06/28/79
FORMATION	PENN-CLEVELAND	PENN-TONKAWA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7418	6549	9384
WELLHEAD PRESSURE,PSIG	1000	1775	3318
OPEN FLOW, MCFD	13000	6900	46000
COMPONENT, MOLE PCT			
METHANE	90.3	83.1	94.7
ETHANE	5.8	6.6	2.4
PROPANE	1.8	3.0	0.7
N-BUTANE	0.5	1.2	0.2
ISOBUTANE	0.2	0.8	0.1
N-PENTANE	0.1	1.1	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	0.8	TRACE
HEXANES PLUS	0.1	1.8	0.1
NITROGEN	0.5	1.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	1.2
HELIUM	0.05	0.10	0.04
HEATING VALUE*	1106	1268	1044
SPECIFIC GRAVITY	0.627	0.733	0.597

	INDEX 9304 SAMPLE 16148	INDEX 9305 SAMPLE 6298	INDEX 9306 SAMPLE 14594
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	MAY	MERYDITH	NORTHRUP
WELL NAME	TERRELL NO. 1	W. C. MERYDITH NO. 1	WALLACE N. HAMKER NO. 1
LOCATION	SEC.1125, BLK.43, H&TC SUR.	SEC. 469, BLK. 43, H&TC SUR.	SEC. 589, BLK. 43, H&TC SUR.
OWNER	UNIVERSAL RESOURCES CORP.	HUMBLE OIL & REFINING CO.	DIAMOND SHAMROCK CORP.
COMPLETED	09/15/80	02/29/56	11/25/75
SAMPLED	12/15/80	04/10/57	03/04/76
FORMATION	PENN-MORROW	PENN-KEYES	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9228	10162	7485
WELLHEAD PRESSURE,PSIG	3223	85	1815
OPEN FLOW, MCFD	4300	NOT GIVEN	6500
COMPONENT, MOLE PCT			
METHANE	93.5	83.0	85.7
ETHANE	2.4	8.0	6.5
PROPANE	0.6	3.6	3.6
N-BUTANE	0.1	1.1	1.1
ISOBUTANE	0.1	1.4	0.5
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.5	0.4
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	1.5	0.1	1.2
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.9	0.4
HELIUM	0.04	0.05	0.10
HEATING VALUE*	1026	1230	1163
SPECIFIC GRAVITY	0.598	0.709	0.668

	INDEX 9307 SAMPLE 15283	INDEX 9308 SAMPLE 15849	INDEX 9309 SAMPLE 16408
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	NORTHRUP	NOT GIVEN	NOT GIVEN
WELL NAME	W. T. TREGELLAS-A NO. 1	BENSCH NO. 1	SCHULTZ "F" NO. 2
LOCATION	SEC. 675, BLK. 43, H&TC SUR.	SEC. 946, BLK. 43, H&TC SUR.	SEC.1068, BLK. 43, T&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	COTTON PETROLEUM CORP.	COTTON PETROLEUM CORP.
COMPLETED	04/04/78	--/--/00	--/--/80
SAMPLED	05/25/78	12/05/79	--/--/82
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	730	7600	6452
WELLHEAD PRESSURE,PSIG	1750	1400	NOT GIVEN
OPEN FLOW, MCFD	6000	1350	2700
COMPONENT, MOLE PCT			
METHANE	85.8	86.0	86.8
ETHANE	6.8	5.9	5.3
PROPANE	3.7	3.7	1.8
N-BUTANE	1.0	1.1	0.3
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	1.1	1.5	2.9
OXYGEN	TRACE	TRACE	0.7
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	TRACE
HELIUM	0.10	0.11	0.05
HEATING VALUE*	1162	1163	1122
SPECIFIC GRAVITY	0.667	0.670	0.662

	INDEX 9310 SAMPLE 11463	INDEX 9311 SAMPLE 11464	INDEX 9312 SAMPLE 16611
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	NOTLA	NOTLA	STUART RANCH
WELL NAME	DAVID KELLN NO. 1	DAVID KELLN NO. 1	INGLE NO. 1
LOCATION	SEC. 59, BLK. 43, H&TC SUR.	SEC. 59, BLK 43, H&TC SUR.	SEC. 970, BLK. 43, H&TC SUR.
OWNER	CABOT CORP.	CABOT CORP.	MPC 1 INC.
COMPLETED	--/--/00	--/--/00	12/22/81
SAMPLED	04/29/68	04/29/68	08/06/82
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9944	10950	9297
WELLHEAD PRESSURE,PSIG	4622	5275	1742
OPEN FLOW, MCFD	14420	14930	1250
COMPONENT, MOLE PCT			
METHANE	86.4	93.9	87.8
ETHANE	7.7	2.6	5.6
PROPANE	2.9	0.7	2.8
N-BUTANE	0.6	0.2	0.7
ISOBUTANE	0.2	0.2	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.0	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.7	0.6	0.3
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.2	1.1
HELIUM	0.05	0.04	0.03
HEATING VALUE*	1146	1033	1142
SPECIFIC GRAVITY	0.658	0.606	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9313 SAMPLE 17552	INDEX 9314 SAMPLE 11974	INDEX 9315 SAMPLE 11975
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	TRENFIELD CLEVELAND	TROSPER	TROSPER
WELL NAME	SQUIRE NO. 2	TROSPER NO. 1	TROSPER NO. 1
LOCATION	SEC. 108-052	SEC. 362, BLK. 43, H&TC SUR.	SEC. 342, BLK. 43, H&TC SUR.
OWNER	MEWBOURNE OIL CO.	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.
COMPLETED	07/22/84	06/10/69	06/10/69
SAMPLED	12/26/84	07/17/69	07/17/69
FORMATION	PENN-CLEVELAND	DEVO-HUNTON & ORDO-VIOLA	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7668	13376	10520
WELLHEAD PRESSURE,PSIG	2300	4285	3748
OPEN FLOW, MCFD	1400	62000	33250
COMPONENT, MOLE PCT			
METHANE	73.8	96.2	96.4
ETHANE	10.6	0.5	0.7
PROPANE	5.3	0.1	0.2
N-BUTANE	1.5	0.0	0.0
ISOBUTANE	0.5	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	4.2	1.7	0.6
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.2	1.8
HELIUM	0.07	0.06	0.04
HEATING VALUE*	1232	986	995
SPECIFIC GRAVITY	0.714	0.577	0.578

	INDEX 9316 SAMPLE 12187	INDEX 9317 SAMPLE 17624	INDEX 9318 SAMPLE 6449
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	TROSPER	UNIT FIELD	WILDCAT
WELL NAME	CITIZEN NATIONAL BANK G-8-A	EUGENE BOOTH NO. 3	J. A. BARTON NO. 1
LOCATION	SEC. 343, BLK. 43, H&TC SUR.	SEC. 637, BLK. 43, H&TC SUR.	SEC. 525, BLK. 43, H&TC SUR.
OWNER	DIAMOND SHAMROCK CORP.	UNIT DRILLING & EXPL. CO.	TEXAS CO.
COMPLETED	12/15/69	10/12/84	10/02/57
SAMPLED	02/09/70	03/21/85	11/23/57
FORMATION	PENN-MORROW L	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10607	9220	10440
WELLHEAD PRESSURE,PSIG	3288	2250	3342
OPEN FLOW, MCFD	5200	23800	1500
COMPONENT, MOLE PCT			
METHANE	95.8	87.9	96.2
ETHANE	1.8	7.2	1.5
PROPANE	0.5	2.5	0.2
N-BUTANE	0.0	0.5	0.1
ISOBUTANE	0.0	0.3	0.1
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.6	0.4	0.2
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.8	1.5
HELIUM	0.04	0.07	0.10
HEATING VALUE*	1016	1132	1018
SPECIFIC GRAVITY	0.583	0.647	0.584

	INDEX 9319 SAMPLE 11059	INDEX 9320 SAMPLE 13551	INDEX 9321 SAMPLE 14249
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HARRY L. KING NO. 1	RACHEL "A" NO. 1	ALEX BORN ET AL. NO. A-1
LOCATION	SEC. 551, BLK. 43, H&TC SUR.	SEC. 292, BLK. 43, H&TC SUR.	SEC. 332, BLK. 43, H&TC SUR.
OWNER	APACHE CORP.	PHILLIPS PETROLEUM CO.	DIAMOND SHAMROCK CORP.
COMPLETED	04/01/67	11/16/72	11/19/74
SAMPLED	08/08/67	02/28/73	12/28/74
FORMATION	PENN-MORROW	PENN-MORROW	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9428	10884	8140
WELLHEAD PRESSURE,PSIG	2675	4175	1947
OPEN FLOW, MCFD	NOT GIVEN	13500	13000
COMPONENT, MOLE PCT			
METHANE	81.8	96.7	82.6
ETHANE	6.7	0.9	7.8
PROPANE	3.1	0.2	4.6
N-BUTANE	0.8	TRACE	1.4
ISOBUTANE	0.5	TRACE	0.7
N-PENTANE	0.0	TRACE	0.3
ISOPENTANE	1.2	TRACE	0.4
CYCLOPENTANE	0.4	TRACE	0.1
HEXANES PLUS	0.5	TRACE	0.3
NITROGEN	3.7	0.5	1.5
OXYGEN	0.7	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.4	0.4
HELIUM	0.07	0.04	0.10
HEATING VALUE*	1165	1001	1216
SPECIFIC GRAVITY	0.706	0.576	0.703

	INDEX 9322 SAMPLE 16995	INDEX 9323 SAMPLE 17321	INDEX 9324 SAMPLE 4574
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIPSCOMB	LIPSCOMB	LIVE OAK
FIELD	WILDCAT	WILEY-TONKAWA	ALBERT W
WELL NAME	LYNN NO. 1	TERREL NO. 1	ALBERT W. WEST A NO. 2
LOCATION	SEC-557, BLK.43, H&TC SUR.	SEC. 80, BLK.10, H&TB SUR.	MICHAEL CRONICAN SUR.
OWNER	JOE C. RICHARDSON	ARGONAUT ENERGY CORP.	CONTINENTAL OIL CO.
COMPLETED	04/29/81	06/15/83	07/06/45
SAMPLED	07/20/83	08/12/84	10/02/48
FORMATION	PENN-CLEVELAND	PENN-TONKAWA	EOCE-SLICK
GEOLOGIC PROVINCE CODE	360	360	220
DEPTH, FEET	7430	6276	6696
WELLHEAD PRESSURE,PSIG	1050	1342	2950
OPEN FLOW, MCFD	3600	3160	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.6	87.4	81.2
ETHANE	6.4	6.3	16.8
PROPANE	4.2	2.3	---
N-BUTANE	1.6	0.7	---
ISOBUTANE	0.5	0.3	---
N-PENTANE	0.8	0.3	---
ISOPENTANE	0.8	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	2.0	1.1	0.9
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.3	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.9	1.7
HELIUM	0.12	0.11	0.01
HEATING VALUE*	1193	1127	1124
SPECIFIC GRAVITY	0.701	0.653	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9325 SAMPLE 12234	INDEX 9326 SAMPLE 5099	INDEX 9327 SAMPLE 14274
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	ATKINSON	BAKER	BRASLAU
WELL NAME	M. M. ATKINSON NO. 1	BAKER NO. 1	F. BRASLAU GU NO. 2
LOCATION	P. MOORE SUR. 145, A-298	NOT GIVEN	J. POITEVENT SUR. A-324
OWNER	RICHARD E. MAAS	W. EARL ROWE	ATLANTIC RICHFIELD CO.
COMPLETED	07/03/69	11/29/47	02/26/75
SAMPLED	04/09/70	11/03/51	02/20/75
FORMATION	EOCE-REKLAW	OLIG-FRIO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4255	2000	8550
WELLHEAD PRESSURE, PSIG	1625	760	5020
OPEN FLOW, MCFD	12500D	4000	60000
COMPONENT, MOLE PCT			
METHANE	90.7	98.4	86.7
ETHANE	4.3	0.1	6.1
PROPANE	2.1	0.1	2.9
N-BUTANE	0.5	0.1	0.7
ISOBUTANE	0.4	0.0	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.0	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.1	0.9	0.2
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE*	0.0	---	0.0
CARBON DIOXIDE	0.3	0.1	2.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1107	1011	1139
SPECIFIC GRAVITY	0.630	0.568	0.671

	INDEX 9328 SAMPLE 14113	INDEX 9329 SAMPLE 10141	INDEX 9330 SAMPLE 16359
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	C. A. WINN	CHAPA E	CHAPA E
WELL NAME	ROY MINNANT NO. 5	EL PASO NATURAL GAS NO. 1	EL PASO NATURAL GAS NO. 2
LOCATION	5 MI. S OF GEORGE WEST	SEC. 320 VIC. CHAPASUR.A-739	SEC.299, HOOPER&WADESUR.A250
OWNER	FRIO PRODUCTION CO.	ATLANTIC REFINING CO.	AMINOIL U.S.A., INC.
COMPLETED	09/03/72	08/20/64	08/31/79
SAMPLED	07/24/74	09/21/65	10/--/81
FORMATION	EOCE-HOCKLEY	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4173	8228	11088
WELLHEAD PRESSURE, PSIG	760	4400	7430
OPEN FLOW, MCFD	4200	20950	47000
COMPONENT, MOLE PCT			
METHANE	88.2	87.4	87.4
ETHANE	6.0	5.8	4.7
PROPANE	2.9	2.2	1.1
N-BUTANE	0.7	0.5	0.2
ISOBUTANE	0.8	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.4	0.4	0.1
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	2.5	5.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1162	1110	1037
SPECIFIC GRAVITY	0.655	0.561	0.663

	INDEX 9331 SAMPLE 16360	INDEX 9332 SAMPLE 4774	INDEX 9333 SAMPLE 4896
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	CHAPA E	CLAYTON	CLAYTON
WELL NAME	EL PASO GAS NO. 1	C. S. HERRING NO. 1	GREAT SO. LIFE INS.CO.NO. 1
LOCATION	HOOPER & WADE SUR. A-250	C. F. SIMMONS SUBD.	BLK. 51
OWNER	AMINOIL U.S.A., INC.	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	01/24/79	06/11/49	03/29/50
SAMPLED	10/--/81	10/25/49	05/19/50
FORMATION	EOCE-WILCOX	EOCE-	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9856	6500	6426
WELLHEAD PRESSURE, PSIG	5915	2405	2315
OPEN FLOW, MCFD	12400	60000	36000
COMPONENT, MOLE PCT			
METHANE	87.9	88.8	88.6
ETHANE	4.6	5.9	5.9
PROPANE	1.1	2.3	2.4
N-BUTANE	0.2	0.6	0.6
ISOBUTANE	0.2	0.4	0.5
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.4
NITROGEN	0.1	0.5	0.0
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	5.5	1.0	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1032	1119	1133
SPECIFIC GRAVITY	0.656	0.645	0.653

	INDEX 9334 SAMPLE 4897	INDEX 9335 SAMPLE 13890	INDEX 9336 SAMPLE 15585
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	CLAYTON	CLAYTON	CLAYTON
WELL NAME	BLK. 76, UNIT NO. 1	BLK. 86 NO. 2	HERRING "A" NO. 1
LOCATION	BLK. 76, SARA AMESON SUR.	D.R. FANT SUR. NO. 20, A-628	JOHN BUCHANAN SUR. A-81
OWNER	MAGNOLIA PETROLEUM CO.	MOBIL OIL CORP.	KILROY CO. OF TEXAS, INC.
COMPLETED	10/24/49	01/15/74	08/15/77
SAMPLED	03/07/50	01/25/74	03/20/79
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6983	8353	7720
WELLHEAD PRESSURE, PSIG	2985	3870	2785
OPEN FLOW, MCFD	43500	2800	4100
COMPONENT, MOLE PCT			
METHANE	88.7	89.8	86.9
ETHANE	5.3	4.1	3.6
PROPANE	2.7	2.4	2.3
N-BUTANE	0.7	0.5	0.6
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	0.7	2.8
OXYGEN	0.1	0.0	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	1.5	1.9
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1141	1105	1083
SPECIFIC GRAVITY	0.652	0.644	0.661

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9337 SAMPLE 15586	INDEX 9338 SAMPLE 16213	INDEX 9339 SAMPLE 16379
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	CLAYTON	FANT	LEROY
WELL NAME	HERRING FAM NO. 1	STANLEY PAULIN NO. 1	J. G. RISER NO. 2
LOCATION	JOHN BUCHANAN SUR. A-81	G. N. LAFANT 816 SUR. A-604	W.W. WINTERS SUR. 402, A792
OWNER	KILROY CO. OF TEXAS, INC.	PEND OREILLE OIL & GAS CO.	M. L. HAWKINS, JR.
COMPLETED	08/10/77	--/--/00	--/--/00
SAMPLED	03/20/79	03/18/81	--/--/00
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	229	220	220
DEPTH, FEET	8351	9476	9545
WELLHEAD PRESSURE,PSIG	4035	NOT GIVEN	2150
OPEN FLOW, MCFD	1330	20000	2356
COMPONENT, MOLE PCT			
METHANE	81.8	85.2	86.5
ETHANE	6.1	6.3	6.1
PROPANE	3.6	3.6	2.9
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	3.8	0.6	0.3
OXYGEN	0.6	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	2.1	2.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1125	1152	1142
SPECIFIC GRAVITY	0.696	0.682	0.671

	INDEX 9340 SAMPLE 16032	INDEX 9341 SAMPLE 13356	INDEX 9342 SAMPLE 17350
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	LIMES	MAKINE NE	MIKESKA N.
WELL NAME	C. S. NELSON TRUST NO. 1	CHARLES LINDHOLM NO. 1	PATRICIA CROCKER NO. 1
LOCATION	CAMERON CO. SCHOOL LAND	R. W. FANT SUR. A615	J. E. TORRET SUR. 305, A-466
OWNER	PEND OREILLE OIL & GAS CO.	PRAIRIE PRODUCING CO.	GOLDKING PRODUCTION CO.
COMPLETED	--/--/00	11/11/71	--/--/80
SAMPLED	07/31/80	08/18/72	07/03/84
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	229	220	220
DEPTH, FEET	7882	8018	10300
WELLHEAD PRESSURE,PSIG	2249	3825	NOT GIVEN
OPEN FLOW, MCFD	5000	6600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.2	84.6	81.2
ETHANE	6.2	7.2	7.8
PROPANE	3.1	4.1	4.3
N-BUTANE	0.8	0.9	1.2
ISOBUTANE	0.6	0.7	0.7
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.5	0.2	0.5
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.3	0.5	0.0
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	1.4	3.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1157	1168	1186
SPECIFIC GRAVITY	0.675	0.682	0.723

	INDEX 9343 SAMPLE 17897	INDEX 9344 SAMPLE 3981	INDEX 9345 SAMPLE 15183
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	NOT GIVEN	OAKVILLE	OAKVILLE E
WELL NAME	KITTIE BURNS NO. 1	L. A. REAGAN NO. 3	H. L. HINTON GU 1 NO 1
LOCATION	W. L. NORVELL SUR. 58, A-310	NOT GIVEN	JAMES MCGLOIN SUR. A-26
OWNER	PETRUS OPERATING CO., INC.	MENDERSON COQUAT	NEUMIN PRODUCTION CO.
COMPLETED	--/--/00	02/25/95	07/08/76
SAMPLED	11/21/85	03/10/95	12/28/77
FORMATION	EOCE-QUEEN CITY	EOCE-WILCOX	EOCE-SLICK
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7195	6930	6759
WELLHEAD PRESSURE,PSIG	3300	920	2374
OPEN FLOW, MCFD	300	11300	2600
COMPONENT, MOLE PCT			
METHANE	89.6	81.8	88.3
ETHANE	5.2	15.1	5.7
PROPANE	1.5	---	2.2
N-BUTANE	0.4	---	0.5
ISOBUTANE	0.2	---	0.3
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	0.2	0.1	0.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.4	3.0	2.2
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1087	1099	1102
SPECIFIC GRAVITY	0.642	0.659	0.649

	INDEX 9346 SAMPLE 12036	INDEX 9347 SAMPLE 16463	INDEX 9348 SAMPLE 13546
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LIVE OAK
FIELD	SALT CREEK	THREE RIVERS	TOM LYNE N
WELL NAME	SALT CREEK G. U. NO. 1	HARRY J. SCHULZ NO. 1	T. J. LYNE NO. 12
LOCATION	D. R. FANT SUR. NO. 2	JOHN HEFFERMAN, A-11	SEC. 165, AB&M SUR. A-74
OWNER	EARLSBORO OIL & GAS CO., INC	ENSERCH EXPLORATION, INC.	ATLANTIC RICHFIELD CO.
COMPLETED	02/05/68	06/11/81	01/06/71
SAMPLED	05/12/69	03/09/82	02/13/73
FORMATION	EOCE-WILCOX	CRET-EDWARDS	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8237	13072	9397
WELLHEAD PRESSURE,PSIG	3265	3912	5625
OPEN FLOW, MCFD	5000	3521	156000
COMPONENT, MOLE PCT			
METHANE	85.3	92.6	86.8
ETHANE	6.2	0.2	6.9
PROPANE	3.6	0.1	2.6
N-BUTANE	0.8	TRACE	0.4
ISOBUTANE	0.5	0.1	0.4
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.4	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	TRACE
NITROGEN	1.1	0.9	0.3
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.6	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	5.1	2.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1162	966	1102
SPECIFIC GRAVITY	0.680	0.628	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9349 SAMPLE 4637	INDEX 9350 SAMPLE 4737	INDEX 9351 SAMPLE 16196
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LIVE OAK	LIVE OAK	LOVING
FIELD	WILDCAT	WILDCAT	ATOKA
WELL NAME	C. W. B. CHRISTENSON NO. 1	MAGUSLIN NO. 1	LUDEMAN "6" NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 6, BLK. C-26,PSL SUR.
OWNER	CONTINENTAL OIL CO.	WESTERN NATURAL GAS CO.	MNG OIL CO.
COMPLETED	08/12/48	12/30/48	12/10/80
SAMPLED	11/27/48	05/03/49	02/24/81
FORMATION	EOCE-QUEEN CITY L	EOCE-WILCOX	PENN-ATOKA
GEOLOGIC PROVINCE CODE	220	220	430
DEPTH, FEET	7172	7986	15702
WELLHEAD PRESSURE,PSIG	4000	3120	10300
OPEN FLOW, MCFD	560	84000	8153
COMPONENT, MOLE PCT			
METHANE	67.8	87.4	94.6
ETHANE	27.0	6.0	0.6
PROPANE	---	2.4	0.1
N-BUTANE	---	0.6	TRACE
ISOBUTANE	---	0.5	TRACE
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.1	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.3	0.1
NITROGEN	3.6	0.4	0.8
OXYGEN	1.4	0.1	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	2.1	3.7
HELIUM	TRACE	TRACE	0.03
HEATING VALUE*	1171	1119	977
SPECIFIC GRAVITY	0.713	0.664	0.600

	INDEX 9352 SAMPLE 15519	INDEX 9353 SAMPLE 15038	INDEX 9354 SAMPLE 16272
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LOVING	LOVING	LOVING
FIELD	MARRISON RANCH	M.A.J.	MADERA RANCH
WELL NAME	MARRISON NO. 10-1	LABO GAS UNIT NO. 1	MALCOLM MADERA NO. 1
LOCATION	SEC. 10, BLK. 29, PSL SUR.	SEC. 34, BLK.56,T-1,T&P SUR.	SEC. 5, BLK. 76, PSL SUR.
OWNER	HUNT PETROLEUM CORP.	TEXACO INC.	GETTY OIL CO.
COMPLETED	10/08/77	11/26/75	07/12/80
SAMPLED	11/17/78	06/29/77	05/10/81
FORMATION	PENN-MORROW	SILU-FUSSELMAN	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16294	17500	15224
WELLHEAD PRESSURE,PSIG	11370	5500	8638
OPEN FLOW, MCFD	4500	2000	4800
COMPONENT, MOLE PCT			
METHANE	96.6	93.4	97.4
ETHANE	1.7	0.5	0.9
PROPANE	0.2	TRACE	0.1
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.5	4.1	1.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.7	1.7	0.5
HELIUM	0.01	0.04	0.02
HEATING VALUE*	1023	961	1011
SPECIFIC GRAVITY	0.577	0.593	0.571

	INDEX 9355 SAMPLE 7525	INDEX 9356 SAMPLE 16666	INDEX 9357 SAMPLE 14108
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LOVING	LOVING	LOVING
FIELD	MASON N	MENTONE	MOORE-HOOPER
WELL NAME	MINNIE KYLE A NO. 2	ARNO NO. 1	MOORE HOOPER NO. 1
LOCATION	SEC. 10, BLK. 55, T&P SUR.	SEC. 80, BLK. 33, H&TC SUR.	SEC. 79, BLK.1, W&NW SUR.
OWNER	OHIO OIL CO.	AMERICAN TRADING & PROD. CO.	SUN OIL CO.
COMPLETED	02/15/53	01/29/80	01/02/74
SAMPLED	04/27/60	09/23/82	07/25/74
FORMATION	PERM-DELAWARE	SILU-FUSSELMAN	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3976	18928	18988
WELLHEAD PRESSURE,PSIG	695	NOT GIVEN	6450
OPEN FLOW, MCFD	NOT GIVEN	6950	164000
COMPONENT, MOLE PCT			
METHANE	79.0	93.9	96.3
ETHANE	9.7	0.5	0.8
PROPANE	4.8	TRACE	0.1
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.5	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	5.3	1.0	1.0
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.1
CARBON DIOXIDE	0.1	4.4	1.7
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1143	960	993
SPECIFIC GRAVITY	0.696	0.603	0.581

	INDEX 9358 SAMPLE 17021	INDEX 9359 SAMPLE 16340	INDEX 9360 SAMPLE 14262
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LOVING	LOVING	LOVING
FIELD	PINAL DOME	SLASH RANCH	VERMEJO
WELL NAME	GLEN S. BRUNSON NO. 17-1	W. D. JOHNSON ET AL, C NO. 1	EL PASO STATE NO. 1
LOCATION	SEC. 17, PSL SUR.	SEC. 167, BLK. 53, T&P SUR.	SEC. 54, BLK. 1, W&NW SUR.
OWNER	HUNT OIL CO.	MOBIL PROD., TX & NM, INC.	FOREST OIL CORP.
COMPLETED	05/25/82	11/24/80	07/26/73
SAMPLED	08/23/83	09/24/81	02/14/75
FORMATION	PERM-WOLFCAMP L	SILU-FUSSELMAN	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15000	19503	18804
WELLHEAD PRESSURE,PSIG	10340	6129	6100
OPEN FLOW, MCFD	3500	3550	32000
COMPONENT, MOLE PCT			
METHANE	90.7	96.1	96.3
ETHANE	5.0	0.6	0.4
PROPANE	1.3	TRACE	TRACE
N-BUTANE	0.4	TRACE	0.0
ISOBUTANE	0.4	TRACE	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	0.6	0.9	0.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.3	0.1
CARBON DIOXIDE	0.0	1.9	2.2
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1110	990	983
SPECIFIC GRAVITY	0.628	0.583	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9361 SAMPLE 10816	INDEX 9362 SAMPLE 16079	INDEX 9363 SAMPLE 6871
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LOVING	LOVING	LUBBOCK
FIELD	WILDCAT	WILDCAT	LEE HARRISON
WELL NAME	WILDER NO. 1	RED BLUFF DEEP NO. 1	E. SCHOPPA NO. 3
LOCATION	SEC. 36, BLK. 76, PSL SUR.	SEC. 7, BLK. 56,T-1-T&P SUR.	SEC. 23, BLK. 1, ELERR SUR.
OWNER	NATURAL GAS & OIL CORP.	M. L. BROWN, JR.	WALICE-BOGART PRODUCTION CO.
COMPLETED	12/12/66	03/--/80	03/--/58
SAMPLED	12/13/66	09/25/80	08/--/58
FORMATION	PENN-MORROW & ATOKA	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15470	11971	NOT GIVEN
WELLHEAD PRESSURE,PSIG	6606	7963	NOT GIVEN
OPEN FLOW, MCFD	32000	10500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.8	86.3	0.5
ETHANE	1.5	8.5	0.1
PROPANE	0.2	2.6	0.1
N-BUTANE	0.1	0.8	0.1
ISOBUTANE	0.0	0.5	0.0
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	TRACE	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.8	0.5	96.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	1.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	1.0
HELIUM	0.01	0.01	0.04
HEATING VALUE*	1021	1165	26
SPECIFIC GRAVITY	0.576	0.659	0.966

	INDEX 9364 SAMPLE 12332	INDEX 9365 SAMPLE 12704	INDEX 9366 SAMPLE 16457
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MADISON	MARION	MARION
FIELD	HOOKER	EXCELSIOR	KILDARE
WELL NAME	WILSON HEIRS NO. 1	BLISS STALCUP	E.F. HICKS NO. 1
LOCATION	JOHN MONTGOMERY SUR. A-153	SMITHLAND	ANTONIO OLS COY SUR.,A-66
OWNER	GLEN ROSE CORP.	BARNWELL DRILLING CO., INC.	HILLIARD OIL & GAS, INC.
COMPLETED	04/01/69	10/27/65	12/04/81
SAMPLED	07/20/70	03/07/71	03/18/82
FORMATION	CRET-GEORGETOWN	CRET-PETTIT	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	220	260	260
DEPTH, FEET	11108	6237	10543
WELLHEAD PRESSURE,PSIG	4100	1000	5200
OPEN FLOW, MCFD	NOT GIVEN	900000	7050
COMPONENT, MOLE PCT			
METHANE	80.1	87.1	94.3
ETHANE	8.3	4.1	2.1
PROPANE	2.8	1.5	0.5
N-BUTANE	0.7	0.6	0.3
ISOBUTANE	0.6	0.8	0.3
N-PENTANE	0.3	0.5	0.1
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.2	0.7	0.2
NITROGEN	5.2	3.7	1.0
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.6	0.7	1.0
HELIUM	0.01	0.03	0.01
HEATING VALUE*	1104	1107	1045
SPECIFIC GRAVITY	0.709	0.663	0.601

	INDEX 9367 SAMPLE 15618	INDEX 9368 SAMPLE 12485	INDEX 9369 SAMPLE 12705
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MARION	MARION	MARION
FIELD	PINES SPILLWAY	RODESSA	RODESSA
WELL NAME	S. E. WOOD NO. 1	CROMER NO. 1	BADGETT NO. 1
LOCATION	J. WALKER SUR. A-413	W. PEACOCK SUR.	JEFFERSON, TEXAS
OWNER	CLAYTON W. WILLIAMS, JR.	ARKANSAS LOUISIANA GAS CO.	BARNWELL DRILLING CO., INC.
COMPLETED	10/09/76	09/14/39	11/14/68
SAMPLED	05/10/79	10/16/70	03/07/71
FORMATION	CRET-RODESSA	CRET-GLOYD P	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6073	5915	6742
WELLHEAD PRESSURE,PSIG	2035	200	800
OPEN FLOW, MCFD	4700	NOT GIVEN	800000
COMPONENT, MOLE PCT			
METHANE	91.4	89.7	86.7
ETHANE	3.9	3.7	2.5
PROPANE	1.1	1.3	0.6
N-BUTANE	0.5	0.4	0.2
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	1.0	2.2	8.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	1.0
HELIUM	0.01	0.12	0.04
HEATING VALUE*	1091	1086	976
SPECIFIC GRAVITY	0.626	0.636	0.633

	INDEX 9370 SAMPLE 10697	INDEX 9371 SAMPLE 11963	INDEX 9372 SAMPLE 11991
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	BAER RANCH	BAY CITY	BAY CITY E
WELL NAME	BAER RANCH NO. A-3	F. G. COBB NO. 32-6	MCWILLIAMS GAS UNIT NO. 2
LOCATION	CHARLES DALE SUR. A-148	MARIA CUMMINS SUR. A-22	SEC. 19, IRGNRR SUR.
OWNER	FALCON SEABOARD DRILLING CO.	SKELLY OIL CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	07/19/65	09/20/68	11/13/67
SAMPLED	08/03/66	07/11/69	08/10/69
FORMATION	OLIG-TEX-MISS NO. 3	OLIG-FRIO	OLIG-SLOAN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	14454	7470	8794
WELLHEAD PRESSURE,PSIG	10750	2435	1610
OPEN FLOW, MCFD	11400	20000	8790
COMPONENT, MOLE PCT			
METHANE	89.2	82.6	91.4
ETHANE	5.3	5.5	3.8
PROPANE	1.2	4.3	1.7
N-BUTANE	0.3	1.5	0.5
ISOBUTANE	0.1	1.8	0.4
N-PENTANE	0.1	0.9	0.1
ISOPENTANE	0.2	1.2	0.2
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	TRACE	1.0	0.2
NITROGEN	0.1	1.2	0.7
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	0.2	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1050	1282	1104
SPECIFIC GRAVITY	0.640	0.739	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9373 SAMPLE 14004	INDEX 9374 SAMPLE 14005	INDEX 9375 SAMPLE 10877
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	BRAZOS AREA BLK. 541	BRAZOS AREA BLK. 541	BRAZOS BLK. 519S 8
WELL NAME	BLK. 541OCS-G-1733 NO. A-2	BLK. 541OCS-G-1733 NO. 2	STATE TRACT 519 S NO. 1
LOCATION	OFFSHORE FED. BLK. 541	OFFSHORE FED. BLK. 541	BRAZOS AREA GULF OF MEXICO
OWNER	TEXACO INC.	TEXACO INC.	SHELL OIL CO.
COMPLETED	03/09/72	03/09/72	10/01/66
SAMPLED	05/04/72	05/04/72	02/22/67
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-B
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6971
WELLHEAD PRESSURE,PSIG	3935	2051	2781
OPEN FLOW, MCFD	2787	1717	20000
COMPONENT, MOLE PCT			
METHANE	94.7	93.9	95.2
ETHANE	2.2	2.3	1.9
PROPANE	0.9	0.8	0.7
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.5	1.2	1.2
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1053	1055	1039
SPECIFIC GRAVITY	0.597	0.606	0.590

	INDEX 9376 SAMPLE 13789	INDEX 9377 SAMPLE 4644	INDEX 9378 SAMPLE 12360
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	COLLEGEPORT	MATAGORDA
FIELD	BRAZOS BLK. A-76 S	MARY PIERCE NO. 1	COLLEGEPORT
WELL NAME	OCS-G-1752 NO. A-1	SEC. A419	C. T. FRAZIER NO. 2C
LOCATION	BLK. A-76 OFFSHORE	GULF OIL CORP.	BLK. 26, E. YEAMANS SUR.A148
OWNER	CITIES SERVICE OIL CO.	07/19/48	DOW CHEMICAL CO.
COMPLETED	10/31/71	01/03/49	12/18/68
SAMPLED	10/24/73	MIOC-	08/13/70
FORMATION	MIOC-BIGENERINA HUMBLEI	220	MIOC-2900 FT. SAND
GEOLOGIC PROVINCE CODE	220	4094	220
DEPTH, FEET	9193	1591	2929
WELLHEAD PRESSURE,PSIG	4200	10500	1252
OPEN FLOW, MCFD	415000		151000
COMPONENT, MOLE PCT			
METHANE	94.8	92.5	98.2
ETHANE	2.0	3.9	0.3
PROPANE	0.9	---	0.1
N-BUTANE	0.2	---	0.0
ISOBUTANE	0.4	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.7	3.3	1.4
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.1	TRACE
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1049	1027	1003
SPECIFIC GRAVITY	0.597	0.589	0.563

	INDEX 9379 SAMPLE 12361	INDEX 9380 SAMPLE 12362	INDEX 9381 SAMPLE 12363
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	COLLEGEPORT	COLLEGEPORT	COLLEGEPORT
WELL NAME	RAY BOWERS NO. 4J	SAM V. LE TULLE NO. 9H	SAM V. LE TULLE NO. 9I
LOCATION	SEC. 38, GM&D SUR., A-186	SEC. 98, D. YEAMANS SUR.A417	SEC. 38, D. YEAMANS SUR.A417
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	DOW CHEMICAL CO.
COMPLETED	04/19/69	04/10/69	06/10/69
SAMPLED	08/13/70	08/13/70	08/13/70
FORMATION	MIOC-NO. 4 SAND	MIOC-NO. 4 SAND	MIOC-NO. 6 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3900	3891	4110
WELLHEAD PRESSURE,PSIG	674	1546	1726
OPEN FLOW, MCFD	4300	2151	4075
COMPONENT, MOLE PCT			
METHANE	97.4	98.3	98.3
ETHANE	0.2	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	2.1	1.5	1.4
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	990	998	998
SPECIFIC GRAVITY	0.566	0.561	0.560

	INDEX 9382 SAMPLE 12364	INDEX 9383 SAMPLE 12365	INDEX 9384 SAMPLE 12366
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	COLLEGEPORT	COLLEGEPORT	COLLEGEPORT
WELL NAME	SAM V. LE TULLE NO. 9F	SAM V. LE TULLE NO. 9G	A. C. HUTCHENSON JR.
LOCATION	SEC. 38, D. YEAMANS SUR.A417	SEC. 38, D. YEAMANS SUR.A417	SEC. 9, GM&D NO. 3 SUR.A-180
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	DOW CHEMICAL CO.
COMPLETED	04/19/69	04/10/69	08/12/69
SAMPLED	08/13/70	08/13/70	08/13/70
FORMATION	MIOC-NO. 7-A SAND	MIOC-NO. 7-B SAND	MIOC-NO. 3-A SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5072	5266	3773
WELLHEAD PRESSURE,PSIG	2053	2171	1171
OPEN FLOW, MCFD	7800	8000	160000
COMPONENT, MOLE PCT			
METHANE	98.2	94.8	98.4
ETHANE	0.1	2.1	0.2
PROPANE	TRACE	1.0	TRACE
N-BUTANE	0.0	0.3	0.0
ISOBUTANE	0.0	0.4	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	1.5	0.9	1.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	997	1066	1000
SPECIFIC GRAVITY	0.560	0.599	0.560

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9385 SAMPLE 12367	INDEX 9386 SAMPLE 12368	INDEX 9387 SAMPLE 12369
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	COLLEGEPORT	COLLEGEPORT	COLLEGEPORT
WELL NAME	RAY BOWERS NO. 4I	J. A. LOPSHIRE NO. 1J	J. A. LOPSHIRE NO. 1M
LOCATION	SEC. 38, GM&D SUR., A-186	SEC. 25, D. YEAMANS SUR.A417	SEC. 25, D. YEAMANS SUR.A417
OWNER	DOW CHEMICAL CO.	DOW CHEMICAL CO.	DOW CHEMICAL CO.
COMPLETED	12/05/69	05/13/69	05/13/69
SAMPLED	08/14/70	08/13/70	08/13/70
FORMATION	MIOC-NO. 5-A SAND	MIOC-NORTH SAND	MIOC-NO. 3 SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4066	1914	3737
WELLHEAD PRESSURE,PSIG	718	773	932
OPEN FLOW, MCFD	1040	7400	3200
COMPONENT, MOLE PCT			
METHANE	98.3	98.5	98.2
ETHANE	0.1	0.0	0.3
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.5	1.3	1.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	998	998	1000
SPECIFIC GRAVITY	0.561	0.561	0.561

	INDEX 9388 SAMPLE 12393	INDEX 9389 SAMPLE 15887	INDEX 9390 SAMPLE 15888
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	COVE	DUNCAN SLOUGH S	DUNCAN SLOUGH S
WELL NAME	TEXAS GULF 57686 NO. 5	GULF COAST WATER NO. 1	GULF COAST WATER NO. 1
LOCATION	STATE TRACT 487-L	MONTEZ & DURAN SUR. 11	MONTEZ & DURAN SUR. 11
OWNER	MOBIL OIL CORP.	DANIEL OIL CO.	DANIEL OIL CO.
COMPLETED	02/21/69	--/--/70	--/--/70
SAMPLED	08/26/70	01/29/80	01/29/80
FORMATION	MIOC-COVE	OLIG-FRIO F-6 U	OLIG-FRIO L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6559	10719	11092
WELLHEAD PRESSURE,PSIG	2923	6000	4000
OPEN FLOW, MCFD	52000	58000	8000
COMPONENT, MOLE PCT			
METHANE	94.3	91.7	89.3
ETHANE	2.3	4.5	5.5
PROPANE	0.9	1.5	2.1
N-BUTANE	0.2	0.4	0.5
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	0.9	0.3	0.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1077	1093	1126
SPECIFIC GRAVITY	0.607	0.623	0.645

	INDEX 9391 SAMPLE 15134	INDEX 9392 SAMPLE 15396	INDEX 9393 SAMPLE 12108
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	MANMAN	HAWKINSVILLE N	LUCKY W
WELL NAME	GLOVER UNIT NO. 1	NORA CALDWELL NO. 1	R. P. DAWDY NO. 1-A
LOCATION	J. T. BELKNAP SUR. A-113	A. C. BUCKNER LEAGUE, A-10	BOWMAN & REESE SUR. A-8
OWNER	ATLANTIC RICHFIELD CO.	M. L. HAWKINS, JR.	J. M. HUBER CORP.
COMPLETED	11/04/77	03/24/77	06/09/68
SAMPLED	11/03/77	10/02/78	11/09/69
FORMATION	PENN-CLEVELAND	OLIG-FRIO	OLIG-FRIO F-12
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9151	11200	9202
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1600	3300
OPEN FLOW, MCFD	NOT GIVEN	4200	7000
COMPONENT, MOLE PCT			
METHANE	87.8	84.3	92.7
ETHANE	5.6	4.4	3.0
PROPANE	2.5	2.9	1.3
N-BUTANE	0.7	0.9	0.5
ISOBUTANE	0.9	2.4	0.2
N-PENTANE	0.3	0.8	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.5	TRACE
HEXANES PLUS	0.2	1.8	0.1
NITROGEN	0.6	0.7	0.9
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.0	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1140	1277	1062
SPECIFIC GRAVITY	0.660	0.743	0.606

	INDEX 9394 SAMPLE 4037	INDEX 9395 SAMPLE 12383	INDEX 9396 SAMPLE 5229
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	MARKHAM	MARKHAM S	NOT GIVEN
WELL NAME	DENMAN KOUNTZE C NO. 3	J. E. DAWDY ET AL. NO. 1	TEXAS STATE E-B NO. 1
LOCATION	HENRY PARKER SUR. L12	BOWMAN & REESE SUR. A-8	STATE TSS, TRES PALACIOS BAY
OWNER	ATLANTIC REFINING CO.	OCCIDENTAL PETROLEUM CORP.	BRAZOS OIL & GAS CO.
COMPLETED	12/06/44	10/05/69	11/11/51
SAMPLED	05/24/45	08/23/70	03/21/52
FORMATION	OLIG-FRIO	OLIG-ANOMILINA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4847	10150	4526
WELLHEAD PRESSURE,PSIG	1900	1650	NOT GIVEN
OPEN FLOW, MCFD	20000	4200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.4	91.4	97.9
ETHANE	3.4	3.8	1.0
PROPANE	---	1.3	TRACE
N-BUTANE	---	0.4	0.0
ISOBUTANE	---	0.2	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.3	TRACE
NITROGEN	0.0	0.7	0.9
OXYGEN	0.1	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	1.2	0.1
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1037	1080	1014
SPECIFIC GRAVITY	0.573	0.624	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9397 SAMPLE 5230	INDEX 9398 SAMPLE 13959	INDEX 9399 SAMPLE 13960
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	NOT GIVEN	OLIVER POINT S	OLIVER POINT S
WELL NAME	TEXAS STATE XA NO. 2	STATE TRACT 86 NO. 1-L	STATE TRACT 86 NO. 1-U
LOCATION	STATE TRACT 199	TRES PALACIOS BAY	TRES PALACIOS BAY
OWNER	BRAZOS OIL & GAS CO.	MCMORAN EXPLORATION CO.	MCMORAN EXPLORATION CO.
COMPLETED	--/--/00	05/22/72	05/22/72
SAMPLED	03/24/52	03/14/74	03/14/74
FORMATION	MIOC-	MIOC-4200 FT. SAND	MIOC-3950 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	4184	3953
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1705	1720
OPEN FLOW, MCFD	NOT GIVEN	7500	8000
COMPONENT, MOLE PCT			
METHANE	98.2	97.9	98.2
ETHANE	0.1	0.3	0.4
PROPANE	TRACE	0.1	TRACE
N-BUTANE	0.1	TRACE	TRACE
ISOBUTANE	0.0	0.1	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	1.4	1.5	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1004	1003	1002
SPECIFIC GRAVITY	0.565	0.564	0.560

	INDEX 9400 SAMPLE 12637	INDEX 9401 SAMPLE 12640	INDEX 9402 SAMPLE 4048
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	OYSTER LAKE	OYSTER LAKE	PALACIOS
WELL NAME	SAM V. LE TULLE ET AL. NO. 1	SAM V. LE TULLE ET AL. NO. 1	STATE BANK NO. 1
LOCATION	RALPH WRIGHT SUR. A-407	RALPH WRIGHT SUR. A-407	NOT GIVEN
OWNER	VENUS OIL CO.	VENUS OIL CO.	ATLANTIC REFINING CO.
COMPLETED	01/13/69	01/13/69	08/06/37
SAMPLED	01/21/71	01/21/71	05/24/45
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3981	3981	7864
WELLHEAD PRESSURE,PSIG	1588	1508	2000
OPEN FLOW, MCFD	41000	41000	15000
COMPONENT, MOLE PCT			
METHANE	98.6	98.6	84.3
ETHANE	0.1	0.2	15.2
PROPANE	0.1	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.2	1.2	0.0
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.2	---
CARBON DIOXIDE	0.1	TRACE	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1003	1002	1126
SPECIFIC GRAVITY	0.562	0.560	0.634

	INDEX 9403 SAMPLE 13449	INDEX 9404 SAMPLE 12110	INDEX 9405 SAMPLE 12111
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	PETRUCHA	PHEASANT	PHEASANT
WELL NAME	PETRUCHA G.U. NO. 2	EAST FRIO NO. 1	EAST FRIO NO. 1
LOCATION	DUGOLD MCFARLAND SUR. A-61	JOHN M. UPDIKE SUR. A-399	JOHN M. UPDIKE SUR. A-399
OWNER	AMOCO PRODUCTION CO.	MICHEL T. MALBOUTY	MICHEL T. MALBOUTY
COMPLETED	03/02/71	08/01/68	08/01/68
SAMPLED	10/03/72	11/11/69	11/11/69
FORMATION	OLIG-FRIO	OLIG-MCDONALD	OLIG-FRIO F-28
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12645	8900	9200
WELLHEAD PRESSURE,PSIG	7339	1500	1500
OPEN FLOW, MCFD	10288	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.9	88.5	89.9
ETHANE	4.8	5.9	5.4
PROPANE	1.9	2.4	1.9
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.2	0.7	0.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.5	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1087	1134	1111
SPECIFIC GRAVITY	0.634	0.646	0.632

	INDEX 9406 SAMPLE 13751	INDEX 9407 SAMPLE 13845	INDEX 9408 SAMPLE 16200
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	PHEASANT SW	PHEASANT SW	PHEASANT SW
WELL NAME	MATL TRULL NO. 2	MATL TRULL NO. 2	MICHALIK MATL G.U. NO. 1
LOCATION	SUSAN PERKINS SUR., A-371	SUSAN PERKINS SUR., A-371	SEC. 31, SUSAN PERKINS SUR.
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	02/24/72	02/24/72	02/--/81
SAMPLED	10/12/73	12/28/73	05/02/81
FORMATION	OLIG-FRIO	OLIG-FRIO H	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11665	11297	10190
WELLHEAD PRESSURE,PSIG	6632	3440	5000
OPEN FLOW, MCFD	76000	25364	310
COMPONENT, MOLE PCT			
METHANE	87.3	87.3	88.1
ETHANE	6.6	6.5	6.1
PROPANE	2.5	2.5	2.5
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.7	0.8	0.8
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.2	0.6	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.0	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1152	1141	1141
SPECIFIC GRAVITY	0.662	0.657	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9409 SAMPLE 16804	INDEX 9410 SAMPLE 11174	INDEX 9411 SAMPLE 11175
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MATAGORDA
FIELD	RUGELEY N	WADSWORTH	WADSWORTH
WELL NAME	F. M. WATSON TRUST ET AL B-1	ETHEL CORNELIUS NO. 15	ETHEL CORNELIUS NO. 15
LOCATION	M. B. NUCKOLLS SUR., A-66	SAMUEL R. FISHER SUR. A-34	SAMUEL R. FISHER SUR. A-34
OWNER	PRAIRIE PRODUCING CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	09/28/81	07/07/66	07/07/66
SAMPLED	03/14/85	10/16/67	10/16/67
FORMATION	OLIG-FRIO L	OLIG-CH-1	CRET-LEWIS 9900
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13116	9317	9853
WELLHEAD PRESSURE, PSIG	8215	1667	3122
OPEN FLOW, MCFD	17500	1630	22800
COMPONENT, MOLE PCT			
METHANE	82.3	86.0	79.3
ETHANE	7.8	6.5	7.2
PROPANE	3.8	2.5	4.2
N-BUTANE	0.9	0.5	1.4
ISOBUTANE	1.1	0.8	2.6
N-PENTANE	0.1	0.2	0.8
ISOPENTANE	0.6	0.1	0.8
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.2	1.7
NITROGEN	0.4	2.1	1.9
OXYGEN	0.0	0.3	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	0.5	0.6
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	1184	1123	1343
SPECIFIC GRAVITY	0.707	0.658	0.780

	INDEX 9412 SAMPLE 4016	INDEX 9413 SAMPLE 5179	INDEX 9414 SAMPLE 1983
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MATAGORDA	MATAGORDA	MAVERICK
FIELD	WILDCAT	WILDCAT	CHITTIM
WELL NAME	GRANBURY-FULLILOVE NO. 1	ETHEL CORNELIUS NO. 1	RYCADE NO. 3
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 115, BLK. 7, I&GNRR SUR.
OWNER	SKELLY OIL CO.	MAGNOLIA PETROLEUM CO.	RYCADE OIL CORP.
COMPLETED	11/10/44	10/01/51	02/02/30
SAMPLED	05/07/45	01/18/52	04/07/30
FORMATION	OLIG-FRIO L	OLIG-FRIO	CRET-GLEN ROSE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8735	11374	5522
WELLHEAD PRESSURE, PSIG	3100	8812	2100
OPEN FLOW, MCFD	3627	43	11750
COMPONENT, MOLE PCT			
METHANE	89.2	89.2	79.8
ETHANE	9.4	5.8	17.9
PROPANE	---	1.8	---
N-BUTANE	---	0.4	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.2	---
NITROGEN	0.0	0.7	0.3
OXYGEN	0.3	0.1	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	1.2	1.7
HELIUM	0.00	0.01	0.02
HEATING VALUE*	1072	1100	1129
SPECIFIC GRAVITY	0.613	0.637	0.662

	INDEX 9415 SAMPLE 10314	INDEX 9416 SAMPLE 10315	INDEX 9417 SAMPLE 8383
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MAVERICK	MAVERICK	MAVERICK
FIELD	CHITTIM	CHITTIM	EAGLE
WELL NAME	CHITTIM ESTATE NO. 1	CHITTIM NO. 1-607	NO. 8
LOCATION	SEC. 186, I&GN RR SUR. A-199	SEC. 607, I & GN SUR. A-199	SEC. 18, BLK. 6, I&GNRR SUR.
OWNER	W. B. YARBOROUGH	W. B. YARBOROUGH	C. C. WINN
COMPLETED	02/25/64	08/01/64	02/24/61
SAMPLED	11/20/65	11/20/65	01/25/62
FORMATION	CRET-PEARSALL	CRET-PEARSALL	CRET-SAN MIGUEL
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6970	7870	1185
WELLHEAD PRESSURE, PSIG	2726	2595	500
OPEN FLOW, MCFD	5600	20800	610
COMPONENT, MOLE PCT			
METHANE	86.1	80.8	99.0
ETHANE	7.4	8.9	0.1
PROPANE	2.1	3.1	0.1
N-BUTANE	0.7	1.5	0.0
ISOBUTANE	0.4	0.9	0.0
N-PENTANE	0.4	1.1	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	0.3	0.0
HEXANES PLUS	0.5	1.8	0.0
NITROGEN	1.5	0.9	0.6
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1149	1295	1007
SPECIFIC GRAVITY	0.663	0.747	0.559

	INDEX 9418 SAMPLE 8241	INDEX 9419 SAMPLE 8243	INDEX 9420 SAMPLE 8244
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCCULLOCH	MCCULLOCH	MCCULLOCH
FIELD	LOJON	LOJON	LOJON
WELL NAME	NAT RANDALS NO. 1	CHARLES MILLER NO. 1	WARREN CAYLOR
LOCATION	A. M. WALDRIP SUR. NO. 146	BOWN SUR. NO. 1184	HETC RR CO. SUR.
OWNER	LOW DRILLING CO., INC.	LOW DRILLING CO., INC.	LOW DRILLING CO., INC.
COMPLETED	05/05/60	07/13/59	05/05/60
SAMPLED	10/12/61	10/12/61	10/12/61
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	410	410	410
DEPTH, FEET	1386	1376	976
WELLHEAD PRESSURE, PSIG	610	600	511
OPEN FLOW, MCFD	2525	5100	940
COMPONENT, MOLE PCT			
METHANE	74.5	77.0	77.0
ETHANE	2.7	2.4	1.9
PROPANE	1.1	1.0	0.6
N-BUTANE	0.3	0.2	0.1
ISOBUTANE	0.2	0.2	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	20.2	18.4	19.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.58	0.56	0.64
HEATING VALUE*	854	872	841
SPECIFIC GRAVITY	0.670	0.662	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9421 SAMPLE 8245	INDEX 9422 SAMPLE 11062	INDEX 9423 SAMPLE 11063
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCCULLOCH	MCCULLOCH	MCCULLOCH
FIELD	LOJON	LOJON	LOJON
WELL NAME	J. M. SHELTON NO. 1	J. B. ROWE NO. 1	S. A. LAWSON NO. 1
LOCATION	B. MULBURT SUR. NO. 1098	NEAR WALDRIP	NEAR WALDRIP
OWNER	J. S. PLUMMER	BRADY MUNICIPAL GAS CORP.	BRADY MUNICIPAL GAS CORP.
COMPLETED	--/--/00	--/--/42	--/--/41
SAMPLED	10/12/61	08/14/67	08/14/67
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	410	410	410
DEPTH, FEET	NOT GIVEN	1395	1400
WELLHEAD PRESSURE,PSIG	NOT GIVEN	620	600
OPEN FLOW, MCFD	NOT GIVEN	5500	4400
COMPONENT, MOLE PCT			
METHANE	80.2	73.4	75.2
ETHANE	0.9	2.8	2.8
PROPANE	0.5	1.8	1.1
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	17.3	20.6	19.5
OXYGEN	0.0	0.4	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.54	0.59	0.59
HEATING VALUE*	657	856	864
SPECIFIC GRAVITY	0.641	0.681	0.667

	INDEX 9424 SAMPLE 11064	INDEX 9425 SAMPLE 11065	INDEX 9426 SAMPLE 1830
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCCULLOCH	MCCULLOCH	MCCULLOCH
FIELD	LOJON	LOJON	M. C. SMITH
WELL NAME	C. E. FROST NO. 1	S. A. LAWSON NO. 2	M. C. SMITH NO. 2
LOCATION	NEAR WALDRIP	NEAR WALDRIP	SEC. 1293, T. SERKHART SUR.
OWNER	BRADY MUNICIPAL GAS CORP.	BRADY MUNICIPAL GAS CORP.	ROTH & FAUROT
COMPLETED	--/--/45	--/--/41	05/31/29
SAMPLED	08/14/67	08/14/67	08/04/29
FORMATION	PENN-STRAWN	PENN-STRAWN	NOT GIVEN
GEOLOGIC PROVINCE CODE	410	410	410
DEPTH, FEET	1400	1399	1567
WELLHEAD PRESSURE,PSIG	265	615	850
OPEN FLOW, MCFD	NOT GIVEN	690	2408
COMPONENT, MOLE PCT			
METHANE	75.7	75.3	73.7
ETHANE	1.6	2.7	8.5
PROPANE	0.7	1.1	---
N-BUTANE	0.2	0.3	---
ISOBUTANE	0.1	0.2	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	20.7	19.5	16.9
OXYGEN	0.1	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.56	0.56	0.68
HEATING VALUE*	834	874	899
SPECIFIC GRAVITY	0.663	0.676	0.669

	INDEX 9427 SAMPLE 5163	INDEX 9428 SAMPLE 15598	INDEX 9429 SAMPLE 14588
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCCULLOCH	MCCULLOCH	MCMULLEN
FIELD	SILER & JOHNSON	WALLOPE CREEK	BRAZIL
WELL NAME	JOHNSON NO. 1	JOHNNIE V. GUICE NO. 1	EARL BAKER NO. 5
LOCATION	INDIANOLA SUR. NO. 15	SEC. 4, BRONAUGH BRO. SUR.	M. F. LOWE SUR. 6, A-886
OWNER	PRINCE BROTHERS & GEHLE DRIL	BLAIR EXPLORATION, INC.	ATLANTIC RICHFIELD CO.
COMPLETED	09/05/51	10/20/78	10/14/76
SAMPLED	02/13/52	04/04/79	02/23/76
FORMATION	PENN-NOT GIVEN	PENN-CROSS CUT	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	410	410	220
DEPTH, FEET	1690	1700	8474
WELLHEAD PRESSURE,PSIG	284	875	4971
OPEN FLOW, MCFD	1500	5082	33250
COMPONENT, MOLE PCT			
METHANE	83.8	74.4	87.6
ETHANE	0.2	2.2	5.7
PROPANE	0.1	1.0	1.9
N-BUTANE	0.0	0.5	0.4
ISOBUTANE	0.1	0.2	0.4
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	15.0	20.1	0.0
OXYGEN	0.1	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.7	3.6
HELIUM	0.50	0.72	TRACE
HEATING VALUE*	867	850	1087
SPECIFIC GRAVITY	0.627	0.676	0.660

	INDEX 9430 SAMPLE 13877	INDEX 9431 SAMPLE 3805	INDEX 9432 SAMPLE 3785
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	CAMPANA S	EZZELL	GREEN BRANCH
WELL NAME	M. E. GOUGER FEE NO. 31	EZZELL C-2	S. T. S. PC LSE. NO. 1
LOCATION	SEC. 75, AB&M SUR. A-1951	NOT GIVEN	SEC. 25
OWNER	TEXACO INC.	EDWIN M. JONES	QUINTANA PETROLEUM CORP.
COMPLETED	04/02/72	--/--/00	06/29/42
SAMPLED	01/31/74	04/16/44	04/08/44
FORMATION	OLIG-FRIO	EOCE-CARRIZO & WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1700	6419	5719
WELLHEAD PRESSURE,PSIG	470	1150	1400
OPEN FLOW, MCFD	4889	NOT GIVEN	747
COMPONENT, MOLE PCT			
METHANE	99.4	80.4	73.4
ETHANE	TRACE	17.0	24.2
PROPANE	TRACE	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.5	2.1	1.4
OXYGEN	0.0	0.4	0.4
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	TRACE	0.00	0.00
HEATING VALUE*	1007	1119	1177
SPECIFIC GRAVITY	0.557	0.650	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9433 SAMPLE 11999	INDEX 9434 SAMPLE 4923	INDEX 9435 SAMPLE 5002
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	GREEN RANCH SE	HAGIST RANCH	HAGIST RANCH
WELL NAME	SOUTH TEXAS SYNDICATE NO. 1	HAGIST RANCH INC. NO. A-1	HAGIST RANCH INC. NO. B-1
LOCATION	MOSES MCCLAIN SUR. A-793	R. W. MILLS SUR. NO. 467	B&B&CRR CO. SUR. NO. 3
OWNER	UNION PRODUCING CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	03/27/68	06/06/50	08/12/50
SAMPLED	08/19/69	05/29/50	01/16/51
FORMATION	EOCE-WILCOX 6200	EOCE-	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6190	7696	7125
WELLHEAD PRESSURE,PSIG	2168	2922	2265
OPEN FLOW, MCFD	3460	34000	1275
COMPONENT, MOLE PCT			
METHANE	86.3	88.9	86.7
ETHANE	5.9	5.4	5.7
PROPANE	3.5	2.2	2.8
N-BUTANE	0.9	0.5	0.7
ISOBUTANE	0.5	0.3	0.6
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.5	0.4
NITROGEN	1.3	0.0	0.2
OXYGEN	0.0	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	1.7	1.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1158	1123	1132
SPECIFIC GRAVITY	0.666	0.655	0.657

	INDEX 9436 SAMPLE 12088	INDEX 9437 SAMPLE 5169	INDEX 9438 SAMPLE 5632
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	HAGIST RANCH	HOSTETTER	HOSTETTER
WELL NAME	HAGIST RANCH NO. 1	A. M. HOSTETTER NO. 1	RENSHAW UNIT NO. 1
LOCATION	ETRR SUR. NO. 6	JUSTO CORONA SUR. NO. 68	SEC. 53, AB&M SUR.
OWNER	FRIO PRODUCTION CO.	SUNRAY OIL CORP.	SUNRAY OIL CORP.
COMPLETED	02/05/68	06/23/51	03/13/54
SAMPLED	08/23/69	12/01/51	05/28/54
FORMATION	OLIG-FRIO	EOCE-WILCOX	EOCE-QUEEN CITY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1055	10088	6068
WELLHEAD PRESSURE,PSIG	390	7664	2271
OPEN FLOW, MCFD	2500	NOT GIVEN	1950
COMPONENT, MOLE PCT			
METHANE	99.2	85.1	89.0
ETHANE	0.0	7.4	5.5
PROPANE	0.0	2.5	2.4
N-BUTANE	0.0	0.6	0.0
ISOBUTANE	0.0	0.3	1.1
N-PENTANE	0.0	0.2	TRACE
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	0.6	0.5	0.5
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	2.8	1.0
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1121	1121	1114
SPECIFIC GRAVITY	0.557	0.675	0.639

	INDEX 9439 SAMPLE 12051	INDEX 9440 SAMPLE 14331	INDEX 9441 SAMPLE 14332
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	HOSTETTER	HOSTETTER	HOSTETTER
WELL NAME	HUGHES GAS UNIT NO. 1	GOUGER GAS UNIT 2 NO. 2	GOUGER GAS UNIT 2 NO. 2
LOCATION	AB&M SUR. A-26	SEC. 67; AB&M SUR. A-27	SEC. 67; AB&M SUR. A-27
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	04/01/68	01/31/73	01/31/73
SAMPLED	09/20/69	05/09/75	05/09/75
FORMATION	EOCE-WILCOX	EOCE-WILCOX	-SCHULZE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9892	9380	9070
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5900	7056
OPEN FLOW, MCFD	600	8000	24000
COMPONENT, MOLE PCT			
METHANE	85.0	86.5	86.4
ETHANE	6.3	5.5	5.4
PROPANE	2.2	3.3	3.5
N-BUTANE	0.4	0.8	0.8
ISOBUTANE	0.4	0.9	0.9
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.5	0.4	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.7	1.7	1.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1085	1157	1161
SPECIFIC GRAVITY	0.675	0.677	0.679

	INDEX 9442 SAMPLE 14273	INDEX 9443 SAMPLE 2482	INDEX 9444 SAMPLE 17505
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	HOSTETTER N	JACOB GAS	LA JOLLA E
WELL NAME	D. W. RHODE 54 NO. 1	JACOB NO. 1-A	CLIFTON WHEELER NO. 1
LOCATION	ALFRED SPAULDING SUR. 54	NOT GIVEN	AB&M SUR. 191,A-508
OWNER	ATLANTIC RICHFIELD CO.	JACOB, BUZZINI & PICKETT, IN	TEXAS GAS EXPLORATION CORP.
COMPLETED	01/25/75	--/--/31	06/13/83
SAMPLED	02/20/75	04/01/32	09/25/84
FORMATION	EOCE-WILCOX	EOCE-JACKSON BASAL	CRET-SLIGO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9000	765	16513
WELLHEAD PRESSURE,PSIG	5800	350	12201
OPEN FLOW, MCFD	28500	4000	20408
COMPONENT, MOLE PCT			
METHANE	90.1	92.0	84.3
ETHANE	4.2	0.0	0.1
PROPANE	1.2	---	TRACE
N-BUTANE	0.3	---	0.0
ISOBUTANE	0.3	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.1	7.6	8.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	3.0
CARBON DIOXIDE	3.6	0.4	4.5
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1045	932	856
SPECIFIC GRAVITY	0.634	0.590	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9445 SAMPLE 5907	INDEX 9446 SAMPLE 5712	INDEX 9447 SAMPLE 4632
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MCMULLEN
FIELD	OPOSSUM CREEK	SAN MIGUEL CREEK	SANCAJA
WELL NAME	MABEL BROWNSON NO. 11	SMC GAU. I, WELL NO. 1	EZZELL NO. C-6
LOCATION	W. H. JACOBS SUR. 10, A-1028	SEC. A-430, SMITH SUR. NO.26	NOT GIVEN
OWNER	BRIDWELL OIL CO.	HUMBLE OIL & REFINING CO.	ESTATE OF EDWIN M. JONES
COMPLETED	04/25/55	10/25/53	08/10/48
SAMPLED	08/04/55	10/08/54	11/19/48
FORMATION	EDGE-WILCOX BASAL	CRET-EDWARDS	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6047	10182	6926
WELLHEAD PRESSURE,PSIG	2300	3700	2950
OPEN FLOW, MCFD	4000	905	12000
COMPONENT, MOLE PCT			
METHANE	85.5	75.4	71.0
ETHANE	5.0	2.5	27.4
PROPANE	3.6	1.3	---
N-BUTANE	1.2	0.4	---
ISOBUTANE	0.9	0.2	---
N-PENTANE	0.3	0.1	---
ISOPENTANE	0.9	0.1	---
CYCLOPENTANE	0.4	TRACE	---
HEXANES PLUS	0.9	0.1	---
NITROGEN	0.9	4.6	0.8
OXYGEN	0.0	0.0	0.3
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	5.1	---
CARBON DIOXIDE	0.5	9.6	1.3
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1232	1309	1210
SPECIFIC GRAVITY	0.709	0.742	0.704

	INDEX 9448 SAMPLE 15882	INDEX 9449 SAMPLE 15729	INDEX 9450 SAMPLE 8534
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MCMULLEN	MCMULLEN	MEDINA
FIELD	TILDEN E	WILLIFORD	WILDCAT
WELL NAME	L. H. MCLAUGHERTY NO. 1	VIRGINIA RAGSDALE NO. 1	CARL EST BUSHWACK RANCH NO.1
LOCATION	BS&F SUR. 13, A-517	PABLO ALANIS SUR. 112, A1120	NOT GIVEN
OWNER	SHELL OIL CO.	ARCO OIL & GAS CO.	MOHO CORP.
COMPLETED	11/12/77	07/18/78	02/03/62
SAMPLED	01/21/80	08/23/79	04/25/62
FORMATION	CRET-EDWARDS	OLIG-FRIO	CRET-ANACACHO
GEOLOGIC PROVINCE CODE	220	220	400
DEPTH, FEET	11592	1698	1184
WELLHEAD PRESSURE,PSIG	4240	453	30
OPEN FLOW, MCFD	14000	11802	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.4	99.1	18.7
ETHANE	1.2	0.1	0.3
PROPANE	0.3	TRACE	0.1
N-BUTANE	0.1	0.0	0.1
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.2	0.6	1.7
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.6
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	6.6	0.1	78.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	967	1006	216
SPECIFIC GRAVITY	0.634	0.559	1.267

	INDEX 9451 SAMPLE 12723	INDEX 9452 SAMPLE 12724	INDEX 9453 SAMPLE 12725
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	AZALEA	AZALEA	AZALEA
WELL NAME	CRESPI NO. 2-47	CRESPI NO. 2-17	WILLIS NO. 1-40
LOCATION	SEC.47, BLK.38, TPRR CO.SUR.	SEC.17, BLK.38, TPRR CO.SUR.	SEC.40, BLK.A, W.T.GRAY SUR.
OWNER	MURPHY H. BAXTER	MURPHY H. BAXTER	MURPHY H. BAXTER
COMPLETED	10/10/60	04/21/61	12/08/59
SAMPLED	03/19/71	03/19/71	03/19/71
FORMATION	DEVO-	DEVO-	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11460	11460	10484
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.6	75.4	69.7
ETHANE	14.3	14.4	13.9
PROPANE	5.3	5.4	6.4
N-BUTANE	1.3	1.1	2.2
ISOBUTANE	0.4	0.6	1.2
N-PENTANE	0.4	0.2	0.9
ISOPENTANE	0.4	0.4	1.4
CYCLOPENTANE	0.1	TRACE	0.6
HEXANES PLUS	0.2	0.1	1.1
NITROGEN	1.7	1.8	2.6
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1265	1250	1405
SPECIFIC GRAVITY	0.737	0.731	0.832

	INDEX 9454 SAMPLE 12726	INDEX 9455 SAMPLE 7214	INDEX 9456 SAMPLE 12739
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	AZALEA	DAVIS	DORA ROBERTS RANCH
WELL NAME	CRESPI UNIT NO. 1	J. T. BROWN ET AL, NO. 1	DORA ROBERTS RANCH NO. 908
LOCATION	SEC. 20, BLK. 38, T-2 SUR.	SEC. 8, T5S, T&PRR	SEC. 9, BLK. 41, T&P RR SUR.
OWNER	MURPHY H. BAXTER	GULF OIL CORP.	CITIES SERVICE OIL CO.
COMPLETED	06/17/58	06/12/59	04/28/63
SAMPLED	03/19/71	09/16/59	03/25/71
FORMATION	PENN-STRAWN	PERM-WICHITA-ALBANY	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10484	9885	11700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2345	2300
OPEN FLOW, MCFD	NOT GIVEN	2000	7200
COMPONENT, MOLE PCT			
METHANE	2.1	70.7	79.2
ETHANE	7.9	15.4	14.2
PROPANE	48.3	6.9	3.5
N-BUTANE	25.0	1.9	0.8
ISOBUTANE	10.3	0.7	0.3
N-PENTANE	1.9	0.1	0.2
ISOPENTANE	3.3	1.2	0.1
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.8	0.2	0.2
NITROGEN	0.1	2.5	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.6
HELIUM	0.01	0.04	0.03
HEATING VALUE*	2889	1324	1206
SPECIFIC GRAVITY	1.746	0.780	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9457 SAMPLE 10977	INDEX 9458 SAMPLE 5547	INDEX 9459 SAMPLE 12776
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	G. BRYANT	NOT GIVEN	PARKS
WELL NAME	G. BRYANT B NO. 1	MR. S. FOSTER NO. B-1	TRACT 23 NO. 1
LOCATION	SEC. 39, BLK. 40, T&P SUR.	SEC. 11, BLK. 141, T&P SUR.	BLK. 40, T3S, T-P RR CO. SUR
OWNER	TEXACO INC.	PLYMOUTH OIL CO.	MOBIL OIL CORP.
COMPLETED	09/02/65	12/27/52	07/24/69
SAMPLED	03/24/66	08/02/53	06/20/71
FORMATION	DEVO-	PENN-STRAWN	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11860	10579	11748
WELLHEAD PRESSURE,PSIG	2352	1200	1050
OPEN FLOW, MCFD	2800	NOT GIVEN	900
COMPONENT, MOLE PCT			
METHANE	76.7	71.6	75.6
ETHANE	13.3	17.0	14.6
PROPANE	5.6	6.3	5.5
N-BUTANE	1.4	1.4	1.2
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.9	2.5	0.9
OXYGEN	0.2	0.0	0.0
ARGON	0.2	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.9
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1258	1273	1259
SPECIFIC GRAVITY	0.733	0.752	0.734

	INDEX 9460 SAMPLE 12677	INDEX 9461 SAMPLE 12737	INDEX 9462 SAMPLE 12801
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MIDLAND	MIDLAND	MIDLAND
FIELD	PEGASUS	SPRABERRY TREND	WAR-SAN
WELL NAME	PEGASUS UNIT 3 NO. 1-18	BEULAH COLEMAN NO. 6	MIDLAND A FEE NO. 5
LOCATION	22 MI. SE MIDLAND	SEC. 8, BLK. 37, T&P RR SUR.	NOT GIVEN
OWNER	MOBIL OIL CORP.	GETTY OIL CO.	TEXACO INC.
COMPLETED	12/13/62	09/20/67	--/--/--
SAMPLED	02/11/71	03/25/71	04/28/71
FORMATION	DEVO-	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11944	11229	11893
WELLHEAD PRESSURE,PSIG	1576	900	1508
OPEN FLOW, MCFD	8200	506	1240
COMPONENT, MOLE PCT			
METHANE	80.8	73.5	61.4
ETHANE	10.8	13.5	18.0
PROPANE	4.1	4.5	11.7
N-BUTANE	0.8	0.9	3.4
ISOBUTANE	0.5	0.6	1.3
N-PENTANE	0.3	0.3	0.6
ISOPENTANE	0.2	TRACE	0.6
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	2.0	4.7	1.8
OXYGEN	0.2	1.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.7
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1185	1182	1472
SPECIFIC GRAVITY	0.692	0.731	0.875

	INDEX 9463 SAMPLE 16781	INDEX 9464 SAMPLE 16783	INDEX 9465 SAMPLE 14502
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MILAM	MILAM	MITCHELL
FIELD	CALIGULA	CALIGULA	ELLWOOD N
WELL NAME	CALIGULA-COFFIELD NO. 1	CALIGULA-COFFIELD NO. 1	SPADE NO. 2
LOCATION	W. W. MILL SUR., A-191	W. W. MILL SUR., A-191	SEC. 25, BLK. 18, SPRR SUR.
OWNER	ENERGETICS, INC.	ENERGETICS, INC.	BURK ROYALTY CO.
COMPLETED	12/30/81	12/30/81	06/04/74
SAMPLED	02/28/83	02/28/83	10/16/75
FORMATION	EOCE-MIDWAY U	EOCE-MIDWAY L	PERM-YATES
GEOLOGIC PROVINCE CODE	220	220	430
DEPTH, FEET	2262	2310	546
WELLHEAD PRESSURE,PSIG	838	896	205
OPEN FLOW, MCFD	660	846	2000
COMPONENT, MOLE PCT			
METHANE	97.0	97.2	52.8
ETHANE	0.4	0.4	4.4
PROPANE	0.1	0.1	0.2
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.9	1.7	41.0
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.02	0.02	0.84
HEATING VALUE*	997	999	630
SPECIFIC GRAVITY	0.567	0.567	0.754

	INDEX 9466 SAMPLE 2065	INDEX 9467 SAMPLE 901	INDEX 9468 SAMPLE 16017
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MITCHELL	MITCHELL	MITCHELL
FIELD	FOSTER	MITCHELL COUNTY	TURNER-GREGORY
WELL NAME	MARY FOSTER NO. 7, OIL WELL	LE SURE NO. 2	ADAMS NO. 2
LOCATION	SEC. 17, BLK. 29, T&P SUR.	SEC. 40, BLK. 28, T1	SEC.24,BLK.29T-LN-T&P SUR.
OWNER	MAGNOLIA PETROLEUM CO.	CALIFORNIA CO.	ELLPEN, INC.
COMPLETED	05/10/30	03/30/23	--/--/00
SAMPLED	06/18/30	07/09/24	07/22/80
FORMATION	PERM-GLORIETA	PERM-	PERM-CLEARFORK
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2756	3005	1350
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	750
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	27.6	5.3	TRACE
ETHANE	62.4	85.2	0.0
PROPANE	---	---	TRACE
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	9.1	6.3	99.7
OXYGEN	0.3	0.6	0.0
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.7	2.5	0.0
HELIUM	0.16	TRACE	0.10
HEATING VALUE*	1398	1580	0
SPECIFIC GRAVITY	0.910	1.029	0.966

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9469 SAMPLE 6305	INDEX 9470 SAMPLE 8739	INDEX 9471 SAMPLE 1066
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MITCHELL	MONTAGUE	MONTAGUE
FIELD	WILDCAT	GIFFORD	NOCONA
WELL NAME	WEINER NO. 1	RUTH GIFFORD NO. 1	J. E. LEMONS NO. 1
LOCATION	SEC. 7, BLK. 13, H&TC SUR.	NOT GIVEN	T8S, BLK. 5, SAM. LITTLE SUR
OWNER	URICE DRILLING CO.	STAR OIL CO., INC.	TEXHOMA OIL & REFINING CO.
COMPLETED	03/20/57	10/16/61	04/--/25
SAMPLED	05/08/57	11/01/62	05/27/25
FORMATION	NOT GIVEN	PENN-CONGLOMERATE	PENN-CISCO
GEOLOGIC PROVINCE CODE	430	420	420
DEPTH, FEET	520	6026	680
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1380	270
OPEN FLOW, MCFD	10000	4800	2000
COMPONENT, MOLE PCT			
METHANE	46.4	80.9	45.0
ETHANE	2.5	7.4	3.5
PROPANE	0.1	4.8	---
N-BUTANE	0.1	1.3	---
ISOBUTANE	0.1	0.5	---
N-PENTANE	0.0	0.2	---
ISOPENTANE	0.1	0.4	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	TRACE	0.1	---
NITROGEN	49.8	3.7	50.0
OXYGEN	TRACE	TRACE	0.5
ARGON	0.1	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.61	0.17	0.91
HEATING VALUE*	529	1173	519
SPECIFIC GRAVITY	0.776	0.699	0.778

	INDEX 9472 SAMPLE 1126	INDEX 9473 SAMPLE 1132	INDEX 9474 SAMPLE 1137
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTAGUE	MONTAGUE	MONTAGUE
FIELD	NOCONA	NOCONA	NOCONA
WELL NAME	ROWLAND NO. 1	RUCKTASHEL NO. 1	ROWLAND NO. 1-A
LOCATION	J. CHAMBLISS SUR.	SAMUEL LITTLE SUR.	J. CHAMBLISS SUR.
OWNER	PURE OIL CO.	TEXAS CO.	TEXHOMA OIL & REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/18/25	08/20/25	08/19/25
FORMATION	PENN-CISCO	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	50.0	42.1	44.7
ETHANE	3.6	5.9	3.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	44.5	49.8	50.2
OXYGEN	0.8	0.9	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.4	0.2
HELIUM	0.95	0.94	1.13
HEATING VALUE*	571	532	512
SPECIFIC GRAVITY	0.759	0.794	0.779

	INDEX 9475 SAMPLE 1295	INDEX 9476 SAMPLE 7912	INDEX 9477 SAMPLE 4036
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTAGUE	MONTAGUE	MONTGOMERY
FIELD	NOCONA	NOCONA N	CONROE
WELL NAME	MADDOX NO. 1	WELL A	KEYSTONE-MILLS NO. 20
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS CO.	GENERAL DRILLING & PROD. CO.	ATLANTIC REFINING CO.
COMPLETED	--/--/00	--/--/46	02/14/34
SAMPLED	08/19/26	03/24/61	07/24/45
FORMATION	NOT GIVEN	PENN-CISCO	EOCE-COCKFIELD U
GEOLOGIC PROVINCE CODE	420	420	220
DEPTH, FEET	NOT GIVEN	1192	4956
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	900
OPEN FLOW, MCFD	NOT GIVEN	5000	18000
COMPONENT, MOLE PCT			
METHANE	51.3	58.6	80.5
ETHANE	5.2	3.5	15.3
PROPANE	---	2.4	---
N-BUTANE	---	1.2	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.3	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.1	---
NITROGEN	41.9	32.5	0.0
OXYGEN	0.3	TRACE	0.0
ARGON	---	0.1	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.96	0.40	TRACE
HEATING VALUE*	613	810	1130
SPECIFIC GRAVITY	0.753	0.772	0.632

	INDEX 9478 SAMPLE 11638	INDEX 9479 SAMPLE 14189	INDEX 9480 SAMPLE 5694
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	CONROE	CONROE	CONROE TOWNSITE
WELL NAME	A. A. & D. A. MADELEY NO. 43	E. WOODY NO. 28	FED. ROYALTY CO. NO. 1
LOCATION	RANSOM MOUSE SUR. A-244	RANSOM MOUSE SUR. A-244	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	TEXACO INC.	HUMBLE OIL & REFINING CO.
COMPLETED	06/26/67	07/17/73	07/20/54
SAMPLED	09/04/68	10/--/74	09/23/54
FORMATION	MIOC-	MIOC-	EOCE-COCKFIELD
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1810	2058	6232
WELLHEAD PRESSURE,PSIG	530	930	2308
OPEN FLOW, MCFD	23182	8700	7400
COMPONENT, MOLE PCT			
METHANE	97.1	97.3	92.1
ETHANE	0.6	1.5	3.7
PROPANE	0.1	0.2	1.8
N-BUTANE	0.4	TRACE	0.2
ISOBUTANE	0.1	TRACE	0.6
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.7	0.6	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1043	1018	1104
SPECIFIC GRAVITY	0.585	0.569	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9481 SAMPLE 15535	INDEX 9482 SAMPLE 4836	INDEX 9483 SAMPLE 9602
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	CONROE W	DECKERS PRAIRIE	LAKE CREEK
WELL NAME	DAN H. MADELEY NO. 1	SCHIEL NO. 1	LAKE CREEK UNIT NO. 27
LOCATION	JAMES PAVEHOUSE SUR.	T. J. STANSBURY SUR.	T. J. NICHOLS SUR. A-397
OWNER	MITCHELL ENERGY CORP.	STERLING OIL & REFINING CORP	SUPERIOR OIL CO.
COMPLETED	01/13/78	09/13/49	05/05/63
SAMPLED	12/12/78	01/25/50	10/14/64
FORMATION	EOCE-WOCKLEY	EOCE-NOT GIVEN	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4055	5486	13540
WELLHEAD PRESSURE,PSIG	1575	2343	5500
OPEN FLOW, MCFD	16330	10400	7620
COMPONENT, MOLE PCT			
METHANE	97.9	90.6	91.8
ETHANE	0.4	4.4	3.9
PROPANE	TRACE	1.8	1.4
N-BUTANE	0.1	0.6	0.3
ISOBUTANE	0.0	0.3	0.1
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.0	0.7	0.0
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.8	2.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1012	1105	1063
SPECIFIC GRAVITY	0.567	0.634	0.621

	INDEX 9484 SAMPLE 13386	INDEX 9485 SAMPLE 13403	INDEX 9486 SAMPLE 14320
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MONTGOMERY	MONTGOMERY
FIELD	LAKE CREEK	PAUL NELSON W	PAUL NELSON W
WELL NAME	EDLA G. FROST NO. 1	CHARLES M. THOMAS NO. 1	GOODSON NO. 2
LOCATION	ARCHIBALD HODGE SUR. A-18	WILLIAM WILLS SUR. A-594	W. S. TAYLOR SUR. A-552
OWNER	PRAIRIE PRODUCING CO.	MCCORMICK OIL & GAS CORP.	MCCORMICK OIL & GAS CORP.
COMPLETED	09/07/71	06/24/71	05/16/73
SAMPLED	05/--/72	09/26/72	04/20/75
FORMATION	EOCE-WILCOX	EOCE-YEGUA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11558	7556	7420
WELLHEAD PRESSURE,PSIG	2080	1465	2600
OPEN FLOW, MCFD	7600	20800	630
COMPONENT, MOLE PCT			
METHANE	84.8	85.3	85.5
ETHANE	6.2	6.6	6.2
PROPANE	2.7	2.7	2.9
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.1	3.0	2.8
OXYGEN	0.2	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	0.9	0.7
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1092	1103	1138
SPECIFIC GRAVITY	0.673	0.659	0.671

	INDEX 9487 SAMPLE 17296	INDEX 9488 SAMPLE 6013	INDEX 9489 SAMPLE 5436
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MONTGOMERY	MOORE	MOORE
FIELD	WILDCAT	BARREL SPRINGS	HUGOTON, TEXAS
WELL NAME	FRIENDSWOOD DEV. NO. 1	MASTERSON A-5	GOCHNAUR NO. 1
LOCATION	J. GROSS SUR., A-719	SEC. 76, BLK. D-18, D&P SUR.	SEC. 3, BLK. M2;HARWELL SUR.
OWNER	VOLVO PETROLEUM, INC.	COLORADO INTERSTATE GAS CO.	KERR-MCGEE OIL IND., INC.
COMPLETED	08/--/82	10/12/40	--/--/00
SAMPLED	05/--/84	01/31/56	03/30/53
FORMATION	EOCE-WILCOX A-2	PERM-WICHITA-ALBANY	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	220	440	440
DEPTH, FEET	9983	2465	3152
WELLHEAD PRESSURE,PSIG	NOT GIVEN	343	431
OPEN FLOW, MCFD	2403	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.5	73.7	73.4
ETHANE	6.4	5.8	6.1
PROPANE	2.4	3.4	3.7
N-BUTANE	0.6	1.1	1.0
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.6	0.3	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.3	13.8	13.7
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	0.2	0.1
HELIUM	0.01	0.83	0.62
HEATING VALUE*	1143	1025	1031
SPECIFIC GRAVITY	0.673	0.713	0.714

	INDEX 9490 SAMPLE 5437	INDEX 9491 SAMPLE 5778	INDEX 9492 SAMPLE 6250
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	REEVES NO. 1	BOULWARE NO. 1	HUBER NO. 2
LOCATION	SEC. 8, BLK. G	SEC. 17, BLK. M-2, MBA SUR.	SEC. 96, BLK. 3-T, T&NO SUR.
OWNER	KERR-MCGEE CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	--/--/00	11/02/54	01/10/57
SAMPLED	03/30/53	02/11/55	02/15/57
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3333	3097
WELLHEAD PRESSURE,PSIG	NOT GIVEN	364	390
OPEN FLOW, MCFD	NOT GIVEN	216	3462
COMPONENT, MOLE PCT			
METHANE	71.2	72.3	74.4
ETHANE	5.9	6.5	6.7
PROPANE	3.9	3.6	3.5
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.4	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.3	14.6	12.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.81	0.72	0.60
HEATING VALUE*	993	1011	1039
SPECIFIC GRAVITY	0.717	0.713	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9493 SAMPLE 7153	INDEX 9494 SAMPLE 7156	INDEX 9495 SAMPLE 7365
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	LETTERMAN GAS UNIT NO. 1	LACY-MEEK NO. 1	NEEL UNIT NO. 1
LOCATION	SEC. 22, BLK. M-2, H&TC SUR.	SEC. 6, BLK. O, H&GN SUR.	SEC. 22, BLK. M-2, CAMPBELL
OWNER	TEXACO INC.	TEXACO INC.	KERR-MCGEE OIL IND., INC.
COMPLETED	01/31/58	10/30/57	06/09/59
SAMPLED	07/24/59	07/24/59	01/30/60
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3289	3287	3274
WELLHEAD PRESSURE,PSIG	382	398	362
OPEN FLOW, MCFD	4178	5090	354
COMPONENT, MOLE PCT			
METHANE	70.6	70.5	70.3
ETHANE	6.6	6.7	6.5
PROPANE	4.2	4.1	3.8
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.6	15.6	16.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.80	0.80	0.90
HEATING VALUE*	1019	1018	1000
SPECIFIC GRAVITY	0.727	0.724	0.721

	INDEX 9496 SAMPLE 13020	INDEX 9497 SAMPLE 13021	INDEX 9498 SAMPLE 13023
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	DOLOMITE WELL NO. 1	HUNGATE NO. 1	PAULUS NO. 1
LOCATION	SEC. 38, BLK. 2T, T&NO SUR.	SEC. 37, BLK. 2T, T&NO SUR.	SEC. 28, BLK. 2T, T&NO SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/20/71	09/20/71	09/20/71
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.6	71.3	72.1
ETHANE	6.3	6.1	6.3
PROPANE	4.5	4.6	4.5
N-BUTANE	1.1	1.0	1.1
ISOBUTANE	0.8	0.8	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	14.2	14.4	14.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.68	0.70	0.69
HEATING VALUE*	1051	1033	1049
SPECIFIC GRAVITY	0.731	0.724	0.726

	INDEX 9499 SAMPLE 13024	INDEX 9500 SAMPLE 15350	INDEX 9501 SAMPLE 3280
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	NOT GIVEN
WELL NAME	FED. NO. 1	FLORES NO. 2B	MASTERSON NO. A-2
LOCATION	SEC. 29, BLK. 2T, T&NO SUR.	SEC. 87, BLK. 3T, T&NO SUR.	SEC. 99, BLK. 3, G&M SUR.
OWNER	PHILLIPS PETROLEUM CO.	DIAMOND SHAMROCK CORP.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	05/30/78	--/--/00
SAMPLED	09/20/71	08/24/78	--/--/00
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3018	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	6172	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	6300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.7	73.3	69.9
ETHANE	6.2	6.6	19.9
PROPANE	4.6	4.0	---
N-BUTANE	1.1	1.1	---
ISOBUTANE	0.7	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	15.2	13.1	9.2
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.1	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.9	0.1	0.1
HELIUM	0.73	0.62	0.50
HEATING VALUE*	1038	1038	1065
SPECIFIC GRAVITY	0.732	0.712	0.692

	INDEX 9502 SAMPLE 1402	INDEX 9503 SAMPLE 1546	INDEX 9504 SAMPLE 1899
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON NO. J-1	T. THOMPSON A-2	FEE A-1
LOCATION	SEC. 59, BLK. O-18, D&P SUR.	SEC. 19, BLK. 44, H&TC SUR.	SEC. 76, BLK. 3 G&M SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	CANADIAN RIVER GAS CO.
COMPLETED	04/30/27	09/--/27	--/--/00
SAMPLED	07/30/27	11/23/27	11/18/29
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3024	3270	3830
WELLHEAD PRESSURE,PSIG	430	432	NOT GIVEN
OPEN FLOW, MCFD	14000	90000	5000
COMPONENT, MOLE PCT			
METHANE	56.1	64.2	70.1
ETHANE	25.8	22.2	19.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	16.5	12.8	9.2
OXYGEN	0.9	0.2	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.58	0.50	0.50
HEATING VALUE*	1031	1048	1051
SPECIFIC GRAVITY	0.755	0.719	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9505 SAMPLE 2283	INDEX 9506 SAMPLE 2648	INDEX 9507 SAMPLE 2768
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	W. M. SHELTON A-1	KILGORE NO. 2-G	REED NO. A-2
LOCATION	SEC. 52, BLK. 3, G&M SUR.	SEC. 29, BLK. PMC, ELRR SUR.	SEC. 47, BLK. 3, G&M SUR.
OWNER	RED RIVER GAS CO.	TEXOMA NATURAL GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	04/05/30	06/02/31	09/--/37
SAMPLED	02/09/31	10/19/33	09/--/37
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2761	2890	2215
WELLHEAD PRESSURE,PSIG	425	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	57800	15600	41000
COMPONENT, MOLE PCT			
METHANE	74.1	59.2	70.8
ETHANE	17.3	20.2	17.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.7	19.4	10.1
OXYGEN	0.2	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.47	0.64	0.46
HEATING VALUE*	1061	962	1038
SPECIFIC GRAVITY	0.673	0.737	0.687

	INDEX 9508 SAMPLE 2862	INDEX 9509 SAMPLE 2864	INDEX 9510 SAMPLE 2873
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	SEAY NO. A-1	BIVINS NO. A-15	KILLGORE NO. A-1
LOCATION	SEC. 85, BLK. 2, B&M SUR.	SEC. 76, BLK. 2, G&M SUR.	SEC. 18, BLK. PMC,ELRR SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	06/13/28	03/04/36	05/27/39
SAMPLED	08/21/41	08/21/41	08/21/41
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2420	2710	2920
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	14000	7300	36400
COMPONENT, MOLE PCT			
METHANE	69.3	67.5	64.9
ETHANE	14.4	15.3	20.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.9	14.6	13.7
OXYGEN	0.2	0.7	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.9	0.3
HELIUM	0.94	0.98	0.62
HEATING VALUE*	960	958	1016
SPECIFIC GRAVITY	0.688	0.699	0.713

	INDEX 9511 SAMPLE 2875	INDEX 9512 SAMPLE 2861	INDEX 9513 SAMPLE 2920
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-7	CRAWFORD NO. A-1	BIVINS A-17
LOCATION	SEC. 71, BLK. 25,ELRR SUR.	SEC. 26, BLK. PMC,ELRR SUR.	SEC. 73, BLK. 2, C&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	09/10/28	06/29/28	01/28/36
SAMPLED	08/21/41	08/22/41	10/14/41
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2919	2550	2875
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	25800	12500	5000
COMPONENT, MOLE PCT			
METHANE	67.8	61.7	65.2
ETHANE	15.4	20.9	17.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.0	15.9	15.6
OXYGEN	0.3	0.6	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.1	0.3
HELIUM	0.96	0.84	1.02
HEATING VALUE*	983	1000	971
SPECIFIC GRAVITY	0.695	0.724	0.707

	INDEX 9514 SAMPLE 2921	INDEX 9515 SAMPLE 3283	INDEX 9516 SAMPLE 3284
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-28	THOMPSON NO. 8-2	SNEED NO. A-1
LOCATION	SEC. 23, BLK. PMC,ELRR SUR.	SEC. 17, BLK. 44, M&TC SUR.	SEC. 51, BLK. 6T, T&NO SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	11/25/38	--/--/00	--/--/00
SAMPLED	10/14/41	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2510	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	33880	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.4	66.2	68.4
ETHANE	18.2	20.2	20.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.0	12.6	10.6
OXYGEN	0.2	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.91	0.64	0.54
HEATING VALUE*	999	1033	1053
SPECIFIC GRAVITY	0.703	0.707	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9517 SAMPLE 3290	INDEX 9518 SAMPLE 3336	INDEX 9519 SAMPLE 3339
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. J-1	SNEED NO. C-1	FEE NO. A-1
LOCATION	SEC. 54, BLK. 46, H&TC SUR.	SEC. 46, BLK. 6T, T&NO SUR.	SEC. 76, BLK. 3, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.0	70.7	71.4
ETHANE	19.7	19.6	19.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.2	8.7	8.4
OXYGEN	0.3	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.50	0.47	0.46
HEATING VALUE*	1062	1067	1066
SPECIFIC GRAVITY	0.692	0.689	0.686

	INDEX 9520 SAMPLE 3350	INDEX 9521 SAMPLE 3842	INDEX 9522 SAMPLE 3918
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	THOMPSON NO. B-3	BROWN NO. 1	SNEED NO. 3-P
LOCATION	SEC. 75, BLK. 018, D&P SUR.	SEC. 4, BLK. 2, G&M SUR.	CENTER M-GEORGE SUR.
OWNER	CANADIAN RIVER GAS CO.	DAVID RUBIN	TEXOMA NATURAL GAS CO.
COMPLETED	--/--/00	--/--/00	01/12/35
SAMPLED	--/--/00	--/--/00	12/22/44
FORMATION	PERM-WICHITA-ALBANY	PERM-BIG LIME	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3333	2338
WELLHEAD PRESSURE,PSIG	NOT GIVEN	330	368
OPEN FLOW, MCFD	NOT GIVEN	18000	8620
COMPONENT, MOLE PCT			
METHANE	68.8	59.6	69.1
ETHANE	18.0	21.8	19.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.9	16.8	10.9
OXYGEN	0.4	0.6	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.6	0.3
HELIUM	0.72	0.62	0.47
HEATING VALUE*	1020	994	1044
SPECIFIC GRAVITY	0.694	0.738	0.695

	INDEX 9523 SAMPLE 3979	INDEX 9524 SAMPLE 3980	INDEX 9525 SAMPLE 4022
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	SNEED NO. 6-P	MOORE NO. 1-P	SNEED B-2
LOCATION	SEC. 38, BLK. GT, T&NO SUR.	SEC. 14, BLK. 44, H&TC SUR.	SEC. 27, BLK. G-T, T&NO SUR.
OWNER	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	10/04/35	03/27/35	--/--/00
SAMPLED	12/22/44	12/22/44	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2200	2971	3014
WELLHEAD PRESSURE,PSIG	485	417	NOT GIVEN
OPEN FLOW, MCFD	31000	9960	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.4	68.3	67.3
ETHANE	15.9	16.8	21.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.0	13.0	10.4
OXYGEN	0.0	0.0	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	1.3	0.1
HELIUM	0.38	0.61	0.49
HEATING VALUE*	988	993	1063
SPECIFIC GRAVITY	0.692	0.701	0.704

	INDEX 9526 SAMPLE 4074	INDEX 9527 SAMPLE 4075	INDEX 9528 SAMPLE 4639
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BAKER NO. 1	BAKER NO. 1	CRAWFORD NO. C-1
LOCATION	SEC. 39, BLK. D-18, D&P SUR.	SEC. 39, BLK. D-18, D&P SUR.	SEC. 24, BLK. PMC, EL&RR SUR
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	12/21/45	12/21/45	09/05/48
SAMPLED	--/--/00	--/--/00	12/08/48
FORMATION	PERM-L	PERM-L	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2670	2476
WELLHEAD PRESSURE,PSIG	399	399	341
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	65.7	69.3	61.4
ETHANE	18.0	15.9	21.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.1	13.8	16.1
OXYGEN	0.0	0.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.98	0.85	0.91
HEATING VALUE*	988	987	1000
SPECIFIC GRAVITY	0.704	0.687	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9529 SAMPLE 4641	INDEX 9530 SAMPLE 4781	INDEX 9531 SAMPLE 5195
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	COOPER NO. A-1	BIVINS A-55	BIVINS NO. A-82
LOCATION	SEC. 16, BLK. PMC, EL&RR SUR	SEC. 75, GUNTER SUR. B-2	SEC. 1, BLK. 1 EL&RR SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/28/48	--/--/00	--/--/00
SAMPLED	12/08/48	10/14/49	05/01/52
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2640	NOT GIVEN	2535
WELLHEAD PRESSURE,PSIG	341	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	24	NOT GIVEN	56000
COMPONENT, MOLE PCT			
METHANE	62.3	72.6	72.9
ETHANE	20.8	5.9	4.9
PROPANE	---	2.8	2.9
N-BUTANE	---	0.8	0.8
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.0	TRACE
NITROGEN	15.1	16.2	16.4
OXYGEN	0.6	0.1	TRACE
ARGON	---	0.1	0.1
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.4	0.4
HELIUM	0.92	0.98	0.97
HEATING VALUE*	1004	963	951
SPECIFIC GRAVITY	0.722	0.704	0.698

	INDEX 9532 SAMPLE 5286	INDEX 9533 SAMPLE 5325	INDEX 9534 SAMPLE 5327
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	RICHARD A NO. 1	SUNRAY NO. 1	LEWIS NO. 1
LOCATION	SEC. 172, BLK. 3-T, T&NO SUR.	SEC. 1, BLK. M-2, B.H. SUR.	SEC. 121, BLK. 3-T, T&NO SUR
OWNER	PHILLIPS PETROLEUM CO.	KERR-MCGEE CORP.	KERR-MCGEE CORP.
COMPLETED	07/12/51	12/30/52	04/05/19
SAMPLED	10/13/52	11/21/52	11/21/52
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2730	3310	3210
WELLHEAD PRESSURE,PSIG	214	415	383
OPEN FLOW, MCFD	105425	1580	865
COMPONENT, MOLE PCT			
METHANE	74.7	74.8	74.9
ETHANE	7.1	6.1	6.3
PROPANE	4.1	3.7	3.9
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.7	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	10.8	12.7	12.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.43	0.50	0.52
HEATING VALUE*	1078	1036	1045
SPECIFIC GRAVITY	0.718	0.708	0.708

	INDEX 9535 SAMPLE 5434	INDEX 9536 SAMPLE 5435	INDEX 9537 SAMPLE 9511
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	LEWIS NO. 1	SUNRAY NO. 1	LOCHTE
LOCATION	SEC. 121, BLK. 3-T, T&NO SUR.	SEC. 1, BLK. M2, HARWELL SUR.	SEC. 8, BLK. 1, PD SUR.
OWNER	KERR-MCGEE OIL IND., INC.	KERR-MCGEE CORP.	A. H. ROWLAND
COMPLETED	--/--/00	--/--/00	12/13/52
SAMPLED	03/30/53	03/30/53	07/02/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3210	3200	2740
WELLHEAD PRESSURE,PSIG	396	428	205
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3585
COMPONENT, MOLE PCT			
METHANE	75.3	75.0	77.6
ETHANE	6.2	6.1	6.6
PROPANE	3.8	3.7	3.9
N-BUTANE	1.0	1.0	1.1
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	12.8	12.4	9.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.51	0.54	0.40
HEATING VALUE*	1046	1043	1091
SPECIFIC GRAVITY	0.706	0.708	0.702

	INDEX 9538 SAMPLE 5605	INDEX 9539 SAMPLE 5762	INDEX 9540 SAMPLE 5765
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	A. NIELD NO. 2	BIVINS A-15	BIVINS A-17
LOCATION	SEC. 361, BLK. 44, H&TC SUR.	SEC. 75, BLK. 2, G&M SUR.	SEC. 73, BLK. 2, G&M SUR.
OWNER	MAGNOLIA PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/15/53	03/04/36	01/28/36
SAMPLED	04/06/54	01/26/55	01/26/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2850	2710	2875
WELLHEAD PRESSURE,PSIG	187	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	87061	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.0	73.2	72.7
ETHANE	6.8	5.1	5.0
PROPANE	4.3	2.7	2.6
N-BUTANE	1.4	0.7	0.8
ISOBUTANE	0.8	0.4	0.5
N-PENTANE	0.4	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.8	15.8	16.3
OXYGEN	0.9	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.41	0.97	1.01
HEATING VALUE*	1107	971	960
SPECIFIC GRAVITY	0.727	0.702	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9541 SAMPLE 5767	INDEX 9542 SAMPLE 5769	INDEX 9543 SAMPLE 6025
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-21	BIVINS A-7	MASTERSON A-5
LOCATION	SEC. 35, BLK. PMC, EL&RR SUR.	SEC. 7, BLK. 25, EL&RR SUR.	SEC. 76, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO,
COMPLETED	--/--/00	09/10/28	10/12/40
SAMPLED	01/26/55	01/26/55	02/10/56
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	-LIME & DOLOMITE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2645	NOT GIVEN	2465
WELLHEAD PRESSURE,PSIG	350	NOT GIVEN	277
OPEN FLOW, MCFD	30000	NOT GIVEN	12000
COMPONENT, MOLE PCT			
METHANE	74.7	72.5	73.6
ETHANE	5.6	5.0	8.2
PROPANE	3.2	2.9	3.7
N-BUTANE	1.0	0.8	0.9
ISOBUTANE	0.5	0.4	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.2	16.3	11.0
OXYGEN	TRACE	TRACE	1.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.1
HELIUM	0.77	1.01	0.15
HEATING VALUE*	1017	966	1053
SPECIFIC GRAVITY	0.702	0.706	0.713

	INDEX 9544 SAMPLE 6985	INDEX 9545 SAMPLE 7074	INDEX 9546 SAMPLE 7075
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	EMMA MCDOWELL NO. 2	KILLGORE A-15	KILLGORE A-16
LOCATION	SEC. 16, BLK. M-16	SEC. 13, BLK. PMC, EL&RR SUR	SEC. 31, BLK. 44, H&TC SUR.
OWNER	KERR-MCGEE OIL IND., INC.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/--/58	12/18/58	01/13/59
SAMPLED	03/25/59	05/14/59	05/04/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2662	3307
WELLHEAD PRESSURE,PSIG	NOT GIVEN	255	169
OPEN FLOW, MCFD	NOT GIVEN	7000	3900
COMPONENT, MOLE PCT			
METHANE	73.8	73.4	75.2
ETHANE	4.5	5.6	6.5
PROPANE	5.6	3.1	3.6
N-BUTANE	1.8	0.9	1.0
ISOBUTANE	0.9	0.5	0.7
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.5	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	7.5	14.3	11.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.6
HELIUM	0.30	0.80	0.50
HEATING VALUE*	1190	1001	1064
SPECIFIC GRAVITY	0.751	0.706	0.714

	INDEX 9547 SAMPLE 7087	INDEX 9548 SAMPLE 7092	INDEX 9549 SAMPLE 7293
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	HUCKABY NO. 2	ZOFFNESS NO. 2	READ A-7
LOCATION	A. DUBOIS SUR.	SEC. 55, BLK. GT, T&ND RRSUR	SEC. 1, BLK. M-3
OWNER	PHILLIPS PETROLEUM CO.	PANHANDLE EASTERN PIPELINE C	COLORADO INTERSTATE GAS CO.
COMPLETED	04/21/59	06/20/31	09/10/59
SAMPLED	06/02/59	06/05/59	12/01/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2962	2100	2165
WELLHEAD PRESSURE,PSIG	1214	1214	205
OPEN FLOW, MCFD	4100	74435	33000
COMPONENT, MOLE PCT			
METHANE	77.7	76.6	77.0
ETHANE	6.5	6.6	6.1
PROPANE	4.4	3.6	3.7
N-BUTANE	1.4	1.2	1.3
ISOBUTANE	0.7	1.0	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	7.8	9.4	9.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.40	0.40	0.40
HEATING VALUE*	1125	1107	1094
SPECIFIC GRAVITY	0.712	0.718	0.709

	INDEX 9550 SAMPLE 7352	INDEX 9551 SAMPLE 7396	INDEX 9552 SAMPLE 7397
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	SNEED NO. 1-20	CRAWFORD D-3	CRAWFORD C-2
LOCATION	SEC. 23, BLK. 6, T&NO SUR.	SEC. 32, BLK. PMC, EL&RR SUR	SEC. 32, BLK. PMC, EL&RR SUR
OWNER	PANHANDLE EASTERN PIPELINE C	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/15/39	08/09/58	08/03/59
SAMPLED	01/19/60	02/16/60	02/16/60
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2690	3209	2945
WELLHEAD PRESSURE,PSIG	177	199	2203
OPEN FLOW, MCFD	4232	7700	16200
COMPONENT, MOLE PCT			
METHANE	76.1	79.3	73.5
ETHANE	6.5	6.3	5.9
PROPANE	4.4	3.5	3.6
N-BUTANE	1.2	1.1	1.0
ISOBUTANE	0.7	0.7	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.7	12.4	12.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.7
HELIUM	0.40	0.60	0.60
HEATING VALUE*	1106	1057	1033
SPECIFIC GRAVITY	0.717	0.718	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9553 SAMPLE 7398		INDEX 9554 SAMPLE 8200		INDEX 9555 SAMPLE 8417	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	KILLGORE A-16		WARRICK NO. 2-R		SNEED D-2	
LOCATION	SEC. 31, BLK. 44, H&TC SUR.		SEC. 92, BLK. 46, H&TC SUR.		SEC. 42, BLK. 6-T, T&NO SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	01/13/59		--/--/00		08/12/61	
SAMPLED	02/16/60		09/13/61		02/07/62	
FORMATION	PERM-WICHITA-ALBANY		PERM-TUBB		PERM-WICHITA-ALBANY&GR. WASH	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3307		NOT GIVEN		2400	
WELLHEAD PRESSURE,PSIG	169		3		186	
OPEN FLOW, MCFD	3900		NOT GIVEN		8600	
COMPONENT, MOLE PCT						
METHANE	74.9		82.0		77.8	
ETHANE	6.2		6.4		6.5	
PROPANE	4.0		2.4		4.0	
N-BUTANE	1.1		0.5		1.3	
ISOBUTANE	0.5		0.4		0.7	
N-PENTANE	0.2		0.1		0.3	
ISOPENTANE	0.3		0.1		0.4	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	11.5		7.7		8.0	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.3	
CARBON DIOXIDE	0.8		0.1		0.37	
HELIUM	0.50		0.15		0.37	
HEATING VALUE*	1063		1052		1120	
SPECIFIC GRAVITY	0.715		0.662		0.712	

	INDEX 9556 SAMPLE 8849		INDEX 9557 SAMPLE 9065		INDEX 9558 SAMPLE 9066	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	MASTERSON A-5		KILLGORE B-1		KILLGORE B-1	
LOCATION	SEC. 14, BLK. B-10,EL&RR SUR		SEC. 22, BLK. PMC,EL&RR SUR.		SEC. 22, BLK. PMC,EL&RR SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	09/04/62		--/--/00		--/--/00	
SAMPLED	02/07/63		08/16/63		08/16/63	
FORMATION	PERM-GRANITE WASH		-BRODERHEAD		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2080		NOT GIVEN		2490	
WELLHEAD PRESSURE,PSIG	189		216		216	
OPEN FLOW, MCFD	13000		NOT GIVEN		30100	
COMPONENT, MOLE PCT						
METHANE	75.9		78.4		73.8	
ETHANE	6.4		6.7		5.8	
PROPANE	4.2		3.9		3.3	
N-BUTANE	1.5		1.6		1.0	
ISOBUTANE	0.5		0.7		0.5	
N-PENTANE	0.4		0.4		0.2	
ISOPENTANE	0.3		0.7		0.3	
CYCLOPENTANE	0.1		0.3		0.1	
HEXANES PLUS	0.3		0.6		0.2	
NITROGEN	9.2		13.5		13.6	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.3		0.1	
HELIUM	0.50		0.80		0.90	
HEATING VALUE*	1109		1098		1026	
SPECIFIC GRAVITY	0.720		0.757		0.711	

	INDEX 9559 SAMPLE 9116		INDEX 9560 SAMPLE 9117		INDEX 9561 SAMPLE 9217	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	FEE NO. 1-R		SNEED NO. 2R		STORM NO. 1	
LOCATION	SEC. 76, BLK. 3, G&M SUR.		SEC. 5, BLK. B-10,EL&RR SUR		SEC. 13, BLK. PMC, EL&RR SUR	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		KAITEX OIL CO.	
COMPLETED	10/17/63		10/14/63		--/--/00	
SAMPLED	10/17/63		10/14/63		01/17/64	
FORMATION	PERM-TUBB		PERM-TUBB		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1164		1312		3383	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		138	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		857	
COMPONENT, MOLE PCT						
METHANE	73.9		76.4		73.0	
ETHANE	6.0		6.2		6.5	
PROPANE	3.4		3.7		3.7	
N-BUTANE	1.3		1.5		1.4	
ISOBUTANE	0.5		0.3		0.4	
N-PENTANE	0.3		0.3		0.3	
ISOPENTANE	0.4		0.5		0.4	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.3	
NITROGEN	12.8		10.1		12.3	
OXYGEN	TRACE		TRACE		0.0	
ARGON	0.1		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.2		0.9	
HELIUM	0.40		0.50		0.60	
HEATING VALUE*	1040		1090		1062	
SPECIFIC GRAVITY	0.721		0.713		0.730	

	INDEX 9562 SAMPLE 10673		INDEX 9563 SAMPLE 10674		INDEX 9564 SAMPLE 10675	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W		PANHANDLE W		PANHANDLE W	
WELL NAME	KILLGORE B-1		BIVINS A-15		SEAY A-1	
LOCATION	SEC. 22, BLK. PMC, EL&RR SUR		SEC. 76, BLK. 2, G&M SUR.		SEC. 85, BLK. 2, G&M SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	06/14/41		03/04/36		06/15/28	
SAMPLED	07/21/66		07/21/66		07/21/66	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	2665		2710		2420	
WELLHEAD PRESSURE,PSIG	187		206		191	
OPEN FLOW, MCFD	9198		1522		983	
COMPONENT, MOLE PCT						
METHANE	72.0		71.7		71.0	
ETHANE	6.2		5.4		6.2	
PROPANE	3.7		3.2		3.9	
N-BUTANE	1.2		1.0		1.3	
ISOBUTANE	0.5		0.5		0.6	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.5		0.4		0.5	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	14.3		16.0		15.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.3		0.1	
HELIUM	0.88		1.00		0.96	
HEATING VALUE*	1038		992		1040	
SPECIFIC GRAVITY	0.730		0.720		0.730	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9565 SAMPLE 10676	INDEX 9566 SAMPLE 10677	INDEX 9567 SAMPLE 11877
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	KILLGORE A-16	KILLGORE A-1	KILLGORE A-17
LOCATION	SEC. 31, BLK. 44, H&TC SUR.	SEC. 18, BLK. PMC&RR SUR.	SEC. 21, BLK. PMC,EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/13/59	05/27/39	05/13/69
SAMPLED	07/21/66	07/21/66	05/14/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3307	2920	3259
WELLHEAD PRESSURE,PSIG	113	124	125
OPEN FLOW, MCFD	1319	2319	1980
COMPONENT, MOLE PCT			
METHANE	73.6	73.1	72.1
ETHANE	6.7	6.4	6.0
PROPANE	4.2	4.0	3.2
N-BUTANE	1.3	1.3	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	11.2	12.3	14.8
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.8
HELIUM	0.50	0.65	0.68
HEATING VALUE*	1088	1067	1003
SPECIFIC GRAVITY	0.730	0.730	0.723

	INDEX 9568 SAMPLE 11894	INDEX 9569 SAMPLE 13260	INDEX 9570 SAMPLE 13264
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	KILLGORE A-17	BIVINS A-172	SEAY A-2
LOCATION	SEC. 21, BLK. PMC,EL&RR SUR.	SEC. 1, BLK.N-1,BOULDIN SUR.	SEC. 85, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/10/69	05/04/72	04/24/72
SAMPLED	05/10/69	05/04/72	04/24/72
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3489	2703	2408
WELLHEAD PRESSURE,PSIG	100	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	500	7570	10150
COMPONENT, MOLE PCT			
METHANE	73.2	72.7	72.7
ETHANE	6.1	5.6	5.6
PROPANE	3.2	3.2	3.3
N-BUTANE	1.1	0.9	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	14.1	15.2	15.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.72	0.59	1.00
HEATING VALUE*	1024	994	996
SPECIFIC GRAVITY	0.717	0.706	0.706

	INDEX 9571 SAMPLE 13662	INDEX 9572 SAMPLE 5763	INDEX 9573 SAMPLE 6012
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	KILLGORE A-19	BIVINS A-2R	MASTERSON A-5
LOCATION	SEC. 12, BLK. PMC, EL&RR SUR.	SEC. 13, BLK. D-18,D&P SUR.	SEC. 76, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	07/16/24	10/12/40
SAMPLED	06/11/73	01/26/55	01/31/56
FORMATION	-15700 FT. SAND	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	1865	1850
WELLHEAD PRESSURE,PSIG	81	NOT GIVEN	343
OPEN FLOW, MCFD	3840	NOT GIVEN	12000
COMPONENT, MOLE PCT			
METHANE	74.8	79.2	78.9
ETHANE	5.8	8.6	8.5
PROPANE	3.5	5.4	3.7
N-BUTANE	1.0	0.8	0.9
ISOBUTANE	0.6	0.8	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	12.7	6.6	6.5
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.3	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.65	0.17	0.16
HEATING VALUE*	1035	1111	1113
SPECIFIC GRAVITY	0.710	0.688	0.688

	INDEX 9574 SAMPLE 7318	INDEX 9575 SAMPLE 7324	INDEX 9576 SAMPLE 7605
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	J. T. SNEED NO. 103	J. T. SNEED NO. 101	SHELTON A-9
LOCATION	SEC. 15, BLK. M, N.JONES SUR	SEC. 54, BLK. 3, G&M SUR.	SEC. 51, BLK. 47, H&TC SUR.
OWNER	NATURAL GAS PIPELINE CO.	NATURAL GAS PIPELINE CO.	AMARILLO OIL CO.
COMPLETED	11/16/59	11/16/59	05/25/60
SAMPLED	12/29/59	12/29/59	07/18/60
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1540	1575	1539
WELLHEAD PRESSURE,PSIG	380	321	411
OPEN FLOW, MCFD	3100	745	3900
COMPONENT, MOLE PCT			
METHANE	81.7	81.3	80.8
ETHANE	6.9	6.8	7.1
PROPANE	2.8	2.6	3.0
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.1	7.7	7.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1072	1060	1072
SPECIFIC GRAVITY	0.668	0.667	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9577 SAMPLE 7606		INDEX 9578 SAMPLE 7796		INDEX 9579 SAMPLE 7831	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	SHELTON A-10		BIWINS A-1R		MASTERSON NO. 2R	
LOCATION	SEC. 53, BLK. 3, G&M SUR.		SEC. 93, BLK. 46, H&TC SUR.		SEC. 85, BLK. D-18, D&P SUR.	
OWNER	AMARILLO OIL CO.		ANADARKO PRODUCTION CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	05/29/60		11/--/60		07/29/60	
SAMPLED	07/18/60		12/13/60		01/18/61	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1579		1873		1662	
WELLHEAD PRESSURE,PSIG	399		394		364	
OPEN FLOW, MCFD	6200		8700		2796	
COMPONENT, MOLE PCT						
METHANE	80.7		82.1		79.8	
ETHANE	7.2		6.6		8.3	
PROPANE	3.0		1.6		3.4	
N-BUTANE	0.8		0.5		0.8	
ISOBUTANE	0.1		0.4		0.5	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.2		0.1		0.1	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	7.1		6.2		6.2	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.3		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.2	
HELIUM	0.20		0.20		0.20	
HEATING VALUE*	1074		1035		1103	
SPECIFIC GRAVITY	0.669		0.656		0.681	

	INDEX 9580 SAMPLE 7832		INDEX 9581 SAMPLE 7833		INDEX 9582 SAMPLE 7864	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	MASTERSON NO. 1R		MASTERSON NO. 3R		SHELTON A-14R	
LOCATION	SEC. 76, BLK. D-18, D&P SUR.		SEC. 86, BLK. D-18, D&P SUR.		SEC. 50, BLK. 47, H&TC SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		AMARILLO OIL CO.	
COMPLETED	08/21/60		07/15/60		02/14/61	
SAMPLED	01/18/61		01/18/61		02/14/61	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1936		1566		1476	
WELLHEAD PRESSURE,PSIG	362		385		394	
OPEN FLOW, MCFD	2816		5374		6700	
COMPONENT, MOLE PCT						
METHANE	78.5		79.5		81.5	
ETHANE	9.4		8.2		7.0	
PROPANE	4.0		3.4		2.7	
N-BUTANE	0.9		0.9		0.6	
ISOBUTANE	0.6		0.6		0.4	
N-PENTANE	0.2		0.2		0.1	
ISOPENTANE	0.1		0.2		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.1	
NITROGEN	5.6		6.5		7.4	
OXYGEN	TRACE		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.3		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.4		TRACE	
HELIUM	0.20		0.20		0.10	
HEATING VALUE*	1142		1114		1064	
SPECIFIC GRAVITY	0.695		0.691		0.665	

	INDEX 9583 SAMPLE 7865		INDEX 9584 SAMPLE 7868		INDEX 9585 SAMPLE 7874	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	SHELTON A-11R		POLLY NO. 2		J. T. SNEED NO. 130	
LOCATION	SEC. 53, BLK. 3, G&M SUR.		SEC. 2, BLK. J.J. POIT. SUR.		SEC. 1, BLK. B-12, D&PRR SUR	
OWNER	AMARILLO OIL CO.		PHILLIPS PETROLEUM CO.		NATURAL GAS PIPELINE CO.	
COMPLETED	02/14/61		01/20/61		12/29/60	
SAMPLED	02/14/61		02/22/61		02/28/61	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1479		1689		1549	
WELLHEAD PRESSURE,PSIG	398		376		400	
OPEN FLOW, MCFD	11000		13000		3600	
COMPONENT, MOLE PCT						
METHANE	81.5		81.2		81.9	
ETHANE	7.1		7.0		7.5	
PROPANE	2.8		2.6		3.2	
N-BUTANE	0.6		0.6		0.7	
ISOBUTANE	0.3		0.4		0.4	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.1		0.1		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	7.2		7.6		5.8	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		TRACE	
HELIUM	0.20		0.10		0.20	
HEATING VALUE*	1070		1063		1107	
SPECIFIC GRAVITY	0.666		0.668		0.673	

	INDEX 9586 SAMPLE 7875		INDEX 9587 SAMPLE 7876		INDEX 9588 SAMPLE 7877	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	MOORE		MOORE		MOORE	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	J. T. SNEED NO. 124		J. T. SNEED NO. 121		J. T. SNEED NO. 126	
LOCATION	SEC. 5, BLK. B-12, D&PRR SUR		SEC. 1, TTRR CO. SUR.		C. RAGSDALE SUR.	
OWNER	NATURAL GAS PIPELINE CO.		NATURAL GAS PIPELINE CO.		NATURAL GAS PIPELINE CO.	
COMPLETED	--/--/00		--/--/00		12/23/60	
SAMPLED	02/28/61		02/28/61		02/28/61	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1714		1660		1572	
WELLHEAD PRESSURE,PSIG	425		355		406	
OPEN FLOW, MCFD	5900		2900		2700	
COMPONENT, MOLE PCT						
METHANE	80.9		80.6		81.4	
ETHANE	7.6		7.8		7.3	
PROPANE	3.2		3.3		2.9	
N-BUTANE	0.7		0.8		0.6	
ISOBUTANE	0.4		0.4		0.4	
N-PENTANE	0.1		0.1		TRACE	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	6.5		6.5		6.9	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.10		0.20		0.10	
HEATING VALUE*	1090		1096		1074	
SPECIFIC GRAVITY	0.672		0.676		0.666	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9589 SAMPLE 7879	INDEX 9590 SAMPLE 7896	INDEX 9591 SAMPLE 7897
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	LATIN NO. 2	SHELTON A-13R	SHELTON A-12R
LOCATION	SEC. 1, J. POITEVENT SUR.	SEC. 52, BLK. 47, H&TC SUR.	SEC. 52, BLK. 3, G&M SUR.
OWNER	PHILLIPS PETROLEUM CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	12/19/60	02/17/61	02/17/61
SAMPLED	03/02/61	02/17/61	02/17/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1675	1516	1497
WELLHEAD PRESSURE,PSIG	346	392	399
OPEN FLOW, MCFD	4300	19500	4123
COMPONENT, MOLE PCT			
METHANE	81.4	81.2	81.7
ETHANE	6.9	7.0	8.3
PROPANE	2.7	2.6	2.5
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.6	7.8	5.9
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1055	1059	1085
SPECIFIC GRAVITY	0.662	0.669	0.665

	INDEX 9592 SAMPLE 7899	INDEX 9593 SAMPLE 7900	INDEX 9594 SAMPLE 8387
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	STATE A NO. 2-R	STATE A 1R	CRAWFORD NO. 1R
LOCATION	SEC. 95, BLK. 46, H&TC SUR.	SEC. 96, BLK. 46, H&TC SUR.	SEC. 24, BLK. PMC, EL&RR SUR
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	03/11/61	03/11/61	07/22/61
SAMPLED	03/11/61	03/11/61	01/31/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1270	1206	1837
WELLHEAD PRESSURE,PSIG	375	378	353
OPEN FLOW, MCFD	9200	5850	9800
COMPONENT, MOLE PCT			
METHANE	81.6	81.9	79.6
ETHANE	6.8	6.7	8.2
PROPANE	2.5	2.5	3.7
N-BUTANE	0.6	0.5	0.8
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.6	7.6	6.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.16
HEATING VALUE*	1061	1051	1112
SPECIFIC GRAVITY	0.667	0.661	0.684

	INDEX 9595 SAMPLE 8456	INDEX 9596 SAMPLE 8480	INDEX 9597 SAMPLE 8482
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	WARRICK NO. 2 R	SNEED B-9R	STATE A-3R
LOCATION	SEC. 92, BLK. 46, H&TC SUR.	SEC. 4, TTRR SUR.	SEC. 92, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.
COMPLETED	10/31/61	05/12/61	04/19/61
SAMPLED	03/14/62	03/21/62	03/21/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1476	1713	1303
WELLHEAD PRESSURE,PSIG	372	410	409
OPEN FLOW, MCFD	7000	1275	5576
COMPONENT, MOLE PCT			
METHANE	81.1	81.7	82.9
ETHANE	6.5	6.7	6.2
PROPANE	2.6	2.7	2.3
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.2	7.4	7.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.14	0.17	0.17
HEATING VALUE*	1050	1063	1055
SPECIFIC GRAVITY	0.666	0.666	0.657

	INDEX 9598 SAMPLE 8847	INDEX 9599 SAMPLE 8852	INDEX 9600 SAMPLE 8857
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	THOMPSON NO. 1R	SNEED NO. 1R	BIVINS NO. 9R
LOCATION	SEC. 26, BLK. B-26,EL&RR SUR	YR- T. MARY S. JOHNSON SUR.	SEC. 93, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/17/62	09/27/62	08/27/63
SAMPLED	02/27/63	02/27/63	02/14/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1725	1577	1464
WELLHEAD PRESSURE,PSIG	380	363	373
OPEN FLOW, MCFD	2050	9100	16000
COMPONENT, MOLE PCT			
METHANE	80.5	81.8	82.5
ETHANE	7.8	6.5	6.5
PROPANE	3.5	2.5	2.5
N-BUTANE	1.1	0.7	0.8
ISOBUTANE	0.2	0.1	TRACE
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.2	7.5	7.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1109	1055	1066
SPECIFIC GRAVITY	0.682	0.663	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9601 SAMPLE 9296	INDEX 9602 SAMPLE 9298	INDEX 9603 SAMPLE 9300
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	SNEED NO. 2R	WARRICK NO. 4R	BIVINS NO. 19R
LOCATION	SEC. 5, BLK. B-10, ELRR SUR.	SEC. 94, BLK. 46, H&TC SUR.	SEC. 4, W.T. PALMER SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/15/63	09/24/63	09/26/63
SAMPLED	04/14/64	04/14/64	04/14/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1764	1548	1534
WELLHEAD PRESSURE,PSIG	287	344	341
OPEN FLOW, MCFD	3300	17200	18000
COMPONENT, MOLE PCT			
METHANE	80.4	82.2	79.9
ETHANE	8.2	6.6	6.9
PROPANE	3.5	2.6	2.4
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.5	0.3	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.0	7.2	8.9
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.15	0.16	0.14
HEATING VALUE*	1110	1062	1044
SPECIFIC GRAVITY	0.681	0.662	0.673

	INDEX 9604 SAMPLE 9755	INDEX 9605 SAMPLE 9759	INDEX 9606 SAMPLE 10028
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	FEE 2R	SNEED 3R	THOMPSON 2R
LOCATION	SEC. 51, BLK 3, G&M SUR.	MORACE HALL SUR.	SEC. 28, BLK B-10, EL & RR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/25/64	08/25/64	07/11/65
SAMPLED	02/18/65	02/18/65	08/05/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1552	1729	1871
WELLHEAD PRESSURE,PSIG	346	384	434
OPEN FLOW, MCFD	2450	4100	1950
COMPONENT, MOLE PCT			
METHANE	80.9	79.4	80.4
ETHANE	6.8	8.0	7.8
PROPANE	2.7	3.8	3.6
N-BUTANE	0.7	0.9	0.8
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.9	6.6	6.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.14	0.16
HEATING VALUE*	1064	1115	1106
SPECIFIC GRAVITY	0.672	0.692	0.682

	INDEX 9607 SAMPLE 10030	INDEX 9608 SAMPLE 10698	INDEX 9609 SAMPLE 11043
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	FEE 3R	BIVINS 24R	SNEED 4R
LOCATION	SEC. 53, BLK 47, HETC SUR.	SEC. 25, BLK. PMC, EL&RR SUR	SEC. 51, BLK. 6-T,T&NO SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/11/65	08/01/66	07/21/67
SAMPLED	08/05/65	08/19/66	07/27/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1492	1925	1777
WELLHEAD PRESSURE,PSIG	285	328	453
OPEN FLOW, MCFD	2450	9900	4800
COMPONENT, MOLE PCT			
METHANE	81.5	77.6	79.6
ETHANE	6.6	8.5	8.1
PROPANE	2.6	4.0	3.5
N-BUTANE	0.6	0.9	0.8
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.7	7.6	6.8
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.18	0.15	0.15
HEATING VALUE*	1060	1107	1105
SPECIFIC GRAVITY	0.667	0.700	0.687

	INDEX 9610 SAMPLE 12894	INDEX 9611 SAMPLE 13675	INDEX 9612 SAMPLE 2302
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOTLEY
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	NOT GIVEN
WELL NAME	BIVINS 47R	KILLGORE 1 R	NOT GIVEN
LOCATION	SEC. 23, BLK. PMC, EL&RR SUR	SEC. 18, BLK PMC, EL&RR SUR.	SEC. 40, BLK. B
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	MERRY BROS. & PERINI, INC.
COMPLETED	07/08/71	--/--/--	--/--/00
SAMPLED	07/09/71	08/08/73	03/01/31
FORMATION	PERM-RED CAVE	PERM-RED CAVE	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	435
DEPTH, FEET	1867	NOT GIVEN	1200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	589	750
OPEN FLOW, MCFD	1500	2390	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.7	80.8	0.0
ETHANE	9.1	7.4	0.0
PROPANE	4.7	3.6	---
N-BUTANE	0.9	0.8	---
ISOBUTANE	0.8	0.5	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	5.2	6.2	99.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.15	0.20	0.04
HEATING VALUE*	1157	1110	0
SPECIFIC GRAVITY	0.701	0.683	0.969

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9613 SAMPLE 6879	INDEX 9614 SAMPLE 12541	INDEX 9615 SAMPLE 12546
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOTLEY	NACOGDOCHES	NACOGDOCHES
FIELD	NOT GIVEN	DOUGLASS	DOUGLASS
WELL NAME	D. E. BIRNIE NO. 1	DOUGLASS GAS UNIT 6 NO. 1	DOUGLASS GAS UNIT 3 NO. 1
LOCATION	SEC. 1, BLK. GP, C&MRR SUR.	COT & COMB SUR.	MIGUEL SACCO SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/03/58	09/24/64	12/11/52
SAMPLED	11/24/58	11/10/70	11/10/70
FORMATION	PENN-STRAWN U	CRET-RODESSA	CRET-PETTIT
GEOLOGIC PROVINCE CODE	435	260	260
DEPTH, FEET	8517	8100	9170
WELLHEAD PRESSURE,PSIG	2089	3460	3656
OPEN FLOW, MCFD	1	95500	3600
COMPONENT, MOLE PCT			
METHANE	71.3	97.5	97.4
ETHANE	15.0	0.5	0.6
PROPANE	6.7	0.2	0.2
N-BUTANE	1.3	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	4.8	0.4	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.4	1.2
HELIUM	0.10	0.01	0.01
HEATING VALUE*	1250	1002	1003
SPECIFIC GRAVITY	0.754	0.574	0.572

	INDEX 9616 SAMPLE 13541	INDEX 9617 SAMPLE 17703	INDEX 9618 SAMPLE 4826
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NACOGDOCHES	NACOGDOCHES	NACOGDOCHES
FIELD	DOUGLASS	NOT GIVEN	TRAWICK
WELL NAME	CROSSMAN "A" NO. 1	ETTA BOZELL NO. 1	THURMAN CRAWFORD NO. 1
LOCATION	JEFFERSON WILSON SUR. A-59	JOHN H. HYDE JR., SUR. A-259	NOT GIVEN
OWNER	INEXCO OIL CO.	PRICHARD ENGINEERING	HUMBLE OIL & REFINING CO.
COMPLETED	10/05/72	--/--/00	05/29/49
SAMPLED	02/--/73	06/08/85	11/29/49
FORMATION	CRET-PETTIT U	CRET-TRAVIS PEAK	CRET-PETTIT L
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8972	10842	7498
WELLHEAD PRESSURE,PSIG	3874	NOT GIVEN	3984
OPEN FLOW, MCFD	2500	1729	42000
COMPONENT, MOLE PCT			
METHANE	96.4	97.5	94.8
ETHANE	1.1	0.3	1.3
PROPANE	0.3	0.1	0.3
N-BUTANE	0.1	0.0	0.2
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.5	0.7	2.0
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.4	1.4	1.0
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1016	996	1012
SPECIFIC GRAVITY	0.584	0.575	0.589

	INDEX 9619 SAMPLE 9189	INDEX 9620 SAMPLE 12539	INDEX 9621 SAMPLE 12543
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NACOGDOCHES	NACOGDOCHES	NACOGDOCHES
FIELD	TRAWICK	TRAWICK	TRAWICK
WELL NAME	TRAWICK G.U. NO. 6	TRAWICK G.U. 6 NO. 2	TRAWICK G.U. 6 NO. 3
LOCATION	NOT GIVEN	LUIS SANCHEZ SUR.	LUIS SANCHEZ SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/24/62	11/19/62	01/29/66
SAMPLED	11/24/63	11/10/70	11/10/70
FORMATION	JURA-	JURA-	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	11840	11820	8576
WELLHEAD PRESSURE,PSIG	5609	4158	3580
OPEN FLOW, MCFD	2502	6000	5000
COMPONENT, MOLE PCT			
METHANE	96.9	95.5	95.3
ETHANE	1.3	1.4	2.6
PROPANE	0.4	0.2	0.6
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	0.1	0.7	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.5	0.9
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1015	1028	1028
SPECIFIC GRAVITY	0.576	0.592	0.584

	INDEX 9622 SAMPLE 12544	INDEX 9623 SAMPLE 12547	INDEX 9624 SAMPLE 4652
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NACOGDOCHES	NACOGDOCHES	NACOGDOCHES
FIELD	TRAWICK	TRAWICK	WILDCAT
WELL NAME	TRAWICK G.U. 1 NO. 1	TRAWICK G.U. 1 NO. 1	SARAH B. ADAMS NO. 1
LOCATION	ZIMRI BENNETT SUR.	ZIMRI BENNETT SUR.	HARRISON-GRAHAM SUR. A-222
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	ARKANSAS FUEL OIL CO.
COMPLETED	05/29/49	09/29/64	11/04/48
SAMPLED	11/10/70	11/10/70	01/07/49
FORMATION	CRET-PETTIT	CRET-RODESSA	CRET-PETTIT L
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	NOT GIVEN	6800	7109
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2940	3185
OPEN FLOW, MCFD	NOT GIVEN	7400	1300
COMPONENT, MOLE PCT			
METHANE	97.2	97.1	80.2
ETHANE	0.7	0.7	16.5
PROPANE	0.3	0.3	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.6	0.7	2.2
OXYGEN	0.0	0.0	0.3
ARGON	0.0	0.0	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.1	1.1	0.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1005	1004	1108
SPECIFIC GRAVITY	0.574	0.574	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9625 SAMPLE 4189	INDEX 9626 SAMPLE 12431	INDEX 9627 SAMPLE 1091
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NAVARRO	NAVARRO	NAVARRO
FIELD	ANGUS	NAN-SU-GAIL	OLD RICHLAND
WELL NAME	J. L. JACKSON NO. 2	STEWART HUNT NO. 1	ERNEST SWANK NO. 1
LOCATION	JOHN MCNEAL SUR.	20 MI. SE CORSICANA	WM. HUDSON SUR.
OWNER	TEX HARVEY OIL CO.	DELTA DRILLING CO.	SUN OIL CO.
COMPLETED	08/25/46	10/17/61	01/--/25
SAMPLED	11/13/46	10/--/70	07/11/25
FORMATION	CRET-U	CRET-SUB-CLARKSVILLE	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	1375	3356	2979
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	770
OPEN FLOW, MCFD	25000	5600	6976
COMPONENT, MOLE PCT			
METHANE	88.0	77.8	84.7
ETHANE	11.3	8.0	12.6
PROPANE	---	6.8	---
N-BUTANE	---	2.3	---
ISOBUTANE	---	2.6	---
N-PENTANE	---	0.9	---
ISOPENTANE	---	0.4	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.7	---
NITROGEN	0.1	0.6	1.7
OXYGEN	0.1	TRACE	0.5
ARGON	---	0.0	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.1	0.5
HELIUM	0.03	0.02	0.05
HEATING VALUE*	1094	1382	1084
SPECIFIC GRAVITY	0.616	0.706	0.631

	INDEX 9628 SAMPLE 931	INDEX 9629 SAMPLE 12430	INDEX 9630 SAMPLE 11672
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NAVARRO	NAVARRO	NAVARRO
FIELD	POWELL	REKA	ROUNDHOUSE
WELL NAME	W. J. MCKIE NO. 3	ANDERSON NO. 1	J. B. FORTSON NO. 1
LOCATION	NOT GIVEN	J. W. ORR SUR. A-625	R. CARADINE SUR. A-139
OWNER	GULF PRODUCTION CO.	DELTA DRILLING CO.	TEXACO INC.
COMPLETED	--/--/00	05/03/69	10/25/67
SAMPLED	09/20/24	--/--/00	10/23/68
FORMATION	NOT GIVEN	JURA-COTTON VALLEY	JURA-HAYNESVILLE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	3060	10170	10342
WELLHEAD PRESSURE,PSIG	125	2450	4300
OPEN FLOW, MCFD	600000	6750	17000
COMPONENT, MOLE PCT			
METHANE	83.8	81.7	88.8
ETHANE	14.1	8.8	5.9
PROPANE	---	3.9	1.7
N-BUTANE	---	1.0	0.6
ISOBUTANE	---	1.2	0.5
N-PENTANE	---	0.6	0.2
ISOPENTANE	---	0.8	0.2
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.6	0.3
NITROGEN	1.6	0.9	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	1.2	1.3
HELIUM	0.06	0.02	0.02
HEATING VALUE*	1102	1221	1116
SPECIFIC GRAVITY	0.634	0.714	0.647

	INDEX 9631 SAMPLE 15153	INDEX 9632 SAMPLE 5256	INDEX 9633 SAMPLE 13215
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NEWTON
FIELD	BLUE MARSH	CALL	CAMPDOWN E
WELL NAME	B. E. QUINN NO. 3	J. H. KURTH, JR. NO. 1	C. A. DYER A NO. 1
LOCATION	GB&CNRR SUR. A-562	NOT GIVEN	4 MI. NW DEWEYVILLE
OWNER	NORTH CENTRAL OIL CORP.	HOUSTON OIL CO. OF TEXAS	BIG 6 DRILLING CO.
COMPLETED	04/28/76	03/06/52	08/15/71
SAMPLED	11/15/77	06/21/52	05/19/72
FORMATION	OLIG-FRIO	EOCE-YEGUA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3882	7462	7195
WELLHEAD PRESSURE,PSIG	500	3262	2350
OPEN FLOW, MCFD	108000	21000	10650
COMPONENT, MOLE PCT			
METHANE	98.5	84.7	93.3
ETHANE	0.2	5.5	4.1
PROPANE	0.1	4.3	1.0
N-BUTANE	0.0	0.9	0.2
ISOBUTANE	TRACE	1.1	0.4
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.8	2.5	0.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1009	1161	1092
SPECIFIC GRAVITY	0.565	0.681	0.608

	INDEX 9634 SAMPLE 13216	INDEX 9635 SAMPLE 12416	INDEX 9636 SAMPLE 13554
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NEWTON
FIELD	CAMPDOWN E	CYPRESS CREEK	DEVIL'S POCKET
WELL NAME	DYER A NO. 1	HANKAMER NO. 1	E. C. HANKAMER NO. 1
LOCATION	4 MI. NW DEWEYVILLE	W. A. SMITH SUR. 32	MT&B RR SUR. 31, A-196
OWNER	BIG 6 DRILLING CO.	BRIGHT & SCHIFF	BUTTES GAS & OIL CO.
COMPLETED	08/15/71	09/15/70	01/15/71
SAMPLED	05/19/72	07/--/70	03/01/73
FORMATION	OLIG-FRIO	EOCE-YEGUA Y-7	EOCE-YEGUA Y-3
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6699	8620	8050
WELLHEAD PRESSURE,PSIG	2500	2784	2790
OPEN FLOW, MCFD	6600	12250	11200
COMPONENT, MOLE PCT			
METHANE	92.6	86.6	89.1
ETHANE	3.4	6.0	3.5
PROPANE	1.6	3.4	2.4
N-BUTANE	0.5	0.7	0.9
ISOBUTANE	0.5	1.1	1.1
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	0.2	0.2	0.6
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.4	0.4
NITROGEN	0.5	0.5	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1105	1183	1162
SPECIFIC GRAVITY	0.619	0.673	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 9637 SAMPLE 13555	INDEX 9638 SAMPLE 4467	INDEX 9639 SAMPLE 13748
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NEWTON
FIELD	DEVIL'S POCKET	GIST	GIST
WELL NAME	E. C. HANKAMER NO. 2	HARTBURG LUMBER CO. NO. 1	B. E. QUINN ET AL. NO. 6
LOCATION	HT&B RR SUR. 31	SEC. 3, ABST 235, HT&B SUR.	A.W. WYMAN SUR. A-1026
OWNER	BUTTES GAS & OIL CO.	STANDARD OIL CO. OF TEXAS	CHEVRON OIL CO.
COMPLETED	08/26/71	11/13/47	03/17/72
SAMPLED	03/01/73	04/21/48	10/09/73
FORMATION	EOCE-YEGUA Y-7	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8507	5611	5242
WELLHEAD PRESSURE, PSIG	2350	2533	2035
OPEN FLOW, MCFD	2800	231	9100
COMPONENT, MOLE PCT			
METHANE	86.7	96.6	98.4
ETHANE	6.6	2.4	0.6
PROPANE	3.4	---	0.1
N-BUTANE	0.8	---	0.0
ISOBUTANE	0.9	---	0.0
N-PENTANE	0.2	---	0.0
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.9	0.5	0.6
OXYGEN	0.0	0.4	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.1	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1168	1022	1010
SPECIFIC GRAVITY	0.665	0.573	0.562

	INDEX 9640 SAMPLE 12441	INDEX 9641 SAMPLE 14188	INDEX 9642 SAMPLE 14519
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NEWTON	NEWTON
FIELD	HARTBURG	HARTBURG NW	HARTBURG NW
WELL NAME	C. A. MORGAN NO. 2-B	R. A. MOORE NO. 5	E. C. HANKAMER B NO. 9
LOCATION	A. SCHMIDT SUR. A-906	SEC. 14, HT&B RR SUR. A-264	SEC. 14, HT&BRR SUR. 912
OWNER	PAN AMERICAN PETROLEUM CORP.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	09/25/69	06/20/73	03/15/74
SAMPLED	10/--/70	10/23/74	10/30/75
FORMATION	OLIG-HACKBERRY	OLIG-STRUMA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7490	7245	7347
WELLHEAD PRESSURE, PSIG	2943	2676	1367
OPEN FLOW, MCFD	12799	31920	2575
COMPONENT, MOLE PCT			
METHANE	91.6	94.1	91.2
ETHANE	3.8	3.3	4.8
PROPANE	2.2	1.3	2.0
N-BUTANE	0.7	0.2	0.5
ISOBUTANE	0.7	0.3	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.0	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1132	1080	1114
SPECIFIC GRAVITY	0.632	0.602	0.626

	INDEX 9643 SAMPLE 12806	INDEX 9644 SAMPLE 8161	INDEX 9645 SAMPLE 13342
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NOLAN	NOLAN	NOLAN
FIELD	BLOODWORTH NE	GROUP	WATTS
WELL NAME	B. N. E. C. U. NO. 3-1 UT	ALDERMAN NO. 1	J. P. HUTCHINS EST. NO. 1
LOCATION	NOT GIVEN	SEC. 65, H&TC SUR.	SEC. 188, BLK. 64, H&TC SUR.
OWNER	SUN OIL CO.	LONE STAR GAS CO.	CLIFTON THOMAS
COMPLETED	07/27/67	04/04/57	08/25/71
SAMPLED	04/27/71	08/12/61	07/28/72
FORMATION	PERM-BLOODWORTH	PENN-CISCO	CRET-GARDNER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5788	4034	5418
WELLHEAD PRESSURE, PSIG	525	986	545
OPEN FLOW, MCFD	NOT GIVEN	4167	5648
COMPONENT, MOLE PCT			
METHANE	64.3	70.1	69.9
ETHANE	14.0	10.6	11.2
PROPANE	8.1	5.7	6.7
N-BUTANE	1.5	1.4	2.1
ISOBUTANE	1.0	0.7	1.0
N-PENTANE	0.7	0.2	0.6
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	9.1	10.2	7.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.12	0.25	0.18
HEATING VALUE*	1268	1154	1232
SPECIFIC GRAVITY	0.815	0.753	0.778

	INDEX 9646 SAMPLE 11564	INDEX 9647 SAMPLE 11565	INDEX 9648 SAMPLE 11566
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	AGUA DULCE	AGUA DULCE	AGUA DULCE
WELL NAME	M. C. PYLE NO. 5	J. C. SPENBERG NO. 3	M. L. RIVERS NO. A-9
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNION PRODUCING CO.	UNION PRODUCING CO.	UNION PRODUCING CO.
COMPLETED	07/13/66	12/22/66	06/04/66
SAMPLED	07/09/68	07/09/68	07/09/68
FORMATION	OLIG-FRIO 5900	OLIG-FRIO 6490	OLIG-FRIO 2500
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5903	6497	2542
WELLHEAD PRESSURE, PSIG	1134	1931	1036
OPEN FLOW, MCFD	650	4700	30100
COMPONENT, MOLE PCT			
METHANE	90.3	90.0	90.7
ETHANE	4.7	4.9	4.6
PROPANE	1.8	2.5	1.5
N-BUTANE	0.5	0.7	0.4
ISOBUTANE	0.3	0.6	0.7
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	0.2	0.1	0.5
HEXANES PLUS	0.6	0.3	1.1
NITROGEN	0.2	0.0	0.1
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1143	1156	1169
SPECIFIC GRAVITY	0.642	0.646	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9649 SAMPLE 11567	INDEX 9650 SAMPLE 11568	INDEX 9651 SAMPLE 11569
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	AGUA DULCE	AGUA DULCE	AGUA DULCE
WELL NAME	M. L. RIVERS NO. A-8	M. C. PYLE NO. 5	M. L. RIVERS A-10
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNION PRODUCING CO.	UNION PRODUCING CO.	UNION PRODUCING CO.
COMPLETED	05/25/66	07/16/66	06/06/66
SAMPLED	07/09/68	07/09/68	07/09/68
FORMATION	FRIO-3300 FT. SAND	OLIG-EAST HARPER	OLIG-FRIO 2600
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3348	5579	2621
WELLHEAD PRESSURE,PSIG	926	1260	970
OPEN FLOW, MCFD	2200	980	3980
COMPONENT, MOLE PCT			
METHANE	94.2	90.4	91.7
ETHANE	0.7	4.5	4.3
PROPANE	0.1	1.8	1.5
N-BUTANE	0.0	0.5	0.9
ISOBUTANE	0.0	0.4	0.5
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.0	0.2	0.4
NITROGEN	4.4	1.3	0.6
OXYGEN	0.5	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.02	0.01	0.01
HEATING VALUE*	969	1109	1120
SPECIFIC GRAVITY	0.581	0.631	0.628

	INDEX 9652 SAMPLE 4343	INDEX 9653 SAMPLE 15203	INDEX 9654 SAMPLE 15236
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	AGUA DULCE W	ARNOLD-DAVID	ARNOLD-DAVID
WELL NAME	LORUTH SMITH RIVER NO. 1	CHAPMAN HEIRS "A" NO. 44-1	CHAPMAN HEIRS "A" NO. 114-1
LOCATION	SEC.26, RICHARD KING FARM	CHAPMAN RANCH	CORPUS CHRISTI GRANT A-411
OWNER	PAN AMERICAN PETROLEUM CORP.	HNG OIL CO.	HNG OIL CO.
COMPLETED	04/18/47	07/01/76	10/24/77
SAMPLED	08/14/47	01/30/78	03/20/78
FORMATION	TERT-	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5528	10000	10124
WELLHEAD PRESSURE,PSIG	1815	4725	7000
OPEN FLOW, MCFD	7800	7000	20500
COMPONENT, MOLE PCT			
METHANE	85.8	91.7	93.1
ETHANE	11.5	4.4	3.9
PROPANE	---	1.6	1.1
N-BUTANE	---	0.9	0.3
ISOBUTANE	---	0.5	0.3
N-PENTANE	---	0.2	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	2.4	0.3	0.3
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.8	0.5
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1075	1100	1081
SPECIFIC GRAVITY	0.624	0.625	0.608

	INDEX 9655 SAMPLE 5026	INDEX 9656 SAMPLE 14592	INDEX 9657 SAMPLE 13878
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	BISHOP	BISHOP W	BLK. 889
WELL NAME	ADOLPH TILL NO. 1	W. BISHOP G.U. NO. 1 NO. 1	T. S. L. 4 1338 NO. B-1
LOCATION	SEC. 161, PALO ALTO GRANT	PALO ALTO GRANT A-116	MUSTANG ISLAND AREA
OWNER	EASTERN STATES PETROLEUM CO.	HOUSTON OIL & MINERALS CORP.	GULF OIL CO.- U.S.
COMPLETED	11/12/50	--/--/00	10/05/72
SAMPLED	03/22/51	02/24/76	01/29/74
FORMATION	OLIG-PFLUGER L	OLIG-VICKSBURG	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7240	9087	11432
WELLHEAD PRESSURE,PSIG	3150	4800	5500
OPEN FLOW, MCFD	1400	2250	13300
COMPONENT, MOLE PCT			
METHANE	90.8	91.1	90.7
ETHANE	4.6	4.5	4.7
PROPANE	1.8	1.9	2.0
N-BUTANE	0.4	0.4	0.5
ISOBUTANE	0.3	0.5	1.0
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.1	TRACE	0.6
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1094	1110	1123
SPECIFIC GRAVITY	0.626	0.630	0.632

	INDEX 9658 SAMPLE 14267	INDEX 9659 SAMPLE 13142	INDEX 9660 SAMPLE 15987
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	BRAYTON	CHAPMAN	CHAPMAN RANCH
WELL NAME	DRISCOLL-SEVIER NO. 3	J. O. CHAPMAN NO. 43	CHAPMAN J NO. 1
LOCATION	SEC. 303, PALO ALTO GRANT	SEC. 46, LAURELES FARM TRACTS	SEC. 82, LAURELES FARM TRACT
OWNER	HNG OIL CO.	TEXACO INC.	MORGAN ENTERPRISES, INC.
COMPLETED	07/16/73	04/02/70	01/10/80
SAMPLED	02/17/75	02/03/72	06/20/80
FORMATION	OLIG-FRIO	OLIG-FRIO L-24	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7429	3170	13668
WELLHEAD PRESSURE,PSIG	2654	600	9025
OPEN FLOW, MCFD	8200	2700	3200
COMPONENT, MOLE PCT			
METHANE	89.8	97.4	84.8
ETHANE	5.5	0.2	7.1
PROPANE	2.0	TRACE	3.2
N-BUTANE	0.4	0.0	0.8
ISOBUTANE	0.6	0.0	1.1
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.3	0.0	0.3
CYCLOPENTANE	0.3	0.0	0.1
HEXANES PLUS	0.6	0.0	0.5
NITROGEN	0.2	2.1	0.2
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	1.6
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1149	990	1184
SPECIFIC GRAVITY	0.648	0.565	0.690

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9661 SAMPLE 4948	INDEX 9662 SAMPLE 13920	INDEX 9663 SAMPLE 13921
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	CLARKWOOD S	CORPUS CHANNEL NW	CORPUS CHANNEL NW
WELL NAME	JONAS WEIL NO. 1	STATE TRACT 15 NO. 3U	STATE TRACT 15 NO. 3L
LOCATION	J. W. GALLAGHER SUR. NO. 318	CORPUS CHRISTI BAY	CORPUS CHRISTI BAY
OWNER	CHICAGO CORP.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	06/10/50	06/28/72	06/28/72
SAMPLED	08/04/50	01/31/74	01/31/74
FORMATION	OLIG-FRIO L	OLIG-M-4	OLIG-M-1C
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9085	9903	11182
WELLHEAD PRESSURE,PSIG	3912	6115	7325
OPEN FLOW, MCFD	20000	40000	5400
COMPONENT, MOLE PCT			
METHANE	92.8	88.9	82.2
ETHANE	4.1	5.3	6.6
PROPANE	1.5	2.4	4.5
N-BUTANE	0.4	0.7	1.2
ISOBUTANE	0.2	1.2	1.7
N-PENTANE	0.2	0.2	0.5
ISOPENTANE	0.0	0.2	0.5
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	0.0	0.8	0.9
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1091	1147	1272
SPECIFIC GRAVITY	0.613	0.649	0.731

	INDEX 9664 SAMPLE 4695	INDEX 9665 SAMPLE 15919	INDEX 9666 SAMPLE 10832
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	CORPUS CHRISTI W	COTTON	ENCINAL CHANNEL
WELL NAME	GUARANTY TITLE & TRUST NO. 2	THOMAS L. BUSENLEHNER NO. 1	STATE TRACT 49 NO. 1-UT
LOCATION	NOT GIVEN	G. FARIAS GRANT A-592	STATE TRACT 49
OWNER	TIDEWATER OIL CO.	HUGHES & HUGHES OIL & GAS	CITIES SERVICE OIL CO.
COMPLETED	12/--/48	08/07/79	10/15/65
SAMPLED	04/12/49	03/13/80	01/05/67
FORMATION	OLIG-FRIO	OLIG-VICKSBURG	OLIG-N-1 & N-2
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9873	8518	12200
WELLHEAD PRESSURE,PSIG	3700	3411	7742
OPEN FLOW, MCFD	2900	31000	750
COMPONENT, MOLE PCT			
METHANE	89.5	91.9	89.5
ETHANE	5.6	4.9	5.1
PROPANE	2.2	1.8	1.8
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.4	0.4	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	0.1	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.4	1.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1126	1118	1097
SPECIFIC GRAVITY	0.642	0.628	0.637

	INDEX 9667 SAMPLE 10635	INDEX 9668 SAMPLE 10636	INDEX 9669 SAMPLE 12104
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	INDIAN POINT	INDIAN POINT	INDIAN POINT
WELL NAME	STATE TRACT 786-NO. 9	STATE TRACT 786-NO.8	STATE TRACT 786 NO. 8
LOCATION	NUECES BAY	NUECES BAY	NUECES BAY
OWNER	FOREST OIL CORP., ET AL.	FOREST OIL CORP., ET AL.	FOREST OIL CORP.
COMPLETED	09/06/65	09/06/65	03/29/69
SAMPLED	06/10/66	06/10/66	11/06/69
FORMATION	OLIG-WATSON	OLIG-COMMONWEALTH	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11562	11784	10210
WELLHEAD PRESSURE,PSIG	7273	7303	4500
OPEN FLOW, MCFD	12000	33000	1352
COMPONENT, MOLE PCT			
METHANE	88.7	87.3	90.8
ETHANE	5.9	6.0	4.6
PROPANE	2.1	2.4	1.8
N-BUTANE	0.6	0.8	0.5
ISOBUTANE	0.6	0.7	0.5
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.6	0.2
NITROGEN	0.0	0.0	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.4	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1136	1172	1114
SPECIFIC GRAVITY	0.650	0.680	0.633

	INDEX 9670 SAMPLE 4461	INDEX 9671 SAMPLE 5110	INDEX 9672 SAMPLE 4873
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	J. O. CHAPMAN RANCH	KNOLLE FARMS	LONDON
WELL NAME	J. O. CHAPMAN NO. 15	KNOLLE NO. 1	C. N. COOKE NO. 4
LOCATION	NO. 46 SUR.	ORANGE GROVE	BLK. 11 JONES SUBD.
OWNER	SEABOARD OIL CO.	PANHANDLE PROD. & REF. CO.	BARNSDALL OIL CO.
COMPLETED	12/03/47	06/01/51	01/09/50
SAMPLED	03/15/48	09/25/51	05/02/50
FORMATION	MIOC-CATAHOULA	OLIG-KOEHLER	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4560	5160	4834
WELLHEAD PRESSURE,PSIG	2500	2200	NOT GIVEN
OPEN FLOW, MCFD	33000	120000	4400
COMPONENT, MOLE PCT			
METHANE	93.2	95.6	91.8
ETHANE	5.4	3.0	4.1
PROPANE	---	0.2	0.9
N-BUTANE	---	0.1	0.2
ISOBUTANE	---	TRACE	0.9
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.7
NITROGEN	0.7	0.7	0.6
OXYGEN	0.3	0.1	0.1
ARGON	---	TRACE	
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.1	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1041	1043	1108
SPECIFIC GRAVITY	0.590	0.584	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9673 SAMPLE 4354	INDEX 9674 SAMPLE 4356	INDEX 9675 SAMPLE 4357
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	LUBY	LUBY	LUBY
WELL NAME	W. M. SPESSARD NO. 16	JOHN M. LUBY NO. 11	G. M. MCCANN NO. 3
LOCATION	CANUTILLO COL. DITCH CO. SUR	MARY J. LUBY SUBD.	CANUTILLO COL. DITCH CO. SUR
OWNER	STANOLIND OIL & GAS CO.	SEABOARD OIL CO.	STANOLIND OIL & GAS CO.
COMPLETED	07/07/47	07/13/38	10/26/37
SAMPLED	09/26/47	09/25/47	09/26/47
FORMATION	MIOC-CATAHOULA	MIOC-CATAHOULA	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4316	4365	4336
WELLHEAD PRESSURE,PSIG	1450	1200	1382
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.0	36.3	70.2
ETHANE	36.5	62.3	27.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	0.7	1.6
OXYGEN	0.6	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1282	1484	1206
SPECIFIC GRAVITY	0.744	0.871	0.702

	INDEX 9676 SAMPLE 4359	INDEX 9677 SAMPLE 4360	INDEX 9678 SAMPLE 12508
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	LUBY	LUBY	LUBY N
WELL NAME	JAMES P. LUBY NO. 16	JAMES P. LUBY NO. 15	J. M. LUBY NO. 24-J
LOCATION	MARY J. LUBY SUBD.	MARY J. LUBY SUBD.	C.C.D. CO. SUR. A-646
OWNER	SEABOARD OIL CO.	SEABOARD OIL CO.	TEXACO INC.
COMPLETED	03/21/38	04/24/47	02/13/70
SAMPLED	09/25/47	09/25/47	11/05/70
FORMATION	OLIG-FRIO	MIOC-CATAHOULA	OLIG-6900
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5062	4354	6950
WELLHEAD PRESSURE,PSIG	2075	1300	2200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.0	53.9	92.1
ETHANE	25.6	45.5	4.1
PROPANE	---	---	1.6
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.6
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	1.1	0.1	0.7
OXYGEN	0.2	0.2	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1198	1361	1102
SPECIFIC GRAVITY	0.688	0.784	0.618

	INDEX 9679 SAMPLE 12094	INDEX 9680 SAMPLE 4649	INDEX 9681 SAMPLE 12042
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	MINNIE BOCK	MINNIE BOCK N	MOBIL-DAVID
WELL NAME	GUARANTY TITLE NO. 1	BICKLER & MOSELEY NO. 1	A. C. MANLEY NO. 3
LOCATION	NOT GIVEN	SEC. 53	LAURELES FARM TRACT, SEC. 2
OWNER	MERIDIAN EXPLORATION CO.	ATLANTIC REFINING CO.	SUN OIL CO.
COMPLETED	01/11/69	10/09/48	05/29/69
SAMPLED	11/--/69	01/17/49	09/15/69
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-MANLEY
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5962	7956	10409
WELLHEAD PRESSURE,PSIG	2200	NOT GIVEN	2395
OPEN FLOW, MCFD	535	9500	13000
COMPONENT, MOLE PCT			
METHANE	90.9	75.2	84.8
ETHANE	4.7	22.6	7.5
PROPANE	2.0	---	3.6
N-BUTANE	0.6	---	0.6
ISOBUTANE	0.6	---	1.2
N-PENTANE	0.5	---	0.2
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.2	---	0.1
HEXANES PLUS	0.6	---	0.3
NITROGEN	0.8	1.0	1.3
OXYGEN	0.0	0.5	0.1
ARGON	0.0	---	0.0
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.7	0.0
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1148	1167	1184
SPECIFIC GRAVITY	0.647	0.680	0.677

	INDEX 9682 SAMPLE 4879	INDEX 9683 SAMPLE 2539	INDEX 9684 SAMPLE 12565
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	MUSTANG ISLAND	NOT GIVEN	PETRONILLA
WELL NAME	STATE NO. 430-1	KING NO. 2	ROBERT LA PRELLE NO. 7
LOCATION	NOT GIVEN	SEC. 23, RICHARD KING FARM	BLK. 8, CCD CO. SUR. A-464
OWNER	ATLANTIC REFINING CO.	STANOLIND OIL & GAS CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	08/29/49	07/15/32	08/20/63
SAMPLED	03/27/50	08/21/32	11/06/70
FORMATION	OLIG-FRIO	OLIG-	OLIG-PETRONILLA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6818	4022	6665
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1680	1020
OPEN FLOW, MCFD	1500	20000	10000
COMPONENT, MOLE PCT			
METHANE	92.0	99.3	91.7
ETHANE	3.6	0.0	4.5
PROPANE	1.3	---	1.5
N-BUTANE	0.4	---	0.4
ISOBUTANE	0.5	---	0.5
N-PENTANE	0.2	---	TRACE
ISOPENTANE	0.1	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	1.2	0.0	0.9
OXYGEN	0.3	0.4	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.3	TRACE
HELIUM	0.01	0.00	0.01
HEATING VALUE*	1079	1006	1093
SPECIFIC GRAVITY	0.618	0.560	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9685 SAMPLE 13570	INDEX 9686 SAMPLE 5175	INDEX 9687 SAMPLE 15571
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	PETRONILLA	RED FISH BAY	RED FISH BAY
WELL NAME	JOHN LARRELLE EST. A NO. 12	STATE 411 NO. 1	STATE TRACT 445 NO. 1 LT
LOCATION	CCC COMPANY SUR. A-464	STATE TRACT 411	TEXAS STATE TRACT 445
OWNER	TEXACO INC.	ATLANTIC REFINING CO.	GETTY OIL CO.
COMPLETED	05/27/71	10/09/51	01/12/77
SAMPLED	03/26/73	01/15/52	02/26/79
FORMATION	OLIG-PETRONILLA	OLIG-MARGINULINA	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5294	7125	11540
WELLHEAD PRESSURE,PSIG	1700	3300	7500
OPEN FLOW, MCFD	69000	15000	3784
COMPONENT, MOLE PCT			
METHANE	87.5	91.6	87.1
ETHANE	5.9	3.9	6.5
PROPANE	2.6	1.5	2.6
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.9	0.3	1.0
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.5	1.1	1.1
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.4	0.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1142	1089	1156
SPECIFIC GRAVITY	0.653	0.622	0.661

	INDEX 9688 SAMPLE 15572	INDEX 9689 SAMPLE 16094	INDEX 9690 SAMPLE 16095
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	RED FISH BAY	RED FISH BAY N	RED FISH BAY N
WELL NAME	STATE TRACT 445 NO. 1 UT	STATE TRACT 351 NO. 2	STATE TRACT 342 NO. 2
LOCATION	TEXAS STATE TRACT 445	S. T. 351 CORPUS CHRISTI BAY	3 MI. E OF ENGLESIDE
OWNER	GETTY OIL CO.	MCMORAN EXPLORATION CO.	MCMORAN EXPLORATION CO.
COMPLETED	01/12/77	02/99/79	11/99/79
SAMPLED	02/26/79	10/13/80	10/13/80
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO D-1
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9338	7858	9550
WELLHEAD PRESSURE,PSIG	6200	450	2800
OPEN FLOW, MCFD	1669	3289	4604
COMPONENT, MOLE PCT			
METHANE	72.5	91.8	91.1
ETHANE	6.5	3.6	3.7
PROPANE	6.2	1.5	1.5
N-BUTANE	2.4	0.4	0.4
ISOBUTANE	5.9	0.6	0.6
N-PENTANE	1.1	0.1	0.1
ISOPENTANE	1.4	0.3	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	3.1	0.3	0.2
NITROGEN	0.4	0.5	1.1
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1566	1107	1093
SPECIFIC GRAVITY	0.906	0.628	0.628

	INDEX 9691 SAMPLE 13969	INDEX 9692 SAMPLE 13143	INDEX 9693 SAMPLE 15407
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	RIVERSIDE	RIVERSIDE-AGUA DULCE	ROCKETT
WELL NAME	E. C. WILSON NO. 10	E. C. WILSON NO. 5	L. R. STANDLEE NO. 1
LOCATION	SHARE 6 OF THE WRIGHT LANDS	PALO ALTO GRANT A-116	V. L. DEHERRERA GT. A-2661
OWNER	SOUTH STATES OIL & GAS CO.	TEXACO INC.	MCCORMICK OIL & GAS CORP.
COMPLETED	03/21/74	05/23/70	08/20/77
SAMPLED	03/27/74	02/02/72	10/10/78
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6749	9660	6800
WELLHEAD PRESSURE,PSIG	2030	1700	2625
OPEN FLOW, MCFD	12700	15000	13000
COMPONENT, MOLE PCT			
METHANE	91.2	94.8	81.6
ETHANE	4.6	3.6	4.9
PROPANE	2.0	0.5	3.4
N-BUTANE	0.5	0.1	1.5
ISOBUTANE	0.6	0.0	2.0
N-PENTANE	0.1	0.0	1.0
ISOPENTANE	0.3	0.2	2.1
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.1	1.0
NITROGEN	0.3	0.5	1.1
OXYGEN	0.0	0.1	0.2
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1126	1059	1357
SPECIFIC GRAVITY	0.632	0.591	0.780

	INDEX 9694 SAMPLE 15551	INDEX 9695 SAMPLE 5292	INDEX 9696 SAMPLE 11233
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	SOUTH BAY	STEDMAN ISLAND	STEDMAN ISLAND
WELL NAME	STATE TRACT 286 NO. 1	ARANSAS DOCK & CHANNEL NO. 1	ST. OF TEX.53065 TR.309 NO.1
LOCATION	CORPUS CHRISTI BAY	SUR. NO. 652	STEADMAN ISLAND BLK. 309
OWNER	TAMARACK PETROLEUM, INC.	ARANSAS DOCK & CHANNEL CO.	MOBIL OIL CORP.
COMPLETED	10/07/76	10/--/51	12/28/65
SAMPLED	12/29/78	10/20/52	11/28/67
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-9500 FOOT SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9865	7300	9406
WELLHEAD PRESSURE,PSIG	6357	NOT GIVEN	5066
OPEN FLOW, MCFD	22000	NOT GIVEN	63000
COMPONENT, MOLE PCT			
METHANE	91.5	90.4	90.3
ETHANE	4.3	4.1	4.6
PROPANE	1.7	1.8	1.7
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.6	0.9	0.8
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	0.3	1.0	0.6
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.3	0.6
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1112	1124	1117
SPECIFIC GRAVITY	0.628	0.640	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9697 SAMPLE 11234	INDEX 9698 SAMPLE 15445	INDEX 9699 SAMPLE 17725
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	STEDMAN ISLAND	STRATTON	STRATTON
WELL NAME	ST. OF TEX-53065 TR.309 NO.1	G. P. WARDNER NO. 128	WARDNER NO. 162
LOCATION	STEDMAN ISLAND BLK. 309	SEC. 14, STRATTON SUBD.	PASO ANCHO DE ABAJO GRANT
OWNER	MOBIL OIL CORP.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	12/28/65	03/18/77	09/07/84
SAMPLED	11/28/67	10/19/78	06/20/85
FORMATION	OLIG-C-3 SAND	OLIG-VICKSBURG	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8969	8260	8525
WELLHEAD PRESSURE,PSIG	2958	2145	2800
OPEN FLOW, MCFD	56000	42000	1116
COMPONENT, MOLE PCT			
METHANE	91.2	62.6	90.7
ETHANE	4.5	8.2	4.1
PROPANE	1.5	8.4	1.8
N-BUTANE	0.3	4.1	0.6
ISOBUTANE	0.6	4.1	0.9
N-PENTANE	0.1	1.5	0.2
ISOPENTANE	0.1	3.5	0.3
CYCLOPENTANE	0.1	0.6	0.1
HEXANES PLUS	0.3	2.1	0.3
NITROGEN	0.5	0.9	0.4
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	4.5	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1101	1619	1113
SPECIFIC GRAVITY	0.626	1.008	0.638

	INDEX 9700 SAMPLE 17726	INDEX 9701 SAMPLE 5040	INDEX 9702 SAMPLE 4604
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	STRATTON	TURKEY CREEK N	WILDCAT
WELL NAME	DRYDEN NO. 9	TURK NO. 1	NUECES BAY STATE NO. 1
LOCATION	FRIO, E-41	BLK. T45, STATE LEASE 30398	TEXAS STATE TRACT 756
OWNER	CHAMPLIN PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	08/18/84	01/05/51	04/10/48
SAMPLED	06/20/85	05/01/51	10/20/48
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6176	9480	3315
WELLHEAD PRESSURE,PSIG	400	6752	1500
OPEN FLOW, MCFD	393	5800	10050
COMPONENT, MOLE PCT			
METHANE	89.8	90.8	98.5
ETHANE	4.7	4.5	1.1
PROPANE	2.0	1.7	---
N-BUTANE	0.6	0.5	---
ISOBUTANE	0.6	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.5	0.2	---
NITROGEN	0.9	0.2	0.0
OXYGEN	0.2	0.1	0.2
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	1.2	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1137	1098	1018
SPECIFIC GRAVITY	0.644	0.631	0.563

	INDEX 9703 SAMPLE 11263	INDEX 9704 SAMPLE 15291	INDEX 9705 SAMPLE 16895
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NUECES	NUECES	NUECES
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	VERONICA D. MCCULLOUGH NO. 1	CHAPMAN RANCH NO. 4	STATE TRACT G NO. 1
LOCATION	SEC. 39 AGUA DULCE GRANT A120	SEC. 80, LAURELES FARM TR.	STATE TRACT 6, NUECES BAY
OWNER	HAAS BROTHERS	CHAMPLIN PETROLEUM CO.	SANCHEZ-O'BRIEN CO.
COMPLETED	--/--/00	09/02/76	12/--/81
SAMPLED	01/26/68	05/--/78	04/21/83
FORMATION	OLIG-FRIO	-LAGARTO	OLIG-COMMONWEALTH
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5452	3518	9928
WELLHEAD PRESSURE,PSIG	1488	1393	3450
OPEN FLOW, MCFD	3230	9000	4500
COMPONENT, MOLE PCT			
METHANE	91.9	93.6	83.7
ETHANE	4.2	0.5	6.6
PROPANE	1.5	0.1	3.3
N-BUTANE	0.4	0.0	1.1
ISOBUTANE	0.5	0.0	1.4
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	0.2	0.0	1.0
CYCLOPENTANE	0.1	0.0	0.2
HEXANES PLUS	0.2	0.0	0.6
NITROGEN	0.7	5.7	0.9
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.9
HELIUM	0.01	0.03	TRACE
HEATING VALUE*	1102	960	1230
SPECIFIC GRAVITY	0.621	0.582	0.709

	INDEX 9706 SAMPLE 5975	INDEX 9707 SAMPLE 7392	INDEX 9708 SAMPLE 14318
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	BARLOW	BARLOW	BULER N
WELL NAME	BARLOW NO. 1	C. H. KELLN NO. 2	GLORIA GRIFFIN NO. 1
LOCATION	SEC. 929, BLK. 43, H&TC SUR.	SEC. 919, BLK. 43, H&TC SUR.	SEC. 67, BLK. 13, T&NO SUR.
OWNER	TEXAS CO.	SHAMROCK OIL & GAS CORP.	COTTON PETROLEUM CORP.
COMPLETED	07/19/55	11/06/59	--/--/00
SAMPLED	11/23/55	02/02/60	04/16/75
FORMATION	PENN-MORROW	MISS-	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7962	8498	8501
WELLHEAD PRESSURE,PSIG	1415	2200	2102
OPEN FLOW, MCFD	1563	2050	2620
COMPONENT, MOLE PCT			
METHANE	89.9	96.2	85.5
ETHANE	5.3	1.9	6.4
PROPANE	2.2	0.4	3.7
N-BUTANE	0.2	0.2	0.9
ISOBUTANE	0.2	TRACE	0.4
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.6	0.5	1.9
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.4
HELIUM	0.13	0.10	0.08
HEATING VALUE*	1107	1030	1143
SPECIFIC GRAVITY	0.629	0.580	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9709 SAMPLE 12209	INDEX 9710 SAMPLE 6356	INDEX 9711 SAMPLE 7008
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	CAMBRIDGE	DOUGLAS-NORTHRUP	DUDE WILSON
WELL NAME	WOLF CREEK NO. 1	PERCY POWERS	LACKEY-WILSON
LOCATION	SEC. 498, BLK. 43, H&TC SUR.	SEC. 652, BLK. 43, H&TCSUR.	SEC. 748, BLK. 43
OWNER	EARL T. SMITH & ASSOC.	BAKER & TAYLOR DRILLING CO.	HORIZON OIL & GAS CO.
COMPLETED	01/26/70	07/08/57	09/23/58
SAMPLED	02/24/70	08/09/57	03/13/59
FORMATION	PENN-MORROW	PENN-DOUGLAS	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9032	5720	7001
WELLHEAD PRESSURE,PSIG	2900	1595	1605
OPEN FLOW, MCFD	14500	19000	5600
COMPONENT, MOLE PCT			
METHANE	81.2	85.4	95.6
ETHANE	8.1	6.1	0.9
PROPANE	5.1	2.9	0.5
N-BUTANE	1.3	0.9	0.5
ISOBUTANE	0.8	0.5	0.1
N-PENTANE	0.5	0.3	0.2
ISOPENTANE	0.6	0.1	0.3
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.6	0.3	0.2
NITROGEN	1.1	2.8	1.1
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.05	0.19	0.10
HEATING VALUE*	1260	1133	1053
SPECIFIC GRAVITY	0.726	0.663	0.593

	INDEX 9712 SAMPLE 7009	INDEX 9713 SAMPLE 7456	INDEX 9714 SAMPLE 7457
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	DUDE WILSON	DUDE WILSON	DUDE WILSON
WELL NAME	D. C. WILSON A NO. 1-750	J. KIRMSE LEASE NO. 1-839	JIM DODSON NO. 1-834
LOCATION	SEC. 750, BLK. 43	SEC. 839, BLK. 43, H&TC SUR.	SEC. 834, BLK. 43, H&TC SUR.
OWNER	HORIZON OIL & GAS CO.	MAYFLO OIL CO.	MAYFLO OIL CO.
COMPLETED	11/21/58	11/--/59	01/--/60
SAMPLED	03/13/59	03/26/60	03/26/60
FORMATION	PENN-NOVI	PENN-CLEVELAND	PENN-MORROW B
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7838	6643	7870
WELLHEAD PRESSURE,PSIG	2217	2000	1731
OPEN FLOW, MCFD	5000	560	1400
COMPONENT, MOLE PCT			
METHANE	83.4	84.5	90.6
ETHANE	9.1	6.7	5.7
PROPANE	3.2	4.2	2.8
N-BUTANE	1.0	1.4	0.4
ISOBUTANE	0.4	0.6	0.2
N-PENTANE	0.3	0.5	0.1
ISOPENTANE	0.2	0.3	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	1.1	1.6	0.4
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1184	1192	1101
SPECIFIC GRAVITY	0.683	0.688	0.620

	INDEX 9715 SAMPLE 15952	INDEX 9716 SAMPLE 16230	INDEX 9717 SAMPLE 15605
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	DUDE WILSON	DUDE WILSON	DUTCHER
WELL NAME	FIRST NATIONAL TRUST NO. 1	KENT NO. 1	LUTH1 "A" NO. 1
LOCATION	SEC. 571, BLK. 43, H&TC SUR.	SEC. 570, BLK. 43, H&TC SUR.	SEC. 401, BLK. 43, H&TC SUR.
OWNER	COURSON OIL & GAS, INC.	COURSON OIL & GAS, INC.	NATOMAS NORTH AMERICA, INC.
COMPLETED	07/30/79	12/19/80	--/--/80
SAMPLED	04/28/80	04/10/81	04/26/79
FORMATION	PENN-CLEVELAND	PENN-CLEVELAND	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6955	6937	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1604	1666	NOT GIVEN
OPEN FLOW, MCFD	4000	4700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.2	83.5	70.4
ETHANE	6.3	6.6	8.3
PROPANE	4.6	4.6	11.0
N-BUTANE	1.4	1.4	4.0
ISOBUTANE	0.5	0.5	1.4
N-PENTANE	0.3	0.4	0.7
ISOPENTANE	0.4	0.3	0.8
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	2.5	2.0	2.1
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.15	0.14	0.11
HEATING VALUE*	1180	1191	1426
SPECIFIC GRAVITY	0.692	0.692	0.845

	INDEX 9718 SAMPLE 7277	INDEX 9719 SAMPLE 1402	INDEX 9720 SAMPLE 7759
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	ELLIS RANCH	ELLIS RANCH	DREW ELLIS NO. C-1
WELL NAME	W. T. TREGELLAS NO. 1	D. E. KUNKEL NO-1	SEC. 892, BLK. 43, H&TC SUR.
LOCATION	SEC. 757, BLK. 43, H&TC SUR.	SEC. 739, BLK. 43, H&TC SUR.	SHAMROCK OIL & GAS CORP.
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	07/28/60
COMPLETED	12/07/59	02/02/60	11/02/60
SAMPLED	11/09/59	PENN-CLEVELAND	PENN-CLEVELAND
FORMATION	MISS-	360	360
GEOLOGIC PROVINCE CODE	360	7196	6783
DEPTH, FEET	NOT GIVEN	1160	1101
WELLHEAD PRESSURE,PSIG	2980	1590	5700
OPEN FLOW, MCFD	7500		
COMPONENT, MOLE PCT			
METHANE	86.5	85.8	77.9
ETHANE	5.2	6.3	9.8
PROPANE	3.1	3.5	4.7
N-BUTANE	0.6	1.2	1.9
ISOBUTANE	0.6	0.5	1.2
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	0.9	0.3	0.5
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	1.5	0.2	0.3
NITROGEN	0.3	1.5	3.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	8.4
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1234	1170	1236
SPECIFIC GRAVITY	0.701	0.673	0.733

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9721 SAMPLE 12948	INDEX 9722 SAMPLE 16058	INDEX 9723 SAMPLE 16625
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	ELLIS RANCH	ELLIS RANCH	FALCON
WELL NAME	HERNDON NO. 1	ODC "A" NO. 2	OLMSTEAD NO. 2018
LOCATION	SEC. 489 BLK. 43 H&TC SUR.	SEC. 760, BLK. 43, H&TC SUR.	SEC.1018, BLK. 43, H&TC SUR.
OWNER	AMAREX, INC.	DIAMOND SHAMROCK CORP.	NATURAL GAS ANADARKO, INC.
COMPLETED	01/20/71	07/28/80	05/19/82
SAMPLED	07/26/71	09/04/80	08/26/82
FORMATION	PENN-MORROW	PENN-CLEVELAND	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9035	7098	8305
WELLHEAD PRESSURE,PSIG	2200	1530	1488
OPEN FLOW, MCFD	60	6100	4150
COMPONENT, MOLE PCT			
METHANE	89.2	88.4	81.0
ETHANE	7.9	6.1	8.4
PROPANE	3.9	2.5	4.8
N-BUTANE	0.8	0.8	1.4
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.4	0.8	1.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.6
HELIUM	0.02	0.07	0.19
HEATING VALUE*	1161	1138	1204
SPECIFIC GRAVITY	0.679	0.648	0.705

	INDEX 9724 SAMPLE 6474	INDEX 9725 SAMPLE 7192	INDEX 9726 SAMPLE 6557
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	FARNSWORTH	FARNSWORTH	FARNSWORTH E
WELL NAME	CONLET B NO. 1	E. HIGGINBOTHAM NO. 2	G. E. IRVIN NO. 1
LOCATION	SEC. 18, BLK. JT, TW&NG SUR.	TRACT 5 A XIMENES SUR.	SEC. 54, BLK. 13, T&NO SUR.
OWNER	W. A. MUBER CORP.	SINCLAIR OIL & GAS CO.	SUN OIL CO.
COMPLETED	01/17/57	09/17/57	01/08/58
SAMPLED	01/13/58	08/28/59	04/15/58
FORMATION	PENN-DES MOINES	PENN-JONES	PENN-MORROW L
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6759	7970	8712
WELLHEAD PRESSURE,PSIG	1620	869	2631
OPEN FLOW, MCFD	17000	3953	15000
COMPONENT, MOLE PCT			
METHANE	83.5	86.0	84.4
ETHANE	6.9	6.9	6.8
PROPANE	4.5	3.9	4.5
N-BUTANE	1.4	0.8	1.3
ISOBUTANE	0.6	0.4	0.7
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.3	0.5	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	2.8	0.7	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.20	0.10	0.10
HEATING VALUE*	1173	1162	1206
SPECIFIC GRAVITY	0.690	0.663	0.692

	INDEX 9727 SAMPLE 7290	INDEX 9728 SAMPLE 7303	INDEX 9729 SAMPLE 10853
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	FARNSWORTH E	FARNSWORTH E	FARNSWORTH N
WELL NAME	RICHARDSON NO. 1	WRIGHT	D. H. NEUFELD NO. 1
LOCATION	SEC. 45, BLK. 13, T&NO SUR.	SEC. 44, BLK. 13, T&NO SUR.	SEC. 10, BLK. 43, GM&M SUR.
OWNER	PHILLIPS PETROLEUM CO.	HORIZON OIL & GAS CO.	TEXAS PACIFIC OIL CO.
COMPLETED	09/30/59	06/20/59	06/28/66
SAMPLED	11/23/59	12/09/59	01/26/67
FORMATION	PENN-MORROW L	MISS-	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8826	NOT GIVEN	7815
WELLHEAD PRESSURE,PSIG	2663	6622	2056
OPEN FLOW, MCFD	11969	9900	15500
COMPONENT, MOLE PCT			
METHANE	92.9	93.2	95.0
ETHANE	3.2	3.4	2.4
PROPANE	1.9	1.6	0.9
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.1	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.6
HELIUM	0.10	0.07	0.06
HEATING VALUE*	1105	1086	1056
SPECIFIC GRAVITY	0.620	0.608	0.596

	INDEX 9730 SAMPLE 11639	INDEX 9731 SAMPLE 12167	INDEX 9732 SAMPLE 13598
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	FARNSWORTH N	FARNSWORTH N	FARNSWORTH SE
WELL NAME	FEE 12-1	MASON NO. 1	BLIZZARD NO. 1
LOCATION	7.6 MI. NW FARNSWORTH	G. C. WOODS SUR.	SEC. 76, BLK. 43, H&TC SUR.
OWNER	OIL DEVELOPMENT CO. OF TEXAS	TEXAS PACIFIC OIL CO., INC.	ALLEN & PARKER
COMPLETED	02/05/68	10/06/69	06/07/72
SAMPLED	09/12/68	01/02/70	05/--/73
FORMATION	PENN-MARMATON	PENN-MORROW	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6238	7282	6952
WELLHEAD PRESSURE,PSIG	360	1625	1628
OPEN FLOW, MCFD	3000	9600	5100
COMPONENT, MOLE PCT			
METHANE	71.9	85.0	83.7
ETHANE	7.3	5.9	5.9
PROPANE	6.6	4.0	4.8
N-BUTANE	1.7	0.9	1.3
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.5	0.3	0.2
ISOPENTANE	0.1	TRACE	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	9.9	2.4	2.7
OXYGEN	0.4	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.00	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.25	0.20	0.16
HEATING VALUE*	1162	1150	1172
SPECIFIC GRAVITY	0.759	0.668	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9733 SAMPLE 17914	INDEX 9734 SAMPLE 10192	INDEX 9735 SAMPLE 15691
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	FARNSWORTH, SE	FRANTZ	HANNA LAKE
WELL NAME	DOC NO. 1-89	R. M. HOLLAND NO. 1	WAGGONER NO. 1
LOCATION	SEC. 89, BLK. 13, T&NO SUR.	M. C. DAY SUR. A-72	SEC. 43, BLK. 10, MT&B SUR.
OWNER	NATURAL GAS ANADARKO, INC.	GULF OIL CORP.	COURSON OIL & GAS, INC.
COMPLETED	07/05/84	12/21/64	08/09/78
SAMPLED	11/26/85	09/06/65	07/12/79
FORMATION	PENN-MORROW U	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8210	7497	8092
WELLHEAD PRESSURE,PSIG	1962	1918	1848
OPEN FLOW, MCFD	3150	7500	5700
COMPONENT, MOLE PCT			
METHANE	87.4	95.5	80.3
ETHANE	5.9	2.2	7.3
PROPANE	2.9	0.8	6.0
N-BUTANE	1.0	0.2	1.9
ISOBUTANE	0.1	0.1	0.8
N-PENTANE	0.4	TRACE	0.5
ISOPENTANE	0.2	0.2	0.6
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.3
NITROGEN	0.8	0.5	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.4
HELIUM	0.11	0.08	0.14
HEATING VALUE*	1153	1052	1257
SPECIFIC GRAVITY	0.661	0.587	0.734

	INDEX 9736 SAMPLE 15951	INDEX 9737 SAMPLE 16891	INDEX 9738 SAMPLE 16136
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	HANNA LAKE	HANSFORD	HARRIS
WELL NAME	RAY NO. 1	LYNN GAS UNIT NO. 2	HARRIS "G" NO.1
LOCATION	SEC. 43, BLK. 10, H&TB SUR.	SEC. 44, BLK. 4T, T&NO SUR.	SEC. 1175, BLK. 43, H&TC SUR
OWNER	COURSON OIL & GAS, INC.	SUN EXPLORATION & PRODUCTION	TEXAS OIL & GAS CORP.
COMPLETED	06/11/79	05/--/82	08/21/80
SAMPLED	04/18/80	04/26/83	12/04/80
FORMATION	PENN-MORROW	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8068	7664	8319
WELLHEAD PRESSURE,PSIG	1748	1286	2000
OPEN FLOW, MCFD	2570	1560	7000
COMPONENT, MOLE PCT			
METHANE	81.1	88.0	79.2
ETHANE	7.2	5.0	5.8
PROPANE	5.7	2.5	8.9
N-BUTANE	1.7	0.7	1.5
ISOBUTANE	0.7	0.2	0.6
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.6	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	1.8	2.4	1.5
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.6
HELIUM	0.14	0.12	0.10
HEATING VALUE*	1237	1095	1291
SPECIFIC GRAVITY	0.720	0.639	0.726

	INDEX 9739 SAMPLE 17915	INDEX 9740 SAMPLE 16259	INDEX 9741 SAMPLE 10704
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	MAYWOOD	MUNTON N	KIOWA CREEK
WELL NAME	LAIR-WERMSKE NO. 1-89	CONDON "53" NO. 1	S. L. BRILLHART NO. 2
LOCATION	SEC. 89, BLK. 13, T&NO SUR.	SEC. 53, BLK. 10, MT&B SUR.	SEC. 823, BLK.43, H&TC SUR.
OWNER	NATURAL GAS ANADARKO, INC.	NEWBOURNE OIL CO.	SHARROCK OIL & GAS CORP.
COMPLETED	02/27/81	05/20/81	03/25/66
SAMPLED	11/26/85	PENN-MORROW	09/02/66
FORMATION	PENN-ATOKA	360	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	8332	360
DEPTH, FEET	8030	2238	8943
WELLHEAD PRESSURE,PSIG	1853	2100	2620
OPEN FLOW, MCFD	2600		2850
COMPONENT, MOLE PCT			
METHANE	81.2	85.3	85.6
ETHANE	10.0	5.9	7.5
PROPANE	4.4	3.3	4.0
N-BUTANE	1.5	1.1	0.8
ISOBUTANE	0.2	0.8	0.3
N-PENTANE	0.6	0.4	0.1
ISOPENTANE	0.2	0.7	0.2
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.4	0.7	0.1
NITROGEN	0.7	1.2	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.7
HELIUM	0.09	0.08	0.06
HEATING VALUE*	1232	1210	1161
SPECIFIC GRAVITY	0.708	0.698	0.670

	INDEX 9742 SAMPLE 10851	INDEX 9743 SAMPLE 16579	INDEX 9744 SAMPLE 15689
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	KIOWA CREEK	LOCKHART	MARSH
WELL NAME	DUKE NO. 1	E.H. LOCKHART NO. 1	PARNELL NO. 1
LOCATION	SEC. 850, BLK. 43, H&TC SUR.	SEC.1001,BLK.43,H&TC SUR.	SEC. 474, BLK. 43, H&TC SUR.
OWNER	MONSANTO CO.	C & K PETROLEUM, INC.	NATURAL GAS ANADARKO, INC.
COMPLETED	02/15/66	11/11/80	06/02/78
SAMPLED	01/24/67	07/17/82	07/12/79
FORMATION	PENN-MORROW	PENN-MORROW	PENN-DOUGLAS
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8900	9375	5826
WELLHEAD PRESSURE,PSIG	2662	1260	1545
OPEN FLOW, MCFD	9200	5450	1980
COMPONENT, MOLE PCT			
METHANE	85.1	95.8	76.5
ETHANE	7.6	1.9	4.9
PROPANE	3.9	0.4	4.6
N-BUTANE	1.0	0.1	1.4
ISOBUTANE	0.2	TRACE	0.6
N-PENTANE	0.1	0.0	0.5
ISOPENTANE	0.4	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.9	0.5	10.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.1
HELIUM	0.05	0.06	0.28
HEATING VALUE*	1166	1028	1098
SPECIFIC GRAVITY	0.676	0.583	0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9745 SAMPLE 15953	INDEX 9746 SAMPLE 7474	INDEX 9747 SAMPLE 8064
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	MARSH	MCGARRAUGH	NORTHRUP
WELL NAME	POWERS NO. 1	C. S. MCGARRAUGH B NO. 3-C	J. W. DANIEL NO. 1
LOCATION	SEC. 496, BLK. 43, H&TC SUR.	SEC. 139, BLK. 13, T&NO SUR.	SEC. 585, BLK. 43, H&TC SUR.
OWNER	BELCO PETROLEUM CORP.	TEXACO INC.	SINCLAIR OIL & GAS CO.
COMPLETED	06/25/79	08/20/59	05/06/61
SAMPLED	04/28/80	03/29/60	07/10/61
FORMATION	PENN-DOUGLAS	MISS-	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5802	8096	7351
WELLHEAD PRESSURE,PSIG	1585	1982	1519
OPEN FLOW, MCFD	3250	5200	4200
COMPONENT, MOLE PCT			
METHANE	77.6	85.7	85.4
ETHANE	6.1	6.8	6.7
PROPANE	4.8	2.7	3.7
N-BUTANE	1.4	0.9	1.1
ISOBUTANE	0.6	0.4	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	8.1	2.1	1.3
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.26	0.10	0.10
HEATING VALUE*	1127	1150	1173
SPECIFIC GRAVITY	0.714	0.667	0.674

	INDEX 9748 SAMPLE 11665	INDEX 9749 SAMPLE 14194	INDEX 9750 SAMPLE 15688
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	NORTHRUP	NORTHRUP	PARNELL NO. 1
WELL NAME	AUTHUR MORGAN A NO. 1	CHARLES H. ELLZEY NO.1	SEC. 474, BLK. 43, H&TC SUR.
LOCATION	SEC. 827, BLK. 43, H&TC SUR.	SEC. 583, BLK.43, H&TC SUR.	NATURAL GAS ANADARKO, INC.
OWNER	PAN AMERICAN PETROLEUM CORP.	DIAMOND SHAMROCK CORP.	06/02/78
COMPLETED	08/13/68	09/13/74	07/12/79
SAMPLED	10/10/68	10/29/74	PENN-CLEVELAND
FORMATION	PENN-DOUGLAS	PENN-CLEVELAND	360
GEOLOGIC PROVINCE CODE	360	360	7278
DEPTH, FEET	5808	7092	1728
WELLHEAD PRESSURE,PSIG	1499	1717	2100
OPEN FLOW, MCFD	9500	6200	
COMPONENT, MOLE PCT			
METHANE	83.6	86.6	85.0
ETHANE	6.9	6.2	7.1
PROPANE	3.8	3.5	4.0
N-BUTANE	1.0	0.9	1.2
ISOBUTANE	0.7	0.4	0.4
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	2.8	1.5	1.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.15	0.12	0.10
HEATING VALUE*	1163	1145	1181
SPECIFIC GRAVITY	0.682	0.659	0.676

	INDEX 9751 SAMPLE 12804	INDEX 9752 SAMPLE 6089	INDEX 9753 SAMPLE 6091
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	NORTHRUP S	NOT GIVEN	NOT GIVEN
WELL NAME	CONNER NO. 1	IRENE CHUNN	GREERER
LOCATION	SEC. 585, BLK. 43, H&TC SUR.	SEC. 76, BLK. 4T, T&NO SUR.	SEC. 52, BLK. 4, T&NO SUR.
OWNER	SIDWELL OIL & GAS, INC.	HONOLULU OIL CORP.	HONOLULU OIL CORP.
COMPLETED	01/31/71	--/--/00	--/--/00
SAMPLED	04/30/71	06/20/56	06/20/56
FORMATION	PENN-MORROW L	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9932	8078	8341
WELLHEAD PRESSURE,PSIG	3150	1798	2510
OPEN FLOW, MCFD	3300	10400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.9	90.3	93.8
ETHANE	5.0	4.6	2.8
PROPANE	2.2	2.2	1.3
N-BUTANE	0.6	0.6	0.3
ISOBUTANE	0.5	0.2	0.2
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	0.6	0.8	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.4	0.5
HELIUM	0.04	0.12	0.06
HEATING VALUE*	1126	1100	1074
SPECIFIC GRAVITY	0.649	0.625	0.605

	INDEX 9754 SAMPLE 7529	INDEX 9755 SAMPLE 16234	INDEX 9756 SAMPLE 8542
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	NOT GIVEN	NOT GIVEN	NOTLA
WELL NAME	WOOTEN NO. 1	HARRIS NO. 1	LELAND E. MEKEEL NO. 5-1
LOCATION	SEC. 837, BLK. 43, H&TC SUR.	SEC. 1094, BLK 43, H&TC SUR.	SEC. 140, BLK. 43, H&TC SUR.
OWNER	J. M. HUBER CORP.	N & L OPERATING CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	03/16/60	09/17/80	09/06/61
SAMPLED	04/27/60	04/20/81	05/07/62
FORMATION	MISS-	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8383	NOT GIVEN	10367
WELLHEAD PRESSURE,PSIG	2182	2060	4795
OPEN FLOW, MCFD	6300	12000	5400
COMPONENT, MOLE PCT			
METHANE	94.3	82.5	93.9
ETHANE	3.1	8.3	2.7
PROPANE	1.0	5.0	1.0
N-BUTANE	0.2	1.2	0.2
ISOBUTANE	0.2	0.6	0.2
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.5	1.1	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	1.0
HELIUM	0.10	0.09	0.04
HEATING VALUE*	1060	1201	1062
SPECIFIC GRAVITY	0.595	0.696	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9757 SAMPLE 8544	INDEX 9758 SAMPLE 13206	INDEX 9759 SAMPLE 13165
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	NOTLA	NOTLA	PAN PETRO
WELL NAME	MARY T. MORRISON NO. 1	HOOVER NO. 1	JINES NO. 1
LOCATION	SEC. 125, BLK. 43, H&TC SUR.	SEC. 216, BLK. 43, H&TC SUR.	SEC. 100, BLK. 13, T&NO SUR.
OWNER	SHAMROCK OIL & GAS CORP.	PHILCON DEVELOPMENT CO.	COTTON PETROLEUM CORP.
COMPLETED	11/07/61	11/11/71	01/07/71
SAMPLED	05/07/62	08/11/72	03/02/72
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10303	10232	8610
WELLHEAD PRESSURE,PSIG	5396	2930	NOT GIVEN
OPEN FLOW, MCFD	15100	7600	1300
COMPONENT, MOLE PCT			
METHANE	97.3	96.4	92.7
ETHANE	0.6	1.6	3.6
PROPANE	0.1	0.3	1.3
N-BUTANE	TRACE	TRACE	0.4
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	0.6	0.9
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.9	0.5
HELIUM	0.03	0.04	0.08
HEATING VALUE*	999	1021	1075
SPECIFIC GRAVITY	0.576	0.582	0.611

	INDEX 9760 SAMPLE 13223	INDEX 9761 SAMPLE 13306	INDEX 9762 SAMPLE 6111
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PAN PETRO	PAN PETRO	PARNELL
WELL NAME	URBAN NO. 1	IRWIN NO. 1	PARNELL NO. 1
LOCATION	SEC. 93, BLK. 13, T&NO SUR.	SEC. 109, BLK. 13, T&NO SUR.	SEC. 494, BLK. 43, H&TC SUR.
OWNER	COTTON PETROLEUM CORP.	WESTERN STATES PRODUCTION CO	MAGNOLIA PETROLEUM CO.
COMPLETED	12/15/71	08/11/71	12/12/55
SAMPLED	05/31/72	07/--/72	07/20/56
FORMATION	PENN-MORROW U	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	8500	8992
WELLHEAD PRESSURE,PSIG	1400	1600	2767
OPEN FLOW, MCFD	10500	5300	900
COMPONENT, MOLE PCT			
METHANE	88.0	92.0	85.9
ETHANE	6.5	3.6	5.4
PROPANE	2.7	1.5	3.1
N-BUTANE	0.6	0.4	0.9
ISOBUTANE	0.2	0.4	0.6
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.5	0.4
NITROGEN	0.9	0.6	1.9
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.6
HELIUM	0.12	0.07	0.06
HEATING VALUE*	1133	1108	1148
SPECIFIC GRAVITY	0.642	0.630	0.672

	INDEX 9763 SAMPLE 8516	INDEX 9764 SAMPLE 11580	INDEX 9765 SAMPLE 11976
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PARNELL	PARSELL	PARSELL
WELL NAME	LIZZIE E. PINCKARD A-1	EVA PARSELL B NO. 1	FLOWERS NO. 1
LOCATION	SEC. 399, BLK. 43, H&TC SUR.	SEC. 58, BLK. 43, H&TC SUR.	SEC. 54, BLK. 43, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	PAN AMERICAN PETROLEUM CORP.	MONSANTO CO.
COMPLETED	11/08/61	--/--/00	--/--/00
SAMPLED	04/23/62	07/16/68	07/22/69
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9264	11059	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3600	2457	4730
OPEN FLOW, MCFD	21000	24100	7000
COMPONENT, MOLE PCT			
METHANE	96.8	97.2	94.0
ETHANE	1.5	1.0	0.4
PROPANE	0.3	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.4	0.1	2.7
OXYGEN	TRACE	0.0	0.6
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.5	2.0
HELIUM	0.05	0.04	0.03
HEATING VALUE*	1019	1005	962
SPECIFIC GRAVITY	0.574	0.575	0.590

	INDEX 9766 SAMPLE 7315	INDEX 9767 SAMPLE 6992	INDEX 9768 SAMPLE 11433
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PAUL HARBAUGH	PERRYTON	PERRYTON
WELL NAME	J. E. WILSON A-1	SCHNEIDNER NO. 1-LT	M. C. BRILLHART NO. 1
LOCATION	SEC. 45, BLK. 43, H&TC SUR.	SEC. 77, BLK 11, AHRENBECK	SEC. 925, BLK. 43, H&TC SUR.
OWNER	SHAMROCK OIL & GAS CORP.	SINCLAIR OIL & GAS CO.	TEXAS PACIFIC OIL CO.
COMPLETED	10/28/59	03/06/59	01/15/68
SAMPLED	12/21/59	03/06/59	04/05/68
FORMATION	PENN-MORROW	PENN-MORROW L	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9019	8001	9879
WELLHEAD PRESSURE,PSIG	2343	2894	2182
OPEN FLOW, MCFD	29000	16500	1470
COMPONENT, MOLE PCT			
METHANE	84.8	90.3	82.6
ETHANE	8.4	4.4	7.9
PROPANE	4.2	2.3	2.8
N-BUTANE	0.8	0.7	1.0
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	1.0	4.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.2
HELIUM	0.10	0.10	0.17
HEATING VALUE*	1166	1105	1114
SPECIFIC GRAVITY	0.666	0.630	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9769 SAMPLE 9679	INDEX 9770 SAMPLE 7458	INDEX 9771 SAMPLE 7528
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PERRYTON NW	PERRYTON S	PERRYTON W
WELL NAME	JOE STOREY NO. 1	HELEN ROGERS NO. 1-15	BLACKBURN NO. 1
LOCATION	SEC. 52, BLK. 11, AHRENBECK SUR	SEC. 15, BLK. 12, H&GNRR SUR	SEC. 1, BLK. 13, T&NO SUR.
OWNER	AMBASSADOR OIL CORP.	MAYFLO OIL CO.	J. M. HUBER CORP.
COMPLETED	10/05/64	03/--/60	01/06/60
SAMPLED	12/28/64	03/26/60	04/27/60
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7877	8716	8542
WELLHEAD PRESSURE, PSIG	2100	2135	2052
OPEN FLOW, MCFD	14700	6695	6700
COMPONENT, MOLE PCT			
METHANE	89.6	95.5	96.3
ETHANE	4.2	2.3	1.8
PROPANE	1.8	0.8	0.7
N-BUTANE	1.0	0.2	0.1
ISOBUTANE	0.4	0.1	0.1
N-PENTANE	0.5	TRACE	TRACE
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	0.8	0.1	0.1
NITROGEN	0.9	0.3	0.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.6
HELIUM	0.10	0.10	0.05
HEATING VALUE*	1154	1053	1038
SPECIFIC GRAVITY	0.657	0.591	0.582

	INDEX 9772 SAMPLE 15069	INDEX 9773 SAMPLE 8112	INDEX 9774 SAMPLE 17916
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	PERRYTON W	PSH1600A	S. M. F.
WELL NAME	MCLARTY NO. 1	LINA B NO. 1	PATTISON NO. 1-87
LOCATION	SEC. 86, BLK. 11, M&TG SUR.	SEC. 570, BLK. 43, H&TC SUR.	SEC. 87, BLK. 13, T&NO SUR.
OWNER	M & L OPERATING CO.	PHILLIPS PETROLEUM CO.	NATURAL GAS ANADARKO, INC.
COMPLETED	05/23/77	12/19/60	06/30/84
SAMPLED	08/04/77	08/09/61	11/26/85
FORMATION	PENN-MORROW	MISS-CHESTER	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8189	9166	6913
WELLHEAD PRESSURE, PSIG	804	2862	1597
OPEN FLOW, MCFD	1850	1335	2350
COMPONENT, MOLE PCT			
METHANE	92.3	95.1	81.6
ETHANE	3.0	2.4	4.7
PROPANE	1.1	0.8	5.4
N-BUTANE	0.4	0.2	2.0
ISOBUTANE	0.1	0.1	0.5
N-PENTANE	0.2	TRACE	0.6
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	2.0	0.2	3.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.5
HELIUM	0.08	0.10	0.18
HEATING VALUE*	1065	1047	1201
SPECIFIC GRAVITY	0.618	0.591	0.720

	INDEX 9775 SAMPLE 17077	INDEX 9776 SAMPLE 15312	INDEX 9777 SAMPLE 6767
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	SCROGGS	SHARE	SPOONY
WELL NAME	SCROGGS NO. 1-21	DAVOL NO. 1	HOBLAND NO. 1
LOCATION	SEC. 21, BLK. 45, M&TC SUR.	SEC. 59, BLK. 4, GH&H SUR.	WILLMUTH SUR.
OWNER	NATURAL GAS ANADARKO, INC.	KENNEDY & MITCHELL, INC.	HORIZON OIL & GAS CO.
COMPLETED	09/02/82	08/25/77	10/01/57
SAMPLED	09/22/83	06/26/78	07/18/58
FORMATION	MISS-CHESTER	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7583	7488	6792
WELLHEAD PRESSURE, PSIG	1888	800	1205
OPEN FLOW, MCFD	1520	450	5800
COMPONENT, MOLE PCT			
METHANE	84.1	89.9	96.3
ETHANE	5.3	4.9	2.0
PROPANE	4.1	2.2	0.6
N-BUTANE	1.5	0.7	0.2
ISOBUTANE	0.5	0.3	TRACE
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.8	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	2.3	0.5	0.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.3	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.2
HELIUM	0.15	0.04	0.10
HEATING VALUE*	1178	1130	1047
SPECIFIC GRAVITY	0.692	0.643	0.582

	INDEX 9778 SAMPLE 16391	INDEX 9779 SAMPLE 17587	INDEX 9780 SAMPLE 16247
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	TURNER	TURNER SE	WAKA W
WELL NAME	BENNY NO. 1	MEKEEL NO. 1	ARCHER-DENDY NO. 1
LOCATION	SEC. 404, BLK. 43, M&TC SUR.	SEC. 303, BLK. 43, H&TC SUR.	SEC. 25, BLK. 4T, T&NO SUR.
OWNER	NATURAL GAS ANADARKO, INC.	TXO PRODUCTION CORP.	COURSON OIL & GAS, INC.
COMPLETED	05/08/81	10/20/84	12/31/80
SAMPLED	12/02/81	02/12/85	04/28/81
FORMATION	PENN-CLEVELAND	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7312	9210	7740
WELLHEAD PRESSURE, PSIG	1790	1675	1799
OPEN FLOW, MCFD	2010	720	555
COMPONENT, MOLE PCT			
METHANE	87.5	83.4	90.7
ETHANE	6.0	8.0	4.3
PROPANE	3.0	4.7	2.1
N-BUTANE	0.7	1.3	0.5
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.5	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.3	0.6	1.4
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.3
HELIUM	0.03	0.06	0.12
HEATING VALUE*	1120	1211	1091
SPECIFIC GRAVITY	0.647	0.696	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9781 SAMPLE 5683	INDEX 9782 SAMPLE 5684	INDEX 9783 SAMPLE 6255
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OCHILTREE	OCHILTREE
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	S. P. DANIEL A NO. 1	S. P. DANIEL A	THERESA WRIGHT NO. 1
LOCATION	SEC. 139, BLK. 4-T, T&NO SUR.	SEC. 139, BLK. 4T, T&NO SUR.	SEC. 3, BLK. 13, T&NO SUR.
OWNER	TEXAS CO.	TEXAS CO.	SUN OIL CO.
COMPLETED	07/01/54	07/01/54	01/10/57
SAMPLED	09/03/54	09/03/54	02/19/57
FORMATION	PENN-ATOKA	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	7342	7550	8672
WELLHEAD PRESSURE,PSIG	1796	2129	2000
OPEN FLOW, MCFD	4390	4750	33000
COMPONENT, MOLE PCT			
METHANE	85.8	86.7	87.3
ETHANE	7.3	7.2	6.0
PROPANE	3.3	2.9	3.2
N-BUTANE	0.9	0.7	1.1
ISOBUTANE	0.3	0.2	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	1.0	1.1	0.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.08	0.08	0.05
HEATING VALUE*	1163	1149	1173
SPECIFIC GRAVITY	0.664	0.657	0.667

	INDEX 9784 SAMPLE 15295	INDEX 9785 SAMPLE 13487	INDEX 9786 SAMPLE 13494
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	WYATT	BRAZOS, BLK. 538L	HIGH ISLAND BLK. 14-L
WELL NAME	LESLIE NO. 1	NO. A-5	NO. 1
LOCATION	SEC. 134, BLK. 43, H&TC SUR.	NOT GIVEN	NOT GIVEN
OWNER	HORIZON OIL & GAS CO.	TEXACO INC.	SUPERIOR OIL CO.
COMPLETED	10/25/77	--/--/70	11/30/71
SAMPLED	05/30/78	12/04/72	12/20/72
FORMATION	PENN-MORROW	MIOC-6000 FT. SAND	MIOC---
GEOLOGIC PROVINCE CODE	360	220	220
DEPTH, FEET	10072	7059	9426
WELLHEAD PRESSURE,PSIG	3523	2220	3590
OPEN FLOW, MCFD	2800	NOT GIVEN	14700
COMPONENT, MOLE PCT			
METHANE	22.9	94.9	94.5
ETHANE	16.6	1.5	3.1
PROPANE	27.0	0.6	0.8
N-BUTANE	14.6	0.2	0.2
ISOBUTANE	6.7	0.4	0.3
N-PENTANE	3.8	0.2	0.1
ISOPENTANE	5.3	TRACE	TRACE
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	2.3	0.4	0.1
NITROGEN	0.0	1.5	0.4
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.5
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	2471	1057	1060
SPECIFIC GRAVITY	1.477	0.602	0.596

	INDEX 9787 SAMPLE 13495	INDEX 9788 SAMPLE 13750	INDEX 9789 SAMPLE 12295
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	HIGH ISLAND BLK. 14-L	HIGH ISLAND BLK. 140	HIGH ISLAND BLK. 140-L
WELL NAME	NO. 1	NO. C-1	NO. B-1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	SUPERIOR OIL CO.	CHEVRON OIL CO.	CHEVRON OIL CO.
COMPLETED	11/30/71	10/25/71	10/07/68
SAMPLED	12/09/72	10/09/73	06/14/70
FORMATION	MIOC---	MIOC-M-20	OLIG-FRIO AMP
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10077	6508	7375
WELLHEAD PRESSURE,PSIG	5405	2600	2775
OPEN FLOW, MCFD	122000	32000	33000
COMPONENT, MOLE PCT			
METHANE	93.0	94.9	94.7
ETHANE	3.1	2.6	2.6
PROPANE	0.8	0.8	0.8
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	1.8	0.6	0.6
OXYGEN	0.3	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1037	1065	1071
SPECIFIC GRAVITY	0.599	0.598	0.603

	INDEX 9790 SAMPLE 10900	INDEX 9791 SAMPLE 13044	INDEX 9792 SAMPLE 13045
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	HIGH ISLAND BLK. 160-L	HIGH ISLAND BLK. 52-L	HIGH ISLAND BLK. 52-L
WELL NAME	UNIT NO. 60-1	FED. NO. A6UT	FED. NO. A-6
LOCATION	DEN AREA	NOT GIVEN	NOT GIVEN
OWNER	SHELL OIL CO., ET AL.	CHEVRON OIL CO.	CHEVRON OIL CO.
COMPLETED	06/23/61	10/29/69	10/29/69
SAMPLED	03/07/67	09/28/71	09/28/71
FORMATION	MIOC-F	OLIG-FRIO M-54C	OLIG-FRIO M-56C
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8444	8530	9728
WELLHEAD PRESSURE,PSIG	3365	2975	3000
OPEN FLOW, MCFD	43500	11500	43000
COMPONENT, MOLE PCT			
METHANE	94.2	92.6	93.2
ETHANE	2.5	3.4	3.4
PROPANE	0.6	1.4	1.2
N-BUTANE	0.2	0.4	0.4
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.5	0.4
NITROGEN	0.5	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1064	1111	1100
SPECIFIC GRAVITY	0.608	0.625	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9793 SAMPLE 12359	INDEX 9794 SAMPLE 17865	INDEX 9795 SAMPLE 17866
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD	HIGH ISLAND E BLK. 129	MATAGORDA ISLAND	MATAGORDA ISLAND
WELL NAME	OCS G-1848 WELL NO. 2	OCS-G-4550 NO. A-1	OCS-G-4550 NO. A-2
LOCATION	NOT GIVEN	BLOCK 712-L	BLOCK 712-L
OWNER	SUN OIL CO.	TENNECO EXP. & PROD. CO.	TENNECO EXP. & PROD. CO.
COMPLETED	09/11/69	03/09/84	03/18/84
SAMPLED	08/13/70	10/11/85	10/11/85
FORMATION	MIOC-J SAND	MIOC-MP-81	MIOC-MP-81
GEOLOGIC PROVINCE CODE	220	955	955
DEPTH, FEET	11208	9652	9477
WELLHEAD PRESSURE,PSIG	8450	3416	3452
OPEN FLOW, MCFD	82596	6855	6855
COMPONENT, MOLE PCT			
METHANE	93.8	95.1	95.7
ETHANE	2.9	2.0	1.9
PROPANE	0.9	0.4	0.4
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.4	0.7	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.0	1.0
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1057	1042	1039
SPECIFIC GRAVITY	0.607	0.596	0.591

	INDEX 9796 SAMPLE 17212	INDEX 9797 SAMPLE 16717	INDEX 9798 SAMPLE 15875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OFFSHORE-OCS	OLDHAM	OLDHAM
FIELD	OCS-G-4557	MAYHOR	LAMBERT
WELL NAME	NO. B-1	AURORA NO. 2	JAY TAYLOR NO. A-1
LOCATION	BRAZOS BLK. 578	LEA. 316, ST. CAP. LAND SUR.	SEC. 82, BLK. GMS, LEE SUR.
OWNER	SUPERIOR OIL CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED	06/23/82	04/28/82	01/11/79
SAMPLED	03/16/84	12/06/82	11/09/79
FORMATION	MIOC-BIG H	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	956	435	435
DEPTH, FEET	11320	7168	6776
WELLHEAD PRESSURE,PSIG	1215	NOT GIVEN	120
OPEN FLOW, MCFD	14411	150	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	25.8	33.6
ETHANE	1.6	12.0	10.6
PROPANE	0.3	22.2	14.8
N-BUTANE	0.1	7.0	3.9
ISOBUTANE	TRACE	3.2	1.7
N-PENTANE	TRACE	1.1	1.0
ISOPENTANE	TRACE	2.2	0.5
CYCLOPENTANE	TRACE	0.4	0.1
HEXANES PLUS	0.1	0.6	0.2
NITROGEN	0.9	24.8	32.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.2	0.2
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.1	0.2
HELIUM	TRACE	0.32	0.42
HEATING VALUE*	1010	1583	1181
SPECIFIC GRAVITY	0.590	1.180	1.013

	INDEX 9799 SAMPLE 16636	INDEX 9800 SAMPLE 16637	INDEX 9801 SAMPLE 16649
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	LAMBERT I	LAMBERT I	LAMBERT I
WELL NAME	JAY TAYLOR NO.A-1(OIL WELL)	JAY TAYLOR NO.B-1(OIL WELL)	JAY TAYLOR D-1
LOCATION	SEC.82,BLK,GMS,WMD LEE SUR.	SEC.82,BLK,GMS,WMD LEE SUR.	SEC.82,BLK GM-S,WMD LEE SUR.
OWNER	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED	03/08/77	02/22/79	--/--/00
SAMPLED	09/13/82	09/13/82	09/20/82
FORMATION	PENN-GRANITE WASH	PENN-GRANITE WASH	PENN-GRANITE WASH
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	6776	6706	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	21.5	26.4	13.7
ETHANE	12.7	8.3	7.4
PROPANE	25.2	15.4	20.0
N-BUTANE	8.7	6.3	8.6
ISOBUTANE	3.8	3.0	3.3
N-PENTANE	1.8	1.2	1.1
ISOPENTANE	2.4	1.8	1.7
CYCLOPENTANE	0.8	1.2	0.1
HEXANES PLUS	1.0	1.5	0.2
NITROGEN	16.2	30.9	34.8
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.2	0.1
HYDROGEN	6.1	2.5	6.7
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.15	0.43	2.03
HEATING VALUE*	1784	1430	1348
SPECIFIC GRAVITY	1.210	1.144	1.137

	INDEX 9802 SAMPLE 16715	INDEX 9803 SAMPLE 6331	INDEX 9804 SAMPLE 6425
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	LAMBERT II	MANARTE	MANARTE
WELL NAME	RANSFIELD NO. A-2	ALAMOSA RANCH NO. A-1	ALAMOSA RANCH B NO. 1
LOCATION	LEA. 310 BLK H-3 ST CAP LAND	SEC. 41, BLK. H-3, CL SUR.	SEC. 13, BLK. H-3, CL SUR.
OWNER	BAKER & TAYLOR DRILLING CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	10/17/79	05/13/57	09/10/57
SAMPLED	12/06/82	05/28/57	10/04/57
FORMATION	PENN-MISSOURIAN LIMESTONE	PENN-VIRGIL L	PENN-MISSOURI L
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	6075	6101	7122
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	140
OPEN FLOW, MCFD	43	40	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	27.3	30.2	19.9
ETHANE	9.5	12.3	9.7
PROPANE	22.7	21.9	21.7
N-BUTANE	9.7	7.3	8.9
ISOBUTANE	3.9	3.5	4.7
N-PENTANE	2.7	1.1	1.4
ISOPENTANE	3.4	1.7	2.4
CYCLOPENTANE	1.7	0.3	0.3
HEXANES PLUS	2.1	0.7	0.9
NITROGEN	17.0	20.3	27.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.3
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	1.4
HELIUM	0.16	0.16	0.30
HEATING VALUE*	1914	1619	1617
SPECIFIC GRAVITY	1.302	1.159	1.257

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9805 SAMPLE 5578	INDEX 9806 SAMPLE 8059	INDEX 9807 SAMPLE 9351
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-111	CHANNING NO. 1	BIVINS D NO. 3
LOCATION	SEC. 22, BLK. 2, G&M SUR.	SEC. 69, BLK. 2, G&M SUR.	SEC. 47, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	BIVINS INTERESTS	AMARILLO OIL CO.
COMPLETED	12/07/53	07/07/61	04/06/64
SAMPLED	12/11/53	07/12/61	05/20/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	3095	2716	2956
WELLHEAD PRESSURE,PSIG	355	NOT GIVEN	296
OPEN FLOW, MCFD	12800	8500	16000
COMPONENT, MOLE PCT			
METHANE	70.0	70.5	70.6
ETHANE	4.9	5.2	5.1
PROPANE	2.7	2.7	2.4
N-BUTANE	0.8	0.8	0.7
ISOBUTANE	0.2	0.5	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	18.8	17.9	18.1
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.7
HELIUM	1.91	1.20	1.28
HEATING VALUE*	924	948	933
SPECIFIC GRAVITY	0.708	0.714	0.710

	INDEX 9808 SAMPLE 9561	INDEX 9809 SAMPLE 11893	INDEX 9810 SAMPLE 16714
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	PANHANDLE W	PANHANDLE W	SUNDANCE
WELL NAME	CHANNING NO. 1	BIVINS A-111	PARKER CREEK NO. 1
LOCATION	SEC. 69, BLK. 2, G&M SUR.	SEC. 22, BLK. 2, G&M SUR.	LEA, 316 ST. CAP. LAND SUR.
OWNER	BIVINS INTERESTS	COLORADO INTERSTATE GAS CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED	--/--/00	12/07/53	09/02/81
SAMPLED	09/18/64	05/21/69	12/06/82
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-GRANITE WASH U
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	3095	7020
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	12800	146
COMPONENT, MOLE PCT			
METHANE	69.9	68.3	15.1
ETHANE	5.0	5.0	8.2
PROPANE	2.7	3.3	24.9
N-BUTANE	0.9	0.9	15.8
ISOBUTANE	0.3	0.3	6.1
N-PENTANE	0.1	0.3	3.6
ISOPENTANE	0.3	0.1	8.2
CYCLOPENTANE	0.1	0.1	1.6
HEXANES PLUS	0.1	0.1	2.6
NITROGEN	18.8	20.3	13.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	TRACE
HELIUM	1.24	1.27	0.18
HEATING VALUE*	934	918	2383
SPECIFIC GRAVITY	0.715	0.721	1.553

	INDEX 9811 SAMPLE 6978	INDEX 9812 SAMPLE 7226	INDEX 9813 SAMPLE 7242
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	TAYLOR NO. 1-H	FULTON NO. 1A-84	FULTON RANCH 1A-84
LOCATION	SEC. 41	SEC. 84, FULTON RANCH SUBDIV	SEC. 84,FULTON RANCH SUBDIV.
OWNER	HUMBLE OIL & REFINING CO.	SHELL OIL CO.& ATLANTIC REF.	SHELL OIL CO.& ATLANTIC REF.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/21/59	10/01/59	10/03/59
FORMATION	PERM-PEASE RIVER	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	1058	NOT GIVEN	3680
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7600
COMPONENT, MOLE PCT			
METHANE	0.3	40.2	38.7
ETHANE	0.1	3.1	3.1
PROPANE	0.1	2.1	1.7
N-BUTANE	0.0	0.9	0.5
ISOBUTANE	0.0	0.6	0.4
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.6	0.2
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	99.2	49.4	52.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.2
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.7
HELIUM	0.10	2.70	2.30
HEATING VALUE*	7	599	534
SPECIFIC GRAVITY	0.965	0.823	0.820

	INDEX 9814 SAMPLE 12578	INDEX 9815 SAMPLE 12579	INDEX 9816 SAMPLE 12612
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	OLDHAM
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BRAVO NO. 1	BRAVO NO. 1	BRAVO NO. 1
LOCATION	SEC. 41, BLK. S GC&F RR SUR.	SEC. 41, BLK.S, GC&FRR SUR.	SEC. 41, BLK.S, GC&FRR SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	01/03/71	01/03/71	01/03/71
SAMPLED	12/16/70	12/16/70	12/21/70
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	2200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.0	1.0	1.1
ETHANE	0.0	0.0	0.0
PROPANE	TRACE	TRACE	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	98.8	98.7	98.6
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.08	0.07	0.07
HEATING VALUE*	10	10	14
SPECIFIC GRAVITY	0.963	0.963	0.963

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9817 SAMPLE 16551	INDEX 9818 SAMPLE 17372	INDEX 9819 SAMPLE 11632
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OLDHAM	OLDHAM	ORANGE
FIELD	WILDCAT	WILDCAT	BRIDGE CITY
WELL NAME	OLD HIGH NO. 1	RAFTER O RANCH NO. 1-28	M. J. L. STARK B NCT NO. 1
LOCATION	SEC. 76, BLK GM-S WMD LEE SR	SEC. 28, BLK.S, GC&SF SUR.	J. H. FORSYTH SUR. A-79
OWNER	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	TEXACO INC.
COMPLETED	--/--/00	--/--/84	03/29/67
SAMPLED	06/22/82	08/12/84	08/19/68
FORMATION	PENN-CANYON	PENN-CANYON LS	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	435	435	220
DEPTH, FEET	5675	6912	10136
WELLHEAD PRESSURE,PSIG	NOT GIVEN	870	5980
OPEN FLOW, MCFD	NOT GIVEN	3000	44800
COMPONENT, MOLE PCT			
METHANE	12.0	21.4	82.6
ETHANE	2.1	3.6	7.7
PROPANE	1.9	2.2	4.9
N-BUTANE	0.7	0.6	1.4
ISOBUTANE	0.5	0.3	1.1
N-PENTANE	0.3	0.2	0.5
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.3	TRACE	0.2
HEXANES PLUS	0.4	0.1	0.6
NITROGEN	54.7	69.6	0.1
OXYGEN	0.0	0.0	0.0
ARGON	0.4	0.4	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	24.9	0.3	0.5
HELIUM	1.58	1.20	TRACE
HEATING VALUE*	302	387	1259
SPECIFIC GRAVITY	1.092	0.905	0.718

	INDEX 9820 SAMPLE 13575	INDEX 9821 SAMPLE 4308	INDEX 9822 SAMPLE 8126
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ORANGE	ORANGE	PALO PINTO
FIELD	TEN MILE CREEK	VIDOR DOME	BRAD
WELL NAME	MYER FEE GAS UNIT 1 NO. 1	MILLER-VIDOR LAND CO. NO. 1	HART NO. 1
LOCATION	SEC. 4, ANN A. MYER SUR., A-101	J. M. SMISHER SUR. NO. 1	SEC. 29, BLK. 3, TP SUR.
OWNER	ATLANTIC RICHFIELD CO.	GULF OIL CORP.	LONE STAR GAS CO.
COMPLETED	01/12/71	04/14/47	10/27/27
SAMPLED	04/09/73	05/22/47	08/08/61
FORMATION	OLIG-NODOSARIA	OLIG-M	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	220	220	425
DEPTH, FEET	7084	6932	3890
WELLHEAD PRESSURE,PSIG	2192	2600	935
OPEN FLOW, MCFD	25600	2200	1903
COMPONENT, MOLE PCT			
METHANE	96.0	91.7	78.9
ETHANE	2.1	7.7	10.6
PROPANE	0.4	---	4.2
N-BUTANE	TRACE	---	1.1
ISOBUTANE	0.4	---	0.7
N-PENTANE	TRACE	---	0.2
ISOPENTANE	0.2	---	0.4
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.1	---	0.2
NITROGEN	0.5	0.1	3.2
OXYGEN	0.0	0.2	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.01	0.01	0.10
HEATING VALUE*	1051	1067	1195
SPECIFIC GRAVITY	0.587	0.597	0.708

	INDEX 9823 SAMPLE 8128	INDEX 9824 SAMPLE 12736	INDEX 9825 SAMPLE 15071
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	BRAD SW	BRAD SW	CARILLE
WELL NAME	E. Y. HART NO. 1	B. SLEMMONS NO. 1	BRANNON NO. 1
LOCATION	SEC. 43, BLK. 3, TP SUR.	NOT GIVEN	LEWIS P. COOKE SUR. A-122
OWNER	PAN AMERICAN PETROLEUM CORP.	CLINTON OIL CO.	W. L. PENNINGTON
COMPLETED	08/07/59	02/09/59	05/20/16
SAMPLED	08/08/61	03/--/71	08/10/77
FORMATION	PENN-CONG. & BIG SALINE	PENN-BIG SALINE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3515	3600	3670
WELLHEAD PRESSURE,PSIG	950	380	650
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	80
COMPONENT, MOLE PCT			
METHANE	79.1	76.9	83.5
ETHANE	10.2	10.1	8.9
PROPANE	4.2	5.1	2.5
N-BUTANE	1.1	1.2	0.4
ISOBUTANE	0.7	0.8	0.2
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.6	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	3.6	4.4	3.4
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.10	0.10	0.12
HEATING VALUE*	1189	1213	1111
SPECIFIC GRAVITY	0.707	0.731	0.663

	INDEX 9826 SAMPLE 6615	INDEX 9827 SAMPLE 8129	INDEX 9828 SAMPLE 12646
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	EMORY	EMORY	EMORY
WELL NAME	S. B. CANTEY ESTATE NO. 1	CANTEY C-4	MONTY WATSON CONE NO. 1
LOCATION	SEC. 19, BLK. 2, T&P RR SUR.	SEC. 24, BLK. 3, TP SUR.	NOT GIVEN
OWNER	TEXOMA PRODUCTION CO.	TEXOMA PRODUCTION CO.	RIDDLE OIL CO.
COMPLETED	08/15/58	10/24/59	12/21/69
SAMPLED	06/02/58	08/08/61	01/22/71
FORMATION	PENN-LAKE	PENN-LAKE	PENN-BIG SALINE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3673	3798	3738
WELLHEAD PRESSURE,PSIG	1650	1220	1600
OPEN FLOW, MCFD	7500	4400	1920
COMPONENT, MOLE PCT			
METHANE	80.8	80.8	76.3
ETHANE	10.1	10.1	9.4
PROPANE	3.6	3.6	3.9
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.2	3.0	7.0
OXYGEN	0.0	TRACE	0.9
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.10	0.10	0.13
HEATING VALUE*	1158	1171	1114
SPECIFIC GRAVITY	0.684	0.691	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9829 SAMPLE 12647	INDEX 9830 SAMPLE 12636	INDEX 9831 SAMPLE 7208
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	EMORY	GRAFORD	WINKSON RANCH
WELL NAME	STATE OF TEXAS UNIT NO. 1	R.R.M. GAULDIN NO. 3	R. D. WINKSON NO. 1
LOCATION	NOT GIVEN	4 MI. NW GRAFORD	SEC. 71, BLK. 3, TP&RR SUR.
OWNER	RIDDLE OIL CO.	GEORGE MITCHELL & ASSOC. INC	TEXOMA PRODUCTION CO.
COMPLETED	05/05/70	--/--/00	07/11/58
SAMPLED	01/22/71	01/20/71	09/04/59
FORMATION	PENN-BIG SALINE	PENN-ATOKA	PENN-BIG SALINE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3683	4147	3310
WELLHEAD PRESSURE,PSIG	1220	1405	1103
OPEN FLOW, MCFD	1486	722	7400
COMPONENT, MOLE PCT			
METHANE	80.0	79.7	79.8
ETHANE	9.3	9.0	10.0
PROPANE	4.4	4.1	3.5
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.2	0.3	TRACE
ISOPENTANE	0.4	0.3	0.6
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.4	4.3	4.1
OXYGEN	0.0	0.3	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.10	0.13	0.10
HEATING VALUE*	1188	1156	1163
SPECIFIC GRAVITY	0.704	0.698	0.693

	INDEX 9832 SAMPLE 10544	INDEX 9833 SAMPLE 640	INDEX 9834 SAMPLE 643
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	JOHNSTON GAP	MINERAL WELLS	MINERAL WELLS
WELL NAME	T. O. WILLIAMS NO. 1	WHARTON NO. 1	KEOWN NO. 9
LOCATION	SEC. 58, BLK. 3, T&P RR SUR.	SEC. 49	NOT GIVEN
OWNER	E.C. JOHNSTON CO., ET AL.	D. A. UPHAM	LONE STAR GAS CO.
COMPLETED	09/12/65	10/--/20	04/28/20
SAMPLED	05/02/66	08/24/21	08/23/21
FORMATION	PENN-ATOKA	PENN-MARBLE FALLS	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3717	3665	999
WELLHEAD PRESSURE,PSIG	1600	410	171
OPEN FLOW, MCFD	12200	4150	1666
COMPONENT, MOLE PCT			
METHANE	78.0	71.7	78.5
ETHANE	10.5	26.6	18.9
PROPANE	4.0	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	4.4	1.6	2.3
OXYGEN	0.1	0.0	0.0
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.0	0.2
HELIUM	0.14	0.08	0.06
HEATING VALUE*	1185	1203	1134
SPECIFIC GRAVITY	0.715	0.692	0.659

	INDEX 9835 SAMPLE 644	INDEX 9836 SAMPLE 12735	INDEX 9837 SAMPLE 14621
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	MINERAL WELLS	MINERAL WELLS N	MINERAL WELLS S
WELL NAME	OAKS NO. 6	WAGLEY "A" NO. 1	HART NO. 8-2
LOCATION	DENNIS MAHONEY SUR	NOT GIVEN	2 MI. SE ORAN
OWNER	LONE STAR GAS CO.	CLINTON OIL CO.	DALLAS PRODUCTION, INC.
COMPLETED	03/17/19	03/06/50	05/--/75
SAMPLED	09/07/21	03/--/71	03/23/76
FORMATION	NOT GIVEN	PENN-BIG SALINE	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1055	4700	4800
WELLHEAD PRESSURE,PSIG	200	195	1670
OPEN FLOW, MCFD	1666	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	79.9	77.1	79.7
ETHANE	17.8	9.5	10.5
PROPANE	---	3.8	4.6
N-BUTANE	---	1.0	1.3
ISOBUTANE	---	0.7	0.6
N-PENTANE	---	0.4	0.2
ISOPENTANE	---	0.3	0.6
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.3	0.3
NITROGEN	1.7	5.7	1.6
OXYGEN	0.2	0.7	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.18	0.11	0.09
HEATING VALUE*	1128	1156	1232
SPECIFIC GRAVITY	0.652	0.718	0.715

	INDEX 9838 SAMPLE 13221	INDEX 9839 SAMPLE 13283	INDEX 9840 SAMPLE 14109
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	PALO PINTO REGULAR	PALO PINTO REGULAR	PALO PINTO REGULAR
WELL NAME	R. J. ANDERSON NO. 1	R. J. ANDERSON NO. 1	LESLIE CRUM NO. 1
LOCATION	WILLIAM PRIEST SUR. A-363	WILLIAM PRIEST SUR. A-363	SEC. 2542, TE&L SUR.
OWNER	RHODES DRILLING CO.	RHODES DRILLING CO.	UPHAM OIL & GAS CO.
COMPLETED	05/18/71	05/18/71	06/04/73
SAMPLED	05/25/72	06/26/72	07/--/74
FORMATION	-ANDY	-ANDY	PENN-BEND CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	814	813	4602
WELLHEAD PRESSURE,PSIG	420	420	1750
OPEN FLOW, MCFD	5170	5368	4200
COMPONENT, MOLE PCT			
METHANE	88.9	88.1	75.1
ETHANE	4.5	4.5	10.8
PROPANE	1.2	1.3	5.8
N-BUTANE	0.2	0.2	1.9
ISOBUTANE	0.4	0.4	0.9
N-PENTANE	TRACE	0.1	0.5
ISOPENTANE	0.1	0.1	1.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	4.1	4.8	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.17	0.17	0.12
HEATING VALUE*	1042	1041	1301
SPECIFIC GRAVITY	0.620	0.626	0.769

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9841 SAMPLE 14767	INDEX 9842 SAMPLE 12934	INDEX 9843 SAMPLE 12635
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	PENNINGTON	SANTO S	STRAWN N
WELL NAME	TEPRR NO. 1-29	GEORGIA POTTER NO. 1	JOHN RITCHIE NO. 1
LOCATION	SEC. 1, T&NO SUR. A-694	L. A. BRADLEY SUR. A-1956	1 MI. S METCALF GAP
OWNER	M. L. PENNINGTON	LONE STAR PRODUCING CO.	GEORGE MITCHELL & ASSOC. INC
COMPLETED	05/09/15	01/21/70	--/--/00
SAMPLED	09/20/16	07/19/71	01/20/71
FORMATION	PENN-CONGLOMERATE	MISS-REEF	PENN-BEND CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3436	4191	3751
WELLHEAD PRESSURE,PSIG	1650	1810	660
OPEN FLOW, MCFD	3500	12051	204
COMPONENT, MOLE PCT			
METHANE	77.8	76.9	77.5
ETHANE	11.2	12.0	9.7
PROPANE	5.0	5.2	3.9
N-BUTANE	1.3	1.1	1.0
ISOBUTANE	0.7	0.7	0.6
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.4	0.2	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.8	2.8	5.2
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.5
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.10	0.12	0.14
HEATING VALUE*	1230	1229	1151
SPECIFIC GRAVITY	0.724	0.723	0.706

	INDEX 9844 SAMPLE 11590	INDEX 9845 SAMPLE 11591	INDEX 9846 SAMPLE 12642
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	STRAWN NW	STUART	STUART
WELL NAME	ELLEN G. STUART B NO. 1	J. N. STUART NO. 167	ELLEN G. STUART B NO. 1
LOCATION	SEC 73, BLK. 8-4	SEC. 74, BLK. 4, T&PRR SUR.	T&P R&R SUR.
OWNER	TEXAS PACIFIC OIL CO.	TEXAS PACIFIC OIL CO.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	03/16/59	03/18/58	03/16/59
SAMPLED	07/22/68	07/26/68	01/27/71
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3859	3513	3870
WELLHEAD PRESSURE,PSIG	985	708	140
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	78.6	77.7	78.7
ETHANE	9.9	10.3	10.2
PROPANE	4.2	5.1	4.6
N-BUTANE	1.2	1.3	1.1
ISOBUTANE	0.3	0.4	0.6
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	4.4	3.8	3.6
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.12	0.10	0.11
HEATING VALUE*	1169	1209	1196
SPECIFIC GRAVITY	0.704	0.722	0.711

	INDEX 9847 SAMPLE 7051	INDEX 9848 SAMPLE 14754	INDEX 9849 SAMPLE 16237
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	W. J. RHODES NO. 1	WALTERS NO. 1	MITCHELL KAHLBAU NO. 2
LOCATION	SEC. 11, BLK. 1, T&P SUR.	SEC. 2593, TE&L SUR., A664	SEC.1785, TE&L SUR. A-560
OWNER	SKELLY OIL CO.	TIPPERARY OIL & GAS CORP.	THREE B OPERATING, INC.
COMPLETED	02/14/59	04/26/75	02/19/80
SAMPLED	04/29/59	09/13/76	04/20/81
FORMATION	PENN-MARBLE FALLS	PENN-ATOKA	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4254	4944	4010
WELLHEAD PRESSURE,PSIG	1766	1320	NOT GIVEN
OPEN FLOW, MCFD	5200	5200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.6	81.8	77.5
ETHANE	10.9	9.5	9.5
PROPANE	3.5	4.4	4.7
N-BUTANE	1.2	0.8	1.3
ISOBUTANE	0.3	0.4	0.5
N-PENTANE	0.7	0.1	0.4
ISOPENTANE	0.8	0.3	0.3
CYCLOPENTANE	0.5	TRACE	0.1
HEXANES PLUS	1.9	0.1	0.3
NITROGEN	1.8	2.9	4.5
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	0.10	0.14	0.10
HEATING VALUE*	1351	1167	1187
SPECIFIC GRAVITY	0.783	0.686	0.720

	INDEX 9850 SAMPLE 15078	INDEX 9851 SAMPLE 12126	INDEX 9852 SAMPLE 12127
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BECKVILLE W	BELLE BOWER	BELLE BOWER
WELL NAME	ELVE TOMKINS NO. 1	J. D. ADAMS ET AL. NO. 1	REED ROYALTY TRUST NO. 1
LOCATION	W.C. WINS SUR. A-44	JOSEPH HUMPHRIES SUR. A-281	W. G. BOOKER SUR. A-67
OWNER	MCCORMICK OIL & GAS CORP.	MARSHALL EXPLORATION, INC.	MARSHALL EXPLORATION, INC.
COMPLETED	12/23/75	02/25/68	04/01/68
SAMPLED	08/22/77	12/02/69	12/02/69
FORMATION	JURA-COTTON VALLEY	CRET-PALUXY	CRET-PALUXY
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9864	3211	3201
WELLHEAD PRESSURE,PSIG	4010	1348	1910
OPEN FLOW, MCFD	5200	18750	10500
COMPONENT, MOLE PCT			
METHANE	90.8	86.0	85.5
ETHANE	5.0	2.7	2.7
PROPANE	1.4	0.9	1.0
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.3	9.2	9.7
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.2	0.1
HELIUM	0.01	0.04	0.04
HEATING VALUE*	1092	970	980
SPECIFIC GRAVITY	0.628	0.629	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9853 SAMPLE 958	INDEX 9854 SAMPLE 2068	INDEX 9855 SAMPLE 2476
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BETHANY	BETHANY	BETHANY
WELL NAME	J. D. FUNK NO. 1	M. L. BRUMBLE NO. 4	W. C. AGURS NO. 5
LOCATION	COORDINATES 2-14	E. F. MITCHESON SUR.	JACOB WOMAC SUR.
OWNER	MAGNOLIA PETROLEUM CO.	TEXAS CO.	F. W. TINNIN
COMPLETED	07/--/24	03/01/30	07/26/29
SAMPLED	12/30/24	06/19/30	--/--/00
FORMATION	CRET-WOODBINE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	1923	2250	2990
WELLHEAD PRESSURE,PSIG	350	725	1200
OPEN FLOW, MCFD	65000	1120	26000
COMPONENT, MOLE PCT			
METHANE	88.0	84.0	84.7
ETHANE	6.2	9.9	10.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.4	5.4	4.2
OXYGEN	0.2	0.0	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.7	0.4
HELIUM	0.05	0.06	0.05
HEATING VALUE*	1003	1028	1043
SPECIFIC GRAVITY	0.610	0.633	0.628

	INDEX 9856 SAMPLE 3940	INDEX 9857 SAMPLE 4276	INDEX 9858 SAMPLE 4277
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BETHANY	BETHANY	BETHANY
WELL NAME	G. W. BRUMBLE NO. 13	E. JOHNSON NO. 1	E. JOHNSON NO. 1
LOCATION	MITCHERSON SUR.	MESSER FAIN SUR.	MESSER FAIN SUR.
OWNER	TEXAS CO.	ROBERTS & MURPHY, ET AL.	ROBERTS & MURPHY
COMPLETED	12/29/44	10/02/45	10/02/45
SAMPLED	12/29/44	12/30/46	12/30/46
FORMATION	CRET-PETTIT	CRET---	CRET-
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5778	6093	5706
WELLHEAD PRESSURE,PSIG	1900	2186	2304
OPEN FLOW, MCFD	NOT GIVEN	4000	8000
COMPONENT, MOLE PCT			
METHANE	90.4	86.1	82.2
ETHANE	8.2	11.0	14.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.3	1.3	1.9
OXYGEN	0.4	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.0	1.1	1.0
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1063	1069	1096
SPECIFIC GRAVITY	0.607	0.628	0.646

	INDEX 9859 SAMPLE 10016	INDEX 9860 SAMPLE 12455	INDEX 9861 SAMPLE 14153
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BETHANY	BETHANY	BETHANY
WELL NAME	ROQUEMORE NO. A-3	T. C. ADAMS NO. 1-C	B. CRENSHAW & U I NO. 1
LOCATION	BEN C. JORDAN SUR. A-348	EZEKIEL JONES SUR.	BEN C. JORDAN SUR. A-348
OWNER	TENNECO OIL CO.	TENNECO OIL CO.	TEXACO INC.
COMPLETED	11/08/63	05/17/47	05/07/74
SAMPLED	07/28/65	10/15/70	09/23/74
FORMATION	CRET-GLEN ROSE	CRET-PETTIT	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	3558	5660	8096
WELLHEAD PRESSURE,PSIG	803	460	1150
OPEN FLOW, MCFD	10050	910	9380
COMPONENT, MOLE PCT			
METHANE	88.5	90.9	85.7
ETHANE	2.9	4.4	7.5
PROPANE	0.9	1.4	2.7
N-BUTANE	0.5	0.4	0.7
ISOBUTANE	0.3	0.4	0.7
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	TRACE	0.0	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.4	0.3	0.3
NITROGEN	6.3	1.2	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	1.3
HELIUM	0.05	0.03	0.01
HEATING VALUE*	1023	1095	1160
SPECIFIC GRAVITY	0.631	0.627	0.673

	INDEX 9862 SAMPLE 12456	INDEX 9863 SAMPLE 3775	INDEX 9864 SAMPLE 4150
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	BETHANY NE	CARTHAGE	CARTHAGE
WELL NAME	T. C. ADAMS C NO. 9	C. BLACK ESTATE NO. 1	LOUIS WERNER B NO. 1-C
LOCATION	EZEKIEL JONES SUR.	BLACK SUR.	NOT GIVEN
OWNER	TENNECO OIL CO.	UNION PRODUCING CO.	SKELLY OIL CO.
COMPLETED	07/19/65	06/23/43	09/26/45
SAMPLED	10/15/70	04/05/44	10/29/46
FORMATION	CRET-PALUXY	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	2639	5695	5760
WELLHEAD PRESSURE,PSIG	165	2635	2706
OPEN FLOW, MCFD	586	22	1118
COMPONENT, MOLE PCT			
METHANE	86.8	80.0	83.4
ETHANE	2.5	17.9	14.8
PROPANE	0.9	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	8.4	1.1	0.9
OXYGEN	0.0	0.4	0.2
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.6	0.7
HELIUM	0.06	0.00	0.02
HEATING VALUE*	991	1131	1110
SPECIFIC GRAVITY	0.632	0.656	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9865 SAMPLE 4151	INDEX 9866 SAMPLE 12445	INDEX 9867 SAMPLE 12446
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE	CARTHAGE	CARTHAGE
WELL NAME	LOUIS WERNER B NO. 1-T	A. R. CURTIS NO. 1	WERNER SMITH NO. 2
LOCATION	5 MI. S OF DEADWOOD	CARTHAGE	CARTHAGE
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	09/26/45	03/12/52	02/05/64
SAMPLED	10/29/46	10/14/70	10/14/70
FORMATION	CRET-PETTIT	CRET-HILL SOUTHEAST	CRET-BLOSSOM
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6008	6247	2100
WELLHEAD PRESSURE,PSIG	2753	250	400
OPEN FLOW, MCFD	17116	3950	1375
COMPONENT, MOLE PCT			
METHANE	82.2	87.6	89.8
ETHANE	15.4	4.3	2.3
PROPANE	---	1.9	0.7
N-BUTANE	---	0.7	0.3
ISOBUTANE	---	0.7	0.2
N-PENTANE	---	0.5	0.1
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.5	0.2
NITROGEN	1.2	3.0	6.0
OXYGEN	0.4	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.1
HELIUM	0.02	0.03	0.07
HEATING VALUE*	1189	1112	1001
SPECIFIC GRAVITY	0.646	0.656	0.611

	INDEX 9868 SAMPLE 12447	INDEX 9869 SAMPLE 12448	INDEX 9870 SAMPLE 12476
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE	CARTHAGE	CARTHAGE
WELL NAME	PENN-SIKES	WERNER SHAW NO. 1	CARTHAGE GAS UNIT NO. 35
LOCATION	CARTHAGE	CARTHAGE	HAMPTON-WEST SUR. A-697
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	10/20/66	09/13/66	02/16/50
SAMPLED	10/14/70	10/14/70	10/21/70
FORMATION	CRET-PALUXY	CRET-GLEN ROSE	CRET-HILL SOUTH
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	3218	6056	5152
WELLHEAD PRESSURE,PSIG	300	500	317
OPEN FLOW, MCFD	4650	1020	100
COMPONENT, MOLE PCT			
METHANE	86.2	85.7	82.5
ETHANE	2.1	2.9	4.4
PROPANE	0.7	1.0	1.6
N-BUTANE	0.2	0.3	0.6
ISOBUTANE	0.3	0.4	0.7
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	9.9	8.9	8.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	1.0
HELIUM	0.06	0.06	0.06
HEATING VALUE*	961	998	1031
SPECIFIC GRAVITY	0.629	0.641	0.672

	INDEX 9871 SAMPLE 12497	INDEX 9872 SAMPLE 12500	INDEX 9873 SAMPLE 12461
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE	CARTHAGE	CARTHAGE N
WELL NAME	BURNETT BROS. NO. 3-T	BURNETT BROS. NO. 6-C	PANGMAN NO. 2
LOCATION	THOMAS SUR. A-530	J. F. CHEARS SUR.	NOT GIVEN
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PENNZOIL PRODUCING CO.
COMPLETED	03/19/48	12/05/49	08/31/66
SAMPLED	10/26/70	10/26/70	10/19/70
FORMATION	CRET-TRAVIS PEAK	CRET-HILL NORTH	CRET-GLEN ROSE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6051	4999	3817
WELLHEAD PRESSURE,PSIG	2483	2521	175
OPEN FLOW, MCFD	7600	10500	320
COMPONENT, MOLE PCT			
METHANE	88.2	77.4	87.9
ETHANE	4.6	7.1	3.5
PROPANE	1.7	5.1	1.8
N-BUTANE	0.6	2.4	0.5
ISOBUTANE	0.7	2.4	0.7
N-PENTANE	0.5	1.4	0.4
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.2	0.5	0.1
HEXANES PLUS	0.7	2.0	0.5
NITROGEN	1.9	0.6	4.4
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.7	0.6	0.2
HELIUM	0.02	0.01	0.05
HEATING VALUE*	1129	1396	1087
SPECIFIC GRAVITY	0.659	0.810	0.650

	INDEX 9874 SAMPLE 15357	INDEX 9875 SAMPLE 2350	INDEX 9876 SAMPLE 4720
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PANOLA	PANOLA
FIELD	CARTHAGE SE	PANOLA	WASKOM
WELL NAME	KNIGHT-STRONG GU NO. 1	WERNER NO. 13	J. D. WOOLWORTH NO. 1-C
LOCATION	GEORGE GILLASPY SUR. A-222	BEN C. JORDAN SUR.	NOT GIVEN
OWNER	DELTA DRILLING CO.	ARKANSAS LOUISIANA GAS CO.	BERT FIELDS
COMPLETED	03/--/77	04/28/31	11/29/48
SAMPLED	08/30/78	05/23/31	04/30/49
FORMATION	JURA-COTTON VALLEY	CRET-	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	9030	4718	4910
WELLHEAD PRESSURE,PSIG	3500	1800	2445
OPEN FLOW, MCFD	9800	26000	10800
COMPONENT, MOLE PCT			
METHANE	85.1	89.2	89.7
ETHANE	7.7	6.9	3.6
PROPANE	2.6	---	1.0
N-BUTANE	0.7	---	0.9
ISOBUTANE	0.6	---	0.9
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.4
NITROGEN	0.8	3.0	3.1
OXYGEN	0.0	0.1	0.2
ARGON	0.0	---	0.0
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.7	0.8	0.6
HELIUM	0.01	0.04	0.03
HEATING VALUE*	1143	1027	1067
SPECIFIC GRAVITY	0.672	0.609	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9877 SAMPLE 12459	INDEX 9878 SAMPLE 14804	INDEX 9879 SAMPLE 14805
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PANOLA	PARKER	PARKER
FIELD	WASKOM	ALEDO	ALEDO
WELL NAME	JERNIGAN A UNIT NO. 1	WINSTON NO. 2	WINSTON NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	J. W. JONES SUR. A-2010
OWNER	PENNZOIL PRODUCING CO.	W. A. MONCRIEF	W. A. MONCRIEF
COMPLETED	05/14/56	--/--/00	03/08/75
SAMPLED	10/13/76	10/05/76	10/05/76
FORMATION	JURA-COTTON VALLEY	PENN-BIG SALINE	PENN-STRAWN
GEOLOGIC PROVINCE CODE	260	420	420
DEPTH, FEET	8474	5500	1286
WELLHEAD PRESSURE,PSIG	765	1985	580
OPEN FLOW, MCFD	213	NOT GIVEN	2800
COMPONENT, MOLE PCT			
METHANE	87.5	76.6	86.8
ETHANE	6.3	11.2	5.7
PROPANE	2.2	5.8	2.7
N-BUTANE	0.6	1.3	0.6
ISOBUTANE	0.8	1.0	0.9
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.0	0.4	0.2
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.7	0.2	0.1
NITROGEN	0.2	1.5	3.1
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.5	TRACE
HELIUM	0.01	0.06	0.24
HEATING VALUE*	1164	1245	1103
SPECIFIC GRAVITY	0.670	0.742	0.644

	INDEX 9880 SAMPLE 15546	INDEX 9881 SAMPLE 15524	INDEX 9882 SAMPLE 15344
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	COYLE	LAKE MINERAL WELLS	LAKE MINERAL WELLS
WELL NAME	GROLEAU NO. 1	W. G. WATKINS NO. 1	T. M. CHRISTIAN NO. 1
LOCATION	G. W. COLE SUR. A-333	MEP&PRR SUR. 357, A-1543	SEC. 358, T&P RR CO. SUR.
OWNER	WORLD PRODUCERS, INC.	MITCHELL ENERGY CORP.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	12/02/77	10/11/77	04/01/77
SAMPLED	12/28/78	08/02/78	08/12/78
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4201	4178	4086
WELLHEAD PRESSURE,PSIG	1727	1650	1471
OPEN FLOW, MCFD	4600	25750	3389
COMPONENT, MOLE PCT			
METHANE	77.4	75.9	74.8
ETHANE	11.0	10.6	11.0
PROPANE	5.1	6.7	7.1
N-BUTANE	1.3	1.6	1.7
ISOBUTANE	0.9	1.0	1.0
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.2	0.5	0.6
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.2	0.3
NITROGEN	2.4	2.9	2.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.11	0.11	0.14
HEATING VALUE*	1256	1268	1292
SPECIFIC GRAVITY	0.736	0.750	0.760

	INDEX 9883 SAMPLE 16065	INDEX 9884 SAMPLE 15881	INDEX 9885 SAMPLE 8368
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	LAKE MINERAL WELLS	LAKE WEATHERFORD	MEEKER
WELL NAME	J. C. PEIPELMAN NO. 2-C	YEARY NO. 1	BOYD UNIT NO. 1-A
LOCATION	MEP SUR. NO. 341, A1493	W. FRANKLIN SUR. A-468	SEC. 35, H&B RR SUR.
OWNER	MITCHELL ENERGY CORP.	DALLAS PRODUCTION, INC.	J. R. MEEKER
COMPLETED	05/11/79	06/--/77	12/21/60
SAMPLED	09/12/80	01/16/80	01/17/62
FORMATION	PENN-ATOKA	PENN-CONGLOMERATE	PENN-ATOKA L
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4191	5600	3960
WELLHEAD PRESSURE,PSIG	1516	1500	1212
OPEN FLOW, MCFD	4300	2106	6200
COMPONENT, MOLE PCT			
METHANE	77.7	83.3	83.0
ETHANE	11.7	9.6	6.8
PROPANE	4.9	2.8	3.8
N-BUTANE	1.3	0.5	1.0
ISOBUTANE	0.8	0.5	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.5	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	2.0	2.3	3.6
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.10	0.10	0.15
HEATING VALUE*	1248	1185	1145
SPECIFIC GRAVITY	0.729	0.668	0.682

	INDEX 9886 SAMPLE 8369	INDEX 9887 SAMPLE 12653	INDEX 9888 SAMPLE 12654
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	MEEKER	MEEKER	MEEKER
WELL NAME	O. E. DOSS NO. 1-B	O. E. DOSS	ED W. PEARSON
LOCATION	SEC. 2551, TE&L SUR.	NOT GIVEN	NOT GIVEN
OWNER	J. R. MEEKER	MEEKER & CO.	MEEKER & CO.
COMPLETED	08/09/59	--/--/00	--/--/00
SAMPLED	01/17/62	01/30/71	01/30/70
FORMATION	PENN-ATOKA L	PENN-ATOKA U	PENN-BRYSON
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	3998	3850	2200
WELLHEAD PRESSURE,PSIG	1212	500	500
OPEN FLOW, MCFD	4800	NOT GIVEN	600
COMPONENT, MOLE PCT			
METHANE	81.4	79.2	86.1
ETHANE	7.9	8.1	4.1
PROPANE	3.9	5.5	2.1
N-BUTANE	1.2	1.4	0.8
ISOBUTANE	0.6	0.9	0.3
N-PENTANE	0.4	0.5	0.1
ISOPENTANE	TRACE	0.3	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.6	0.1
NITROGEN	3.9	3.2	6.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.2
HELIUM	0.15	0.14	0.25
HEATING VALUE*	1156	1221	1044
SPECIFIC GRAVITY	0.691	0.726	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9889 SAMPLE 12655	INDEX 9890 SAMPLE 5104	INDEX 9891 SAMPLE 16284
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	MEEKER	NOT GIVEN	SPRINGTOWN
WELL NAME	A. F. BOYD NO. B	SCOTT-WOOD NO. 1	MATHIS NO. 1
LOCATION	NOT GIVEN	T&P SUR. NO. 121	M. THOMAS SUR., A-1304
OWNER	MEEKER & CO.	LVO CORP.	SPINDLETOP OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	07/30/80
SAMPLED	01/30/71	11/29/51	06/12/81
FORMATION	PENN-ATOKA L	NOT GIVEN	PENN-BEND CONGLOMERATE
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	4000	NOT GIVEN	5445
WELLHEAD PRESSURE,PSIG	600	NOT GIVEN	1790
OPEN FLOW, MCFD	200	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	81.5	81.8	84.6
ETHANE	8.0	7.6	8.2
PROPANE	4.8	4.2	3.0
N-BUTANE	1.0	1.2	0.6
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.3	3.9	1.9
OXYGEN	0.0	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.15	0.13	0.10
HEATING VALUE*	1175	1156	1142
SPECIFIC GRAVITY	0.694	0.688	0.664

	INDEX 9892 SAMPLE 16294	INDEX 9893 SAMPLE 15362	INDEX 9894 SAMPLE 12255
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PECOS
FIELD	STRAWN	WEATHERFORD	ABELL
WELL NAME	LEONARD NO. 2	MONCRIEF RANCH NO. 1	BOYS RANCH NO. 1
LOCATION	JOHN COLE SUR., A-218	T. H. WOOLEY SUR. A-1674	SEC. 32, BLK. 9, H&GN SUR.
OWNER	WORLD PRODUCERS, INC.	W. A. MONCRIEF, JR.	TEXAS OIL & GAS CORP.
COMPLETED	01/17/81	05/19/75	01/20/69
SAMPLED	07/13/81	08/24/78	05/05/70
FORMATION	PENN-STRAWN	PENN-STRAWN	PERM-CLEARFORK
GEOLOGIC PROVINCE CODE	420	420	430
DEPTH, FEET	2525	2768	3455
WELLHEAD PRESSURE,PSIG	842	880	1615
OPEN FLOW, MCFD	7775	8000	2750
COMPONENT, MOLE PCT			
METHANE	90.0	89.2	90.2
ETHANE	2.8	3.8	5.0
PROPANE	1.1	1.6	2.1
N-BUTANE	0.3	0.4	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	4.8	3.8	1.5
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.34	0.31	0.01
HEATING VALUE*	1017	1047	1098
SPECIFIC GRAVITY	0.611	0.618	0.625

	INDEX 9895 SAMPLE 14305	INDEX 9896 SAMPLE 13268	INDEX 9897 SAMPLE 12095
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	APACHE CAMP	APCO-WARNER	CARDINAL
WELL NAME	WHITE ESTATE A NO. 1	CROCKETT STATE NO. 2	CARDINAL UNIVERSITY NO. 1
LOCATION	SEC. 97, BLK. 19, G&R SUR.	SEC. A-2, PINK PHELPS SUR.	SEC. 4, BLK.17,UNIV.LDS SUR.
OWNER	TEXAS OIL & GAS CORP.	SUN OIL CO.	ADOBE OIL & GAS CORP.
COMPLETED	02/15/74	01/04/71	11/25/67
SAMPLED	03/13/75	06/16/72	11/03/69
FORMATION	ORDO-ELLENBURGER	PERM-CLEARFORK	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9534	3149	1543
WELLHEAD PRESSURE,PSIG	2740	1285	568
OPEN FLOW, MCFD	3250	1560	3480
COMPONENT, MOLE PCT			
METHANE	83.8	83.9	88.6
ETHANE	5.3	7.8	3.3
PROPANE	3.4	2.7	1.7
N-BUTANE	1.2	0.6	0.5
ISOBUTANE	0.5	0.5	0.2
N-PENTANE	0.5	0.2	TRACE
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	3.2	1.6	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.1	1.1
CARBON DIOXIDE	1.2	0.4	3.2
HELIUM	0.08	0.05	TRACE
HEATING VALUE*	1152	1115	1045
SPECIFIC GRAVITY	0.695	0.664	0.646

	INDEX 9898 SAMPLE 7701	INDEX 9899 SAMPLE 8442	INDEX 9900 SAMPLE 11027
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	CHENOT	COYANOSA	COYANOSA
WELL NAME	SOUTHLAND ROYALTY ET AL NO.1	EFFIE POTTS SIBLEY NO. 1	EFFIE POTTS SIBLEY NO. 2C
LOCATION	SEC. 76, BLK. 11, H&GN SUR.	SEC. 48, BLK. OW	SEC. 19, BLK. C-2, PSL SUR.
OWNER	STANDARD OIL CO. OF TEXAS	SOCONY MOBIL OIL CO., INC.	MOBIL OIL CORP.
COMPLETED	11/29/58	02/14/62	07/23/66
SAMPLED	09/26/60	02/18/62	07/10/67
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	MISS-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4936	9657	10475
WELLHEAD PRESSURE,PSIG	1925	4172	4673
OPEN FLOW, MCFD	14250	240200	16300
COMPONENT, MOLE PCT			
METHANE	96.1	83.9	83.0
ETHANE	1.7	8.1	8.8
PROPANE	0.4	3.0	3.8
N-BUTANE	0.1	0.8	1.1
ISOBUTANE	0.1	0.6	0.5
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	TRACE	0.6	0.5
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.7	0.5
NITROGEN	0.9	1.5	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	0.05	0.02	0.01
HEATING VALUE*	1030	1206	1192
SPECIFIC GRAVITY	0.581	0.694	0.688

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9901 SAMPLE 14260	INDEX 9902 SAMPLE 14261	INDEX 9903 SAMPLE 14501
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	COYANOSA	COYANOSA	COYANOSA
WELL NAME	J. O. NEAL 42 NO. 4	J. O. NEAL 42 NO. 4	J. O. NEAL 42 NO. 5
LOCATION	SEC. 42, BLK. DW, TTRR SUR.	SEC. 42, BLK. DW, TTRR SUR.	SEC. 42, BLK.DW, TTRRCO.SUR.
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	06/24/74	06/24/74	09/16/75
SAMPLED	02/13/75	02/13/75	10/14/75
FORMATION	DEVO-	MISS-	PERM-BELL CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11996	11156	5172
WELLHEAD PRESSURE,PSIG	1613	5552	2350
OPEN FLOW, MCFD	4056	24000	14975
COMPONENT, MOLE PCT			
METHANE	92.9	92.7	89.8
ETHANE	3.1	3.9	4.4
PROPANE	1.0	1.2	1.5
N-BUTANE	0.2	0.3	0.4
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.9	2.9
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.4	0.1
HELIUM	0.01	0.02	0.03
HEATING VALUE*	1050	1071	1072
SPECIFIC GRAVITY	0.609	0.608	0.624

	INDEX 9904 SAMPLE 14638	INDEX 9905 SAMPLE 12423	INDEX 9906 SAMPLE 15320
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	DAMERON	EL CINCO	ELSINORE
WELL NAME	SIDLO NO. 2	RUTH MARY PRICE NO. 1	MONTGOMERY-FULK NO. 11
LOCATION	SEC. 18, BLK. 3, H&TC SUR.	SEC. 9, BLK. 12, H&GN SUR.	SEC. 9, BLK. 170, TTRR CO.
OWNER	GEORGE H. MITCHELL	J. M. HUBER CORP.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	08/13/74	09/05/69	01/15/78
SAMPLED	04/19/76	09/28/70	07/19/78
FORMATION	PERM-CLEARFORK	PERM-LEONARD L	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3227	4678	13365
WELLHEAD PRESSURE,PSIG	1000	1862	1868
OPEN FLOW, MCFD	3800	4650	89536
COMPONENT, MOLE PCT			
METHANE	89.5	80.2	51.9
ETHANE	5.2	9.4	0.2
PROPANE	1.7	4.9	0.1
N-BUTANE	0.5	1.3	TRACE
ISOBUTANE	0.2	0.7	TRACE
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.1	0.4	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.8	2.3	0.8
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	1.9	0.0	0.0
CARBON DIOXIDE	0.7	0.0	46.6
HELIUM	0.01	0.03	0.03
HEATING VALUE*	1088	1220	541
SPECIFIC GRAVITY	0.630	0.710	1.017

	INDEX 9907 SAMPLE 14505	INDEX 9908 SAMPLE 11789	INDEX 9909 SAMPLE 12142
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	SMW	GOMEZ	GOMEZ
WELL NAME	ALLISON RANCH 3-170 NO. 1	W. M. PALMER NO. 1	ABELL EAST UNIT NO. 1
LOCATION	SEC. 3, BLK. 170, TTRRCO.SUR	SEC. 22, BLK. DW, TCRR SUR.	JEFFERSON RICHARDS SUR. 222
OWNER	CONTINENTAL OIL CO.	FOREST OIL CORP.	GULF OIL CORP.
COMPLETED	08/05/74	11/21/68	01/05/68
SAMPLED	10/--/75	03/07/69	12/15/69
FORMATION	ORDO-MONTOYA	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12994	21539	21018
WELLHEAD PRESSURE,PSIG	NOT GIVEN	7490	7209
OPEN FLOW, MCFD	21000	40000	130000
COMPONENT, MOLE PCT			
METHANE	56.1	95.5	96.5
ETHANE	0.2	0.1	0.1
PROPANE	0.1	0.1	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.1	3.3	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	42.5	1.0	2.9
HELIUM	0.03	0.01	0.02
HEATING VALUE*	574	972	980
SPECIFIC GRAVITY	0.975	0.579	0.584

	INDEX 9910 SAMPLE 14128	INDEX 9911 SAMPLE 15522	INDEX 9912 SAMPLE 16450
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	GOMEZ	GOMEZ	GOMEZ SE
WELL NAME	DIXEL RESOURCES NO. 2	RATMAL EAGLE NO. 1	M. MCCOMB GAS UNIT NO. 1
LOCATION	SEC 1, BLK203, SA HOPSON SUR	SEC. 3, BLK. 142, T&STL SUR.	SEC. 2, BLK.198, TUNNELL SUR
OWNER	LADD PETROLEUM CORP.	GIFFORD-MITCHELL-WISENBAKER	EXXON CO., U.S.A.
COMPLETED	04/27/73	07/31/78	11/23/81
SAMPLED	08/12/74	11/22/78	03/16/82
FORMATION	PENN-ATOKA	DEVO-	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16250	18900	25404
WELLHEAD PRESSURE,PSIG	11792	7039	6400
OPEN FLOW, MCFD	14096	15100	4850
COMPONENT, MOLE PCT			
METHANE	96.2	95.1	95.8
ETHANE	0.1	0.3	0.0
PROPANE	TRACE	TRACE	0.0
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.7	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	3.6	3.7
HELIUM	0.02	0.01	0.02
HEATING VALUE*	976	974	970
SPECIFIC GRAVITY	0.589	0.595	0.592

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9913 SAMPLE 12742	INDEX 9914 SAMPLE 13296	INDEX 9915 SAMPLE 17474
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	GREY RANCH	GREY RANCH W	HEINER S
WELL NAME	BLACKSTONE-SLAUGHTER G NO. 1	BLACKSTONE-SLAUGHTER NO. 1	CROWLEY STATE NO. 1
LOCATION	SEC. 16, BLK. 129, T&STL SUR.	SEC. 1, BLK. 131, T&STL SUR.	SEC. 990-BI-102 SC & SFRR
OWNER	SUPERIOR OIL CO.	CHEVRON OIL CO.	WAY, RALPH L., INC.
COMPLETED	10/31/67	09/20/71	05/17/83
SAMPLED	03/27/71	07/11/72	10/04/84
FORMATION	ORDO-ELLENBURGER	ORDO-ELLENBURGER	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14567	18348	4380
WELLHEAD PRESSURE,PSIG	2360	4000	1584
OPEN FLOW, MCFD	24164	184000	7400
COMPONENT, MOLE PCT			
METHANE	95.6	51.6	98.7
ETHANE	1.1	TRACE	0.0
PROPANE	0.2	TRACE	0.2
N-BUTANE	TRACE	0.0	0.1
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.0	0.7
NITROGEN	0.6	0.5	TRACE
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	1.4
CARBON DIOXIDE	2.4	47.7	0.02
HELIUM	0.02	0.03	1029
HEATING VALUE*	998	523	0.596
SPECIFIC GRAVITY	0.590	1.020	

	INDEX 9916 SAMPLE 12780	INDEX 9917 SAMPLE 12781	INDEX 9918 SAMPLE 12782
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	HERSHEY	HERSHEY	HERSHEY
WELL NAME	ELIZABETH LOUIS STATE	AUDIE LUCAS	J. C. KELLY
LOCATION	SEC. 19, BLK. 50, T&P SUR.	SEC. 8, BLK. 50, T&P SUR.	SEC. 8, BLK. 51, T&P SUR.
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	03/15/62	06/16/61	07/08/60
SAMPLED	04/21/71	04/21/71	04/21/71
FORMATION	SILU-FUSSELMAN &DEVO-MONTOYA	SILU-FUSSELMAN &DEVO-MONTOYA	SILU-FUSSELMAN &DEVO-MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15936	16030	15831
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.2	94.8	94.0
ETHANE	0.4	0.4	0.3
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.6	1.6
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.7	4.2	3.8
HELIUM	0.01	0.01	0.01
HEATING VALUE*	974	967	958
SPECIFIC GRAVITY	0.597	0.600	0.600

	INDEX 9919 SAMPLE 15328	INDEX 9920 SAMPLE 14175	INDEX 9921 SAMPLE 14266
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	HERSHEY W	HOKIT	HOKIT E
WELL NAME	HERSHENSON NO. 1	HELLON-HOKIT NO. 1	HARRAL NO. 23 NO. 1
LOCATION	SEC. 5, BLK. 51, T&PRR SUR.	SEC. 17, BLK. 127, T&STL SUR	SEC. 23, BLK. 127, T&STL SUR
OWNER	NORTHERN NATURAL GAS CO.	ALLIED CHEMICAL CORP.	UNION TEXAS PETROLEUM CORP.
COMPLETED	09/25/77	12/06/73	06/04/74
SAMPLED	03/01/78	10/04/74	02/--/75
FORMATION	ORDO-MONTOYA	NOT GIVEN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15445	11038	9777
WELLHEAD PRESSURE,PSIG	4926	3200	3250
OPEN FLOW, MCFD	20500	65000	23000
COMPONENT, MOLE PCT			
METHANE	94.9	77.1	49.8
ETHANE	0.4	3.2	13.7
PROPANE	0.0	1.4	14.3
N-BUTANE	0.1	0.5	5.3
ISOBUTANE	0.0	0.3	3.5
N-PENTANE	0.2	0.2	3.3
ISOPENTANE	TRACE	0.2	3.0
CYCLOPENTANE	TRACE	TRACE	0.4
HEXANES PLUS	0.1	0.2	1.6
NITROGEN	0.6	2.1	0.2
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	14.7	0.8
HELIUM	0.01	0.08	TRACE
HEATING VALUE*	986	929	1919
SPECIFIC GRAVITY	0.603	0.762	1.137

	INDEX 9922 SAMPLE 10366	INDEX 9923 SAMPLE 10367	INDEX 9924 SAMPLE 13272
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	HOKIT NW	HOKIT NW	HUBER
WELL NAME	MARY MCKENZIE NO. 1-UT	MARY MCKENZIE NO. 1-LT	V. G. NEVILLE-STATE NO. 1
LOCATION	SEC.2,BLK.180-1/2,TCRR SUR.	SEC.2,BLK.180-1/2,TC RR SUR.	SEC. 70, BLK. 194, GC-SF RR
OWNER	REDCO CORP.	REDCO CORP.	GULF OIL CO.- U.S.
COMPLETED	01/12/64	10/18/63	07/21/71
SAMPLED	01/18/66	01/18/66	08/20/72
FORMATION	PERM-WICHITA-ALBANY	PENN-	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6572	6936	5070
WELLHEAD PRESSURE,PSIG	2163	2150	2049
OPEN FLOW, MCFD	3000	19915	28000
COMPONENT, MOLE PCT			
METHANE	84.6	86.0	71.0
ETHANE	7.5	7.2	8.7
PROPANE	2.8	2.6	4.8
N-BUTANE	1.0	0.9	1.5
ISOBUTANE	0.2	0.4	0.7
N-PENTANE	0.5	0.3	0.4
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.5	0.2
NITROGEN	1.4	0.8	10.7
OXYGEN	0.0	0.0	1.7
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	0.1
HELIUM	0.04	0.05	0.07
HEATING VALUE*	1173	1167	1114
SPECIFIC GRAVITY	0.685	0.674	0.754

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9925 SAMPLE 12820	INDEX 9926 SAMPLE 5640	INDEX 9927 SAMPLE 13006
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	LEHN-APCO N	LEON VALLEY	LEON VALLEY
WELL NAME	SHEARER NO. 1	STATE D.U. NO. 1	STATE NO. 2-DV
LOCATION	SEC. 37, BLK. 10, H&GN SUR.	SEC. 7, BLK. 28	SEC.7, BLK.28, UNIV.LD.SUR.
OWNER	LARIO OIL & GAS CO.	GULF OIL CORP.	COMANCHE GAS CO.
COMPLETED	09/23/70	02/11/54	04/06/55
SAMPLED	05/13/71	06/18/54	08/30/71
FORMATION	ORDO-MONTOYA	PERM-YATES	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4963	2552	2690
WELLHEAD PRESSURE,PSIG	1970	NOT GIVEN	150
OPEN FLOW, MCFD	9500	6500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	96.4	94.1
ETHANE	9.0	0.5	2.1
PROPANE	3.8	0.0	0.9
N-BUTANE	1.1	0.1	0.4
ISOBUTANE	0.7	0.0	0.2
N-PENTANE	0.4	0.0	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.2	0.0	TRACE
HEXANES PLUS	0.5	TRACE	0.1
NITROGEN	3.4	2.2	1.3
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.1	0.1	0.3
CARBON DIOXIDE	0.5	0.6	0.4
HELIUM	0.04	0.03	0.02
HEATING VALUE*	1190	990	1050
SPECIFIC GRAVITY	0.712	0.572	0.600

	INDEX 9928 SAMPLE 10726	INDEX 9929 SAMPLE 16387	INDEX 9930 SAMPLE 12115
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	LINTERNA	MANZANITA	NOT GIVEN
WELL NAME	CHARLES J. WALKER NO. 1	MANZANITA G.U. NO. 1	NEAL ESTATE NO. 1
LOCATION	SEC. 19, BLK. 49, T&P SUR.	SEC. 169, BLK. 3, T&P SUR.	SEC. 14, BLK. 142, T&STL SUR
OWNER	FOREST OIL CORP.	TEXACO INC.	WM. MOSS PROPERTIES, INC.
COMPLETED	03/09/66	04/01/81	12/11/68
SAMPLED	09/20/66	10/27/81	11/15/69
FORMATION	ORDO-ELLENBURGER	DEVO-MANZANITA	PERM-CAPITAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	21526	13834	3060
WELLHEAD PRESSURE,PSIG	3984	4800	1200
OPEN FLOW, MCFD	30000	5364	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.7	94.8	88.8
ETHANE	0.1	0.4	3.5
PROPANE	TRACE	TRACE	1.1
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.7	0.6	5.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.4	4.0	0.4
HELIUM	0.03	0.01	0.04
HEATING VALUE*	910	967	1020
SPECIFIC GRAVITY	0.650	0.597	0.620

	INDEX 9931 SAMPLE 12116	INDEX 9932 SAMPLE 16052	INDEX 9933 SAMPLE 17880
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NEAL ESTATE NO. 1	UNIV. 23-15 NO. 1	PAGE MANKS NO. 1
LOCATION	SEC. 14, BLK. 142, T&STL SUR	SEC. 15, BLK. 23, U L SUR.	SEC. 17, BLK. 125, T&STL SUR
OWNER	WM. MOSS PROPERTIES, INC.	EXXON CO., U.S.A.	HARVEY E. YATES CO.
COMPLETED	12/11/68	--/--/00	07/16/84
SAMPLED	11/15/69	08/21/80	10/24/85
FORMATION	PERM-YATES	PENN-MORROW	PENN-BARBASAL
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2846	17916	6800
WELLHEAD PRESSURE,PSIG	1300	7950	1867
OPEN FLOW, MCFD	6000	2692	1610
COMPONENT, MOLE PCT			
METHANE	87.7	96.6	75.3
ETHANE	3.6	0.6	5.0
PROPANE	1.8	0.1	2.1
N-BUTANE	0.4	0.0	0.8
ISOBUTANE	TRACE	0.0	0.3
N-PENTANE	0.4	0.0	0.5
ISOPENTANE	0.9	0.0	0.1
CYCLOPENTANE	0.2	0.0	0.3
HEXANES PLUS	0.1	0.0	0.7
NITROGEN	6.0	0.4	11.0
OXYGEN	0.0	0.0	2.7
ARGON	0.9	TRACE	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	2.3	1.1
HELIUM	0.05	0.01	0.03
HEATING VALUE*	1035	992	1017
SPECIFIC GRAVITY	0.632	0.582	0.723

	INDEX 9934 SAMPLE 16888	INDEX 9935 SAMPLE 11684	INDEX 9936 SAMPLE 11752
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	NUZ	OATES NE	OATES NE
WELL NAME	NUTT NO. 1-16	E. E. MCINTYRE NO. 1	PAUL DAVIS NO. 1
LOCATION	SEC. 16, BLK-125, T&STL SUR.	SEC. 139, BLK 3, T&PRR SUR.	BLK. 3, T&PRR SUR.
OWNER	PENNZOIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/05/82	03/22/67	11/05/68
SAMPLED	04/22/83	10/08/67	02/03/69
FORMATION	PERM-WOLFCAMP	ORDO-ELLENBURGER	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6576	15466	13302
WELLHEAD PRESSURE,PSIG	1573	4093	4492
OPEN FLOW, MCFD	4200	36500	27000
COMPONENT, MOLE PCT			
METHANE	91.1	60.2	85.7
ETHANE	3.6	0.1	0.2
PROPANE	1.5	TRACE	0.0
N-BUTANE	0.5	0.0	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.2
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	2.0	1.4	9.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	38.3	12.7
HELIUM	0.07	0.00	TRACE
HEATING VALUE*	1073	612	897
SPECIFIC GRAVITY	0.621	0.934	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9937 SAMPLE 12760	INDEX 9938 SAMPLE 12761	INDEX 9939 SAMPLE 12762
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	OWEGO	OWEGO	OWEGO
WELL NAME	VALLEY A NO. 2	VALLEY B NO. 1	VALLEY A NO. 2
LOCATION	SEC. 115, BLK. 11, H&GN SUR.	SEC. 115, BLK. 11, H&GN SUR.	SEC. 115, BLK. 11, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	07/24/58	07/29/59	12/07/66
SAMPLED	04/12/71	04/12/71	04/12/71
FORMATION	PERM-TUBB	PERM-GLORIETA	PERM-CLEARFORK
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2900	2250	2439
WELLHEAD PRESSURE,PSIG	215	375	495
OPEN FLOW, MCFD	2425	2232	3014
COMPONENT, MOLE PCT			
METHANE	86.9	86.1	87.6
ETHANE	5.6	6.5	6.0
PROPANE	2.1	2.7	2.4
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.1	0.6	0.4
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.5	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.7	1.9	1.6
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.4	0.3	0.3
CARBON DIOXIDE	1.6	0.9	0.5
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1097	1118	1118
SPECIFIC GRAVITY	0.654	0.653	0.648

	INDEX 9940 SAMPLE 5642	INDEX 9941 SAMPLE 9976	INDEX 9942 SAMPLE 16249
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PAYTON	PAYTON	PECOS GRANDE
WELL NAME	H. J. EATON NO. 1	PAYTON NO. 1	8004 JV-P GRANDE NO. 1
LOCATION	SEC. 1, BLK. 9, H&GN SUR.	SEC. 99, BLK 8, H&GN SUR.	SEC. 2, BLK.49,T-10 TEPRR SU
OWNER	EL PASO NATURAL GAS CO.	CITIES SERVICE OIL CO.	BTA OIL PRODUCERS
COMPLETED	02/04/54	07/09/64	08/04/80
SAMPLED	06/22/54	07/16/65	04/29/81
FORMATION	MISS-	ORDO-SIMPSON	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6598	9814	21517
WELLHEAD PRESSURE,PSIG	1734	600	6400
OPEN FLOW, MCFD	3100	197	17922
COMPONENT, MOLE PCT			
METHANE	84.9	86.6	90.9
ETHANE	9.7	5.9	0.1
PROPANE	2.9	2.7	TRACE
N-BUTANE	0.7	1.3	TRACE
ISOBUTANE	0.2	0.4	0.0
N-PENTANE	0.1	1.0	TRACE
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.7	TRACE
NITROGEN	0.9	1.0	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	8.2
HELIUM	0.03	0.10	0.03
HEATING VALUE*	1154	1193	923
SPECIFIC GRAVITY	0.656	0.680	0.636

	INDEX 9943 SAMPLE 2034	INDEX 9944 SAMPLE 2035	INDEX 9945 SAMPLE 5091
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PECOS VALLEY	PECOS VALLEY	PECOS VALLEY
WELL NAME	BUELL & HAGAN NO. 2	BUELL & HAGAN NO. 1	H. J. EATON A NO. 1
LOCATION	SEC. 22, BLK. 10, H&GN	SEC. 21, BLK. 10, H&GN	SEC. 29, BLK. 3, METC SUR.
OWNER	BUELL & HAGAN	BUELL & HAGAN	GALLERY & HURT, INC.
COMPLETED	03/01/29	05/06/30	11/18/50
SAMPLED	06/09/30	06/12/30	07/30/51
FORMATION	PERM-YATES	PERM-YATES	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1612	1528	5340
WELLHEAD PRESSURE,PSIG	15	500	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7770	24000
COMPONENT, MOLE PCT			
METHANE	67.7	85.4	84.5
ETHANE	27.9	13.6	7.0
PROPANE	---	---	3.0
N-BUTANE	---	---	1.0
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.5
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.4
NITROGEN	2.9	0.6	2.3
OXYGEN	1.1	0.2	0.1
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.4
HELIUM	0.00	TRACE	0.04
HEATING VALUE*	1186	1109	1160
SPECIFIC GRAVITY	0.714	0.627	0.680

	INDEX 9946 SAMPLE 10023	INDEX 9947 SAMPLE 13493	INDEX 9948 SAMPLE 11647
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PECOS VALLEY	PECOS VALLEY	PERRY BASS
WELL NAME	BERTHA D. YOUNG NO. 2	BYRNE NO. 1	TEXAS AMERICAN SYND. NO. 1
LOCATION	SEC. 49, BLK. 10, H&GN SUR.	SEC. 54, BLK. 10 H&GNRR SUR.	SEC.213,BLK.10,GH&SARR SUR.
OWNER	HUMBLE OIL & REFINING CO.	HANSON OIL CO.	PERRY R. BASS
COMPLETED	08/14/64	07/15/71	02/21/68
SAMPLED	07/31/65	12/23/72	05/16/68
FORMATION	DEVO-	ORDO-ELLENBURGER	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5223	7099	13260
WELLHEAD PRESSURE,PSIG	2080	2300	4300
OPEN FLOW, MCFD	35000	11500	85000
COMPONENT, MOLE PCT			
METHANE	86.1	87.7	91.1
ETHANE	6.9	5.3	2.5
PROPANE	3.9	2.6	0.6
N-BUTANE	0.9	1.0	0.3
ISOBUTANE	0.5	0.4	TRACE
N-PENTANE	0.3	0.6	0.3
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	1.6	1.3	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.1	0.3	3.9
HELIUM	0.04	0.05	0.02
HEATING VALUE*	1157	1149	1025
SPECIFIC GRAVITY	0.664	0.659	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9949 SAMPLE 13091	INDEX 9950 SAMPLE 13092	INDEX 9951 SAMPLE 12287
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PETCO	PETCO	PIKES PEAK
WELL NAME	NEAL ESTATE NO. 1	NEAL ESTATE NO. 1	ELSINORE CATTLE CO. NO. 1
LOCATION	SEC.22,BLK.142,T&STL RR SUR.	SEC.22,BLK.142,T&STL RR SUR.	SEC. 10, BLK. C, GC&SF SUR.
OWNER	PETROLEUM CORP.	PETROLEUM CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	05/17/70	05/17/70	03/20/70
SAMPLED	10/21/71	10/21/71	06/05/70
FORMATION	DEVO-NOT GIVEN	ORDO-ELLENBURGER	ORDO-MONTOYA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11128	13717	14172
WELLHEAD PRESSURE,PSIG	4031	4818	4583
OPEN FLOW, MCFD	15500	22200	20200
COMPONENT, MOLE PCT			
METHANE	92.7	96.1	87.8
ETHANE	3.0	1.6	0.4
PROPANE	1.0	0.5	TRACE
N-BUTANE	0.4	0.2	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.6	0.7	0.9
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.2	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.4	10.7
HELIUM	0.02	0.03	0.03
HEATING VALUE*	1049	1039	897
SPECIFIC GRAVITY	0.605	0.587	0.663

	INDEX 9952 SAMPLE 13557	INDEX 9953 SAMPLE 5284	INDEX 9954 SAMPLE 5644
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PIKES PEAK E	PUCKETT	PUCKETT
WELL NAME	ELSINORE CATTLE CO. NO. 1	GLENNA NO. 1	PUCKETT K-1
LOCATION	SEC. 25 BLK. C, GC&SF SUR.	SEC. 28, BLK. 101, TCRR SUR.	SEC. 39, BLK. 101, TCRR SUR.
OWNER	TEXAS PACIFIC OIL CO., INC.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/01/72	08/01/52	04/10/54
SAMPLED	03/01/73	10/10/62	06/22/54
FORMATION	DEVO-	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12654	13600	12358
WELLHEAD PRESSURE,PSIG	2950	4550	4558
OPEN FLOW, MCFD	28000	50000	33000
COMPONENT, MOLE PCT			
METHANE	56.6	69.6	70.9
ETHANE	0.5	1.1	1.0
PROPANE	0.1	0.5	0.2
N-BUTANE	0.1	0.0	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.0	0.6	0.5
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	41.6	28.0	26.9
HELIUM	0.03	0.03	0.03
HEATING VALUE*	597	747	734
SPECIFIC GRAVITY	0.975	0.845	0.830

	INDEX 9955 SAMPLE 12848	INDEX 9956 SAMPLE 12849	INDEX 9957 SAMPLE 14685
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PUCKETT	PUCKETT	PUCKETT E
WELL NAME	ROBBINS 1A NO. 5-D	MITCHELL-THOMAS 1 NO. 1	MITCHELL "E" NO. 1
LOCATION	SEC.24,BLK.126,T&STL RR SUR.	SEC. 23, BLK. 100, ELRR SUR.	SEC. 9, BLK. 102, J. GIBSON
OWNER	CHEVRON OIL CO.	CHEVRON OIL CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/59	--/--/58	09/09/75
SAMPLED	06/10/71	06/10/71	05/28/76
FORMATION	DEVO-	ORDO-ELLENBURGER	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11650	14500	11328
WELLHEAD PRESSURE,PSIG	700	2215	3722
OPEN FLOW, MCFD	48000	66000	67500
COMPONENT, MOLE PCT			
METHANE	93.0	70.6	84.4
ETHANE	2.5	1.0	9.2
PROPANE	0.6	0.4	3.3
N-BUTANE	0.1	TRACE	0.7
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.6	0.8	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	26.7	0.7
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1023	766	1157
SPECIFIC GRAVITY	0.612	0.837	0.666

	INDEX 9958 SAMPLE 12756	INDEX 9959 SAMPLE 16419	INDEX 9960 SAMPLE 7885
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	PUCKETT N	PUCKETT W	PUTNAM
WELL NAME	H. A. WIMBERLY NO. 2	EMMA LOU UNIT NO. 1	MCDONALD NO. 1
LOCATION	SEC. 4, BLK. 100	SEC. 58, BLK. 101, AB&M SUR.	SEC. 124, BLK. 11, H&GN SUR.
OWNER	MASSIE HUNT TRUST	GULF OIL CORP.	CLARK OIL CO.
COMPLETED	--/--/62	11/25/77	02/--/61
SAMPLED	04/06/71	01/29/82	05/01/61
FORMATION	ORDO-ELLENBURGER	PENN-BEND CONGLOMERATE	PERM-WOLFCAMP L
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10004	22156	5076
WELLHEAD PRESSURE,PSIG	2750	14707	2100
OPEN FLOW, MCFD	11400	8800	5200
COMPONENT, MOLE PCT			
METHANE	91.9	94.7	87.4
ETHANE	2.6	3.2	5.4
PROPANE	1.0	TRACE	2.1
N-BUTANE	0.3	TRACE	0.7
ISOBUTANE	0.2	0.0	0.3
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.7	0.3	3.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	4.6	TRACE
HELIUM	0.05	0.01	0.10
HEATING VALUE*	1039	968	1097
SPECIFIC GRAVITY	0.618	0.603	0.642

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9961 SAMPLE 7789	INDEX 9962 SAMPLE 13834	INDEX 9963 SAMPLE 4835
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	ROJO CABALLOS	ROJO CABALLOS S	SANTA ROSA
WELL NAME	IVY B, WEATHERBY NO. 1	FRED SCHLOSSER ESTATE NO. 1	PEERLESS NO. 1
LOCATION	SEC. 20, BLK. 48, T&PRR SUR.	SEC. 25, BLK. 49, T&PRR SUR.	SEC. 106, BLK. B, H&GN SUR.
OWNER	MOBIL OIL CO.	GULF OIL CO.- U.S.	SLICK-MOORMAN OIL CO.
COMPLETED	12/05/60	05/31/73	04/28/49
SAMPLED	12/05/60	12/05/73	12/07/49
FORMATION	PENN-	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15117	21630	8995
WELLHEAD PRESSURE,PSIG	10460	6505	4390
OPEN FLOW, MCFD	NOT GIVEN	84000	28250
COMPONENT, MOLE PCT			
METHANE	91.4	98.0	91.4
ETHANE	4.8	0.1	3.4
PROPANE	1.3	TRACE	1.4
N-BUTANE	0.3	0.0	0.7
ISOBUTANE	0.4	0.0	0.2
N-PENTANE	0.2	0.0	0.5
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	0.5
NITROGEN	0.4	0.3	1.0
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	1.5	0.4
HELIUM	0.01	0.02	0.03
HEATING VALUE*	1097	995	1117
SPECIFIC GRAVITY	0.623	0.570	0.632

	INDEX 9964 SAMPLE 9977	INDEX 9965 SAMPLE 15302	INDEX 9966 SAMPLE 12953
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	SHEFFIELD	SIERRA MADERA	SURVEY 16
WELL NAME	CANON 10-1	SIERRA MADERA NO. 1	COYANOSA GAS NO.2, WELL NO.3
LOCATION	SEC. 10, BLK 178, TCRR SUR.	SEC. 68, BLK. D, GS&SF SUR.	SEC. 46, BLK. OU, T.T.RR SUR.
OWNER	SHELL OIL CO.	L. R. FRENCH, JR.	HUMBLE OIL & REFINING CO.
COMPLETED	10/07/63	05/22/77	10/13/69
SAMPLED	07/09/65	06/01/78	08/17/71
FORMATION	ORDO-MCKEE	DEVO-	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8328	12700	10998
WELLHEAD PRESSURE,PSIG	2166	3000	3736
OPEN FLOW, MCFD	3600	8000	85000
COMPONENT, MOLE PCT			
METHANE	78.0	92.0	83.6
ETHANE	9.7	0.2	8.4
PROPANE	4.3	0.1	4.1
N-BUTANE	2.2	0.0	0.9
ISOBUTANE	0.5	0.0	0.6
N-PENTANE	0.3	0.0	0.4
ISOPENTANE	0.7	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	3.4	1.1	1.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	6.6	TRACE
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1220	938	1185
SPECIFIC GRAVITY	0.730	0.625	0.680

	INDEX 9967 SAMPLE 2036	INDEX 9968 SAMPLE 2038	INDEX 9969 SAMPLE 2039
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	TAYLOR-LINK	TAYLOR-LINK	TAYLOR-LINK
WELL NAME	UNIV. NO. 1	UNIV. C-3	BOWERS UE NO. 1
LOCATION	SEC. 36, BLK. 18, UNIV. LAND	SEC. 31, BLK. 16, UNIV. LAND	SEC. 31, BLK. 16, UNIV. LAND
OWNER	BUELL & HAGAN	LANDRETH PRODUCTION CORP.	SHELL OIL CO.
COMPLETED	05/31/29	11/16/29	05/01/30
SAMPLED	06/13/30	06/12/30	06/13/30
FORMATION	PERM-	NOT GIVEN	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1313	915	1651
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	38.6	60.9	44.7
ETHANE	31.8	33.9	49.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	29.0	4.5	0.4
OXYGEN	0.3	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	5.5
HELIUM	0.17	0.06	0.02
HEATING VALUE*	961	1229	1354
SPECIFIC GRAVITY	0.835	0.749	0.854

	INDEX 9970 SAMPLE 2040	INDEX 9971 SAMPLE 12812	INDEX 9972 SAMPLE 13968
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	TAYLOR-LINK	TCI	THUNDERBIRD
WELL NAME	BOWERS U NO. 2	O. W. WILLIAMS NET-11	BLOWING SAND NO. 1
LOCATION	SEC. 31, BLK. 16	SEC. 13, BLK. 3, H&TC SUR.	SEC. 17, BLK. 3, H&TC SUR.
OWNER	SHELL OIL CO.	TEXACO INC.	THUNDERBIRD OIL CO.
COMPLETED	11/19/29	--/--/00	--/--/73
SAMPLED	06/13/30	04/30/71	--/--/00
FORMATION	PERM-	PERM-GRAYBURG	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	1633	2084	5600
WELLHEAD PRESSURE,PSIG	NOT GIVEN	376	1200
OPEN FLOW, MCFD	NOT GIVEN	340	20000
COMPONENT, MOLE PCT			
METHANE	63.9	85.1	81.7
ETHANE	31.8	6.7	8.8
PROPANE	---	2.5	4.0
N-BUTANE	---	0.7	1.1
ISOBUTANE	---	0.2	0.8
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	0.3	1.8	2.8
OXYGEN	0.1	TRACE	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	1.2	0.0
CARBON DIOXIDE	4.0	1.1	0.3
HELIUM	0.00	0.02	0.05
HEATING VALUE*	1217	1116	1166
SPECIFIC GRAVITY	0.753	0.667	0.687

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9973 SAMPLE 10187	INDEX 9974 SAMPLE 12749	INDEX 9975 SAMPLE 12750
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	WAHA	WAHA	WAHA
WELL NAME	WAYNE MOORE NO. 6	WAYNE MOORE NO. 3	J. H. HODGE NO. 2
LOCATION	SEC. 5, BLK. C-3, PSL SUR.	SEC. 6, BLK. C-3, PSL SUR.	SEC. 8, BLK. C-3, PSL SUR.
OWNER	MOBIL OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	10/04/65	11/26/62	06/04/68
SAMPLED	10/05/65	04/02/71	04/02/71
FORMATION	DEVO-	PERM-DELAWARE	MISS-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	11025	4918	9937
WELLHEAD PRESSURE,PSIG	6028	898	3673
OPEN FLOW, MCFD	6190	433	15925
COMPONENT, MOLE PCT			
METHANE	92.0	89.6	86.5
ETHANE	3.0	4.9	7.6
PROPANE	1.1	1.6	2.7
N-BUTANE	0.3	0.5	0.8
ISOBUTANE	0.2	0.4	0.4
N-PENTANE	0.2	TRACE	0.3
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.8	2.6	0.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.1	0.3
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1054	1085	1158
SPECIFIC GRAVITY	0.617	0.629	0.660

	INDEX 9976 SAMPLE 12751	INDEX 9977 SAMPLE 3824	INDEX 9978 SAMPLE 4455
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	WAHA	WILDCAT	WILDCAT
WELL NAME	WAYNE MOORE NO. 14	MAC DER NO. 4	OMEGA NO. 1
LOCATION	SEC. 6, BLK. C-3, PSL SUR.	SEC. 36, BLK. 144, T&SL SUR.	SEC. 11, BLK. 134, T&SL RY SUR
OWNER	MOBIL OIL CORP.	STANDARD OIL CO. OF TEXAS	PHILLIPS PETROLEUM CO.
COMPLETED	04/16/68	03/15/44	10/28/47
SAMPLED	04/02/71	04/27/44	04/08/48
FORMATION	DEVO-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12147	4706	1460
WELLHEAD PRESSURE,PSIG	3853	1900	NOT GIVEN
OPEN FLOW, MCFD	10610	17300	687
COMPONENT, MOLE PCT			
METHANE	93.9	90.8	89.4
ETHANE	2.3	3.7	0.0
PROPANE	0.7	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.3	4.7	8.0
OXYGEN	0.0	0.3	1.0
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.8	0.5	1.5
HELIUM	0.01	0.00	0.08
HEATING VALUE*	1030	986	906
SPECIFIC GRAVITY	0.602	0.599	0.607

	INDEX 9979 SAMPLE 5375	INDEX 9980 SAMPLE 8827	INDEX 9981 SAMPLE 9056
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	LILLIAN RUDICIL NO. 1	E. P. SIBLEY B NO. 1	W. C. TYRRELL NO. 1
LOCATION	M&GN SUR. NO. 541	SEC. 45, BLK. 0W, T&TRR SUR.	SEC. 2, BLK. 115, GC&SF SUR.
OWNER	TEXAS CO.	MOBIL OIL CO.	PURE OIL CO.
COMPLETED	10/19/52	01/06/63	--/--/00
SAMPLED	01/07/53	01/13/63	07/24/63
FORMATION	PERM-YATES	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3007	15000	19826
WELLHEAD PRESSURE,PSIG	1225	5398	7400
OPEN FLOW, MCFD	1110	21730	68000
COMPONENT, MOLE PCT			
METHANE	90.8	95.6	97.0
ETHANE	2.6	1.6	0.1
PROPANE	0.5	0.3	0.1
N-BUTANE	0.1	0.1	TRACE
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	4.6	0.6	0.2
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.2	0.0	0.0
CARBON DIOXIDE	0.7	1.3	2.5
HELIUM	0.03	0.03	0.01
HEATING VALUE*	993	1022	987
SPECIFIC GRAVITY	0.604	0.587	0.581

	INDEX 9982 SAMPLE 15030	INDEX 9983 SAMPLE 2042	INDEX 9984 SAMPLE 2043
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	WILDCAT	YATES	YATES
WELL NAME	ARCO-TERRAZAS NO. 1	YATES NO. 11	YATES H NO. 2
LOCATION	SEC. 1, BLK. 105 W.P., HOWARD	SEC. 61, BLK. 1, I&GN	SEC. 32, BLK. 194, GCSF SUR.
OWNER	C & K PETROLEUM, INC.	MID-KANSAS & TRANSCONTINENTA	MID-KANSAS OIL & GAS CO.
COMPLETED	07/30/76	02/08/28	08/05/28
SAMPLED	06/22/77	06/13/30	06/14/30
FORMATION	PERM-WOLFCAMP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9660	1305	1558
WELLHEAD PRESSURE,PSIG	3836	20	500
OPEN FLOW, MCFD	7606	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.4	84.6	47.0
ETHANE	7.1	9.9	46.4
PROPANE	3.6	---	---
N-BUTANE	1.0	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	1.7	1.1	0.2
OXYGEN	TRACE	0.2	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	4.3	6.2
HELIUM	0.02	0.00	0.01
HEATING VALUE*	1160	1034	1308
SPECIFIC GRAVITY	0.670	0.652	0.846

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9985 SAMPLE 12766	INDEX 9986 SAMPLE 13638	INDEX 9987 SAMPLE 17412
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	POLK
FIELD	YUCCA BUTTE	YUCCA BUTTE	ALABAMA-COUSHATTA
WELL NAME	BLACKSTONE-SLAUGHTER	SLAUGHTER 66 NO. 1	CHIEF COLABE NO. 1
LOCATION	SEC. 19, BLK. 9-2, TCRR SUR.	SEC. 66, BLK. A-2, TCRR SUR.	NOT GIVEN
OWNER	SHELL OIL CO.	SKELLY OIL CO.	UNION OIL CO. OF CALIF.
COMPLETED	09/12/66	02/10/73	11/21/83
SAMPLED	04/15/71	07/03/73	09/11/84
FORMATION	PENN-DETRITAL	PENN-DETRITAL	CRET-WOODBINE L
GEOLOGIC PROVINCE CODE	430	430	220
DEPTH, FEET	8190	8800	15400
WELLHEAD PRESSURE,PSIG	2182	2450	5000
OPEN FLOW, MCFD	5600	3000	70000
COMPONENT, MOLE PCT			
METHANE	88.7	82.7	90.8
ETHANE	5.6	8.1	0.7
PROPANE	1.7	4.0	0.1
N-BUTANE	0.5	1.2	0.1
ISOBUTANE	0.3	0.5	0.1
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	2.1	1.7	0.1
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	7.7
HELIUM	0.04	0.04	TRACE
HEATING VALUE*	1084	1188	956
SPECIFIC GRAVITY	0.632	0.693	0.644

	INDEX 9988 SAMPLE 15984	INDEX 9989 SAMPLE 14980	INDEX 9990 SAMPLE 11292
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POLK	POLK	POLK
FIELD	DAMASCUS	HORTENSE	LIVINGSTON
WELL NAME	ANICO NO. 1	SOUTHLAND PAPER MILLS M NO.	C. B. GRANBURY NO. 56
LOCATION	I&G SUR. A-337	J. A. CUMMINGS SUR. A-647	A. VIESCA SUR. A-77
OWNER	HINTON PRODUCTION CO.	BELCO PETROLEUM CORP.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/00	10/01/75	03/29/67
SAMPLED	06/--/80	04/16/77	02/15/68
FORMATION	CRET-WOODBINE	CRET-WOODBINE	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9175	12578	2863
WELLHEAD PRESSURE,PSIG	3467	4400	677
OPEN FLOW, MCFD	37000	7526	180
COMPONENT, MOLE PCT			
METHANE	92.2	76.3	98.8
ETHANE	1.8	7.1	0.0
PROPANE	0.6	5.9	TRACE
N-BUTANE	0.3	2.2	0.0
ISOBUTANE	0.1	1.5	0.0
N-PENTANE	0.1	0.6	0.0
ISOPENTANE	0.1	0.7	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.4	0.0
NITROGEN	2.0	0.2	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	4.9	0.2
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1034	1258	993
SPECIFIC GRAVITY	0.636	0.790	0.563

	INDEX 9991 SAMPLE 14515	INDEX 9992 SAMPLE 15138	INDEX 9993 SAMPLE 14554
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POLK	POLK	POLK
FIELD	LIVINGSTON	LIVINGSTON	R. B. WOODBINE
WELL NAME	DR. M. J. PRATT NO. 16	DR. M. J. PRATT NO. 16	SOUTHLAND PAPER MILLS NO. 1
LOCATION	SWABB CITY	9 MI. SE OF LIVINGSTON	JAMES CUMMINGS SUR. A-647
OWNER	SUN OIL CO.	SUN OIL CO.	BELCO PETROLEUM CORP.
COMPLETED	08/20/75	01/17/77	10/01/75
SAMPLED	10/30/75	11/03/77	12/23/75
FORMATION	EOCE-YEGUA	EOCE-YEGUA	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4614	4614	12577
WELLHEAD PRESSURE,PSIG	900	1740	6443
OPEN FLOW, MCFD	356	5867	7526
COMPONENT, MOLE PCT			
METHANE	90.3	77.9	89.6
ETHANE	3.3	3.6	4.0
PROPANE	1.7	1.6	1.6
N-BUTANE	0.3	0.5	0.3
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	3.1	12.8	0.4
OXYGEN	0.0	2.4	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	1.4
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1048	951	1058
SPECIFIC GRAVITY	0.622	0.685	0.642

	INDEX 9994 SAMPLE 13783	INDEX 9995 SAMPLE 14239	INDEX 9996 SAMPLE 15152
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POLK	POLK	POLK
FIELD	SEVEN OAKS N	SEVEN OAKS N	SEVEN OAKS N
WELL NAME	SOUTHLAND PAPER MILLS NO.B-2	T. E. JONES UNIT NO. 1	SEVEN OAKS TOWNSITE NO. 1
LOCATION	MELC BR SUR. A-314	J.S.W. SCARES SUR. A-69	B.J. HARPER SUR. A-36
OWNER	GEORGE MITCHELL & ASSOC. INC	MITCHELL ENERGY CORP.	MITCHELL ENERGY CORP.
COMPLETED	06/08/72	05/01/73	09/13/77
SAMPLED	10/26/73	12/03/74	11/21/77
FORMATION	CRET-WOODBINE	CRET-WOODBINE	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	12450	12270	12332
WELLHEAD PRESSURE,PSIG	2200	5215	3700
OPEN FLOW, MCFD	3425	6000	1750
COMPONENT, MOLE PCT			
METHANE	74.5	56.2	84.3
ETHANE	8.2	13.9	7.4
PROPANE	5.3	10.9	2.7
N-BUTANE	2.2	4.8	0.7
ISOBUTANE	1.9	3.5	0.4
N-PENTANE	1.3	1.7	0.2
ISOPENTANE	1.3	2.5	0.2
CYCLOPENTANE	0.4	0.3	TRACE
HEXANES PLUS	1.4	1.6	0.1
NITROGEN	0.3	0.2	0.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.3	4.5	0.7
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1367	1654	1116
SPECIFIC GRAVITY	0.831	1.029	0.681

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 9997 SAMPLE 7559	INDEX 9998 SAMPLE 911	INDEX 9999 SAMPLE 1141
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BROOKESMITH	BUSH DOME	BUSH DOME
WELL NAME	BIVINS NO. 1-207	BIVINS A-1	BUSH A-1
LOCATION	SEC. 207, BLK. 2, AB&M SUR.	SEC. 26, BLK. 6 BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	SHELL OIL CO.	U.S. BUREAU OF MINES	AMARILLO OIL CO.
COMPLETED	05/18/60	--/--/00	06/20/25
SAMPLED	05/21/60	--/--/00	08/--/25
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3420	3161	3248
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	700
OPEN FLOW, MCFD	491	8000	15000
COMPONENT, MOLE PCT			
METHANE	63.3	59.4	56.7
ETHANE	3.6	13.5	14.1
PROPANE	2.9	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	22.7	25.6	27.6
OXYGEN	0.0	0.3	0.8
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	5.6	0.9	0.8
HELIUM	1.48	1.78	1.78
HEATING VALUE*	794	844	827
SPECIFIC GRAVITY	0.750	0.738	0.753

	INDEX 10000 SAMPLE 1286	INDEX 10001 SAMPLE 1330	INDEX 10002 SAMPLE 1592
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-1	BIVINS A-1	FUQUA A-1
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 18, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	AMARILLO OIL CO.
COMPLETED	06/30/26	06/30/26	--/--/00
SAMPLED	08/18/26	12/09/26	03/15/28
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-BLAINE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3160	3160	905
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	8000	8000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.5	56.5	1.7
ETHANE	14.2	14.5	1.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	26.0	27.9	96.3
OXYGEN	0.6	0.3	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.8	0.0
HELIUM	1.75	1.74	0.05
HEATING VALUE*	847	832	39
SPECIFIC GRAVITY	0.746	0.753	0.962

	INDEX 10003 SAMPLE 1663	INDEX 10004 SAMPLE 1680	INDEX 10005 SAMPLE 2664
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH B-1	BUSH B-1	BIVINS A-1
LOCATION	SEC. 19, BLK. 6, BS&F SUR.	SEC. 19, BLK.6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	U.S. BUREAU OF MINES
COMPLETED	--/--/00	--/--/00	09/15/23
SAMPLED	07/31/28	10/04/28	03/11/34
FORMATION	PERM-BLAINE	PERM-WICHITA-ALBANY	PERM-BLAINE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	590	3227	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	219	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	58.2	6.7
ETHANE	1.0	14.7	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	95.6	24.1	93.0
OXYGEN	0.5	0.6	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.7	0.1
HELIUM	0.26	1.72	0.10
HEATING VALUE*	18	653	67
SPECIFIC GRAVITY	0.949	0.730	0.939

	INDEX 10006 SAMPLE 2689	INDEX 10007 SAMPLE 2690	INDEX 10008 SAMPLE 2691
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-2	BIVINS A-2	BIVINS A-2
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	--/--/00	--/--/00	01/15/35
SAMPLED	01/01/35	01/11/35	03/19/35
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3208	3261	3261
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	710
OPEN FLOW, MCFD	25	4400	12000
COMPONENT, MOLE PCT			
METHANE	65.9	59.7	63.9
ETHANE	9.2	10.3	10.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	22.1	25.9	23.5
OXYGEN	0.1	1.4	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.9	0.7
HELIUM	1.79	1.82	1.79
HEATING VALUE*	832	789	828
SPECIFIC GRAVITY	0.693	0.721	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10009 SAMPLE 2699	INDEX 10010 SAMPLE 2705	INDEX 10011 SAMPLE 2800
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	CROSS BAR RANCH NO. 1	BUSH A-1	BUSH A-1
LOCATION	SEC. 37, BLK. 5, G&M SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	SINCLAIR-PRAIRIE OIL CO.
COMPLETED	04/29/20	--/--/00	--/--/00
SAMPLED	07/09/35	12/13/35	10/08/38
FORMATION	PERM-BLAINE	PERM-BLAINE	PERM-BLAINE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	547	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.2	0.5	0.0
ETHANE	1.0	1.0	3.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	97.6	98.3	95.7
OXYGEN	0.0	0.1	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.07	0.00	0.07
HEATING VALUE*	30	23	65
SPECIFIC GRAVITY	0.963	0.957	0.972

	INDEX 10012 SAMPLE 2802	INDEX 10013 SAMPLE 2803	INDEX 10014 SAMPLE 2804
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH NO. 1	BUSH NO. 1	BUSH NO. 1
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	SINCLAIR-PRAIRIE OIL CO.	SINCLAIR-PRAIRIE OIL CO.	SINCLAIR-PRAIRIE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/24/38	11/02/38	11/09/38
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3700	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	3.2	2.6	2.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	84.0	82.3	80.8
OXYGEN	12.8	14.8	16.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.3	0.2
HELIUM	0.00	0.00	0.00
HEATING VALUE*	47	47	52
SPECIFIC GRAVITY	0.988	0.991	0.993

	INDEX 10015 SAMPLE 2805	INDEX 10016 SAMPLE 2808	INDEX 10017 SAMPLE 2809
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH NO. 1	BUSH NO. 1	BUSH NO. 1
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	SINCLAIR-PRAIRIE OIL CO.	SINCLAIR-PRAIRIE OIL CO.	SINCLAIR-PRAIRIE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/20/38	12/01/38	12/11/38
FORMATION	PENN-	PENN-	PENN-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	1.8	1.8	1.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	88.9	81.1	85.2
OXYGEN	6.0	16.9	13.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	3.3	0.2	0.1
HELIUM	0.00	0.00	0.00
HEATING VALUE*	32	32	22
SPECIFIC GRAVITY	0.996	0.993	0.987

	INDEX 10018 SAMPLE 2810	INDEX 10019 SAMPLE 2813	INDEX 10020 SAMPLE 2814
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH NO. 1	BUSH A-1	BUSH A-1
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	SINCLAIR-PRAIRIE OIL CO.	SINCLAIR-PRAIRIE OIL CO.	SINCLAIR-PRAIRIE OIL CO.
COMPLETED	--/--/00	02/05/39	02/05/39
SAMPLED	01/02/39	02/06/39	02/06/39
FORMATION	PENN-	PERM-BLAINE	PERM-BLAINE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.0	0.0	0.0
ETHANE	2.2	1.5	2.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	87.2	98.0	97.0
OXYGEN	9.8	0.5	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.0	0.3
HELIUM	0.00	0.00	0.11
HEATING VALUE*	39	27	38
SPECIFIC GRAVITY	0.987	0.969	0.972

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10021 SAMPLE 2823	INDEX 10022 SAMPLE 2824	INDEX 10023 SAMPLE 2889
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-2	BUSH NO. A-2	BIVINS A-3
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	10/17/39	10/17/39	--/--/00
SAMPLED	10/06/39	10/27/39	09/01/41
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3210	3210	2500
WELLHEAD PRESSURE,PSIG	709	709	NOT GIVEN
OPEN FLOW, MCFD	10110	10110	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.6	59.4	60.9
ETHANE	10.1	11.4	10.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	26.3	28.1	24.9
OXYGEN	0.7	0.5	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.6	0.9
HELIUM	1.80	1.83	1.85
HEATING VALUE*	809	806	812
SPECIFIC GRAVITY	0.728	0.738	0.715

	INDEX 10024 SAMPLE 2891	INDEX 10025 SAMPLE 3070	INDEX 10026 SAMPLE 3071
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-3	BUSH A-2	BIVINS A-4
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	09/20/41	10/05/39	01/03/42
SAMPLED	09/22/41	02/21/42	02/02/42
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3005	3220	3412
WELLHEAD PRESSURE,PSIG	7031	709	701
OPEN FLOW, MCFD	21524	NOT GIVEN	8000
COMPONENT, MOLE PCT			
METHANE	60.5	61.5	62.3
ETHANE	10.3	10.4	11.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	26.4	25.5	23.2
OXYGEN	0.2	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	0.6	0.8
HELIUM	1.85	1.84	1.76
HEATING VALUE*	797	809	841
SPECIFIC GRAVITY	0.714	0.711	0.709

	INDEX 10027 SAMPLE 3079	INDEX 10028 SAMPLE 3104	INDEX 10029 SAMPLE 3293
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-5	BIVINS A-5	BIVINS A-5
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	03/06/42	03/06/42	--/--/00
SAMPLED	02/26/42	03/06/42	02/29/42
FORMATION	PERM-BLAINE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1490	3275	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	21800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	3.4	62.8	61.6
ETHANE	1.3	9.7	11.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	94.9	24.7	24.5
OXYGEN	0.0	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.6	0.6
HELIUM	0.08	1.82	1.86
HEATING VALUE*	58	810	823
SPECIFIC GRAVITY	0.955	0.705	0.710

	INDEX 10030 SAMPLE 3294	INDEX 10031 SAMPLE 3295	INDEX 10032 SAMPLE 3296
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-4	BIVINS A-2	BUSH B-1
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 19, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/01/42	05/01/42	05/01/42
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.3	60.9	61.7
ETHANE	11.4	11.3	11.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	24.4	24.8	24.1
OXYGEN	0.3	0.5	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.7	0.7
HELIUM	1.78	1.81	1.82
HEATING VALUE*	825	819	828
SPECIFIC GRAVITY	0.713	0.715	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10033 SAMPLE 3400	INDEX 10034 SAMPLE 3416	INDEX 10035 SAMPLE 3576
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-3	BUSH A-3	BUSH A-3
LOCATION	SEC. 27, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	--/--/00	--/--/00	06/05/42
SAMPLED	--/--/00	--/--/00	07/31/42
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.5	61.8	60.8
ETHANE	7.5	10.9	12.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.2	24.4	25.2
OXYGEN	0.4	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.8	0.7	0.8
HELIUM	1.56	1.84	1.80
HEATING VALUE*	828	821	833
SPECIFIC GRAVITY	0.682	0.711	0.716

	INDEX 10036 SAMPLE 3588	INDEX 10037 SAMPLE 3609	INDEX 10038 SAMPLE 3610
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-1	BIVINS A-6	BIVINS A-6
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	06/30/24	12/15/42	12/15/42
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PERM-BLAINE	PERM-BLAINE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.5	5.4	59.1
ETHANE	1.7	1.0	11.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	97.2	93.2	26.4
OXYGEN	0.4	0.1	1.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.05	0.10	1.88
HEATING VALUE*	36	73	796
SPECIFIC GRAVITY	0.967	0.946	0.720

	INDEX 10039 SAMPLE 3631	INDEX 10040 SAMPLE 5197	INDEX 10041 SAMPLE 5198
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-4	BIVINS A-5	BIVINS A-3
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	--/--/00	03/13/42	09/27/41
SAMPLED	--/--/00	02/04/52	02/06/52
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3274	3117
WELLHEAD PRESSURE,PSIG	NOT GIVEN	680	677
OPEN FLOW, MCFD	NOT GIVEN	11900	14800
COMPONENT, MOLE PCT			
METHANE	61.7	66.1	65.9
ETHANE	10.8	3.5	3.5
PROPANE	---	1.8	1.8
N-BUTANE	---	0.5	0.5
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	25.1	24.7	22.5
OXYGEN	0.1	TRACE	TRACE
ARGON	---	0.2	0.1
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.9	0.5
HELIUM	1.84	1.80	1.84
HEATING VALUE*	819	815	810
SPECIFIC GRAVITY	0.709	0.711	0.679

	INDEX 10042 SAMPLE 5199	INDEX 10043 SAMPLE 5200	INDEX 10044 SAMPLE 5201
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	FUQUA A-1
WELL NAME	BIVINS A-4	BUSH A-2	SEC. 18, BLK. 6, BS&F SUR.
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	U.S. BUREAU OF MINES
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	05/17/28
COMPLETED	01/11/42	10/24/39	01/25/52
SAMPLED	04/16/52	01/30/52	PERM-WICHITA-ALBANY
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	440
GEOLOGIC PROVINCE CODE	440	440	3595
DEPTH, FEET	3212	3290	684
WELLHEAD PRESSURE,PSIG	679	678	2000
OPEN FLOW, MCFD	10700	12200	
COMPONENT, MOLE PCT			
METHANE	66.9	66.2	64.7
ETHANE	3.6	3.7	3.6
PROPANE	1.7	1.9	1.9
N-BUTANE	0.5	0.6	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	24.0	24.3	26.4
OXYGEN	TRACE	0.1	0.1
ARGON	0.2	0.2	0.2
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.1	0.7	0.9
HELIUM	1.76	1.77	1.83
HEATING VALUE*	816	826	802
SPECIFIC GRAVITY	0.709	0.712	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10045 SAMPLE 5202	INDEX 10046 SAMPLE 5203	INDEX 10047 SAMPLE 5204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-4	BIVINS A-2	BUSH A-5
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	04/15/43	02/02/35	10/11/43
SAMPLED	01/31/52	01/28/52	02/06/52
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3290	3297	3350
WELLHEAD PRESSURE,PSIG	678	677	674
OPEN FLOW, MCFD	7800	10600	27000
COMPONENT, MOLE PCT			
METHANE	65.3	66.7	65.6
ETHANE	3.6	3.6	3.5
PROPANE	1.8	1.8	1.9
N-BUTANE	0.4	0.5	0.5
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	25.6	24.1	25.3
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.9	0.5
HELIUM	1.83	1.72	1.79
HEATING VALUE*	815	822	819
SPECIFIC GRAVITY	0.715	0.709	0.713

	INDEX 10048 SAMPLE 5205	INDEX 10049 SAMPLE 5206	INDEX 10050 SAMPLE 5664
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-3	BUSH B-1	BIVINS A-4
LOCATION	SEC. 27, BLK. 6, BS&F SUR.	SEC. 19, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	06/15/42	11/13/28	01/11/42
SAMPLED	02/01/52	01/25/52	07/30/54
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3313	3261	3387
WELLHEAD PRESSURE,PSIG	672	679	NOT GIVEN
OPEN FLOW, MCFD	15300	5300	11920
COMPONENT, MOLE PCT			
METHANE	66.4	66.8	66.5
ETHANE	3.6	3.6	3.9
PROPANE	1.8	1.8	1.9
N-BUTANE	0.5	0.4	0.5
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	24.4	23.9	23.8
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.8	1.0	0.9
HELIUM	1.80	1.77	1.72
HEATING VALUE*	821	823	834
SPECIFIC GRAVITY	0.710	0.708	0.712

	INDEX 10051 SAMPLE 5665	INDEX 10052 SAMPLE 5666	INDEX 10053 SAMPLE 5667
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-4	BUSH A-3	BIVINS A-5
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	04/15/43	06/05/42	03/13/42
SAMPLED	07/30/54	07/30/54	07/30/54
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3196	3222	3165
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	11300	16930	15000
COMPONENT, MOLE PCT			
METHANE	65.8	66.2	65.8
ETHANE	3.9	3.9	3.9
PROPANE	1.7	1.6	1.8
N-BUTANE	0.5	0.6	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.9	24.4	24.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.6
HELIUM	1.79	1.75	1.77
HEATING VALUE*	825	826	828
SPECIFIC GRAVITY	0.711	0.711	0.714

	INDEX 10054 SAMPLE 5668	INDEX 10055 SAMPLE 5669	INDEX 10056 SAMPLE 5670
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-5	BUSH A-2	BUSH B-1
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 20, BLK. 6, BS&F SUR.	SEC. 19, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	10/11/43	10/24/39	11/13/28
SAMPLED	07/30/54	07/30/54	07/30/54
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3265	3190	3227
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	22500	12000	3002
COMPONENT, MOLE PCT			
METHANE	65.5	65.7	67.1
ETHANE	3.9	3.7	3.8
PROPANE	1.8	1.8	1.7
N-BUTANE	0.5	0.5	0.5
ISOBUTANE	0.4	0.2	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.2	25.2	25.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.8
HELIUM	1.78	1.80	1.71
HEATING VALUE*	828	820	833
SPECIFIC GRAVITY	0.716	0.711	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10057 SAMPLE 5671	INDEX 10058 SAMPLE 5672	INDEX 10059 SAMPLE 5673
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-2	BIVINS A-3	FUQUA A-1
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 18, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	02/02/35	09/27/41	05/17/28
SAMPLED	07/30/54	07/30/54	07/30/54
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3208	3005	3502
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	11400	21524	
COMPONENT, MOLE PCT			
METHANE	66.5	65.1	66.6
ETHANE	3.8	3.8	1.9
PROPANE	2.0	1.8	1.5
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.1	25.4	24.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	0.4
HELIUM	1.70	1.80	1.78
HEATING VALUE*	830	820	817
SPECIFIC GRAVITY	0.709	0.714	0.709

	INDEX 10060 SAMPLE 7928	INDEX 10061 SAMPLE 8911	INDEX 10062 SAMPLE 8912
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-7	BIVINS A-5	BUSH A-2
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	08/16/58	03/13/42	10/24/39
SAMPLED	05/16/61	04/10/63	04/10/63
FORMATION	PERM---	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3360	NOT GIVEN	3287
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.9	66.8	66.6
ETHANE	0.1	3.5	3.8
PROPANE	TRACE	1.7	1.6
N-BUTANE	TRACE	0.6	0.6
ISOBUTANE	TRACE	0.2	0.2
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	97.6	24.2	24.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.2	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.6
HELIUM	0.10	1.86	1.92
HEATING VALUE*	21	827	827
SPECIFIC GRAVITY	0.960	0.712	0.711

	INDEX 10063 SAMPLE 8913	INDEX 10064 SAMPLE 8914	INDEX 10065 SAMPLE 8915
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-7	BIVINS A-4	BUSH B-1
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 19, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	08/16/58	01/11/42	11/13/28
SAMPLED	04/10/63	04/10/63	04/10/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3413	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.7	66.2	67.6
ETHANE	3.5	3.6	3.8
PROPANE	1.6	1.7	1.7
N-BUTANE	0.7	0.6	0.7
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.3	24.3	22.9
OXYGEN	0.0	0.3	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.8
HELIUM	1.95	1.72	1.78
HEATING VALUE*	818	826	845
SPECIFIC GRAVITY	0.716	0.717	0.713

	INDEX 10066 SAMPLE 8916	INDEX 10067 SAMPLE 8917	INDEX 10068 SAMPLE 8918
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-5	BUSH A-3	BIVINS A-2
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	03/13/42	06/05/42	02/02/35
SAMPLED	04/10/63	04/10/63	04/10/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3394	3334	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.0	65.2	67.2
ETHANE	3.6	3.8	3.4
PROPANE	1.6	1.7	1.7
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	26.7	25.2	23.7
OXYGEN	0.7	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.8
HELIUM	1.65	1.83	1.80
HEATING VALUE*	802	824	834
SPECIFIC GRAVITY	0.725	0.721	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10069 SAMPLE 8919	INDEX 10070 SAMPLE 8925	INDEX 10071 SAMPLE 8926
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-4	BUSH A-2	BUSH A-3
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	04/15/43	10/24/39	06/05/62
SAMPLED	04/10/63	04/17/63	04/17/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.3	66.7	66.8
ETHANE	3.6	3.6	3.6
PROPANE	1.7	1.5	1.7
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.6	24.5	23.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.7
HELIUM	1.85	1.87	1.86
HEATING VALUE*	830	824	834
SPECIFIC GRAVITY	0.715	0.709	0.710

	INDEX 10072 SAMPLE 8927	INDEX 10073 SAMPLE 8928	INDEX 10074 SAMPLE 8929
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-4	BUSH A-5	BIVINS A-2
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	04/15/43	10/11/43	02/02/35
SAMPLED	04/17/63	04/17/63	04/17/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3300	NOT GIVEN	3313
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.3	66.1	67.3
ETHANE	3.6	3.6	3.6
PROPANE	1.7	1.7	1.9
N-BUTANE	0.7	0.6	0.6
ISOBUTANE	TRACE	0.2	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.7	24.8	23.3
OXYGEN	TRACE	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.8
HELIUM	1.83	1.87	1.78
HEATING VALUE*	829	828	839
SPECIFIC GRAVITY	0.712	0.714	0.712

	INDEX 10075 SAMPLE 8930	INDEX 10076 SAMPLE 8931	INDEX 10077 SAMPLE 8932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-4	BIVINS A-5	BIVINS A-7
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	01/11/42	03/13/42	08/16/56
SAMPLED	04/17/63	04/17/63	04/17/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	3267	3360
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.4	66.4	65.3
ETHANE	3.7	3.6	3.6
PROPANE	1.7	1.7	1.6
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	23.1	24.4	25.6
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.5
HELIUM	1.79	1.79	1.97
HEATING VALUE*	840	830	816
SPECIFIC GRAVITY	0.711	0.712	0.714

	INDEX 10078 SAMPLE 8939	INDEX 10079 SAMPLE 8940	INDEX 10080 SAMPLE 8941
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-2	BIVINS A-4	BIVINS A-5
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	02/02/35	01/11/42	03/06/42
SAMPLED	07/10/63	07/10/63	07/10/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3300	3412	3275
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.9	67.3	66.6
ETHANE	3.7	3.6	4.0
PROPANE	1.4	1.7	1.7
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	24.9	25.1	23.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.7
HELIUM	1.87	1.78	1.88
HEATING VALUE*	822	834	837
SPECIFIC GRAVITY	0.713	0.707	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10081 SAMPLE 8942	INDEX 10082 SAMPLE 8943	INDEX 10083 SAMPLE 8944
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-7	BUSH A-2	BUSH A-3
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	08/16/58	10/24/39	06/05/62
SAMPLED	07/10/63	07/15/63	07/16/63
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3360	3320	3334
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.5	67.3	66.9
ETHANE	3.6	3.6	3.6
PROPANE	1.7	2.1	1.7
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.5	23.3	23.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.7
HELIUM	1.88	1.79	1.83
HEATING VALUE*	818	845	834
SPECIFIC GRAVITY	0.717	0.713	0.711

	INDEX 10084 SAMPLE 8945	INDEX 10085 SAMPLE 9007	INDEX 10086 SAMPLE 9858
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-4	BIVINS A-8R	BIVINS A-2
LOCATION	SEC. 23, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	04/15/43	05/15/63	02/02/35
SAMPLED	07/16/63	06/07/63	04/01/65
FORMATION	PERM-WICHITA-ALBANY	PERM-RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3300	2408	3300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	482	610
OPEN FLOW, MCFD	NOT GIVEN	20	6100
COMPONENT, MOLE PCT			
METHANE	65.6	66.3	66.6
ETHANE	3.5	3.5	3.7
PROPANE	1.5	1.6	1.9
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	25.4	25.4	23.8
OXYGEN	0.2	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.8
HELIUM	1.83	1.90	1.83
HEATING VALUE*	817	807	837
SPECIFIC GRAVITY	0.715	0.701	0.713

	INDEX 10087 SAMPLE 9859	INDEX 10088 SAMPLE 9860	INDEX 10089 SAMPLE 9861
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-4	BIVINS A-5	BIVINS A-7
LOCATION	SEC. 22, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	01/11/42	03/12/42	08/16/58
SAMPLED	02/01/65	03/01/65	02/01/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3412	3275	3360
WELLHEAD PRESSURE,PSIG	610	612	615
OPEN FLOW, MCFD	3700	6400	7000
COMPONENT, MOLE PCT			
METHANE	66.9	66.1	65.2
ETHANE	3.6	3.7	3.5
PROPANE	1.7	1.8	1.7
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	23.6	24.6	25.6
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.5
HELIUM	1.82	1.87	1.96
HEATING VALUE*	836	827	819
SPECIFIC GRAVITY	0.710	0.715	0.713

	INDEX 10090 SAMPLE 9862	INDEX 10091 SAMPLE 9864	INDEX 10092 SAMPLE 9865
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-8R	BUSH NO. A-3	BUSH A-4
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	05/15/63	06/05/62	04/15/43
SAMPLED	04/01/65	02/01/65	04/01/65
FORMATION	PERM-RED CAVE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2408	3334	3300
WELLHEAD PRESSURE,PSIG	482	614	612
OPEN FLOW, MCFD	20	6800	3600
COMPONENT, MOLE PCT			
METHANE	65.9	66.9	65.4
ETHANE	3.7	3.7	3.7
PROPANE	1.7	1.8	1.7
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.6	23.7	25.3
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.5
HELIUM	1.86	1.82	1.90
HEATING VALUE*	819	836	822
SPECIFIC GRAVITY	0.711	0.713	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10093 SAMPLE 9867	INDEX 10094 SAMPLE 9868	INDEX 10095 SAMPLE 9869
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-7	BUSH A-8	BUSH A-9
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 28, BLK. 6, BS&F SUR.	SEC. 25, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	06/05/63	06/25/63	03/09/65
SAMPLED	07/15/64	02/01/65	03/31/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3477	3500	3436
WELLHEAD PRESSURE,PSIG	684	618	625
OPEN FLOW, MCFD	240	2200	5400
COMPONENT, MOLE PCT			
METHANE	69.9	66.7	66.0
ETHANE	3.7	3.5	3.8
PROPANE	1.8	1.9	2.0
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	21.2	23.5	23.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.1	0.5
HELIUM	1.80	1.84	1.71
HEATING VALUE*	864	833	880
SPECIFIC GRAVITY	0.697	0.713	0.734

	INDEX 10096 SAMPLE 9870	INDEX 10097 SAMPLE 9872	INDEX 10098 SAMPLE 9873
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH B-1	FUQUA A-1	FUQUA A-2
LOCATION	SEC. 19, BLK. 6, BS&F SUR.	SEC. 18, BLK. 6, BS&F SUR.	SEC. 24, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	07/12/28	05/--/28	03/--/65
SAMPLED	03/24/65	03/02/65	03/22/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3342	3585	3475
WELLHEAD PRESSURE,PSIG	567	594	604
OPEN FLOW, MCFD	2300	1950	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.2	64.4	65.1
ETHANE	3.8	3.7	3.7
PROPANE	1.8	1.8	1.9
N-BUTANE	0.6	0.7	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	23.2	25.9	25.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	1.0
HELIUM	1.77	1.96	1.84
HEATING VALUE*	848	832	820
SPECIFIC GRAVITY	0.714	0.726	0.721

	INDEX 10099 SAMPLE 10799	INDEX 10100 SAMPLE 10800	INDEX 10101 SAMPLE 10801
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-9	BIVINS A-7	BIVINS A-5
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	02/04/65	08/16/58	03/06/42
SAMPLED	12/05/66	12/05/66	12/05/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3436	3360	3275
WELLHEAD PRESSURE,PSIG	640	647	630
OPEN FLOW, MCFD	5400	7000	6400
COMPONENT, MOLE PCT			
METHANE	65.3	64.6	65.7
ETHANE	3.7	3.7	3.7
PROPANE	1.8	1.9	1.9
N-BUTANE	0.6	0.5	0.5
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.5	26.0	24.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.6
HELIUM	1.90	1.96	1.90
HEATING VALUE*	823	817	829
SPECIFIC GRAVITY	0.714	0.718	0.714

	INDEX 10102 SAMPLE 10802	INDEX 10103 SAMPLE 10804	INDEX 10104 SAMPLE 10836
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-9	BIVINS A-4	BUSH B-1
LOCATION	SEC. 2, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 19, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	03/20/65	01/11/42	11/01/28
SAMPLED	12/05/66	12/05/66	03/17/67
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3464	3412	3340
WELLHEAD PRESSURE,PSIG	687	629	633
OPEN FLOW, MCFD	17000	3700	2300
COMPONENT, MOLE PCT			
METHANE	64.5	66.3	66.2
ETHANE	3.6	3.7	3.7
PROPANE	1.9	1.9	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.9	24.1	24.1
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	0.9
HELIUM	1.93	1.78	1.78
HEATING VALUE*	819	835	831
SPECIFIC GRAVITY	0.722	0.716	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10105 SAMPLE 10839	INDEX 10106 SAMPLE 10840	INDEX 10107 SAMPLE 10844
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	FUQUA A-1	FUQUA A-2	BUSH A-8
LOCATION	SEC. 18, BLK. 6, BS&F SUR.	SEC. 24, BLK. 6, BS&F SUR.	SEC. 20, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	05/01/28	05/01/65	06/01/63
SAMPLED	01/17/67	01/17/67	01/20/67
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3585	3475	3500
WELLHEAD PRESSURE,PSIG	626	640	614
OPEN FLOW, MCFD	1950	2000	2200
COMPONENT, MOLE PCT			
METHANE	66.2	65.1	65.5
ETHANE	3.8	3.8	3.7
PROPANE	1.6	1.9	1.8
N-BUTANE	0.4	0.5	0.6
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	24.9	25.5	24.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.8	0.7
HELIUM	1.87	1.89	1.91
HEATING VALUE*	818	831	829
SPECIFIC GRAVITY	0.706	0.720	0.716

	INDEX 10108 SAMPLE 11487	INDEX 10109 SAMPLE 11491	INDEX 10110 SAMPLE 11492
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-4	BIVINS A-9	BUSH A-8
LOCATION	SEC. 22, BLK. 6, B&SF SUR.	SEC. 2, BLK. JAD, BS&F SUR.	SEC. 20, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	01/11/42	04/04/65	05/25/63
SAMPLED	05/14/68	05/16/68	05/16/68
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3412	3378	3500
WELLHEAD PRESSURE,PSIG	646	615	604
OPEN FLOW, MCFD	13000	17000	2400
COMPONENT, MOLE PCT			
METHANE	66.3	65.0	65.2
ETHANE	3.8	3.8	3.7
PROPANE	1.7	1.9	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	23.9	25.1	24.7
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.8	1.2
HELIUM	1.92	1.84	1.77
HEATING VALUE*	829	828	835
SPECIFIC GRAVITY	0.710	0.720	0.726

	INDEX 10111 SAMPLE 11493	INDEX 10112 SAMPLE 11494	INDEX 10113 SAMPLE 11495
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BUSH A-9	BUSH B-1	FUQUA A-1
LOCATION	SEC. 25, BLK. 6, BS&F SUR.	SEC. 19, BLK. 6, BS&F SUR.	SEC. 18, BLK. 6, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	03/09/65	07/12/28	05/17/28
SAMPLED	05/16/68	05/16/68	05/16/68
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3436	3342	3585
WELLHEAD PRESSURE,PSIG	631	646	637
OPEN FLOW, MCFD	5700	2300	2000
COMPONENT, MOLE PCT			
METHANE	65.3	67.3	64.2
ETHANE	3.8	3.8	3.9
PROPANE	1.8	1.8	1.8
N-BUTANE	0.6	0.6	0.6
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.4	0.0	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	25.1	23.0	25.9
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.2	0.2
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.3
HELIUM	1.82	1.74	1.89
HEATING VALUE*	830	845	830
SPECIFIC GRAVITY	0.717	0.710	0.723

	INDEX 10114 SAMPLE 11525	INDEX 10115 SAMPLE 13364	INDEX 10116 SAMPLE 13365
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME	BIVINS A-8R	BIVINS A-9	BIVINS A-11
LOCATION	SEC. 26, BLK. 6, BS&F SUR.	SEC. 2, BLK. JAD, BS&F SUR.	SEC. 2, BLK. JAD, BS&F SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	05/15/63	04/04/65	01/06/67
SAMPLED	06/03/68	08/31/72	08/31/72
FORMATION	PERM-RED CAVE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2408	3401	3340
WELLHEAD PRESSURE,PSIG	449	666	660
OPEN FLOW, MCFD	600	20000	8500
COMPONENT, MOLE PCT			
METHANE	65.2	64.4	64.3
ETHANE	3.7	3.7	3.9
PROPANE	1.6	2.1	1.9
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.2	0.6	0.3
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	26.2	25.7	25.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.2
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.7	0.9
HELIUM	1.79	1.93	1.88
HEATING VALUE*	814	814	815
SPECIFIC GRAVITY	0.710	0.717	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10117 SAMPLE 13367		INDEX 10118 SAMPLE 13699		INDEX 10119 SAMPLE 13702	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	BUSH DOME		BUSH DOME		BUSH DOME	
WELL NAME	BIVINS B-2		BIVINS A-11		BIVINS A-9	
LOCATION	SEC. 28, BLK. 6, BS&F SUR.		SEC. 2, BLK. 6, BS&F SUR.		SEC. 2, BLK. 6, BS&F SUR.	
OWNER	U.S. BUREAU OF MINES		U.S. BUREAU OF MINES		U.S. BUREAU OF MINES	
COMPLETED	10/24/67		01/01/67		03/20/65	
SAMPLED	08/31/72		08/30/73		08/30/73	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3484		3340		3464	
WELLHEAD PRESSURE,PSIG	650		677		684	
OPEN FLOW, MCFD	6800		8600		18500	
COMPONENT, MOLE PCT						
METHANE	63.2		64.9		65.0	
ETHANE	3.8		3.8		3.7	
PROPANE	1.8		2.2		1.9	
N-BUTANE	0.4		0.0		0.5	
ISOBUTANE	0.3		0.8		0.4	
N-PENTANE	0.1		0.2		TRACE	
ISOPENTANE	TRACE		0.0		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	27.0		25.3		25.6	
OXYGEN	0.0		0.0		0.0	
ARGON	0.2		0.1		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		0.6		0.6	
HELIUM	1.91		1.91		1.94	
HEATING VALUE*	768		823		818	
SPECIFIC GRAVITY	0.723		0.716		0.716	

	INDEX 10120 SAMPLE 9008		INDEX 10121 SAMPLE 11526		INDEX 10122 SAMPLE 16027	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	HORSE CREEK DOME		HORSE CREEK DOME		LAMBERT III	
WELL NAME	BUSH A-7		BUSH A-7		EMENY-O'BRIEN NO. 1	
LOCATION	SEC. 25, BLK. 6, BS&F SUR.		SEC. 25, BLK. 6, BS&F SUR.		SEC. 30, BLK. M-19, G&M SUR.	
OWNER	U.S. BUREAU OF MINES		U.S. BUREAU OF MINES		BAKER & TAYLOR DRILLING CO.	
COMPLETED	06/05/63		06/05/63		--/--/80	
SAMPLED	06/06/63		06/03/68		08/09/80	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3477		3477		3412	
WELLHEAD PRESSURE,PSIG	774		692		65	
OPEN FLOW, MCFD	NOT GIVEN		200		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	70.0		69.7		63.4	
ETHANE	3.9		3.8		3.9	
PROPANE	1.9		1.7		1.8	
N-BUTANE	0.7		0.6		0.5	
ISOBUTANE	0.2		0.1		0.3	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.2		0.3		0.1	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	20.5		21.3		27.6	
OXYGEN	0.0		0.0		0.1	
ARGON	0.1		0.1		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.7		TRACE	
HELIUM	1.42		1.44		1.83	
HEATING VALUE*	880		864		803	
SPECIFIC GRAVITY	0.704		0.700		0.719	

	INDEX 10123 SAMPLE 16028		INDEX 10124 SAMPLE 16029		INDEX 10125 SAMPLE 16716	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	LAMBERT III		LAMBERT III		LAMBERT IV	
WELL NAME	EMENY-O'BRIEN NO. 1		EMENY-O'BRIEN NO. 1		BUSH "2-A" NO. 1	
LOCATION	SEC. 30, BLK. M-19, G&M SUR.		SEC. 30, BLK. M-19, G&M SUR.		SEC. 2, BLK 6&B, ORTMAN SUR.	
OWNER	BAKER & TAYLOR DRILLING CO.		BAKER & TAYLOR DRILLING CO.		BAKER & TAYLOR DRILLING CO.	
COMPLETED	--/--/80		--/--/80		10/18/80	
SAMPLED	08/--/80		08/--/80		12/06/82	
FORMATION	PERM-WICHITA-ALBANY		PERM-WICHITA-ALBANY		PENN-CISCO	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3412		3412		6028	
WELLHEAD PRESSURE,PSIG	65		65		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		5	
COMPONENT, MOLE PCT						
METHANE	63.3		63.2		31.6	
ETHANE	3.9		3.9		4.3	
PROPANE	1.8		1.8		3.8	
N-BUTANE	0.6		0.6		1.2	
ISOBUTANE	0.3		0.3		0.9	
N-PENTANE	0.1		0.1		0.5	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	0.1		0.1		0.4	
HEXANES PLUS	0.1		0.1		0.6	
NITROGEN	27.5		27.6		54.6	
OXYGEN	0.1		0.1		0.1	
ARGON	0.1		0.1		0.2	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.3	
HELIUM	1.81		1.85		1.17	
HEATING VALUE*	810		809		647	
SPECIFIC GRAVITY	0.722		0.724		0.909	

	INDEX 10126 SAMPLE 16030		INDEX 10127 SAMPLE 4067		INDEX 10128 SAMPLE 7838	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	LAMBERT NO. 3		NOT GIVEN		NOT GIVEN	
WELL NAME	EMENY-O'BRIEN NO. 1		WATER WELL		BARNES ESTATE R NO. 1	
LOCATION	SEC. 30, BLK. M-19, G&M SUR.		NOT GIVEN		SEC. 7, WARRICK SUR.	
OWNER	BAKER & TAYLOR DRILLING CO.		L. H. PUCKETT		H. N. BURNETT	
COMPLETED	--/--/80		--/--/00		--/--/00	
SAMPLED	08/09/80		--/--/00		02/03/61	
FORMATION	PERM-WICHITA-ALBANY		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	3412		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	65		NOT GIVEN		291	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	63.4		0.0		81.3	
ETHANE	3.8		0.0		7.2	
PROPANE	1.9		---		2.8	
N-BUTANE	0.5		---		0.6	
ISOBUTANE	0.3		---		0.3	
N-PENTANE	0.1		---		0.1	
ISOPENTANE	0.2		---		0.1	
CYCLOPENTANE	0.1		---		TRACE	
HEXANES PLUS	0.1		---		0.1	
NITROGEN	27.4		2.6		7.2	
OXYGEN	0.1		0.0		TRACE	
ARGON	0.1		---		TRACE	
HYDROGEN	0.0		---		TRACE	
HYDROGEN SULFIDE**	0.0		---		0.0	
CARBON DIOXIDE	TRACE		97.2		0.1	
HELIUM	1.85		0.15		0.10	
HEATING VALUE*	808		0		1069	
SPECIFIC GRAVITY	0.720		1.512		0.668	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10129 SAMPLE 209	INDEX 10130 SAMPLE 214	INDEX 10131 SAMPLE 1031
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON NO. 4	RANCH CREEK NO. 1	WARRICK NO. 1
LOCATION	SEC. 109, BLK. B-18, D&P SUR.	SEC. 2, BLK. B-11, ELRR SUR.	SEC. 16, BLK. Y-2
OWNER	AMARILLO OIL CO.	RANCH CREEK OIL & GAS CO.	AMARILLO OIL CO.
COMPLETED	09/--/19	--/--/00	--/--/00
SAMPLED	04/15/20	04/16/20	04/20/25
FORMATION	PERM-LIME	PERM-BLUE GRANITE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1600	2363	2930
WELLHEAD PRESSURE, PSIG	435	650	430
OPEN FLOW, MCFD	107000	3000	70000
COMPONENT, MOLE PCT			
METHANE	76.4	72.3	68.4
ETHANE	15.0	15.6	20.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.5	11.0	9.9
OXYGEN	0.6	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.0	0.4
HELIUM	0.49	0.60	0.50
HEATING VALUE*	1043	1012	1062
SPECIFIC GRAVITY	0.661	0.676	0.701

	INDEX 10132 SAMPLE 1259	INDEX 10133 SAMPLE 1896	INDEX 10134 SAMPLE 2335
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-4	BIVINS B-1	TUCK-TRIGG NO. 1
LOCATION	SEC. 24, BLK. B-18, D&P SUR.	SEC. 39, BLK. M-20, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.
OWNER	AMARILLO OIL CO.	CANADIAN RIVER GAS CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/--/25	11/15/29	08/29/20
SAMPLED	04/08/26	11/15/29	05/25/31
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2640	2560
WELLHEAD PRESSURE, PSIG	430	415	NOT GIVEN
OPEN FLOW, MCFD	4500	S6957	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.0	71.3	67.0
ETHANE	20.4	17.6	15.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.7	9.7	17.2
OXYGEN	1.8	0.6	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.0
HELIUM	0.25	0.49	0.64
HEATING VALUE*	1052	1038	948
SPECIFIC GRAVITY	0.729	0.686	0.698

	INDEX 10135 SAMPLE 2883	INDEX 10136 SAMPLE 3287	INDEX 10137 SAMPLE 3297
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	COUGHLAN NO. A-1	MASTERSON NO. J-2	MASTERSON NO. N-1
LOCATION	SEC. 1, BLK. D-18, D&P SUR.	SEC. 69, BLK. D-18, D&P SUR.	SEC. 179, BLK. 3, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	12/26/36	--/--/00	--/--/00
SAMPLED	08/22/41	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2326	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	20100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.4	67.2	70.1
ETHANE	21.7	17.7	18.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	14.9	13.8	10.1
OXYGEN	0.0	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.77	0.90	0.54
HEATING VALUE*	1021	998	1049
SPECIFIC GRAVITY	0.722	0.698	0.690

	INDEX 10138 SAMPLE 3333	INDEX 10139 SAMPLE 3347	INDEX 10140 SAMPLE 3355
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON NO. G-2	MASTERSON NO. E-2	BIVINS NO. B-3
LOCATION	NOT GIVEN	SEC. 70, BLK. B-18, D&P SUR.	SEC. 15, BLK. M-20, G&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.8	73.5	71.8
ETHANE	18.8	19.5	17.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.2	6.3	9.2
OXYGEN	0.4	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.74	0.25	0.54
HEATING VALUE*	1024	1094	1046
SPECIFIC GRAVITY	0.698	0.678	0.684

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10141 SAMPLE 3361	INDEX 10142 SAMPLE 3366	INDEX 10143 SAMPLE 3741
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-20	BIVINS NO. A-16	BIVINS NO. A-30
LOCATION	SEC. 35, BLK. M-20, G&M SUR.	SEC. 33, BLK. M-20, G&M SUR.	SEC. 192, BLK. 2, AB&M SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	--/--/00	--/--/00	04/06/44
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	3668
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	31
COMPONENT, MOLE PCT			
METHANE	72.5	71.7	41.1
ETHANE	16.6	17.9	7.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.6	9.2	37.1
OXYGEN	0.4	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.2	11.7
HELIUM	0.56	0.54	1.95
HEATING VALUE*	1032	1047	558
SPECIFIC GRAVITY	0.679	0.684	0.853

	INDEX 10144 SAMPLE 5059	INDEX 10145 SAMPLE 5196	INDEX 10146 SAMPLE 5410
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-77	BIVINS NO. A-83	BIVINS A-92
LOCATION	SEC. 71, BLK. 2, G&M SUR.	SEC. 45, BLK. B-18, D&P SUR.	SEC. 34, BLK. B-11, ELERR SUR
OWNER	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/02/51	03/20/52	03/10/53
SAMPLED	07/17/51	05/01/52	03/11/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2725	2383	2230
WELLHEAD PRESSURE,PSIG	366	352	310
OPEN FLOW, MCFD	37400	11975	3000
COMPONENT, MOLE PCT			
METHANE	71.2	72.5	72.9
ETHANE	5.1	4.8	4.9
PROPANE	2.7	2.9	2.8
N-BUTANE	0.6	0.9	0.8
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	17.9	16.6	16.3
OXYGEN	0.3	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.4	0.3
HELIUM	1.05	1.04	0.97
HEATING VALUE*	936	959	960
SPECIFIC GRAVITY	0.704	0.705	0.701

	INDEX 10147 SAMPLE 5411	INDEX 10148 SAMPLE 5412	INDEX 10149 SAMPLE 5425
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-89	BIVINS A-88	BIVINS A-91
LOCATION	SEC. 21, BLK.2, G&M SUR.	SEC. 21, BLK. O-18, D&P SUR.	SEC. 58, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/12/52	10/18/52	03/20/53
SAMPLED	03/11/53	03/11/53	03/25/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2640	2427	2272
WELLHEAD PRESSURE,PSIG	349	342	360
OPEN FLOW, MCFD	10900	62500	10200
COMPONENT, MOLE PCT			
METHANE	72.1	72.6	72.7
ETHANE	4.7	5.2	4.6
PROPANE	2.7	3.0	2.7
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	17.4	16.3	17.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	1.03	0.99	1.06
HEATING VALUE*	943	969	948
SPECIFIC GRAVITY	0.702	0.705	0.700

	INDEX 10150 SAMPLE 5468	INDEX 10151 SAMPLE 5469	INDEX 10152 SAMPLE 5568
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-95	BIVINS A-96	BIVINS NO. A-98
LOCATION	SEC. 37, BLK. O-18, D&P SUR.	SEC. 16, BLK. O-18, D&P SUR.	SEC. 59, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/24/53	04/25/53	08/18/53
SAMPLED	05/15/53	05/15/53	12/01/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2438	2462	2431
WELLHEAD PRESSURE,PSIG	322	320	367
OPEN FLOW, MCFD	12000	19200	7400
COMPONENT, MOLE PCT			
METHANE	72.7	72.5	72.0
ETHANE	5.4	5.6	5.1
PROPANE	2.8	3.1	2.7
N-BUTANE	0.8	0.9	0.8
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.0	15.7	17.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.98	0.96	1.09
HEATING VALUE*	972	978	954
SPECIFIC GRAVITY	0.704	0.704	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10153 SAMPLE 5569	INDEX 10154 SAMPLE 5570	INDEX 10155 SAMPLE 5571
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-99	BIVINS NO. A-100	BIVINS NO. A-101
LOCATION	SEC. 44, BLK. 0-18, D&P SUR.	SEC. 36, BLK. 0-18, D&P SUR.	SEC. 34, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/02/53	09/10/53	09/30/53
SAMPLED	12/01/53	12/01/53	12/01/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2295	2550	2605
WELLHEAD PRESSURE,PSIG	326	313	331
OPEN FLOW, MCFD	4400	10600	27800
COMPONENT, MOLE PCT			
METHANE	72.2	72.7	72.6
ETHANE	5.1	5.4	5.4
PROPANE	2.8	2.9	2.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.8	15.9	15.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	1.05	0.97	0.98
HEATING VALUE*	958	974	974
SPECIFIC GRAVITY	0.704	0.704	0.703

	INDEX 10156 SAMPLE 5572	INDEX 10157 SAMPLE 5573	INDEX 10158 SAMPLE 5574
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-102	BIVINS NO. A-103	BIVINS NO. A-104
LOCATION	SEC. 31, BLK. 0-18, D&P SUR.	SEC. 81, BLK. 2, G&M SUR.	SEC. 57, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/10/53	10/02/53	09/28/53
SAMPLED	12/01/53	12/01/53	12/01/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2370	2409	2350
WELLHEAD PRESSURE,PSIG	335	325	349
OPEN FLOW, MCFD	36000	7300	7800
COMPONENT, MOLE PCT			
METHANE	72.6	72.6	72.2
ETHANE	5.5	5.4	5.2
PROPANE	3.0	2.9	2.8
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.7	15.9	16.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.99	0.99	1.13
HEATING VALUE*	979	974	960
SPECIFIC GRAVITY	0.705	0.704	0.704

	INDEX 10159 SAMPLE 5575	INDEX 10160 SAMPLE 5576	INDEX 10161 SAMPLE 5577
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-105	BIVINS NO. A-106	BIVINS NO. 109
LOCATION	SEC. 58, BLK. 0-18, D&P SUR.	SEC. 30, BLK. B-11, EL&RR SUR.	SEC. 70, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/23/53	10/26/53	12/06/53
SAMPLED	12/01/53	12/01/53	12/11/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2430	2355	2475
WELLHEAD PRESSURE,PSIG	317	348	371
OPEN FLOW, MCFD	23000	20800	12600
COMPONENT, MOLE PCT			
METHANE	72.6	71.8	71.3
ETHANE	5.6	5.8	5.1
PROPANE	3.0	2.8	2.7
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.6	17.2	17.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.96	1.14	1.17
HEATING VALUE*	984	950	943
SPECIFIC GRAVITY	0.707	0.704	0.704

	INDEX 10162 SAMPLE 5579	INDEX 10163 SAMPLE 5580	INDEX 10164 SAMPLE 5581
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	COUGHLIN NO. A-2	BIVINS NO. 108	BIVINS NO. 110
LOCATION	SEC. 77, BLK. 0-18, D&P SUR.	SEC. 17, BLK. 0-18, D&P SUR.	SEC. 8, BLK. 0-18, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/12/53	--/--/00	12/10/53
SAMPLED	12/15/53	12/15/53	12/15/53
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2385	2605	2500
WELLHEAD PRESSURE,PSIG	300	300	328
OPEN FLOW, MCFD	6800	3000	7800
COMPONENT, MOLE PCT			
METHANE	74.3	71.8	72.8
ETHANE	6.0	5.5	5.9
PROPANE	3.4	2.9	3.3
N-BUTANE	1.0	0.8	1.0
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	13.2	16.4	15.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	0.2
HELIUM	0.76	1.11	0.94
HEATING VALUE*	1029	968	1000
SPECIFIC GRAVITY	0.708	0.706	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10165 SAMPLE 5747	INDEX 10166 SAMPLE 5748	INDEX 10167 SAMPLE 5760
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON NO. B-32	BIVINS NO. A-124	BIVINS A-5
LOCATION	SEC. 64, BLK. 47, H&TC SUR.	SEC. 23, BLK. 5, G&M SUR.	SEC. 25, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	--/--/00	10/10/26
SAMPLED	01/03/55	01/03/55	02/16/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2500	2500	2374
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.3	74.4	73.4
ETHANE	5.8	5.2	5.2
PROPANE	2.8	2.6	2.9
N-BUTANE	0.7	0.7	0.9
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.6	14.9	15.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.1
HELIUM	0.60	0.90	0.96
HEATING VALUE*	1000	962	982
SPECIFIC GRAVITY	0.687	0.692	0.702

	INDEX 10168 SAMPLE 5764	INDEX 10169 SAMPLE 5770	INDEX 10170 SAMPLE 5824
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS E-1	BIVINS A-13	MASTERSON NO. A-25
LOCATION	SEC. 27, BLK. 0-18, D&P SUR.	SEC. 7, BLK. 0-18, D&P SUR.	SEC. 12, BLK. B-11, ELERR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/07/28	09/15/30	--/--/00
SAMPLED	01/26/55	01/26/55	05/03/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2175	NOT GIVEN	2802
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	310
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	28300
COMPONENT, MOLE PCT			
METHANE	73.6	73.1	73.7
ETHANE	5.4	5.6	5.8
PROPANE	2.6	3.3	3.0
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.3	15.1	14.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.96	0.98	0.89
HEATING VALUE*	969	985	994
SPECIFIC GRAVITY	0.694	0.704	0.702

	INDEX 10171 SAMPLE 5921	INDEX 10172 SAMPLE 5922	INDEX 10173 SAMPLE 5923
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-129	BIVINS A-128	MASTERSON A-26
LOCATION	SEC. 32, BLK. 0-18, D&P SUR.	SEC. 6, BLK. 0-18, D&P SUR.	SEC. 83, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/11/55	--/--/00	--/--/00
SAMPLED	08/23/55	08/24/55	08/24/55
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2882	2622	2545
WELLHEAD PRESSURE, PSIG	316	312	309
OPEN FLOW, MCFD	63000	136000	34000
COMPONENT, MOLE PCT			
METHANE	72.5	73.0	73.4
ETHANE	5.4	5.8	5.5
PROPANE	2.9	3.0	3.0
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.0	15.0	15.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.97	0.91	0.87
HEATING VALUE*	972	987	991
SPECIFIC GRAVITY	0.706	0.704	0.706

	INDEX 10174 SAMPLE 5930	INDEX 10175 SAMPLE 5931	INDEX 10176 SAMPLE 5932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON J-4	MASTERSON J-2	CRAWFORD D-1
LOCATION	SEC. 9, BLK. B-11, ELERR SUR	SEC. 68, BLK. 0-18, D&P SUR.	SEC. 68, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/16/53	09/16/27	12/05/48
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2686	2388	2915
WELLHEAD PRESSURE, PSIG	299	295	311
OPEN FLOW, MCFD	6144	2728	2286
COMPONENT, MOLE PCT			
METHANE	73.2	73.5	73.6
ETHANE	5.7	6.0	6.2
PROPANE	3.0	3.2	3.2
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.7	14.3	13.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.88	0.86	0.82
HEATING VALUE*	1002	1008	1009
SPECIFIC GRAVITY	0.709	0.709	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10177 SAMPLE 5933	INDEX 10178 SAMPLE 5934	INDEX 10179 SAMPLE 5936
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-44	MASTERSON J-5	BRADLEY A-1
LOCATION	SEC. 81, BLK. B-3, G&M SUR.	SEC. 11, BLK. B-3, G&M SUR.	SEC. 8, BLK. B-11, EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/10/53	10/02/53	08/11/42
SAMPLED	--/--/00	--/--/00	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2318	2665	2345
WELLHEAD PRESSURE,PSIG	512	255	306
OPEN FLOW, MCFD	1390	424	16446
COMPONENT, MOLE PCT			
METHANE	73.5	74.2	72.6
ETHANE	6.2	6.9	6.0
PROPANE	3.3	3.4	3.8
N-BUTANE	1.0	1.0	1.0
ISOBUTANE	0.3	0.4	0.2
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	14.0	12.4	14.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.84	0.70	0.93
HEATING VALUE*	1016	1042	1008
SPECIFIC GRAVITY	0.710	0.713	0.712

	INDEX 10180 SAMPLE 5937	INDEX 10181 SAMPLE 6015	INDEX 10182 SAMPLE 6023
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-38	MASTERSON I-1	COUGHLAN A-1
LOCATION	SEC. 67, BLK. D-18, D&P SUR.	SEC. 20, BLK. 3, G&M SUR.	SEC. 1, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/09/53	12/13/22	12/26/36
SAMPLED	--/--/00	01/31/56	02/10/56
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY	PERM-LIME & DOLOMITE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2443	1920	2326
WELLHEAD PRESSURE,PSIG	282	342	308
OPEN FLOW, MCFD	663	16000	7848
COMPONENT, MOLE PCT			
METHANE	73.7	76.5	73.9
ETHANE	6.5	7.6	6.0
PROPANE	3.5	3.7	3.4
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	13.3	9.6	13.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.79	0.44	0.80
HEATING VALUE*	1032	1070	1023
SPECIFIC GRAVITY	0.711	0.694	0.709

	INDEX 10183 SAMPLE 6228	INDEX 10184 SAMPLE 6229	INDEX 10185 SAMPLE 6231
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B NO. 66	BIVINS A NO. 130	BIVINS A NO. 139
LOCATION	SEC. 104, BLK. D-18, D&PSUR.	SEC. 33, BLK. D-18, D&P SUR.	SEC. 14, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/08/56	07/17/55	04/30/56
SAMPLED	01/23/57	01/23/57	01/23/57
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1850	2453	2196
WELLHEAD PRESSURE,PSIG	304	345	297
OPEN FLOW, MCFD	21	22700	110000
COMPONENT, MOLE PCT			
METHANE	76.4	72.6	73.5
ETHANE	7.0	5.3	5.8
PROPANE	3.4	2.6	2.9
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	10.5	16.5	15.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.63	1.03	0.95
HEATING VALUE*	1056	957	986
SPECIFIC GRAVITY	0.696	0.703	0.700

	INDEX 10186 SAMPLE 6232	INDEX 10187 SAMPLE 6287	INDEX 10188 SAMPLE 6288
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A NO. 143	MASTERSON A-19	MASTERSON G-4
LOCATION	SEC. 65, BLK. 2, G&M SUR.	SEC. 3, BLK. D-18, D&P SUR.	SEC. 79, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/27/56	12/14/50	07/26/51
SAMPLED	01/23/57	03/02/57	03/02/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2590	2322	2310
WELLHEAD PRESSURE,PSIG	315	295	285
OPEN FLOW, MCFD	5200	18300	20000
COMPONENT, MOLE PCT			
METHANE	73.1	73.3	73.7
ETHANE	5.5	6.0	5.6
PROPANE	2.7	3.1	3.1
N-BUTANE	0.6	0.9	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.9	14.5	14.2
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	1.03	0.94	0.89
HEATING VALUE*	968	996	1001
SPECIFIC GRAVITY	0.699	0.703	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10189 SAMPLE 6289	INDEX 10190 SAMPLE 6290	INDEX 10191 SAMPLE 6291
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON A-23	MASTERSON J-3	MASTERSON J-6
LOCATION	SEC. 84, BLK. 2, G&M SUR.	SEC. 18, BLK. B-11, EL&RRSUR	SEC. 80, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/25/53	06/09/51	10/10/56
SAMPLED	03/02/57	03/02/57	03/02/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2187	2225	2859
WELLHEAD PRESSURE,PSIG	297	295	284
OPEN FLOW, MCFD	18260	17000	1680
COMPONENT, MOLE PCT			
METHANE	73.1	73.6	71.4
ETHANE	5.9	6.0	5.4
PROPANE	3.1	3.2	2.5
N-BUTANE	0.9	1.0	0.6
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.8	14.2	17.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.7
HELIUM	0.96	0.93	1.18
HEATING VALUE*	1000	1008	933
SPECIFIC GRAVITY	0.709	0.706	0.701

	INDEX 10192 SAMPLE 6292	INDEX 10193 SAMPLE 6308	INDEX 10194 SAMPLE 6309
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON A-28	MASTERSON B-61	MASTERSON C-1
LOCATION	SEC. 13, BLK. B-11, EL&RRSUR	SEC. 70, BLK. O-18, D&P SUR.	SEC. 65, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/09/56	11/11/55	12/08/18
SAMPLED	03/02/57	05/09/57	05/09/57
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2715	2227	1780
WELLHEAD PRESSURE,PSIG	272	292	295
OPEN FLOW, MCFD	11800	5128	12067
COMPONENT, MOLE PCT			
METHANE	71.7	74.2	74.8
ETHANE	5.8	6.2	6.3
PROPANE	2.9	3.3	3.4
N-BUTANE	0.7	0.9	0.9
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.1	13.1	13.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	1.07	0.83	0.82
HEATING VALUE*	973	1026	1028
SPECIFIC GRAVITY	0.711	0.704	0.708

	INDEX 10195 SAMPLE 6310	INDEX 10196 SAMPLE 6311	INDEX 10197 SAMPLE 6312
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-50	CRAWFORD B-2	BIVINS A-70
LOCATION	SEC. 28, BLK. O-18, D&P SUR.	SEC. 80, BLK. O-18, D&P SUR.	SEC. 9, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/23/49	01/31/51	01/22/51
SAMPLED	05/09/57	05/09/57	05/09/57
FORMATION	-RED GRANITE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2633	2270	2350
WELLHEAD PRESSURE,PSIG	303	288	299
OPEN FLOW, MCFD	7855	7634	10903
COMPONENT, MOLE PCT			
METHANE	72.8	73.3	73.8
ETHANE	5.6	5.9	5.9
PROPANE	2.8	3.1	3.0
N-BUTANE	0.9	0.9	0.8
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.5	14.3	14.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.04	0.92	0.97
HEATING VALUE*	979	1005	997
SPECIFIC GRAVITY	0.704	0.704	0.708

	INDEX 10198 SAMPLE 6313	INDEX 10199 SAMPLE 6314	INDEX 10200 SAMPLE 6316
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	CRAWFORD D-2	BIVINS A-149	BIVINS A-69
LOCATION	SEC. 9, BLK. O-18, D&P SUR.	SEC. 20, BLK. O-18, D&P SUR.	SEC. 5, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/06/49	10/29/56	11/17/50
SAMPLED	05/09/57	05/09/57	05/09/57
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2330	2580	2390
WELLHEAD PRESSURE,PSIG	300	292	301
OPEN FLOW, MCFD	26724	3100	26871
COMPONENT, MOLE PCT			
METHANE	72.7	72.6	73.0
ETHANE	5.9	5.4	5.7
PROPANE	3.0	2.9	3.0
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.0	15.8	15.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.97	1.01	0.98
HEATING VALUE*	988	973	993
SPECIFIC GRAVITY	0.704	0.704	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10201 SAMPLE 6317	INDEX 10202 SAMPLE 6318	INDEX 10203 SAMPLE 6319
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-38	BIVINS A-32	BIVINS A-31
LOCATION	SEC. 10; BLK. O-18; D&P SUR.	SEC. 22; BLK. O-18; D&P SUR.	SEC. 15; BLK. O-18; D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/09/49	01/30/47	12/18/48
SAMPLED	05/09/57	05/09/57	05/09/57
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2260	2290	2145
WELLHEAD PRESSURE,PSIG	296	371	297
OPEN FLOW, MCFD	11543	519	3594
COMPONENT, MOLE PCT			
METHANE	73.0	73.0	73.8
ETHANE	5.9	5.8	5.9
PROPANE	3.2	3.2	3.1
N-BUTANE	0.9	1.0	0.9
ISOBUTANE	0.7	0.5	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	14.6	14.8	14.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.91	0.96	0.95
HEATING VALUE*	1008	1008	998
SPECIFIC GRAVITY	0.707	0.712	0.708

	INDEX 10204 SAMPLE 7073	INDEX 10205 SAMPLE 7096	INDEX 10206 SAMPLE 7097
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-158	STATE NO. 1	BRITAIN WETMOUTH NO. 5-6
LOCATION	SEC. 5, M. E. PALMER SUR.	S OF 65-47 IN RIVER BED	SEC. 6; BLK. RBM, RBM SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/23/58	01/16/58	08/24/54
SAMPLED	05/13/59	06/02/59	06/02/59
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2685	2266	1975
WELLHEAD PRESSURE,PSIG	2466	407	280
OPEN FLOW, MCFD	8200	17800	8984
COMPONENT, MOLE PCT			
METHANE	77.0	74.3	76.7
ETHANE	6.4	4.8	7.3
PROPANE	3.3	1.7	3.6
N-BUTANE	1.0	0.4	1.0
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	10.3	15.3	9.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	1.6	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.50	0.80	0.50
HEATING VALUE*	1059	938	1074
SPECIFIC GRAVITY	0.697	0.696	0.698

	INDEX 10207 SAMPLE 7098	INDEX 10208 SAMPLE 7099	INDEX 10209 SAMPLE 7100
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON A-29	MASTERSON B-6	MASTERSON B-27
LOCATION	SEC. 134; BLK. 3, G&M SUR.	SEC. 19; BLK. 3, G&M SUR.	SEC. 27; BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/23/56	12/23/42	08/23/51
SAMPLED	06/02/59	06/02/59	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PENN-TOPEKA
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2502	2140	2195
WELLHEAD PRESSURE,PSIG	364	282	276
OPEN FLOW, MCFD	900	32980	3358
COMPONENT, MOLE PCT			
METHANE	75.5	76.4	77.6
ETHANE	6.1	7.3	6.6
PROPANE	2.6	3.7	3.3
N-BUTANE	0.8	0.9	0.9
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.9	9.2	10.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.1
HELIUM	0.70	0.50	0.50
HEATING VALUE*	1003	1069	1060
SPECIFIC GRAVITY	0.694	0.696	0.692

	INDEX 10210 SAMPLE 7101	INDEX 10211 SAMPLE 7102	INDEX 10212 SAMPLE 7103
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-29	MASTERSON B-31	MASTERSON B-32
LOCATION	SEC. 28; BLK. 3, G&M SUR.	SEC. 65; BLK. 47, M&TC SUR.	SEC. 69; BLK. 47, M&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/17/51	03/05/52	04/23/52
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1796	1820	2230
WELLHEAD PRESSURE,PSIG	242	273	201
OPEN FLOW, MCFD	921	15241	2293
COMPONENT, MOLE PCT			
METHANE	77.5	77.5	76.4
ETHANE	6.4	6.5	5.9
PROPANE	3.8	3.3	2.6
N-BUTANE	1.2	0.9	0.7
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.2	9.8	12.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.50	0.50	0.60
HEATING VALUE*	1094	1064	1006
SPECIFIC GRAVITY	0.705	0.694	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10213 SAMPLE 7104	INDEX 10214 SAMPLE 7105	INDEX 10215 SAMPLE 7106
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-33	MASTERSON B-26	MASTERSON B-37
LOCATION	SEC. 18, BLK. 3, G&M SUR.	SEC. 63, BLK. 26, H&TC SUR.	SEC. 66, BLK. 47, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/05/52	08/18/51	01/13/53
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2129	1810	2640
WELLHEAD PRESSURE,PSIG	271	274	237
OPEN FLOW, MCFD	31856	7370	936
COMPONENT, MOLE PCT			
METHANE	76.5	77.6	77.2
ETHANE	7.2	6.4	6.4
PROPANE	3.7	3.5	3.1
N-BUTANE	0.9	1.1	0.9
ISOBUTANE	0.6	0.7	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.8	9.6	10.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.50	0.50	0.60
HEATING VALUE*	1078	1078	1039
SPECIFIC GRAVITY	0.700	0.700	0.689

	INDEX 10216 SAMPLE 7107	INDEX 10217 SAMPLE 7108	INDEX 10218 SAMPLE 7109
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-34	MASTERSON B-39	MASTERSON B-57
LOCATION	SEC. 15, BLK. 3, G&M SUR.	SEC. 107, BLK. 0-18, D&P SUR	SEC. 68, BLK. 47, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/14/52	05/04/53	03/23/55
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2015	2402	2230
WELLHEAD PRESSURE,PSIG	271	275	272
OPEN FLOW, MCFD	1302	3413	5316
COMPONENT, MOLE PCT			
METHANE	76.9	75.5	71.7
ETHANE	7.2	6.8	7.4
PROPANE	3.6	3.6	3.7
N-BUTANE	0.9	1.0	1.1
ISOBUTANE	0.6	0.6	0.7
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	9.8	11.2	13.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.1	0.3
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.50	0.60	0.20
HEATING VALUE*	1074	1060	1088
SPECIFIC GRAVITY	0.697	0.707	0.748

	INDEX 10219 SAMPLE 7111	INDEX 10220 SAMPLE 7112	INDEX 10221 SAMPLE 7113
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-58	MASTERSON B-59	MASTERSON B-69
LOCATION	SEC. 67, BLK. 47, H&TC SUR.	SEC. 16, BLK. 3, G&M SUR.	SEC. 21, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	03/17/55	04/27/55	09/01/56
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2844	1920	2100
WELLHEAD PRESSURE,PSIG	208	251	285
OPEN FLOW, MCFD	214	2731	28374
COMPONENT, MOLE PCT			
METHANE	77.2	77.2	75.9
ETHANE	6.9	7.0	7.1
PROPANE	3.4	3.4	3.7
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.9	9.7	10.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.50	0.40	0.60
HEATING VALUE*	1074	1068	1068
SPECIFIC GRAVITY	0.698	0.694	0.703

	INDEX 10222 SAMPLE 7114	INDEX 10223 SAMPLE 7115	INDEX 10224 SAMPLE 7116
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-60	MASTERSON B-71	MASTERSON B-70
LOCATION	SEC. 106, BLK. 0-18, D&P SUR	SEC. 70, BLK. 47, H&TC SUR.	SEC. 4, BLK. B-11, ELERR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/24/55	07/28/56	09/14/56
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2067	2301	2110
WELLHEAD PRESSURE,PSIG	291	320	273
OPEN FLOW, MCFD	2534	133	2539
COMPONENT, MOLE PCT			
METHANE	76.6	75.6	76.4
ETHANE	6.8	6.1	7.7
PROPANE	3.5	2.8	3.8
N-BUTANE	0.9	0.8	1.0
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	10.4	12.5	9.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	TRACE
HELIUM	0.50	0.70	0.40
HEATING VALUE*	1070	1016	1087
SPECIFIC GRAVITY	0.701	0.694	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10225 SAMPLE 7117	INDEX 10226 SAMPLE 7118	INDEX 10227 SAMPLE 7119
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-79	MASTERSON B-72	MASTERSON F-1
LOCATION	SEC. 22, BLK. 3, G&P SUR.	SEC. 5, BLK. B-11, EL&RR SUR	SEC. 14, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/10/58	09/22/56	10/01/21
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-GRANITE WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2176	2370	1707
WELLHEAD PRESSURE,PSIG	279	212	272
OPEN FLOW, MCFD	77000	1945	8690
COMPONENT, MOLE PCT			
METHANE	76.7	74.2	76.3
ETHANE	7.1	6.3	7.2
PROPANE	3.6	2.7	3.6
N-BUTANE	0.9	0.9	1.0
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.9	13.5	10.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	0.1
HELIUM	0.51	0.80	0.50
HEATING VALUE*	1075	1004	1073
SPECIFIC GRAVITY	0.699	0.703	0.701

	INDEX 10228 SAMPLE 7120	INDEX 10229 SAMPLE 7121	INDEX 10230 SAMPLE 7122
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-80	MASTERSON I-1	MASTERSON I-1
LOCATION	SEC. 62, BLK. 47, H&TC SUR.	SEC. 29, BLK. 3, G&M SUR.	SEC. 82, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	01/31/58	12/13/22	11/--/20
SAMPLED	05/--/58	05/--/58	05/--/58
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-GRANITE WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1996	1610	1605
WELLHEAD PRESSURE,PSIG	274	275	276
OPEN FLOW, MCFD	10700	14319	805
COMPONENT, MOLE PCT			
METHANE	77.7	76.5	77.5
ETHANE	6.5	7.2	7.3
PROPANE	3.8	3.5	3.7
N-BUTANE	1.1	1.0	1.0
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.3	10.0	9.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.1	TRACE
HELIUM	0.50	0.50	0.40
HEATING VALUE*	1078	1067	1081
SPECIFIC GRAVITY	0.695	0.697	0.693

	INDEX 10231 SAMPLE 7123	INDEX 10232 SAMPLE 7124	INDEX 10233 SAMPLE 7288
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON N-1	MASTERSON N-1	MASTERSON B-82
LOCATION	SEC. 2, BLK. B-11, EL&RR SUR	SEC. 17, BLK. 3, G&M SUR.	SEC. 66, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/01/21	05/29/30	--/--/00
SAMPLED	05/--/58	05/--/58	11/24/59
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1767	1980	2045
WELLHEAD PRESSURE,PSIG	277	262	260
OPEN FLOW, MCFD	330	7626	5100
COMPONENT, MOLE PCT			
METHANE	76.7	76.9	74.1
ETHANE	8.0	7.2	6.1
PROPANE	3.8	3.6	3.3
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	8.9	9.6	13.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.40	0.50	0.80
HEATING VALUE*	1088	1084	1016
SPECIFIC GRAVITY	0.698	0.702	0.701

	INDEX 10234 SAMPLE 7562	INDEX 10235 SAMPLE 7612	INDEX 10236 SAMPLE 7730
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-84	MASTERSON B-83	MASTERSON B-86
LOCATION	SEC. 105, BLK. D-18, D&P SUR	SEC. 93, BLK. D-18, D&P SUR.	SEC. 82, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	06/03/60	09/08/60
SAMPLED	05/03/60	07/18/60	10/12/60
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1610	2175	1926
WELLHEAD PRESSURE,PSIG	248	2528	258
OPEN FLOW, MCFD	3000	69000	32
COMPONENT, MOLE PCT			
METHANE	75.8	73.4	74.8
ETHANE	6.8	6.9	7.8
PROPANE	3.5	4.1	4.1
N-BUTANE	0.7	1.4	1.1
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.4	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	11.1	12.1	10.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.60	0.70	0.50
HEATING VALUE*	1057	1062	1092
SPECIFIC GRAVITY	0.698	0.717	0.717

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10237 SAMPLE 7731	INDEX 10238 SAMPLE 7770	INDEX 10239 SAMPLE 8195
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-88	BIVINS A-159	WARRICK NO. 1-R
LOCATION	SEC. 1, BLK. B-11, EL&RR SUR	SEC. 13, BLK. O-18, D&P SUR.	SEC. 166, BLK. Y-2, TT&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	10/10/60	10/27/60	--/--/--
SAMPLED	10/14/60	11/10/60	09/16/61
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-GRANITE WASH	PERM-TUBB
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2390	2240	NOT GIVEN
WELLHEAD PRESSURE,PSIG	252	252	2
OPEN FLOW, MCFD	5600	11100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.8	64.9	81.2
ETHANE	7.8	5.4	6.1
PROPANE	4.3	2.9	2.4
N-BUTANE	1.3	0.9	0.6
ISOBUTANE	0.8	0.4	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	12.9	23.4	8.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	TRACE
HELIUM	0.070	0.60	0.15
HEATING VALUE*	1093	900	1038
SPECIFIC GRAVITY	0.745	0.742	0.684

	INDEX 10240 SAMPLE 8253	INDEX 10241 SAMPLE 8440	INDEX 10242 SAMPLE 8441
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	STATE OF TEXAS NO. 1	MASTERSON B-90	MASTERSON B-91
LOCATION	CANADIAN RIVER BED	SEC. 10, BLK. 3, G&M SUR.	SEC. 108, BLK. O-18, D&P SUR
OWNER	AMARILLO OIL CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/22/57	06/30/61	07/19/61
SAMPLED	09/06/61	03/09/62	03/09/62
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2158	2106	2030
WELLHEAD PRESSURE,PSIG	292	240	249
OPEN FLOW, MCFD	5200	7100	3100
COMPONENT, MOLE PCT			
METHANE	76.6	74.1	74.4
ETHANE	6.3	7.3	6.7
PROPANE	3.1	3.9	3.6
N-BUTANE	0.8	1.2	1.0
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	11.6	11.4	12.3
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.54	0.65	0.69
HEATING VALUE*	1032	1075	1040
SPECIFIC GRAVITY	0.691	0.717	0.707

	INDEX 10243 SAMPLE 8443	INDEX 10244 SAMPLE 8444	INDEX 10245 SAMPLE 8452
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-89	BIVINS A-162	BIVINS A-163
LOCATION	SEC. 85, BLK. O-18, D&P SUR.	SEC. 24, BLK. O-18, D&P SUR.	SEC. 103, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/04/61	07/21/61	09/01/61
SAMPLED	03/07/62	03/07/62	03/16/62
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2130	2450	2260
WELLHEAD PRESSURE,PSIG	319	244	233
OPEN FLOW, MCFD	5300	19100	8000
COMPONENT, MOLE PCT			
METHANE	76.1	71.9	76.9
ETHANE	6.4	5.7	6.2
PROPANE	4.0	3.5	3.5
N-BUTANE	1.3	1.0	1.2
ISOBUTANE	0.7	0.5	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	10.0	15.6	10.3
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.99	0.51
HEATING VALUE*	1101	1002	1069
SPECIFIC GRAVITY	0.718	0.718	0.702

	INDEX 10246 SAMPLE 8892	INDEX 10247 SAMPLE 9218	INDEX 10248 SAMPLE 9284
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS NO. A-46	MASTERSON NO. J-7	BIVINS A-166
LOCATION	SEC. 11, BLK. 5, G&M SUR.	SEC. 9, BLK. 3, G&M SUR.	SEC. 106, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/13/49	07/19/57	09/16/63
SAMPLED	03/13/63	01/17/64	04/09/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1870	2767	1911
WELLHEAD PRESSURE,PSIG	NOT GIVEN	181	213
OPEN FLOW, MCFD	NOT GIVEN	6245	37000
COMPONENT, MOLE PCT			
METHANE	77.0	71.8	76.8
ETHANE	6.0	6.6	6.4
PROPANE	3.4	3.5	3.6
N-BUTANE	1.3	1.2	1.2
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	10.3	14.1	10.0
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.51	0.86	0.50
HEATING VALUE*	1077	1035	1075
SPECIFIC GRAVITY	0.707	0.726	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10249 SAMPLE 9285	INDEX 10250 SAMPLE 9286	INDEX 10251 SAMPLE 9349
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-165	MCBRIDE A-2	BIVINS D NO. 1
LOCATION	SEC. 99, BLK. 46, H&TC SUR.	SEC. 38, BLK. 46, H&TC SUR.	SEC. 48, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	AMARILLO OIL CO.
COMPLETED	09/09/63	08/21/63	03/18/64
SAMPLED	04/10/64	04/09/64	05/20/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2823	1990	2534
WELLHEAD PRESSURE,PSIG	1194	192	289
OPEN FLOW, MCFD	235000	41000	11800
COMPONENT, MOLE PCT			
METHANE	77.3	76.3	71.6
ETHANE	6.7	6.8	5.1
PROPANE	3.9	3.5	2.4
N-BUTANE	1.3	1.3	0.8
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.4	0.5	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	8.7	10.2	17.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.3	0.6
CARBON DIOXIDE	0.2	0.3	1.26
HELIUM	0.50	0.51	938
HEATING VALUE*	1105	1082	0.703
SPECIFIC GRAVITY	0.708	0.711	

	INDEX 10252 SAMPLE 9350	INDEX 10253 SAMPLE 9352	INDEX 10254 SAMPLE 9651
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS D NO. 2	BIVINS D NO. 4	BIVINS 5D
LOCATION	SEC. 56, BLK. 2, G&M SUR.	SEC. 60, BLK. 2, G&M SUR.	SEC. 30, BLK. D-18, D&P SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	03/18/64	04/06/64	08/26/64
SAMPLED	05/20/64	05/20/64	12/09/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2624	2428	2686
WELLHEAD PRESSURE,PSIG	284	280	282
OPEN FLOW, MCFD	13500	24000	17250
COMPONENT, MOLE PCT			
METHANE	72.4	72.1	71.9
ETHANE	5.1	5.1	5.3
PROPANE	2.6	2.5	2.6
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.5	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.5	16.8	16.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.4	0.7
HELIUM	1.12	1.19	1.12
HEATING VALUE*	955	954	950
SPECIFIC GRAVITY	0.703	0.704	0.705

	INDEX 10255 SAMPLE 9652	INDEX 10256 SAMPLE 9653	INDEX 10257 SAMPLE 9654
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS 6D	BIVINS 7D	BIVINS 8D
LOCATION	SEC. 6, BLK. D-18, D&P SUR.	SEC. 60, BLK. B-2, G&M SUR.	SEC. 59, BLK. B-2, G&M SUR.
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
COMPLETED	08/26/64	08/27/64	08/26/64
SAMPLED	12/09/64	12/09/64	12/09/64
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2999	2440	2831
WELLHEAD PRESSURE,PSIG	276	284	287
OPEN FLOW, MCFD	8800	8400	11000
COMPONENT, MOLE PCT			
METHANE	78.8	71.4	71.7
ETHANE	5.0	5.3	5.1
PROPANE	2.6	2.7	2.5
N-BUTANE	0.7	0.8	0.8
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.9	17.0	17.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.5	0.6
HELIUM	1.16	1.16	1.16
HEATING VALUE*	922	925	942
SPECIFIC GRAVITY	0.707	0.709	0.704

	INDEX 10258 SAMPLE 9798	INDEX 10259 SAMPLE 9799	INDEX 10260 SAMPLE 9801
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-167	MASTERSON B-93	MCBRIDE A-2
LOCATION	SEC. 15, BLK M-20, G&M SUR.	SEC. 58, BLK 47, H&TC SUR.	SEC. 98, BLK 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/10/64	10/02/63	08/21/63
SAMPLED	03/15/65	03/15/65	03/16/65
FORMATION	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY&GR. WASH	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2133	2060	1990
WELLHEAD PRESSURE,PSIG	183	195	192
OPEN FLOW, MCFD	34500	72000	41000
COMPONENT, MOLE PCT			
METHANE	76.7	76.2	77.0
ETHANE	5.1	5.8	4.1
PROPANE	3.6	3.8	3.5
N-BUTANE	1.2	1.5	1.2
ISOBUTANE	0.6	0.8	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.3	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	10.2	9.8	9.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.52	0.65	0.50
HEATING VALUE*	1088	1101	1089
SPECIFIC GRAVITY	0.708	0.717	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10261 SAMPLE 10026	INDEX 10262 SAMPLE 10031	INDEX 10263 SAMPLE 10658
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-166	WARRICK A-6	BIVINS A-98
LOCATION	SEC. 106, BLK 46, H&TC SUR.	SEC. 16, BLK Y-2, A&M SUR.	SEC. 59, BLK. 2, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/16/53	07/29/65	08/18/53
SAMPLED	02/26/65	08/05/65	07/21/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1911	2331	2431
WELLHEAD PRESSURE,PSIG	232	162	232
OPEN FLOW, MCFD	57000	64000	2894
COMPONENT, MOLE PCT			
METHANE	76.9	76.3	69.4
ETHANE	6.3	6.6	4.9
PROPANE	3.7	4.2	2.7
N-BUTANE	1.1	1.3	0.9
ISOBUTANE	0.6	0.9	0.4
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.2	0.5	0.8
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	10.1	9.0	18.9
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.51	0.44	1.16
HEATING VALUE*	1077	1110	944
SPECIFIC GRAVITY	0.704	0.721	0.720

	INDEX 10264 SAMPLE 10661	INDEX 10265 SAMPLE 10662	INDEX 10266 SAMPLE 10665
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-13	BIVINS A-143	BIVINS A-14
LOCATION	SEC. 7, BLK. 018, D&P SUR.	SEC. 55, BLK. 2, G&M SUR.	SEC. 26, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/15/30	05/27/56	11/09/35
SAMPLED	07/21/66	07/21/66	07/21/66
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2820	2590	2347
WELLHEAD PRESSURE,PSIG	205	212	202
OPEN FLOW, MCFD	1202	3855	13336
COMPONENT, MOLE PCT			
METHANE	70.2	70.7	71.4
ETHANE	5.4	5.2	5.8
PROPANE	3.0	3.1	3.6
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.3	0.3	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	17.6	17.3	15.6
OXYGEN	0.0	0.2	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	1.3	0.1
HELIUM	1.08	1.06	0.95
HEATING VALUE*	965	966	1010
SPECIFIC GRAVITY	0.720	0.720	0.720

	INDEX 10267 SAMPLE 10666	INDEX 10268 SAMPLE 10667	INDEX 10269 SAMPLE 11898
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON J-2	MASTERSON C-1	BIVINS A-153
LOCATION	SEC. 69, BLK. 018, D&P SUR.	SEC. 65, BLK. 018, D&P SUR.	SEC. 33, BLK. B-11, ELRR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/16/27	--/--/00	06/08/57
SAMPLED	07/21/66	07/21/66	05/23/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2388	NOT GIVEN	2320
WELLHEAD PRESSURE,PSIG	184	190	NOT GIVEN
OPEN FLOW, MCFD	1810	7744	12700
COMPONENT, MOLE PCT			
METHANE	72.3	73.1	69.8
ETHANE	6.9	6.8	5.6
PROPANE	4.2	4.0	3.1
N-BUTANE	1.2	1.1	1.2
ISOBUTANE	0.7	0.6	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	13.6	12.8	17.7
OXYGEN	0.0	0.0	0.1
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.75	0.75	1.03
HEATING VALUE*	1069	1063	969
SPECIFIC GRAVITY	0.730	0.720	0.723

	INDEX 10270 SAMPLE 11899	INDEX 10271 SAMPLE 11900	INDEX 10272 SAMPLE 12414
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	BIVINS A-36	BIVINS A-33	MASTERSON I-1
LOCATION	SEC. 43, BLK. 0-18, D&P SUR.	SEC. 35, BLK. 0-18, D&P SUR.	SEC. 20, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/25/49	07/22/47	12/13/22
SAMPLED	05/23/69	05/23/69	09/16/70
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2630	2420	1920
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	163
OPEN FLOW, MCFD	9200	17000	130
COMPONENT, MOLE PCT			
METHANE	70.2	71.1	75.3
ETHANE	5.0	6.0	8.6
PROPANE	3.3	3.2	5.1
N-BUTANE	1.2	0.9	1.1
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	16.6	16.4	8.1
OXYGEN	0.1	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.0
HELIUM	0.93	0.95	0.35
HEATING VALUE*	995	989	1132
SPECIFIC GRAVITY	0.730	0.720	0.716

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10273 SAMPLE 12816	INDEX 10274 SAMPLE 12845	INDEX 10275 SAMPLE 12881
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
WELL NAME	MASTERSON B-94	BIVINS A-169	BIVINS A-170
LOCATION	SEC. 69, BLK. 018, D&P SUR.	SEC. 23, BLK. 018, D&P SUR.	SEC. 22, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	03/22/71	06/06/71	06/22/71
SAMPLED	05/14/71	06/06/71	06/22/71
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	2394	2343
WELLHEAD PRESSURE,PSIG	145	NOT GIVEN	180
OPEN FLOW, MCFD	11000	849	2610
COMPONENT, MOLE PCT			
METHANE	69.6	68.5	72.3
ETHANE	7.1	6.5	5.7
PROPANE	4.6	4.3	3.7
N-BUTANE	1.4	1.3	1.1
ISOBUTANE	0.8	0.9	0.5
N-PENTANE	0.3	0.6	0.3
ISOPENTANE	0.4	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	14.7	15.4	14.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.81	0.93	0.96
HEATING VALUE*	1070	1041	1020
SPECIFIC GRAVITY	0.750	0.751	0.721

	INDEX 10276 SAMPLE 12954	INDEX 10277 SAMPLE 2312	INDEX 10278 SAMPLE 5935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-171	CRAWFORD NO. 8-1	MASTERSON E-2R
LOCATION	SEC. 23, BLK. 0-18, D&P SUR.	SEC. 78, BLK. 0-18, D&P SUR.	SEC. 79, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/26/71	--/--/00	--/--/00
SAMPLED	08/19/71	04/14/31	--/--/00
FORMATION	PERM-WICHITA-ALBANY	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2270	1845	1755
WELLHEAD PRESSURE,PSIG	147	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	13880	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.9	75.6	78.2
ETHANE	5.5	18.1	8.6
PROPANE	3.6	---	5.8
N-BUTANE	0.9	---	0.9
ISOBUTANE	0.6	---	0.4
N-PENTANE	0.4	---	0.2
ISOPENTANE	0.0	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.2
NITROGEN	14.1	5.6	7.1
OXYGEN	0.0	0.4	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.98	0.17	0.23
HEATING VALUE*	1016	1090	1116
SPECIFIC GRAVITY	0.707	0.669	0.695

	INDEX 10279 SAMPLE 5983	INDEX 10280 SAMPLE 5984	INDEX 10281 SAMPLE 6000
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-138	BIVINS A-138	MASTERSON B-64R
LOCATION	SEC. 25, BLK. 5, G&M SUR.	SEC. 25, BLK. 5, G&M SUR.	SEC. 95, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/31/55	12/31/55	02/12/56
SAMPLED	--/--/00	--/--/00	01/19/56
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1988	1988	1800
WELLHEAD PRESSURE,PSIG	279	279	250
OPEN FLOW, MCFD	135	135	600
COMPONENT, MOLE PCT			
METHANE	75.1	75.1	78.0
ETHANE	8.7	9.1	6.5
PROPANE	5.1	5.2	3.4
N-BUTANE	1.3	1.3	0.9
ISOBUTANE	0.6	0.7	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	7.9	7.7	9.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.30	0.26	0.39
HEATING VALUE*	1144	1153	1057
SPECIFIC GRAVITY	0.726	0.727	0.687

	INDEX 10282 SAMPLE 6002	INDEX 10283 SAMPLE 6003	INDEX 10284 SAMPLE 6006
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON B-64R	MASTERSON B-64R	MASTERSON B-64R
LOCATION	SEC. 95, BLK. 0-18, D&P SUR.	SEC. 95, BLK. 0-18, D&P SUR.	SEC. 95, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/12/56	02/12/56	02/12/56
SAMPLED	01/22/56	01/25/56	01/29/56
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1754	1718	1630
WELLHEAD PRESSURE,PSIG	195	75	190
OPEN FLOW, MCFD	416	29	120
COMPONENT, MOLE PCT			
METHANE	78.5	78.9	79.3
ETHANE	6.5	6.7	6.8
PROPANE	3.1	3.2	3.1
N-BUTANE	0.9	0.6	0.8
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	9.6	9.1	8.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.38	0.37	0.34
HEATING VALUE*	1050	1047	1057
SPECIFIC GRAVITY	0.682	0.674	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10285 SAMPLE 6014	INDEX 10286 SAMPLE 6016	INDEX 10287 SAMPLE 6024
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON I-1	MASTERSON D-4R	COUGHLAN A-1
LOCATION	SEC. 20, BLK. 3, G&M SUR.	SEC. 108, BLK. D-18, D&P SUR	SEC. 1, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	12/1-/22	11/29/19	12/26/36
SAMPLED	01/31/56	01/31/56	02/10/56
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1540	1640	1780
WELLHEAD PRESSURE,PSIG	342	331	308
OPEN FLOW, MCFD	16000	30000	7848
COMPONENT, MOLE PCT			
METHANE	76.9	77.5	78.5
ETHANE	7.6	8.0	8.4
PROPANE	3.5	3.7	3.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	9.5	8.5	6.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.41	0.32	0.16
HEATING VALUE*	1069	1097	1123
SPECIFIC GRAVITY	0.692	0.697	0.694

	INDEX 10288 SAMPLE 6026	INDEX 10289 SAMPLE 6039	INDEX 10290 SAMPLE 6041
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON D-9R	MASTERSON M-1	BIVINS A-25
LOCATION	SEC. 108, BLK. D-18, D&P SUR	SEC. 2, BLK. 11, EL&RR SUR.	SEC. 2, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	11/29/19	07/01/21	05/21/39
SAMPLED	02/10/56	02/24/56	02/24/56
FORMATION	PERM-RED CAVE	PERM-WICHITA-ALBANY&RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1640	1767	1843
WELLHEAD PRESSURE,PSIG	324	312	303
OPEN FLOW, MCFD	29000	408	6970
COMPONENT, MOLE PCT			
METHANE	76.9	75.4	78.4
ETHANE	7.8	8.1	8.7
PROPANE	3.7	4.2	3.9
N-BUTANE	0.9	1.5	0.9
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.4	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	8.9	8.8	6.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.1	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.37	0.37	0.18
HEATING VALUE*	1087	1126	1123
SPECIFIC GRAVITY	0.697	0.721	0.693

	INDEX 10291 SAMPLE 6042	INDEX 10292 SAMPLE 7125	INDEX 10293 SAMPLE 7126
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS A-2R	MASTERSON B-75R	MASTERSON B-76R
LOCATION	SEC. 3, BLK. D-18, D&P SUR.	SEC. 95, BLK D-18, D&P SUR.	SEC. 661 BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/16/56	01/02/58	01/07/58
SAMPLED	02/24/56	05/--/58	05/--/58
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1865	1706	1628
WELLHEAD PRESSURE,PSIG	351	353	303
OPEN FLOW, MCFD	8282	13600	14000
COMPONENT, MOLE PCT			
METHANE	78.7	80.5	79.4
ETHANE	8.7	7.6	7.8
PROPANE	3.7	3.4	3.6
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.4	6.6	7.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.16	0.20	0.30
HEATING VALUE*	1136	1098	1103
SPECIFIC GRAVITY	0.689	0.678	0.686

	INDEX 10294 SAMPLE 7127	INDEX 10295 SAMPLE 7175	INDEX 10296 SAMPLE 7657
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON B-78R	NOT GIVEN	BIVINS A NO. 10R
LOCATION	SEC. 105, BLK. 78, D&P SUR.	SEC 60	SEC. 93, BLK. M-20, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	BRITAIN-WEYMOUTH	AMARILLO OIL CO.
COMPLETED	12/23/57	--/--/00	08/09/60
SAMPLED	05/--/58	08/22/59	08/29/60
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1620	NOT GIVEN	1645
WELLHEAD PRESSURE,PSIG	296	NOT GIVEN	266
OPEN FLOW, MCFD	8500	NOT GIVEN	1260
COMPONENT, MOLE PCT			
METHANE	78.8	76.9	80.0
ETHANE	7.3	6.9	7.3
PROPANE	3.5	5.2	3.5
N-BUTANE	0.9	0.7	1.0
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	6.1	11.1	7.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.30	0.42	0.20
HEATING VALUE*	1082	1029	1095
SPECIFIC GRAVITY	0.684	0.683	0.684

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10297 SAMPLE 7707	INDEX 10298 SAMPLE 7708	INDEX 10299 SAMPLE 7741
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON B-86	BIVINS A NO. 11	MASTERSON B-87R
LOCATION	SEC. 82, BLK. 3, G&M SUR.	SEC. 42, G&M SUR.	SEC. 16, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	AMARILLO OIL CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	10/04/60	09/29/60
SAMPLED	10/07/60	10/07/60	10/21/60
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1604	1524	1468
WELLHEAD PRESSURE,PSIG	257	312	354
OPEN FLOW, MCFD	8700	3200	2900
COMPONENT, MOLE PCT			
METHANE	76.8	79.3	78.0
ETHANE	7.2	7.8	8.3
PROPANE	3.6	3.1	3.7
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	9.7	7.9	8.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.50	0.10	0.30
HEATING VALUE*	1074	1087	1089
SPECIFIC GRAVITY	0.698	0.686	0.688

	INDEX 10300 SAMPLE 7898	INDEX 10301 SAMPLE 7981	INDEX 10302 SAMPLE 8051
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	STATE NO. 2R	EXELL-SHELL NO. 1	MASTERSON B
LOCATION	TRACT 7, CANADIAN RIVER SUR.	SEC. 30, BLK. O-18, D&P SUR.	SEC. 67, BLK. O-18, D&P SUR.
OWNER	AMARILLO OIL CO.	BIVINS INTERESTS	ANADARKO PRODUCTION CO.
COMPLETED	02/23/61	--/--/00	04/13/61
SAMPLED	02/23/61	05/23/61	07/05/61
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1414	2160	1746
WELLHEAD PRESSURE,PSIG	356	395	271
OPEN FLOW, MCFD	4600	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	77.5	77.2	77.5
ETHANE	8.6	8.3	8.9
PROPANE	3.6	3.0	4.1
N-BUTANE	0.8	0.6	0.9
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	8.2	9.6	6.7
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.20	0.20	0.20
HEATING VALUE*	1090	1060	1135
SPECIFIC GRAVITY	0.695	0.687	0.702

	INDEX 10303 SAMPLE 8254	INDEX 10304 SAMPLE 8388	INDEX 10305 SAMPLE 8424
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	STATE OF TEXAS NO. 2-R	BIVINS NO. 2R	ALLISON NO. 1R
LOCATION	CANADIAN RIVER BED	SEC. 21, BLK. O-18, D&P SUR.	SEC. 1, W. J. PALMER SUR.
OWNER	AMARILLO OIL CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/26/61	--/--/00	08/11/61
SAMPLED	09/06/61	01/31/62	03/05/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1414	NOT GIVEN	1463
WELLHEAD PRESSURE,PSIG	356	NOT GIVEN	271
OPEN FLOW, MCFD	4600	NOT GIVEN	3950
COMPONENT, MOLE PCT			
METHANE	77.8	77.4	81.2
ETHANE	8.4	8.2	6.7
PROPANE	4.0	3.8	2.8
N-BUTANE	0.9	0.8	0.7
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	7.6	8.3	7.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.23	0.30	0.15
HEATING VALUE*	1108	1087	1067
SPECIFIC GRAVITY	0.695	0.689	0.669

	INDEX 10306 SAMPLE 8428	INDEX 10307 SAMPLE 8429	INDEX 10308 SAMPLE 8479
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 6R	WARRICK NO. 1R	MASTERSON B-1-R
LOCATION	SEC. 40, A-20, G&M SUR.	SEC. 16, BLK. Y-2, TT&RR SUR	SEC. 67, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	ANADARKO PRODUCTION CO.
COMPLETED	08/12/61	10/23/61	04/13/61
SAMPLED	03/05/62	03/02/62	03/21/62
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1513	1506	1746
WELLHEAD PRESSURE,PSIG	269	2732	250
OPEN FLOW, MCFD	3400	6500	9367
COMPONENT, MOLE PCT			
METHANE	80.7	80.7	71.4
ETHANE	6.8	6.8	8.6
PROPANE	3.0	2.9	4.2
N-BUTANE	0.8	0.8	1.0
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.6	7.5	7.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.16	0.15	0.26
HEATING VALUE*	1073	1083	1124
SPECIFIC GRAVITY	0.674	0.679	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10309 SAMPLE 8481	INDEX 10310 SAMPLE 8848	INDEX 10311 SAMPLE 8850
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON I-1R	BIVINS NO. 10R	MASTERSON B-92R
LOCATION	SEC. 69, BLK. 47, H&TC SUR.	SEC. 95, BLK. 46, H&TC SUR.	SEC. 26, BLK. 3, G&M SUR.
OWNER	ANADARKO PRODUCTION CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/22/61	08/16/62	09/25/62
SAMPLED	--/--/00	02/05/63	02/07/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1772	1531	1384
WELLHEAD PRESSURE,PSIG	287	241	277
OPEN FLOW, MCFD	1254	1150	5600
COMPONENT, MOLE PCT			
METHANE	75.8	80.0	78.6
ETHANE	8.3	7.2	7.7
PROPANE	4.4	3.2	3.8
N-BUTANE	1.1	0.8	1.0
ISOBUTANE	0.6	0.4	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.8	7.7	7.8
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.30	0.10	0.30
HEATING VALUE*	1118	1081	1099
SPECIFIC GRAVITY	0.716	0.680	0.691

	INDEX 10312 SAMPLE 8851	INDEX 10313 SAMPLE 8853	INDEX 10314 SAMPLE 8855
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 14R	MASTERSON NO. 7R	BIVINS NO. 13R
LOCATION	SEC. 103, BLK. 46, H&TC SUR.	SEC. 65, BLK. D-18, D&P SUR.	SEC. 35, BLK. M-20, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/17/62	09/14/62	10/03/62
SAMPLED	02/05/63	02/07/63	02/15/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1637	1700	1650
WELLHEAD PRESSURE,PSIG	270	311	195
OPEN FLOW, MCFD	540	9600	1700
COMPONENT, MOLE PCT			
METHANE	79.0	78.9	79.7
ETHANE	6.9	8.3	6.7
PROPANE	3.2	3.8	2.9
N-BUTANE	0.9	1.0	1.0
ISOBUTANE	0.1	0.3	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	9.1	6.8	8.4
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.30	0.20	0.30
HEATING VALUE*	1058	1113	1067
SPECIFIC GRAVITY	0.679	0.691	0.682

	INDEX 10315 SAMPLE 8858	INDEX 10316 SAMPLE 8859	INDEX 10317 SAMPLE 8860
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	WARRICK NO. 3R	BIVINS NO. 11R	BIVINS NO. 15R
LOCATION	SEC. 96, BLK. 46, H&TC SUR.	SEC. 41, BLK. M-20, G&M SUR.	SEC. 108, BLK. 46, H&TC SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/31/62	08/23/62	09/13/62
SAMPLED	02/14/63	02/14/63	02/14/63
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1502	1480	1714
WELLHEAD PRESSURE,PSIG	263	261	333
OPEN FLOW, MCFD	6300	7100	2900
COMPONENT, MOLE PCT			
METHANE	81.2	81.5	77.8
ETHANE	6.7	6.8	8.5
PROPANE	2.9	2.8	3.9
N-BUTANE	1.0	0.8	1.1
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.4	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	7.4	7.2	7.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.10	0.20
HEATING VALUE*	1077	1073	1119
SPECIFIC GRAVITY	0.675	0.670	0.701

	INDEX 10318 SAMPLE 8862	INDEX 10319 SAMPLE 9251	INDEX 10320 SAMPLE 9310
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 12R	BIVINS NO. 2R	COUGHLAN NO. 1R
LOCATION	SEC. 32, BLK. M-20, G&M SUR.	SEC. 21, BLK. D-18, D&P SUR.	SEC. 77, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/31/62	10/02/62	11/10/63
SAMPLED	02/15/63	03/06/64	04/14/64
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1542	1817	1882
WELLHEAD PRESSURE,PSIG	231	353	317
OPEN FLOW, MCFD	4150	2392	8700
COMPONENT, MOLE PCT			
METHANE	80.7	76.1	78.9
ETHANE	6.9	9.2	9.0
PROPANE	2.2	4.2	3.8
N-BUTANE	0.9	1.2	1.0
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	8.0	8.0	6.2
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.20	0.40	0.16
HEATING VALUE*	1066	1122	1129
SPECIFIC GRAVITY	0.673	0.709	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10321 SAMPLE 9622	INDEX 10322 SAMPLE 9623	INDEX 10323 SAMPLE 9756
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	CRAWFORD NO. 3-R	MASTERSON NO. 11-R	CRAWFORD 2R
LOCATION	SEC. 68, BLK. 0-18, D&P SUR.	SEC. 67, BLK. 0-18, D&P SUR.	SEC. 34, BLK PRC, EL&RR SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/28/64	09/28/64	09/30/64
SAMPLED	11/04/64	11/04/64	02/18/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1704	1747	1887
WELLHEAD PRESSURE,PSIG	277	228	327
OPEN FLOW, MCFD	7200	6100	8200
COMPONENT, MOLE PCT			
METHANE	77.6	76.5	78.4
ETHANE	9.0	9.0	8.9
PROPANE	3.9	4.4	4.1
N-BUTANE	0.9	1.1	0.9
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	7.0	7.3	6.4
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.31	0.24	0.20
HEATING VALUE*	1122	1139	1129
SPECIFIC GRAVITY	0.700	0.714	0.697

	INDEX 10324 SAMPLE 9757	INDEX 10325 SAMPLE 9758	INDEX 10326 SAMPLE 9760
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE,	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 9R	MASTERSON 12R	MASTERSON 10R
LOCATION	SEC. 64, BLK 0-18, D&P SUR.	SEC. 35, BLK 0-10, EL&RR SUR	SEC. 10, BLK 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	09/02/64	09/03/64	09/10/64
SAMPLED	02/18/65	02/19/65	02/19/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1824	1518	1448
WELLHEAD PRESSURE,PSIG	308	195	222
OPEN FLOW, MCFD	9900	4900	7700
COMPONENT, MOLE PCT			
METHANE	79.1	78.4	72.6
ETHANE	8.0	6.8	7.3
PROPANE	3.9	3.5	4.1
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.4	0.5	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	6.8	8.8	8.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.22	0.38	0.36
HEATING VALUE*	1115	1081	1093
SPECIFIC GRAVITY	0.691	0.692	0.696

	INDEX 10327 SAMPLE 9802	INDEX 10328 SAMPLE 10024	INDEX 10329 SAMPLE 10025
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MCBRIDE 1 R	MASTERSON 15R	MASTERSON 13R
LOCATION	SEC. 98, BLK 46, METC SUR.	SEC. 103, BLK 0-18, D&P SUR.	SEC. 63, BLK 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/20/64	07/13/65	07/16/65
SAMPLED	03/16/65	08/05/65	08/04/65
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1370	1603	1849
WELLHEAD PRESSURE,PSIG	208	249	292
OPEN FLOW, MCFD	3100	7900	17500
COMPONENT, MOLE PCT			
METHANE	80.1	77.9	78.0
ETHANE	7.2	8.1	8.4
PROPANE	3.3	4.3	3.8
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.3	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	7.4	7.4	6.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.16	0.27	0.19
HEATING VALUE*	1090	1119	1139
SPECIFIC GRAVITY	0.681	0.700	0.709

	INDEX 10330 SAMPLE 10027	INDEX 10331 SAMPLE 10659	INDEX 10332 SAMPLE 10660
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 16R	BIVINS 2R	BIVINS A-15OR
LOCATION	SEC. 24, BLK 3, GH&H SUR.	SEC. 21, BLK. 018, D&P SUR.	SEC. 18, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	07/13/65	10/02/60	11/08/56
SAMPLED	08/04/65	07/21/66	07/22/66
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1639	1817	2284
WELLHEAD PRESSURE,PSIG	229	318	190
OPEN FLOW, MCFD	2200	2252	161
COMPONENT, MOLE PCT			
METHANE	77.8	76.0	76.4
ETHANE	7.2	9.2	7.1
PROPANE	3.8	4.3	3.3
N-BUTANE	0.9	1.0	0.8
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	8.9	8.2	11.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.36	0.31	0.31
HEATING VALUE*	1082	1122	1055
SPECIFIC GRAVITY	0.694	0.710	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10333 SAMPLE 10663		INDEX 10334 SAMPLE 10664		INDEX 10335 SAMPLE 10668	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS A-2R		BIVINS A-4R		CRAWFORD 3R	
LOCATION	SEC. 13, BLK. D18, D&P SUR.		SEC. 24, BLK. D18, D&P SUR.		SEC. 68, BLK. D18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	07/16/24		--/--/00		09/28/64	
SAMPLED	07/21/66		07/21/66		07/21/66	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1865		NOT GIVEN		1704	
WELLHEAD PRESSURE,PSIG	317		305		248	
OPEN FLOW, MCFD	4676		562		1945	
COMPONENT, MOLE PCT						
METHANE	78.1		77.3		76.6	
ETHANE	8.9		9.5		9.3	
PROPANE	4.1		4.5		4.6	
N-BUTANE	1.0		1.1		1.1	
ISOBUTANE	0.5		0.5		0.6	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.3		0.3		0.3	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	6.6		6.2		7.1	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.17		0.15		0.22	
HEATING VALUE*	1130		1150		1150	
SPECIFIC GRAVITY	0.700		0.710		0.720	

	INDEX 10336 SAMPLE 10699		INDEX 10337 SAMPLE 10723		INDEX 10338 SAMPLE 10724	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 23R		MASTERSON 19R		MASTERSON 20R	
LOCATION	SEC. 12, BLK. 0-18, D&P SUR.		SEC. 33, BLK. 3, G&M SUR.		SEC. 97, BLK. 46, H&TC SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	08/01/66		09/13/66		09/31/66	
SAMPLED	08/19/66		09/14/66		09/14/66	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1880		1521		1625	
WELLHEAD PRESSURE,PSIG	324		181		199	
OPEN FLOW, MCFD	9000		1110		780	
COMPONENT, MOLE PCT						
METHANE	77.3		76.9		75.0	
ETHANE	8.4		7.0		7.1	
PROPANE	3.9		4.3		4.5	
N-BUTANE	0.8		1.3		1.4	
ISOBUTANE	0.4		0.6		0.5	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2		0.3		0.4	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	8.0		8.8		10.2	
OXYGEN	0.2		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.15		0.34		0.49	
HEATING VALUE*	1098		1109		1099	
SPECIFIC GRAVITY	0.700		0.710		0.720	

	INDEX 10339 SAMPLE 10736		INDEX 10340 SAMPLE 10737		INDEX 10341 SAMPLE 10757	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	MASTERSON 22R		BIVINS 20R		MASTERSON 21R	
LOCATION	SEC. 100, BLK. 3, G&M SUR.		SEC. 97, BLK. 46, H&TC SUR.		SEC. 107, BLK. 0-18, D&P SUR	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	09/20/66		09/23/66		09/16/66	
SAMPLED	09/23/66		09/26/66		10/25/66	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1680		1454		1631	
WELLHEAD PRESSURE,PSIG	231		1192		197	
OPEN FLOW, MCFD	7800		3750		6500	
COMPONENT, MOLE PCT						
METHANE	76.5		79.5		74.8	
ETHANE	9.0		7.4		7.5	
PROPANE	4.6		4.5		4.2	
N-BUTANE	1.2		1.8		1.1	
ISOBUTANE	0.4		0.3		0.5	
N-PENTANE	0.1		0.2		0.3	
ISOPENTANE	0.3		0.2		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	7.4		7.8		10.5	
OXYGEN	0.0		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		0.1	
HELIUM	0.26		0.16		0.43	
HEATING VALUE*	1132		1092		1095	
SPECIFIC GRAVITY	0.710		0.680		0.720	

	INDEX 10342 SAMPLE 11042		INDEX 10343 SAMPLE 11044		INDEX 10344 SAMPLE 11045	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	POTTER		POTTER		POTTER	
FIELD	PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE		PANHANDLE W/RED CAVE	
WELL NAME	BIVINS 26R		CRAWFORD 4R		BIVINS 25R	
LOCATION	SEC. 81, BLK. 2, G&M SUR.		SEC. 78, BLK. 0-18, D&P SUR.		SEC. 27, BLK. 0-18, D&P SUR.	
OWNER	COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.		COLORADO INTERSTATE GAS CO.	
COMPLETED	07/24/67		07/21/67		07/21/67	
SAMPLED	07/28/67		07/26/67		07/26/67	
FORMATION	PERM-RED CAVE		PERM-RED CAVE		PERM-RED CAVE	
GEOLOGIC PROVINCE CODE	440		440		440	
DEPTH, FEET	1825		1873		1780	
WELLHEAD PRESSURE,PSIG	3991		324		352	
OPEN FLOW, MCFD	4300		5900		12000	
COMPONENT, MOLE PCT						
METHANE	74.8		78.3		77.4	
ETHANE	8.8		6.6		9.1	
PROPANE	4.3		3.7		4.0	
N-BUTANE	1.0		0.9		0.9	
ISOBUTANE	0.6		0.4		0.5	
N-PENTANE	0.2		0.2		0.2	
ISOPENTANE	0.2		0.2		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	9.4		6.9		7.0	
OXYGEN	0.0		0.1		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.2		0.3	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.13		0.17		0.21	
HEATING VALUE*	1108		1114		1121	
SPECIFIC GRAVITY	0.715		0.694		0.698	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10345 SAMPLE 11079	INDEX 10346 SAMPLE 11080	INDEX 10347 SAMPLE 11081
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 27R	MASTERSON 24R	MASTERSON 23R
LOCATION	SEC. 27, BLK. 3, G&N SUR.	SEC. 69, BLK. 0-18, D&P SUR.	SEC. 71, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/12/67	08/07/67	08/07/67
SAMPLED	08/15/67	08/14/67	08/14/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1659	1763	1842
WELLHEAD PRESSURE,PSIG	219	204	285
OPEN FLOW, MCFD	920	3100	6700
COMPONENT, MOLE PCT			
METHANE	76.1	75.5	77.3
ETHANE	10.3	9.0	8.9
PROPANE	4.0	4.4	3.9
N-BUTANE	1.1	1.1	1.0
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	6.9	7.9	7.3
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.20	0.26	0.18
HEATING VALUE*	1139	1130	1114
SPECIFIC GRAVITY	0.710	0.714	0.698

	INDEX 10348 SAMPLE 11082	INDEX 10349 SAMPLE 11096	INDEX 10350 SAMPLE 11548
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 25R	BIVINS 27R	BIVINS 29R
LOCATION	SEC. 105, BLK. 0-18, D&P SUR.	SEC. 55, BLK. 2, G&N SUR.	SEC. 57, BLK. 2, G&N SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	08/12/67	08/29/67	06/18/68
SAMPLED	08/15/67	09/07/67	06/18/68
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1631	2114	1742
WELLHEAD PRESSURE,PSIG	180	372	NOT GIVEN
OPEN FLOW, MCFD	2050	630	128
COMPONENT, MOLE PCT			
METHANE	75.2	72.8	77.2
ETHANE	7.4	8.9	8.7
PROPANE	3.9	5.1	4.9
N-BUTANE	1.0	1.4	1.1
ISOBUTANE	0.6	0.9	0.8
N-PENTANE	0.2	0.5	0.5
ISOPENTANE	0.2	0.5	0.0
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	10.5	9.8	6.3
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.4	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.47	0.22	0.18
HEATING VALUE*	1077	1170	1164
SPECIFIC GRAVITY	0.708	0.749	0.717

	INDEX 10351 SAMPLE 11549	INDEX 10352 SAMPLE 11562	INDEX 10353 SAMPLE 11571
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 30R	BIVINS NO. 30R	BIVINS 31R
LOCATION	SEC. 31, BLK. 0-18, D&P SUR.	SEC. 31, BLK. 0-18, D&P SUR.	SEC. 10, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/23/68	07/07/68	07/12/68
FORMATION	NOT GIVEN	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	700	1800	1800
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	800	NOT GIVEN	2350
COMPONENT, MOLE PCT			
METHANE	72.2	76.7	77.4
ETHANE	5.1	9.3	9.3
PROPANE	3.1	4.7	4.4
N-BUTANE	1.0	1.1	1.1
ISOBUTANE	0.4	0.6	0.5
N-PENTANE	0.1	0.4	0.2
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	16.4	6.6	6.2
OXYGEN	0.0	0.1	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	1.02	0.18	0.20
HEATING VALUE*	975	1154	1146
SPECIFIC GRAVITY	0.709	0.715	0.705

	INDEX 10354 SAMPLE 11572	INDEX 10355 SAMPLE 11768	INDEX 10356 SAMPLE 11769
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON NO. 28R	BIVINS 33R	BIVINS 34R
LOCATION	SEC. 3, BLK. 0-18, D&P SUR.	SEC. 2, BLK. 0-18, D&P SUR.	SEC. 15, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	02/13/69	02/18/69
SAMPLED	07/14/68	02/26/69	02/26/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1750	1820	1755
WELLHEAD PRESSURE,PSIG	NOT GIVEN	319	333
OPEN FLOW, MCFD	NOT GIVEN	5600	9200
COMPONENT, MOLE PCT			
METHANE	77.6	77.7	77.8
ETHANE	9.3	9.0	9.0
PROPANE	4.5	4.1	4.1
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.1	6.4	6.5
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.20	0.21	0.21
HEATING VALUE*	1151	1137	1135
SPECIFIC GRAVITY	0.706	0.703	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10357 SAMPLE 11770	INDEX 10358 SAMPLE 11773	INDEX 10359 SAMPLE 11774
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 35R	BIVINS 30R	BIVINS 29R
LOCATION	SEC. 16, BLK. O-18, D&P SUR.	SEC. 31, BLK. O-18, D&P SUR.	SEC. 57, BLK. 2, GEM SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/19/69	--/--/00	--/--/00
SAMPLED	02/26/69	02/28/69	02/28/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1905	1859	1764
WELLHEAD PRESSURE,PSIG	333	350	356
OPEN FLOW, MCFD	8000	7400	2800
COMPONENT, MOLE PCT			
METHANE	76.3	78.6	77.9
ETHANE	9.2	9.1	8.7
PROPANE	4.3	3.9	4.3
N-BUTANE	1.1	0.8	1.1
ISOBUTANE	0.5	0.3	0.5
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	7.3	6.4	6.6
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.23	0.17	0.16
HEATING VALUE*	1140	1120	1134
SPECIFIC GRAVITY	0.715	0.691	0.702

	INDEX 10360 SAMPLE 11775	INDEX 10361 SAMPLE 11776	INDEX 10362 SAMPLE 11777
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 31R	BIVINS 32R	BIVINS 33R
LOCATION	SEC. 10, BLK. O-18, D&P SUR.	SEC. 11, BLK. O-18, D&P SUR.	SEC. 72, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	02/19/69	02/13/69
SAMPLED	02/28/69	02/27/69	02/27/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE X
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1823	1851	2069
WELLHEAD PRESSURE,PSIG	338	327	319
OPEN FLOW, MCFD	7600	9090	5600
COMPONENT, MOLE PCT			
METHANE	78.0	77.8	72.8
ETHANE	8.9	8.9	9.2
PROPANE	3.9	4.1	5.9
N-BUTANE	1.9	1.8	2.2
ISOBUTANE	0.4	0.4	1.3
N-PENTANE	0.2	0.2	1.0
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	6.8	6.6	5.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.3	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.19	0.19	0.00
HEATING VALUE*	1117	1116	1281
SPECIFIC GRAVITY	0.694	0.691	0.787

	INDEX 10363 SAMPLE 11778	INDEX 10364 SAMPLE 11779	INDEX 10365 SAMPLE 11780
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 34R	BIVINS 35R	MASTERSON 28R
LOCATION	SEC. 15, BLK. O-18, D&P SUR.	SEC. 16, BLK. O-18, D&P SUR.	SEC. 3, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/18/69	02/19/69	--/--/68
SAMPLED	02/27/69	02/28/69	02/28/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1755	1905	1779
WELLHEAD PRESSURE,PSIG	342	333	325
OPEN FLOW, MCFD	9200	8000	8000
COMPONENT, MOLE PCT			
METHANE	78.1	76.7	78.3
ETHANE	8.9	9.0	8.8
PROPANE	4.0	4.1	4.0
N-BUTANE	1.0	1.1	0.8
ISOBUTANE	0.5	0.9	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.5	7.7	6.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.18	0.22	0.19
HEATING VALUE*	1124	1114	1113
SPECIFIC GRAVITY	0.695	0.701	0.690

	INDEX 10366 SAMPLE 11781	INDEX 10367 SAMPLE 11782	INDEX 10368 SAMPLE 11805
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	CRAWFORD 5R	GAGE 1R	MASTERSON 35R
LOCATION	SEC. 1, BLK. O-18, D&P SUR.	SEC. 7, BLK. B-11, EL&RR SUR	SEC. 103, BLK. O-18, D&P SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/26/69	02/26/69	02/27/69
SAMPLED	02/28/69	02/28/69	04/02/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1836	1738	1523
WELLHEAD PRESSURE,PSIG	341	NOT GIVEN	230
OPEN FLOW, MCFD	6800	2820	4100
COMPONENT, MOLE PCT			
METHANE	76.5	76.9	76.9
ETHANE	9.1	9.2	7.9
PROPANE	4.5	4.6	4.2
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.7	0.7	0.5
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	6.7	6.6	7.8
OXYGEN	0.1	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.19	0.18	0.61
HEATING VALUE*	1152	1146	1111
SPECIFIC GRAVITY	0.718	0.709	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10369 SAMPLE 11806	INDEX 10370 SAMPLE 11807	INDEX 10371 SAMPLE 11808
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON NO. 34R	GAGE 1R	MASTERSON 32R
LOCATION	SEC. 94, BLK. 0-18, D&P SUR.	SEC. 7, BLK. B-11, EL&RR SUR	SEC. 74, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/21/69	02/26/69	--/--/08
SAMPLED	04/02/69	04/07/69	04/07/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1636	1738	1934
WELLHEAD PRESSURE,PSIG	266	291	314
OPEN FLOW, MCFD	7100	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.9	77.5	78.2
ETHANE	8.1	9.1	8.5
PROPANE	3.7	4.6	4.1
N-BUTANE	1.1	1.1	1.0
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	7.5	6.3	6.3
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.24	0.19	0.16
HEATING VALUE*	1113	1142	1136
SPECIFIC GRAVITY	0.700	0.704	0.702

	INDEX 10372 SAMPLE 11878	INDEX 10373 SAMPLE 11879	INDEX 10374 SAMPLE 11951
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	CRAWFORD 5R	BIVINS 33R	MASTERSON 33R
LOCATION	SEC. 4, BLK. 0-18, D&P SUR.	SEC. 2, BLK. 0-18, D&P SUR.	SEC. 72, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	02/26/69	02/13/69	03/13/69
SAMPLED	05/28/69	05/14/69	07/08/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1836	1820	1895
WELLHEAD PRESSURE,PSIG	341	319	292
OPEN FLOW, MCFD	6800	5600	4100
COMPONENT, MOLE PCT			
METHANE	77.8	76.4	77.1
ETHANE	8.9	9.4	8.9
PROPANE	4.4	4.5	4.7
N-BUTANE	0.9	1.1	0.9
ISOBUTANE	0.4	0.7	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	6.7	6.5	6.8
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.19	0.16	0.16
HEATING VALUE*	1128	1157	1135
SPECIFIC GRAVITY	0.698	0.715	0.705

	INDEX 10375 SAMPLE 12279	INDEX 10376 SAMPLE 12297	INDEX 10377 SAMPLE 12299
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 36R	CRAWFORD 6R	BIVINS 37R
LOCATION	SEC. 25, BLK. 0-18, D&P SUR.	SEC. 80, BLK. 0-18, D&P SUR.	SEC. 26, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/29/70	06/12/70	05/28/70
SAMPLED	06/05/70	06/12/70	06/15/70
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1848	1745	1716
WELLHEAD PRESSURE,PSIG	219	200	361
OPEN FLOW, MCFD	57	2500	480
COMPONENT, MOLE PCT			
METHANE	77.6	76.8	77.2
ETHANE	8.7	9.0	9.4
PROPANE	4.1	4.9	5.0
N-BUTANE	0.7	0.9	0.9
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.6	0.1
NITROGEN	6.7	6.5	6.2
OXYGEN	0.6	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.3	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.11	0.17	0.18
HEATING VALUE*	1108	1140	1149
SPECIFIC GRAVITY	0.692	0.709	0.706

	INDEX 10378 SAMPLE 12300	INDEX 10379 SAMPLE 12301	INDEX 10380 SAMPLE 12302
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 36R	BIVINS 38R	BIVINS 39R
LOCATION	SEC.10, BLK.B-11, EL&RR SUR.	SEC. 22, BLK. 0-18, D&P SUR.	SEC. 14, BLK. 0-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/18/70	06/04/70	06/08/70
SAMPLED	06/18/70	06/19/70	06/08/70
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1650	1738	1721
WELLHEAD PRESSURE,PSIG	NOT GIVEN	345	NOT GIVEN
OPEN FLOW, MCFD	3000	1900	12900
COMPONENT, MOLE PCT			
METHANE	76.2	76.8	77.8
ETHANE	9.0	9.5	8.7
PROPANE	4.8	4.6	4.4
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.3	7.2	6.8
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.20	0.21	0.18
HEATING VALUE*	1140	1127	1124
SPECIFIC GRAVITY	0.713	0.704	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10381 SAMPLE 12755	INDEX 10382 SAMPLE 12815	INDEX 10383 SAMPLE 12817
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON NO. 41 R	MASTERSON 42R	MASTERSON 49R
LOCATION	SEC. 79, BLK. 018, D&P SUR.	SEC. 70, BLK. 018, D&P SUR.	SEC. 36, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/09/71	04/12/71	05/08/71
SAMPLED	04/09/71	04/12/71	05/14/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1750	1724	1804
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	131
OPEN FLOW, MCFD	2000	1040	1618
COMPONENT, MOLE PCT			
METHANE	74.5	74.8	69.1
ETHANE	10.7	10.1	7.6
PROPANE	5.6	5.2	5.1
N-BUTANE	1.3	1.3	1.4
ISOBUTANE	0.7	0.9	0.9
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	6.1	6.8	9.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	5.4
HELIUM	0.18	0.19	0.36
HEATING VALUE*	1199	1179	1078
SPECIFIC GRAVITY	0.736	0.734	0.782

	INDEX 10384 SAMPLE 12825	INDEX 10385 SAMPLE 12826	INDEX 10386 SAMPLE 12836
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 40R	BIVINS 41R	MASTERSON 49R
LOCATION	SEC. 30, BLK. B-11, EL&RR SUR.	SEC. 44, BLK. 018, D&P SUR.	SEC. 36, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/19/71	05/23/71	05/--/71
SAMPLED	05/19/71	05/23/71	05/25/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1650	1660	1866
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	131
OPEN FLOW, MCFD	41	435	2600
COMPONENT, MOLE PCT			
METHANE	75.5	75.4	74.7
ETHANE	9.8	9.5	6.0
PROPANE	5.1	5.1	5.2
N-BUTANE	1.1	1.2	1.4
ISOBUTANE	0.6	0.6	0.8
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.3	0.5
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	7.0	7.4	8.5
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.14	0.16	0.39
HEATING VALUE*	1170	1162	1149
SPECIFIC GRAVITY	0.727	0.727	0.733

	INDEX 10387 SAMPLE 12844	INDEX 10388 SAMPLE 12846	INDEX 10389 SAMPLE 12882
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 42R	BIVINS 43R	BIVINS 44R
LOCATION	SEC. 38, BLK. O-18, D&P SUR.	SEC. 13, BLK. O-18, D&P SUR.	SEC. 28, BLK. 018, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	05/27/71	06/09/71	06/12/71
SAMPLED	06/01/71	06/09/71	06/12/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1801	1865	1783
WELLHEAD PRESSURE,PSIG	NOT GIVEN	230	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1900	1750
COMPONENT, MOLE PCT			
METHANE	72.2	74.5	77.0
ETHANE	8.8	10.8	9.0
PROPANE	5.0	5.4	4.5
N-BUTANE	1.5	1.2	1.7
ISOBUTANE	0.7	0.8	0.0
N-PENTANE	0.3	0.4	0.0
ISOPENTANE	0.3	0.0	0.5
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	10.8	6.6	6.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.14	0.17	0.25
HEATING VALUE*	1133	1182	1142
SPECIFIC GRAVITY	0.752	0.731	0.710

	INDEX 10390 SAMPLE 12893	INDEX 10391 SAMPLE 12895	INDEX 10392 SAMPLE 12956
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS NO. 46R	BIVINS A-169R	BIVINS 45R
LOCATION	SEC. 9, BLK. 018, D&P SUR.	SEC. 23, BLK. 018, D&P SUR.	SEC. 17, BLK. O-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	06/30/71	07/07/71	06/29/71
SAMPLED	06/30/71	07/07/71	08/23/71
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1760	1858	1978
WELLHEAD PRESSURE,PSIG	NOT GIVEN	348	590
OPEN FLOW, MCFD	3800	2400	200
COMPONENT, MOLE PCT			
METHANE	78.1	78.9	64.0
ETHANE	8.9	9.9	16.3
PROPANE	4.3	4.3	11.2
N-BUTANE	0.9	0.8	2.2
ISOBUTANE	0.4	0.9	1.5
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	5.5	5.1	4.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.22	0.17	0.07
HEATING VALUE*	1128	1157	1378
SPECIFIC GRAVITY	0.698	0.700	0.830

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10393 SAMPLE 13261	INDEX 10394 SAMPLE 13262	INDEX 10395 SAMPLE 13265
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	BIVINS 49R	BIVINS 53R	BIVINS 52R
LOCATION	SEC. 5, BLK. D-18, D&P SUR.	SEC. 58, BLK. 2, G&M SUR.	SEC. 36, BLK. D-18, D&P SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	04/15/72	05/26/72	06/04/72
SAMPLED	04/15/72	05/26/72	06/04/72
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1843	1702	1830
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	21000	240	550
COMPONENT, MOLE PCT			
METHANE	76.8	76.2	76.6
ETHANE	9.8	9.1	9.1
PROPANE	4.5	5.0	5.0
N-BUTANE	0.9	1.2	1.2
ISOBUTANE	0.5	0.7	0.7
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.5	6.9	6.5
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.22	0.16	0.16
HEATING VALUE*	1136	1151	1155
SPECIFIC GRAVITY	0.701	0.716	0.713

	INDEX 10396 SAMPLE 13663	INDEX 10397 SAMPLE 13664	INDEX 10398 SAMPLE 13676
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE	PANHANDLE W/RED CAVE
WELL NAME	MASTERSON 63 R	MASTERSON 61 R	MASTERSON 61 R
LOCATION	SEC. 81, BLK. D-18, D&P SUR.	SEC. 81, BLK. 3, G&M SUR.	SEC. 81, BLK. 3, G&M SUR.
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/11/73	06/11/73	08/08/73
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	295	135	182
OPEN FLOW, MCFD	4140	NOT GIVEN	124
COMPONENT, MOLE PCT			
METHANE	77.5	66.7	74.9
ETHANE	9.7	9.2	10.2
PROPANE	4.5	4.9	5.6
N-BUTANE	0.8	1.0	1.4
ISOBUTANE	0.5	0.6	0.8
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.2	0.3	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.3
NITROGEN	6.4	14.2	6.3
OXYGEN	0.0	2.2	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	TRACE
HELIUM	0.21	0.15	0.22
HEATING VALUE*	1129	1044	1205
SPECIFIC GRAVITY	0.696	0.758	0.743

	INDEX 10399 SAMPLE 14282	INDEX 10400 SAMPLE 7552	INDEX 10401 SAMPLE 7570
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W/RED CAVE	PEDROSA	PEDROSA
WELL NAME	BIVINS 80R	PEDROSA NO. 1	PEDROSA NO. 1
LOCATION	SEC. 34, BLK. D-18, D&P SUR.	SEC. 3, BLK. 4, ACH&B SUR.	SEC. 3, BLK. 4, ACH&B SUR.
OWNER	CIG EXPLORATION, INC.	LEE T. BIVINS	LEE T. BIVINS
COMPLETED	12/15/75	--/--/00	--/--/00
SAMPLED	02/28/75	05/12/60	06/06/60
FORMATION	PERM-RED CAVE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	1816	3310	NOT GIVEN
WELLHEAD PRESSURE,PSIG	256	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	729	NOT GIVEN	107
COMPONENT, MOLE PCT			
METHANE	79.3	64.2	67.7
ETHANE	7.2	3.8	4.0
PROPANE	3.7	3.0	3.5
N-BUTANE	0.3	0.6	0.4
ISOBUTANE	0.3	0.3	0.6
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	TRACE	TRACE	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	8.4	19.7	21.5
OXYGEN	0.5	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	6.5	3.2
HELIUM	0.16	1.40	1.40
HEATING VALUE*	1048	949	830
SPECIFIC GRAVITY	0.672	0.768	0.721

	INDEX 10402 SAMPLE 7583	INDEX 10403 SAMPLE 8074	INDEX 10404 SAMPLE 1310
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PEDROSA	PEDROSA	TUCK TRIGG DOME
WELL NAME	PEDROSA NO. 1	PEDROSA NO. 2	CROSS BAR RANCH NO. 1
LOCATION	SEC. 3, BLK. 4, ACH&B SUR.	SEC. 3, BLK 4, ACH&B SUR.	SEC. 37, BLK. 5, G&M SUR.
OWNER	LEE T. BIVINS	PIONEER NATURAL GAS CO.	POTTER COUNTY OIL & GAS CO.
COMPLETED	--/--/00	09/29/60	--/--/00
SAMPLED	06/20/60	07/20/61	09/24/26
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2692	2671	3920
WELLHEAD PRESSURE,PSIG	NOT GIVEN	564	182
OPEN FLOW, MCFD	2000	675	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.6	74.3	56.8
ETHANE	6.0	6.4	13.8
PROPANE	2.6	2.8	---
N-BUTANE	0.6	0.6	---
ISOBUTANE	0.4	0.4	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	15.0	14.2	28.5
OXYGEN	0.5	0.4	0.2
ARGON	0.1	0.1	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.8
HELIUM	0.50	0.50	1.72
HEATING VALUE*	972	987	823
SPECIFIC GRAVITY	0.697	0.695	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10405 SAMPLE 2477	INDEX 10406 SAMPLE 9871	INDEX 10407 SAMPLE 10808
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	TUCK TRIGG DOME	TUCK TRIGG DOME	TUCK TRIGG DOME
WELL NAME	CROSS BAR RANCH NO. 1	BUSH B-2R	BUSH B-3R
LOCATION	SEC. 37, BLK. 5, G&M SUR.	SEC. 30, BLK. M-19, G&M SUR.	SEC. 29, BLK. M-19, G&M SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	04/29/30	01/--/65	12/02/66
SAMPLED	03/15/32	03/09/65	12/06/66
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2560	2540	2450
WELLHEAD PRESSURE,PSIG	NOT GIVEN	501	515
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.0	71.2	70.5
ETHANE	15.5	5.6	5.6
PROPANE	---	2.7	2.9
N-BUTANE	---	0.8	0.7
ISOBUTANE	---	0.4	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	18.3	16.1	19.0
OXYGEN	0.3	0.0	0.0
ARGON	---	0.1	0.1
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	0.64	0.62	0.62
HEATING VALUE*	936	952	937
SPECIFIC GRAVITY	0.709	0.713	0.709

	INDEX 10408 SAMPLE 10811	INDEX 10409 SAMPLE 10875	INDEX 10410 SAMPLE 10885
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	TUCK TRIGG DOME	TUCK TRIGG DOME	TUCK TRIGG DOME
WELL NAME	BUSH B-2R	U.S.B.&R. 2R	U.S.B.&R. 1R
LOCATION	SEC. 30, BLK. M-19, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	01/01/65	11/12/66	11/04/66
SAMPLED	12/14/66	02/23/67	03/08/67
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2540	2537	2499
WELLHEAD PRESSURE,PSIG	497	508	486
OPEN FLOW, MCFD	7500	8300	2900
COMPONENT, MOLE PCT			
METHANE	70.1	70.1	70.8
ETHANE	5.6	5.7	5.7
PROPANE	3.0	3.0	2.9
N-BUTANE	0.7	0.9	0.7
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	19.0	18.8	18.6
OXYGEN	0.1	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.63	0.63	0.66
HEATING VALUE*	940	958	949
SPECIFIC GRAVITY	0.712	0.720	0.721

	INDEX 10411 SAMPLE 11489	INDEX 10412 SAMPLE 12408	INDEX 10413 SAMPLE 12409
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	TUCK TRIGG DOME	TUCK TRIGG DOME	TUCK TRIGG DOME
WELL NAME	BUSH B-3R	U.S.B.&R. 1R	BUSH B-3R
LOCATION	SEC. 29, BLK. M-19, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.	SEC. 29, BLK. M-19, G&M SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED	12/01/66	12/04/66	12/01/66
SAMPLED	05/14/68	09/11/70	09/11/70
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2443	2499	2450
WELLHEAD PRESSURE,PSIG	515	498	528
OPEN FLOW, MCFD	8100	2900	8100
COMPONENT, MOLE PCT			
METHANE	70.9	70.7	70.6
ETHANE	5.6	5.4	5.4
PROPANE	3.0	2.9	2.9
N-BUTANE	0.7	0.7	0.6
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	18.9	18.8	19.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.65	0.65	0.64
HEATING VALUE*	958	948	932
SPECIFIC GRAVITY	0.712	0.707	0.705

	INDEX 10414 SAMPLE 12410	INDEX 10415 SAMPLE 12411	INDEX 10416 SAMPLE 2834
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	TUCK TRIGG DOME	TUCK TRIGG DOME	WILDCAT
WELL NAME	BUSH B-2R	U.S.B.&R. 2R	CITY OF AMARILLO NO. 1
LOCATION	SEC. 30, BLK. M-19, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.	SEC. 167, BLK. 2, A&B&M SUR.
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	CANADIAN RIVER GAS CO.
COMPLETED	01/01/65	11/12/66	06/10/40
SAMPLED	09/11/70	09/11/70	03/11/40
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2540	2507	3750
WELLHEAD PRESSURE,PSIG	514	521	NOT GIVEN
OPEN FLOW, MCFD	7400	8300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.8	70.5	24.2
ETHANE	5.4	5.5	11.3
PROPANE	2.9	3.0	---
N-BUTANE	0.7	0.6	---
ISOBUTANE	0.3	0.4	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	18.8	18.8	52.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.0	9.8
HELIUM	0.65	0.64	2.24
HEATING VALUE*	937	938	448
SPECIFIC GRAVITY	0.706	0.707	0.915

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10417 SAMPLE 3606	INDEX 10418 SAMPLE 7150	INDEX 10419 SAMPLE 7560
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STANOLIND NO. 1 GRIFFIN	CAROLINE BUSH EMENY NO. 1	BIVINS NO. 1-207
LOCATION	SEC. 9, BLK. 2, AB&M SUR.	SEC. 9, BLK. M-19, G&M SUR.	SEC. 207, BLK. 2, AB&M SUR.
OWNER	STANOLIND OIL & GAS CO.	HUMBLE OIL & REFINING CO.	SHELL OIL CO.
COMPLETED	--/--/00	--/--/00	05/18/60
SAMPLED	09/28/42	07/24/59	05/18/60
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	4205	NOT GIVEN	3420
WELLHEAD PRESSURE,PSIG	125	NOT GIVEN	670
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	57
COMPONENT, MOLE PCT			
METHANE	1.2	1.0	63.7
ETHANE	0.0	0.1	3.6
PROPANE	---	0.2	2.6
N-BUTANE	---	0.0	0.5
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	98.2	98.2	22.7
OXYGEN	0.4	TRACE	TRACE
ARGON	---	0.1	0.1
HYDROGEN	---	0.3	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	0.0	5.1
HELIUM	0.24	0.20	1.42
HEATING VALUE*	12	18	807
SPECIFIC GRAVITY	0.961	0.961	0.750

	INDEX 10420 SAMPLE 7561	INDEX 10421 SAMPLE 7563	INDEX 10422 SAMPLE 7566
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BIVINS RANCH NO. 1-207	BIVINS RANCH NO. 1-207	BIVINS RANCH NO. 1-207
LOCATION	SEC. 207, BLK. 2, AB&M SUR.	SEC. 207, BLK. 2, AB&M SUR.	SEC. 207, BLK. 2, AB&M SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/24/60	05/27/60	05/31/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	3420	NOT GIVEN	3420
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	300	NOT GIVEN	200
COMPONENT, MOLE PCT			
METHANE	58.9	63.6	64.5
ETHANE	3.1	3.1	3.5
PROPANE	2.4	5.6	0.7
N-BUTANE	0.4	0.5	0.3
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	20.9	20.9	23.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	12.5	4.5	5.3
HELIUM	1.30	1.50	1.40
HEATING VALUE*	741	872	772
SPECIFIC GRAVITY	0.809	0.762	0.738

	INDEX 10423 SAMPLE 7926	INDEX 10424 SAMPLE 9874	INDEX 10425 SAMPLE 12001
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BIVINS RANCH NO. 1-207	FUQUA NO. D-1	MASTERSON A-33
LOCATION	SEC. 207, BLK. 2, AB&M SUR.	SEC. 13, BLK. 21W,EL&RR SUR.	SEC. 78, BLK. 47, H&TC SUR.
OWNER	SHELL OIL CO.	U.S. BUREAU OF MINES	COLORADO INTERSTATE GAS CO.
COMPLETED	03/27/61	02/01/65	--/--/00
SAMPLED	04/13/61	03/23/65	08/21/69
FORMATION	PERM-RED CAVE	PERM-RED CAVE	PENN-LIMESTONE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	2510	2630	6818
WELLHEAD PRESSURE,PSIG	520	NOT GIVEN	225
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	20
COMPONENT, MOLE PCT			
METHANE	74.1	0.1	54.9
ETHANE	4.9	0.0	10.3
PROPANE	2.1	0.0	17.1
N-BUTANE	0.5	0.0	4.1
ISOBUTANE	0.9	0.0	1.3
N-PENTANE	0.1	0.0	0.9
ISOPENTANE	0.1	0.0	0.7
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	16.6	95.7	10.6
OXYGEN	TRACE	3.0	0.1
ARGON	0.1	1.2	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.0
HELIUM	0.70	0.01	0.17
HEATING VALUE*	937	1	1419
SPECIFIC GRAVITY	0.689	0.976	0.925

	INDEX 10426 SAMPLE 15990	INDEN 10427 SAMPLE 16000	INDEX 10428 SAMPLE 16080
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	EMENY NO. 1	EMENY NO. 1	EMENY NO. 1
LOCATION	SEC. 29, BLK M-19, G&M SUR.	SEC. 29, BLK. M-19, G&M SUR.	SEC. 29, BLK. M-19, G&M SUR.
OWNER	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED	--/--/00	07/09/80	07/09/80
SAMPLED	06/28/80	07/17/80	09/24/80
FORMATION	PENN-GRANITE WASH	PENN-GRANITE WASH	PENN-GRANITE WASH
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	5700	5700	5700
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.9	43.6	37.3
ETHANE	2.9	3.6	2.7
PROPANE	4.4	4.4	3.1
N-BUTANE	5.0	2.6	2.4
ISOBUTANE	2.4	1.3	1.3
N-PENTANE	2.1	0.9	0.6
ISOPENTANE	2.6	1.0	0.8
CYCLOPENTANE	0.5	0.2	0.5
HEXANES PLUS	1.4	0.6	0.7
NITROGEN	40.7	40.1	49.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.3	0.4	0.4
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.0
HELIUM	0.65	0.61	0.58
HEATING VALUE*	1081	971	747
SPECIFIC GRAVITY	1.028	0.904	0.912

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10429 SAMPLE 10691		INDEX 10430 SAMPLE 12495		INDEX 10431 SAMPLE 34	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	RAINS		RAINS		RANDALL	
FIELD	DUNBAR		YANTIS W.		PALO DURO CREEK	
WELL NAME	EARL REYNOLDS GAS UNIT NO. 1		SENTRY G. U. NO. 1		PALO DURO OIL CO. NO. 1	
LOCATION	BONIFACIO DE OSINEA SUR.		O. P. SELLS SUR.		SEC. 125, BLK. 1E&N SUR.	
OWNER	TEXACO INC.		PAN AMERICAN PETROLEUM CORP.		PALO DURO OIL CO.	
COMPLETED	12/11/64		08/05/62		07/21/19	
SAMPLED	08/09/66		10/25/70		07/24/19	
FORMATION	JURA-SMACKOVER		JURA-SMACKOVER		PERM-	
GEOLOGIC PROVINCE CODE	260		260		435	
DEPTH, FEET	13075		12522		400	
WELLHEAD PRESSURE,PSIG	3510		3834		NOT GIVEN	
OPEN FLOW, MCFD	41000		24000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	46.6		59.4		0.9	
ETHANE	11.6		6.2		1.2	
PROPANE	5.6		4.0		---	
N-BUTANE	1.9		1.3		---	
ISOBUTANE	2.0		1.4		---	
N-PENTANE	0.4		0.4		---	
ISOPENTANE	0.8		0.3		---	
CYCLOPENTANE	0.1		TRACE		---	
HEXANES PLUS	0.3		0.3		---	
NITROGEN	22.2		14.4		97.3	
OXYGEN	0.0		0.0		0.3	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.1		---	
HYDROGEN SULFIDE**	3.1		4.7		---	
CARBON DIOXIDE	5.3		7.4		0.3	
HELIUM	0.10		0.05		0.09	
HEATING VALUE*	1047		983		31	
SPECIFIC GRAVITY	0.920		0.847		0.967	

	INDEX 10432 SAMPLE 16547		INDEX 10433 SAMPLE 1734		INDEX 10434 SAMPLE 2047	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REAGAN		REAGAN		REAGAN	
FIELD	BENEDUM NE		BIG LAKE		BIG LAKE	
WELL NAME	BRANCH NO. 1C		UNIV. NO. B-1		UNIV. NO. 12	
LOCATION	ME&NT SUR.		SEC. 36, BLK. 9		SEC. 36, BLK. 9, UNIV. LAND	
OWNER	SAXON OIL CO.		TEXON OIL & LAND CO.		W. E. BEYHAN	
COMPLETED	05/15/82		12/01/28		12/01/25	
SAMPLED	06/17/82		04/06/29		06/17/30	
FORMATION	PENN-BEND LIME		NOT GIVEN		NOT GIVEN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	10380		8523		2937	
WELLHEAD PRESSURE,PSIG	1433		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	10410		22000		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	82.3		42.7		34.4	
ETHANE	10.0		53.2		55.1	
PROPANE	3.5		---		---	
N-BUTANE	0.9		---		---	
ISOBUTANE	0.7		---		---	
N-PENTANE	0.4		---		---	
ISOPENTANE	0.1		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.3		---		---	
NITROGEN	0.8		3.8		6.2	
OXYGEN	0.0		0.2		0.2	
ARGON	0.0		---		---	
HYDROGEN	0.1		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.8		0.2		4.2	
HELIUM	0.03		0.06		0.09	
HEATING VALUE*	1198		1386		1336	
SPECIFIC GRAVITY	0.693		0.837		0.895	

	INDEX 10435 SAMPLE 2048		INDEX 10436 SAMPLE 12686		INDEX 10437 SAMPLE 5993	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REAGAN		REAGAN		REAGAN	
FIELD	BIG LAKE		BIG LAKE		CENTRALIA DRAW	
WELL NAME	UNIV. NO. 65		UNIV. 3955 NO. 1-2		W. H. DIXON NO. 1	
LOCATION	SEC. 36, BLK. 9, UNIV. LAND		SEC. 2, BLK. 2		SEC. 1, A. ROACH SUR. A-4875	
OWNER	W. E. BEYHAN		MARATHON OIL CO.		TEXAS CO.	
COMPLETED	01/01/27		01/28/55		05/17/55	
SAMPLED	06/19/30		02/16/71		12/29/55	
FORMATION	NOT GIVEN		PENN-STRAWN		PERM-DEAN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	2975		8350		7846	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		246		55	
OPEN FLOW, MCFD	NOT GIVEN		5606		30	
COMPONENT, MOLE PCT						
METHANE	33.1		65.7		67.8	
ETHANE	53.1		16.5		12.5	
PROPANE	---		9.2		11.6	
N-BUTANE	---		3.0		3.8	
ISOBUTANE	---		1.5		0.8	
N-PENTANE	---		0.9		0.7	
ISOPENTANE	---		0.4		0.8	
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---		0.4		0.3	
NITROGEN	3.2		2.1		1.3	
OXYGEN	0.3		0.0		0.0	
ARGON	---		0.0		0.0	
HYDROGEN	---		0.0		0.1	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	10.3		0.5		0.3	
HELIUM	0.06		0.04		0.03	
HEATING VALUE*	1287		1431		1451	
SPECIFIC GRAVITY	0.933		0.846		0.849	

	INDEX 10438 SAMPLE 2049		INDEX 10439 SAMPLE 16548		INDEX 10440 SAMPLE 9385	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	REAGAN		REAGAN		REAGAN	
FIELD	GRAYSON		REAGAN		TEXON	
WELL NAME	GRAYSON NO. 1		BRANCH NO. 1T		UNIV. AA NO. 1	
LOCATION	SEC. 33, BLK. 8, UNIV. LAND		ME&NT SUR.		SEC. 2,BLK.5,UNIV. LANDS SUR	
OWNER	SKELLY OIL CO.		SAXON OIL CO.		GREAT WESTERN DRILLING CO.	
COMPLETED	02/11/28		09/20/81		07/23/54	
SAMPLED	06/18/30		06/17/82		10/06/54	
FORMATION	PERM-SAN ANDRES		SILU-FUSSELMAN		SILU-FUSSELMAN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	3131		11494		9972	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		2831		2619	
OPEN FLOW, MCFD	NOT GIVEN		3021		8150	
COMPONENT, MOLE PCT						
METHANE	9.7		78.9		76.7	
ETHANE	67.2		11.2		12.3	
PROPANE	---		4.4		4.9	
N-BUTANE	---		1.3		1.6	
ISOBUTANE	---		0.7		0.7	
N-PENTANE	---		0.3		0.5	
ISOPENTANE	---		0.4		0.4	
CYCLOPENTANE	---		0.1		0.1	
HEXANES PLUS	---		0.4		0.4	
NITROGEN	9.4		0.7		1.9	
OXYGEN	0.4		0.0		0.0	
ARGON	---		0.0		TRACE	
HYDROGEN	---		0.0		0.0	
HYDROGEN SULFIDE**	---		0.0		0.0	
CARBON DIOXIDE	13.2		0.5		0.4	
HELIUM	0.14		0.09		0.06	
HEATING VALUE*	1302		1236		1265	
SPECIFIC GRAVITY	1.056		0.718		0.740	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10441 SAMPLE 7145	INDEX 10442 SAMPLE 15560	INDEX 10443 SAMPLE 10626
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REAGAN	REEVES	REEVES
FIELD	WILDCAT	ADAM	AMBLER
WELL NAME	L. PROCTER B NO. 6	ADAM ESTATE NO. 1	LANGFORD NO. 1
LOCATION	SEC. 23, I37, T&P RR SUR.	SEC. 11, BLK. 3, H&GN SUR.	SEC. 9, BLK. 4, H&GN SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	ATAPCO	MARLAN PRODUCTION CO.
COMPLETED	--/--/00	09/18/78	12/18/66
SAMPLED	07/--/59	01/29/79	06/23/66
FORMATION	NOT GIVEN	PENN-MORROW	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10600	17208	4335
WELLHEAD PRESSURE,PSIG	NOT GIVEN	10812	2225
OPEN FLOW, MCFD	NOT GIVEN	12100	3800
COMPONENT, MOLE PCT			
METHANE	85.1	92.2	96.9
ETHANE	4.9	0.4	1.6
PROPANE	0.8	TRACE	0.1
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.2	TRACE	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	7.8	4.1	0.9
OXYGEN	0.8	0.8	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.2	0.2
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	982	954	1021
SPECIFIC GRAVITY	0.630	0.605	0.572

	INDEX 10444 SAMPLE 13588	INDEX 10445 SAMPLE 15104	INDEX 10446 SAMPLE 15105
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	ATHEN	CASEY DRAW	CASEY DRAW
WELL NAME	SPENCER NO. 1	JOHNSON NO. 1	JOHNSON NO. 2
LOCATION	SEC. 33, BLK. 55, T&P SUR.	SEC. 22, BLK. C-11, PSL SUR.	SEC. 22, BLK. C-11, PSL SUR.
OWNER	COASTAL STATES GAS PROD. CO.	MONSANTO CO.	MONSANTO CO.
COMPLETED	12/06/72	03/09/76	08/25/76
SAMPLED	04/20/73	09/--/77	09/--/77
FORMATION	NOT GIVEN	PERM-DELAWARE	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12911	3836	3886
WELLHEAD PRESSURE,PSIG	4600	1550	1515
OPEN FLOW, MCFD	22000	2400	2200
COMPONENT, MOLE PCT			
METHANE	98.7	95.9	96.9
ETHANE	0.3	0.7	0.7
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	1.0	2.2	2.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	9.9	0.9	1.0
HELIUM	0.02	0.03	0.03
HEATING VALUE*	906	995	995
SPECIFIC GRAVITY	0.657	0.581	0.580

	INDEX 10447 SAMPLE 14687	INDEX 10448 SAMPLE 14688	INDEX 10449 SAMPLE 12375
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	CHAPMAN	CHAPMAN	GREASEWOOD
WELL NAME	A. T. RANDOLPH G.U. NO. 1	A. T. RANDOLPH G.U. NO. 1	CORNELL KNIGHT NO. 1
LOCATION	SEC. 34, BLK. 57, T-2 T&P SR	SEC. 34, BLK. 57, T-2 T&P SR	SEC. 9, BLK. C-19, PSL SUR.
OWNER	GULF ENERGY & MINERALS CO.	GULF ENERGY & MINERALS CO.	TEXACO INC.
COMPLETED	09/22/74	09/17/74	09/22/68
SAMPLED	06/04/76	06/04/76	08/19/70
FORMATION	SILU-FUSSELMAN	PENN-ATOKA	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15499	12884	16293
WELLHEAD PRESSURE,PSIG	5353	6664	5800
OPEN FLOW, MCFD	19600	25025	37000
COMPONENT, MOLE PCT			
METHANE	96.6	98.0	93.3
ETHANE	0.3	0.6	0.4
PROPANE	TRACE	0.1	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.9	0.3	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	2.0	1.0	5.6
HELIUM	0.03	0.01	0.02
HEATING VALUE*	985	1006	952
SPECIFIC GRAVITY	0.579	0.569	0.613

	INDEX 10450 SAMPLE 12422	INDEX 10451 SAMPLE 12551	INDEX 10452 SAMPLE 10612
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	GREASEWOOD	GREASEWOOD	MAMON
WELL NAME	CORNELL KNIGHT NO. 1	CORNELL KNIGHT NO. 1	WAPLES PLATTER
LOCATION	SEC. 9, BLK. C19, PSL SUR.	SEC. 9, BLK. C19, PSL SUR.	SEC. 22, BLK. 50, T1S
OWNER	TEXACO INC.	TEXACO INC.	JAKE L. HAMON
COMPLETED	09/22/68	09/22/68	--/--/65
SAMPLED	09/23/70	11/19/70	06/14/66
FORMATION	DEVO-	SILU-DEVO	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16293	16293	20450
WELLHEAD PRESSURE,PSIG	5777	5777	6700
OPEN FLOW, MCFD	37000	37000	50000
COMPONENT, MOLE PCT			
METHANE	93.6	93.4	90.0
ETHANE	0.4	0.4	0.3
PROPANE	TRACE	TRACE	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.9	0.6	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	5.0	5.5	9.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	956	954	917
SPECIFIC GRAVITY	0.608	0.612	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10453 SAMPLE 14473	INDEX 10454 SAMPLE 15719	INDEX 10455 SAMPLE 15336
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	L.N.D.	LOCKRIDGE S	MARSH S
WELL NAME	PECOS UNIT NO. 1	SAM J. DWYER NO. 1	REEVES STATE NO. 1-22
LOCATION	SEC. 29, BLK. 4, H&GNRR SUR.	BLK. 51, HERNANDEZ SUR.	SEC. 22, BLK. 45, PSL SUR.
OWNER	TEXAS WEST OIL & GAS CORP.	GETTY OIL CO.	CHEVRON U.S.A., INC.
COMPLETED	04/21/75	08/06/79	08/27/77
SAMPLED	10/03/75	08/06/79	07/31/78
FORMATION	PENN-ATOKA	DEVO-	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15218	16760	2688
WELLHEAD PRESSURE,PSIG	8950	6800	1149
OPEN FLOW, MCFD	44000	6000	2900
COMPONENT, MOLE PCT			
METHANE	95.2	93.9	98.6
ETHANE	0.4	2.8	0.1
PROPANE	0.1	0.7	TRACE
N-BUTANE	TRACE	0.2	TRACE
ISOBUTANE	TRACE	0.1	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.4	0.6	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.9	1.3	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1039	1039	1006
SPECIFIC GRAVITY	0.597	0.598	0.564

	INDEX 10456 SAMPLE 13391	INDEX 10457 SAMPLE 13392	INDEX 10458 SAMPLE 15353
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	MI VIDA	MI VIDA	NOT GIVEN
WELL NAME	CAMP UNIT NO. 1	CAMP UNIT NO. 1	J. B. YOUNG NO. 1
LOCATION	SEC. 3, BLK. 4, H&GN SUR.	SEC. 3, BLK. 4, H&GN SUR.	SEC. 2, BLK. 50, T-7, P&PRR SUR.
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	W. W. BUCHANAN
COMPLETED	10/24/71	10/24/71	10/16/77
SAMPLED	09/22/72	09/22/72	08/28/78
FORMATION	ORDO-ELLENBURGER	SILU-FUSSELMAN	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	18444	16332	5103
WELLHEAD PRESSURE,PSIG	2990	6515	2206
OPEN FLOW, MCFD	4565	512305	3240
COMPONENT, MOLE PCT			
METHANE	47.0	92.5	90.4
ETHANE	0.1	0.4	4.0
PROPANE	TRACE	TRACE	0.5
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	0.4	4.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.5	0.3	0.0
CARBON DIOXIDE	52.0	6.4	0.1
HELIUM	0.03	0.01	0.06
HEATING VALUE*	481	946	1035
SPECIFIC GRAVITY	1.067	0.622	0.612

	INDEX 10459 SAMPLE 14897	INDEX 10460 SAMPLE 11886	INDEX 10461 SAMPLE 12811
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	RIPPLINGER	ROJO CABALLOS W	ROJO CABALLOS W
WELL NAME	WORSHAM UNIT NO. 1	MILLWEE-STATE NO. 1	TXL REEVES STATE UNIT
LOCATION	SEC. 4, BLK. C-7, PSL SUR.	SEC. 18, BLK. 49, T&P SUR.	SEC. 20, BLK. 49, T&PRR SUR.
OWNER	UNION OIL CO. OF CALIF.	FOREST OIL CORP.	TEXACO INC.
COMPLETED	08/09/75	09/30/68	06/19/66
SAMPLED	02/17/77	05/15/69	--/--/00
FORMATION	DEVO-	PERM-WOLFCAMP	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	18147	15257	20520
WELLHEAD PRESSURE,PSIG	6340	6595	6877
OPEN FLOW, MCFD	2565	2900	375000
COMPONENT, MOLE PCT			
METHANE	96.4	94.4	94.9
ETHANE	0.9	3.0	0.3
PROPANE	0.1	0.6	0.1
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.5	0.7	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.6	0.0
CARBON DIOXIDE	2.1	0.01	4.0
HELIUM	0.01	1055	0.02
HEATING VALUE*	995	0.598	969
SPECIFIC GRAVITY	0.582		0.599

	INDEX 10462 SAMPLE 15538	INDEX 10463 SAMPLE 13073	INDEX 10464 SAMPLE 10813
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	SAN MARTINE	SAND LAKE	TORO
WELL NAME	CALDWELL STATE NO. 1	T. A. KIRK G.U. NO. 1	REEVES TXL FEE UNIT NO. 1
LOCATION	SEC. 9, BLK. 71, PSL SUR.	SEC. 25, BLK. C-18, PSL SUR.	SEC. 46, B50, T7, T&P SUR.
OWNER	DYCO PETROLEUM CORP.	GULF OIL CO.- U.S.	TEXACO INC.
COMPLETED	08/15/77	02/01/71	07/26/66
SAMPLED	12/13/78	10/07/71	12/13/66
FORMATION	DEVO-	PENN-ATOKA	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10680	14590	19895
WELLHEAD PRESSURE,PSIG	3600	8553	6661
OPEN FLOW, MCFD	2900	19400	170000
COMPONENT, MOLE PCT			
METHANE	90.5	97.6	96.6
ETHANE	3.2	0.5	0.2
PROPANE	0.6	0.1	0.1
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.8	0.3	0.8
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.4	1.5	2.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1006	1000	985
SPECIFIC GRAVITY	0.629	0.574	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10465 SAMPLE 5809	INDEX 10466 SAMPLE 12720	INDEX 10467 SAMPLE 12721
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	TOYAH	TOYAH	TOYAH
WELL NAME	TOYAH UNIT NO. 1	TOYAH NO. 3	TOYAH NO. 2
LOCATION	SEC. 20, BLK. C-17, PSL SUR.	SEC. 24, BLK. C17	SEC. 23, BLK. C-17
OWNER	GULF OIL CORP.&PHILLIPS PET.	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	09/--/58	--/--/00	--/--/00
SAMPLED	04/22/58	03/19/71	03/19/71
FORMATION	SILU-	PENN-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12570	11354	12460
WELLHEAD PRESSURE,PSIG	4600	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	56000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.5	97.2	91.2
ETHANE	0.4	1.0	0.4
PROPANE	0.0	0.2	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	0.5	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.4	1.1	7.6
HELIUM	0.02	0.01	0.01
HEATING VALUE*	934	1008	931
SPECIFIC GRAVITY	0.631	0.574	0.632

	INDEX 10468 SAMPLE 10629	INDEX 10469 SAMPLE 11072	INDEX 10470 SAMPLE 11073
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	WAHA W	WAHA W	WAHA W
WELL NAME	RAPE NO. 2	W. T. BARBER NO. 9-U	W. T. BARBER NO. 9
LOCATION	SEC. 2, BLK.C-4, P.S.L. SUR.	SEC. 21, BLK7, H&GN RRCO.SUR	SEC. 21, BLK7, H&GN RRCO.SUR
OWNER	SHELL OIL CO.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	02/11/65	01/11/67	01/17/67
SAMPLED	06/23/66	08/17/67	08/17/67
FORMATION	ORDO-ELLENBURGER	PERM-DELAWARE	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16071	5826	6213
WELLHEAD PRESSURE,PSIG	5735	2310	2520
OPEN FLOW, MCFD	38000	183	16500
COMPONENT, MOLE PCT			
METHANE	94.5	88.5	89.3
ETHANE	1.3	5.3	5.0
PROPANE	0.8	2.2	1.8
N-BUTANE	0.2	0.6	0.6
ISOBUTANE	TRACE	0.4	0.4
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.2	2.3	1.7
OXYGEN	0.1	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.8	TRACE	0.1
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1013	1104	1119
SPECIFIC GRAVITY	0.602	0.637	0.640

	INDEX 10471 SAMPLE 12748	INDEX 10472 SAMPLE 14040	INDEX 10473 SAMPLE 14041
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	WAHA W	WORSHAM	WORSHAM
WELL NAME	WAYNE MOORE NO. 12	WORSHAM "19" NO. 1	WORSHAM "19" NO. 1
LOCATION	SEC. 3, BLK. C-3, PSL SUR.	SEC. 19, BLK.6, H&GN SUR.	SEC. 19, BLK. 6, H&GN SUR
OWNER	MOBIL OIL CORP.	AMERICAN QUASAR PET. CO.	AMERICAN QUASAR PET. CO.
COMPLETED	12/09/66	11/30/73	11/30/73
SAMPLED	04/02/71	07/08/74	07/08/74
FORMATION	ORDO-ELLENBURGER	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16499	17110	16611
WELLHEAD PRESSURE,PSIG	2642	5126	5740
OPEN FLOW, MCFD	4126	9600	12800
COMPONENT, MOLE PCT			
METHANE	93.5	96.3	95.6
ETHANE	1.6	0.6	0.7
PROPANE	0.4	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.6	0.6	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	2.4	3.0
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1002	989	984
SPECIFIC GRAVITY	0.610	0.584	0.591

	INDEX 10474 SAMPLE 15835	INDEX 10475 SAMPLE 10949	INDEX 10476 SAMPLE 12268
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REEVES	REEVES	REEVES
FIELD	WORSHAM E	WORSHAM-BAYER	WORSHAM-BAYER
WELL NAME	S. E. LIGON-STATE NO. 6	STATE SCHOOL BOARD ZZ NO. 4	WRAY NO. 1
LOCATION	SEC. 16, BLK. 7, H&GN RR SUR	SEC. 15, BLK. C-4, PSL SUR.	SEC. 4 BLK. 7, H&GN SUR.
OWNER	GULF OIL CORP.	GULF OIL CORP.	IMPERIAL-AMERICAN MANAGEMENT
COMPLETED	07/25/79	06/01/66	04/21/69
SAMPLED	11/19/79	05/02/67	05/22/70
FORMATION	PERM-CHERRY CANYON	ORDO-ELLENBURGER	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6154	16798	14456
WELLHEAD PRESSURE,PSIG	2405	5696	3013
OPEN FLOW, MCFD	15000	330000	2115
COMPONENT, MOLE PCT			
METHANE	91.9	92.4	89.9
ETHANE	4.4	1.0	5.6
PROPANE	1.2	0.2	1.6
N-BUTANE	0.4	0.0	0.4
ISOBUTANE	0.3	0.0	0.3
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.3
NITROGEN	1.2	0.6	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	5.8	0.5
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1086	959	1096
SPECIFIC GRAVITY	0.613	0.620	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10477 SAMPLE 10182	INDEX 10478 SAMPLE 4683	INDEX 10479 SAMPLE 4684
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	BAYSIDE	BLANCO CREEK	BLANCO CREEK
WELL NAME	A. L. COLE NO. 1	W. S. PERRYMAN NO. 1-T	W. S. PERRYMAN NO. 1C
LOCATION	JUAN POBEDANO GRANT A-49	NOT GIVEN	NOT GIVEN
OWNER	SUN OIL CO.	SOUTHERN MINERALS CORP.	SOUTHERN MINERALS CORP.
COMPLETED	--/--/00	09/17/48	09/17/48
SAMPLED	09/30/65	02/14/49	02/14/49
FORMATION	OLIG-FRIO 8000	OLIG-FRIO & VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8005	7114	6630
WELLHEAD PRESSURE,PSIG	750	3023	2393
OPEN FLOW, MCFD	10600	9250	27000
COMPONENT, MOLE PCT			
METHANE	96.5	91.3	71.2
ETHANE	2.6	4.1	9.2
PROPANE	0.9	1.8	11.7
N-BUTANE	0.3	0.5	1.1
ISOBUTANE	0.3	0.5	3.8
N-PENTANE	0.1	0.3	0.9
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.3	0.6	1.4
NITROGEN	0.6	0.3	0.1
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1079	1124	1467
SPECIFIC GRAVITY	0.604	0.636	0.854

	INDEX 10480 SAMPLE 13545	INDEX 10481 SAMPLE 14319	INDEX 10482 SAMPLE 2566
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	FAGAN	FAGAN	GOLIAD
WELL NAME	FAGAN "L" NO. 2	FAGAN ESTATE M NO. 4	J. O'CONNER NO. 2
LOCATION	MICHAUL RILEY SUR. A-57	MARY BRYNE SUR. A-8	NO. 40, C.E.&P.T.&R.SUR.
OWNER	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.	GULF PRODUCTION CO.
COMPLETED	03/29/72	08/30/73	09/18/32
SAMPLED	02/20/73	03/25/75	10/14/32
FORMATION	OLIG-FRIO	NOT GIVEN	OLIG-FRIO L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2072	8030	5704
WELLHEAD PRESSURE,PSIG	225	2230	2240
OPEN FLOW, MCFD	8300	18000	20000
COMPONENT, MOLE PCT			
METHANE	98.7	88.7	83.4
ETHANE	0.1	4.8	15.6
PROPANE	TRACE	3.0	---
N-BUTANE	0.0	1.0	---
ISOBUTANE	0.0	0.6	---
N-PENTANE	0.0	0.3	---
ISOPENTANE	0.0	0.5	---
CYCLOPENTANE	0.0	0.1	---
HEXANES PLUS	0.0	0.2	---
NITROGEN	1.1	0.5	0.5
OXYGEN	0.1	0.0	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1002	1164	1124
SPECIFIC GRAVITY	0.562	0.660	0.657

	INDEX 10483 SAMPLE 4042	INDEX 10484 SAMPLE 4043	INDEX 10485 SAMPLE 12466
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	GRETA	GRETA	GRETA W
WELL NAME	J. M. OBRIEN & NO. 1	O'CONNER NO. 5	W. J. FOX NO. 1
LOCATION	WINFIELD SUR.	N. S. CRUNK SUR.	WILLIAM MEWS SUR. A-33
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	DUER WAGNER & CO.
COMPLETED	11/5/41	10/06/43	07/27/67
SAMPLED	05/30/45	--/--/00	10/21/70
FORMATION	MIOC-	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3432	5050	5701
WELLHEAD PRESSURE,PSIG	1300	2650	1610
OPEN FLOW, MCFD	200	180000	8500
COMPONENT, MOLE PCT			
METHANE	95.2	93.0	90.9
ETHANE	4.6	6.7	4.4
PROPANE	---	---	2.5
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.7
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.0	0.0	0.4
OXYGEN	0.0	0.1	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1047	1062	1127
SPECIFIC GRAVITY	0.579	0.590	0.632

	INDEX 10486 SAMPLE 11589	INDEX 10487 SAMPLE 10648	INDEX 10488 SAMPLE 13535
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	HUFF	LAKE PASTURE	MARY ELLEN O'CONNER
WELL NAME	O'CONNER NO. 44L	MAUDE WILLIAMS A NO. D-SC	R. E. O'CONNER NO.4
LOCATION	FLORENTINE RIOS SUR. A-59	H. C. SWEET A-393	68&C RR CO. SUR. A-382
OWNER	T-C OIL CO.	QUINTANA PETROLEUM CORP.	AMOCO PRODUCTION CO.
COMPLETED	06/09/67	08/29/65	04/10/71
SAMPLED	07/26/68	07/7/66	02/15/73
FORMATION	MIOC-HUFF	OLIG-FS-509	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2619	5117	3138
WELLHEAD PRESSURE,PSIG	910	1700	635
OPEN FLOW, MCFD	30200	100000	3011
COMPONENT, MOLE PCT			
METHANE	97.8	93.3	99.1
ETHANE	0.2	3.6	0.1
PROPANE	TRACE	0.3	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.4	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.5	0.0
CYCLOPENTANE	0.0	0.3	0.0
HEXANES PLUS	0.0	0.4	0.0
NITROGEN	1.7	0.8	0.7
OXYGEN	0.3	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	999	1084	1006
SPECIFIC GRAVITY	0.566	0.610	0.557

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10489 SAMPLE 4466	INDEX 10490 SAMPLE 4587	INDEX 10491 SAMPLE 4839
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	NOT GIVEN	REFUGIO	REFUGIO E
WELL NAME	C. T. MOLEMAN B-1	JAMIE HYNES NO. 4-A	J. J. O'BRIEN NO. A-1
LOCATION	NOT GIVEN	O'BRIEN SUR.	REFUGIO TOWN TR. SUR. ABS.56
OWNER	SOUTHERN MINERALS CORP.	LA GLORIA CORP. & SKELLY OIL	UNION PRODUCING CO.
COMPLETED	12/14/47	03/20/48	09/10/49
SAMPLED	04/29/48	10/08/48	12/28/49
FORMATION	MIOC-OAKVILLE	OLIG-SINTON	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2354	5295	5826
WELLHEAD PRESSURE,PSIG	1000	2400	1058
OPEN FLOW, MCFD	14500	15000	13000
COMPONENT, MOLE PCT			
METHANE	99.3	90.4	90.8
ETHANE	0.3	9.0	4.7
PROPANE	---	---	1.9
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.0	0.0	0.6
OXYGEN	0.2	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1011	1077	1118
SPECIFIC GRAVITY	0.559	0.604	0.630

	INDEX 10492 SAMPLE 15410	INDEX 10493 SAMPLE 12043	INDEX 10494 SAMPLE 4648
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	REFUGIO	REFUGIO
FIELD	TOM O'CONNER	VIDAURI	VIDAURI W
WELL NAME	FANNIE V. W. MEARD NO. 70	JAMES F. WELDER NO. 1	J. F. WELDER HEIRS NO. 6
LOCATION	THOMAS M. WEBB SUR. A-298	NOT GIVEN	JOSEPH FARLEY SUR.
OWNER	QUINTANA PETROLEUM CORP.	MERIDIAN EXPLORATION CO.	P. R. RUTHERFORD, ET AL.
COMPLETED	01/18/77	11/16/47	09/06/48
SAMPLED	10/09/78	09/16/69	01/10/49
FORMATION	MIOC-CATAHOULA	OLIG-FRIO	OLIG-FRIO U
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4044	4760	4530
WELLHEAD PRESSURE,PSIG	1505	1932	2060
OPEN FLOW, MCFD	27800	15000	37500
COMPONENT, MOLE PCT			
METHANE	98.3	95.9	92.6
ETHANE	0.6	2.3	6.9
PROPANE	0.1	0.5	---
N-BUTANE	TRACE	0.1	---
ISOBUTANE	TRACE	TRACE	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	TRACE	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.5	0.5	0.1
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1018	1047	1062
SPECIFIC GRAVITY	0.566	0.584	0.592

	INDEX 10495 SAMPLE 4444	INDEX 10496 SAMPLE 14402	INDEX 10497 SAMPLE 15373
STATE	TEXAS	TEXAS	TEXAS
COUNTY	REFUGIO	ROBERTS	ROBERTS
FIELD	WILDCAT	CARRIE KILLEBREW	CARRIE KILLEBREW
WELL NAME	J. F. WELDER HEIRS NO. 1	KILLEBREW A NO. 1	MORRISON NO. 1
LOCATION	NOT GIVEN	SEC. 220, BLK. 42, H&TC SUR.	SEC. 212, BLK. 42, H&TC SUR.
OWNER	P. R. RUTHERFORD, ET AL.	EASON OIL CO.	PIONEER PRODUCTION CORP.
COMPLETED	11/16/47	08/09/74	04/--/78
SAMPLED	01/16/48	06/19/75	09/12/78
FORMATION	OLIG-FRIO	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	220	360	360
DEPTH, FEET	4869	8536	8618
WELLHEAD PRESSURE,PSIG	2010	2550	1480
OPEN FLOW, MCFD	5875	58500	59000
COMPONENT, MOLE PCT			
METHANE	91.3	80.3	81.5
ETHANE	6.8	10.4	10.7
PROPANE	---	3.9	4.3
N-BUTANE	---	0.7	0.9
ISOBUTANE	---	0.5	0.3
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.0	0.3
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	1.3	2.2	0.7
OXYGEN	0.3	0.2	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	1.4	0.8
HELIUM	0.01	0.05	0.05
HEATING VALUE*	1047	1155	1205
SPECIFIC GRAVITY	0.598	0.693	0.696

	INDEX 10498 SAMPLE 15395	INDEX 10499 SAMPLE 16923	INDEX 10500 SAMPLE 7334
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	CARRIE KILLEBREW	CAT CREEK	CREE-FLOWERS
WELL NAME	MORRISON NO. 2	MORRISON NO. 3-8	FLOWERS BROS. 3
LOCATION	SEC. 213, BLK. 42, H&TC SUR.	SEC. 8, BLK.44-W.J.SIMS SUR.	SEC. 70, BLK. C, G&M SUR.
OWNER	EASON OIL CO.	TENNECO OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/00	06/--/81	10/20/59
SAMPLED	09/--/78	05/03/83	01/11/60
FORMATION	NOT GIVEN	PENN-GRANITE WASH	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	181	3869
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2100	896
OPEN FLOW, MCFD	NOT GIVEN	2900	6800
COMPONENT, MOLE PCT			
METHANE	74.2	75.5	80.2
ETHANE	9.8	11.8	7.8
PROPANE	5.8	6.5	4.3
N-BUTANE	0.8	1.9	1.2
ISOBUTANE	0.2	0.5	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.7	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	5.5	1.7	5.0
OXYGEN	0.5	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.1	0.4	0.1
HELIUM	0.03	0.09	0.10
HEATING VALUE*	1096	1285	1148
SPECIFIC GRAVITY	0.737	0.749	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10501 SAMPLE 7739	INDEX 10502 SAMPLE 7740	INDEX 10503 SAMPLE 12347
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	CREE-FLOWERS	CREE-FLOWERS	CREE-FLOWERS
WELL NAME	MILLS NO. A-1	MILLS NO. 1	FLOWERS BROS. NO. 4
LOCATION	CLAY CO. SCHOOL LAND	CLAY CO. SCHOOL LAND	SEC. 74, BLK. C, G&M SUR.
OWNER	JAMES F. SMITH, ET AL.	JAMES F. SMITH, ET AL.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/00	--/--/00	05/31/70
SAMPLED	10/25/60	10/25/60	08/10/70
FORMATION	PERM-WOLFCAMP	PERM-WOLFCAMP	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3628	3608	8611
WELLHEAD PRESSURE,PSIG	888	879	1947
OPEN FLOW, MCFD	4000	6400	2600
COMPONENT, MOLE PCT			
METHANE	86.5	86.8	78.7
ETHANE	6.6	6.9	11.6
PROPANE	2.5	2.6	5.5
N-BUTANE	0.7	0.8	1.2
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.2	2.4	1.3
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.4
HELIUM	0.10	0.10	0.05
HEATING VALUE*	1124	1133	1232
SPECIFIC GRAVITY	0.656	0.657	0.715

	INDEX 10504 SAMPLE 13185	INDEX 10505 SAMPLE 13542	INDEX 10506 SAMPLE 8347
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	CREE-FLOWERS	CREE-FLOWERS	CREE-FLOWERS W
WELL NAME	D. D. PAYNE A NO. 1	FLOWERS "A" NO. 1	R. A. FLOWERS NO. 1
LOCATION	BLK. A-50, CLAY CO. SCH. LD.	SEC. 79, BLK. C, G&M SUR.	SEC. 5, BS&F SUR.
OWNER	HELMERICH & PAYNE, INC.	HELMERICH & PAYNE, INC.	TEXACO INC.
COMPLETED	12/21/71	07/05/72	06/13/61
SAMPLED	04/04/72	02/19/73	12/22/61
FORMATION	PENN-DOUGLAS	PENN-DOUGLAS	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5868	6287	4168
WELLHEAD PRESSURE,PSIG	1622	1645	1050
OPEN FLOW, MCFD	2500	5200	1200
COMPONENT, MOLE PCT			
METHANE	82.1	79.9	83.7
ETHANE	8.9	8.7	6.8
PROPANE	4.9	5.1	3.5
N-BUTANE	1.3	1.3	1.0
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.1	TRACE
NITROGEN	1.1	3.6	3.2
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.4
HELIUM	0.10	0.16	0.14
HEATING VALUE*	1224	1189	1136
SPECIFIC GRAVITY	0.699	0.705	0.674

	INDEX 10507 SAMPLE 17200	INDEX 10508 SAMPLE 16068	INDEX 10509 SAMPLE 5515
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	HALE RANCH	LEDRICK RANCH	LIPS
WELL NAME	R. D. MILLS NO. 1	LEDRICK NO. 2-55	CHAS. LIPS NO. 11
LOCATION	TRACT 1-B,CLAY CO.SCH.LD SUR	SEC. 55, BLK. C, G&M SUR.	SEC. 4, BLK.44, TE WHITE SUR
OWNER	AMAX PETROLEUM CORP.	TENNECO OIL CO.	SINCLAIR OIL & GAS CO.
COMPLETED	05/15/83	06/24/80	05/26/53
SAMPLED	02/20/84	09/18/80	07/09/53
FORMATION	MISS-KINDERHOOK L	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12478	9285	8510
WELLHEAD PRESSURE,PSIG	2900	1200	2032
OPEN FLOW, MCFD	1900	2500	2500
COMPONENT, MOLE PCT			
METHANE	88.4	76.9	89.7
ETHANE	6.6	13.6	6.6
PROPANE	2.2	5.4	2.1
N-BUTANE	0.6	1.3	0.5
ISOBUTANE	0.4	0.5	0.1
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.4	1.4	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.0
HELIUM	0.05	0.02	0.06
HEATING VALUE*	1122	1259	1125
SPECIFIC GRAVITY	0.638	0.720	0.630

	INDEX 10510 SAMPLE 6113	INDEX 10511 SAMPLE 13172	INDEX 10512 SAMPLE 17601
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	LIPS	LOCKE	MEMORDIE RANCH
WELL NAME	LIPS B	TEPE NO. 1	MEMORDIE NO.127-C-2
LOCATION	SEC. 31, BLK. A, H&GN SUR.	SEC. 17, BLK.44 KIVLEHEN SUR	SEC. 127, C&M SUR.
OWNER	STANOLIND OIL & GAS CO.	J. M. HUBER CORP.	PLAINS RESOURCES, INC.
COMPLETED	05/16/56	01/08/72	08/05/83
SAMPLED	07/26/56	05/24/72	--/--/00
FORMATION	PENN-MORROW	PERM-WICHITA-ALBANY	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8494	4586	7475
WELLHEAD PRESSURE,PSIG	2000	1120	NOT GIVEN
OPEN FLOW, MCFD	15000	3650	1832
COMPONENT, MOLE PCT			
METHANE	89.4	87.5	77.2
ETHANE	4.2	6.6	12.9
PROPANE	2.1	2.8	5.7
N-BUTANE	0.8	0.7	1.0
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.5	0.2	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	0.7	0.3	0.1
NITROGEN	0.8	1.0	1.2
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.8
HELIUM	0.14	0.04	0.05
HEATING VALUE*	1156	1154	1230
SPECIFIC GRAVITY	0.659	0.655	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10513 SAMPLE 10538	INDEX 10514 SAMPLE 14634	INDEX 10515 SAMPLE 16140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	MENDOTA	MENDOTA NW	MENDOTA NW
WELL NAME	FLOWERS LISTON NO. 1	R. A. FLOWERS NO. 3	FLOWERS TRUST "B" NO. 3
LOCATION	SEC. 62, BLK. B-1, H&GN SUR.	SEC. 4, BS&F SUR.	SEC. C, BS&F SUR.
OWNER	HUMBLE OIL & REFINING CO.	AMARILLO OIL CO.	EXXON CO., U.S.A.
COMPLETED	11/15/65	03/01/76	--/--/00
SAMPLED	04/19/66	04/13/76	12/08/80
FORMATION	PENN-MORROW	PERM-GRANITE WASH	PERM-GRANITE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11308	9596	10102
WELLHEAD PRESSURE, PSIG	4252	2397	1835
OPEN FLOW, MCFD	23600	30000	21500
COMPONENT, MOLE PCT			
METHANE	89.0	83.0	77.5
ETHANE	7.2	9.6	8.3
PROPANE	1.6	3.9	7.4
N-BUTANE	0.2	0.9	1.9
ISOBUTANE	0.1	0.6	0.7
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	1.1	3.5
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.5	0.1
HELIUM	0.04	0.04	0.12
HEATING VALUE*	1100	1183	1231
SPECIFIC GRAVITY	0.631	0.682	0.732

	INDEX 10516 SAMPLE 11969	INDEX 10517 SAMPLE 14401	INDEX 10518 SAMPLE 7505
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	MORRISON RANCH	MORRISON RANCH	NOT GIVEN
WELL NAME	MARY T. MORRISON D NO. 1	CONRAD NO. 1	MARION OSBORNE NO. 2
LOCATION	SEC. 180, BLK. 42, H&TC SUR.	SEC. 192, BLK. 42, H&TC SUR.	SEC. 26, BLK. 8-1, H&GN SUR.
OWNER	UNION OIL CO. OF CALIF.	DYCO PETROLEUM CORP.	GULF OIL CORP.
COMPLETED	09/23/68	--/--/00	--/--/00
SAMPLED	07/17/69	06/19/75	04/20/60
FORMATION	PENN-MORROW U	NOT GIVEN	PENN-G PAY U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10594	NOT GIVEN	9570
WELLHEAD PRESSURE, PSIG	2913	NOT GIVEN	3157
OPEN FLOW, MCFD	2800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	74.1	86.6
ETHANE	5.9	5.1	6.8
PROPANE	4.9	2.0	3.3
N-BUTANE	0.8	0.4	0.8
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	2.5	12.9	0.0
OXYGEN	0.4	1.8	0.0
ARGON	0.1	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	2.1	1.3
HELIUM	0.05	0.03	0.03
HEATING VALUE*	1112	954	1161
SPECIFIC GRAVITY	0.698	0.710	0.669

	INDEX 10519 SAMPLE 4834	INDEX 10520 SAMPLE 7475	INDEX 10521 SAMPLE 7650
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	PANHANDLE W	PARSELL	PARSELL
WELL NAME	LIPPS NO. 2	NO. 1-147	NO. 1-153
LOCATION	SEC. 157, BLK. 13, T&NO RR SUR	SEC. 147, BLK. 42, H&TC SUR.	SEC. 153, BLK. 42, H&TC SUR.
OWNER	SINCLAIR OIL & GAS CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	04/20/49	04/07/58	10/24/59
SAMPLED	01/27/50	03/27/60	08/21/60
FORMATION	-QUARTZ WASH	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8098	9996	9853
WELLHEAD PRESSURE, PSIG	2041	3864	1777
OPEN FLOW, MCFD	41000	1200	2060
COMPONENT, MOLE PCT			
METHANE	93.7	87.0	85.4
ETHANE	2.6	8.0	8.8
PROPANE	0.9	2.5	3.4
N-BUTANE	0.3	0.4	0.7
ISOBUTANE	0.1	0.4	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.0	0.5	0.0
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	0.7	1.1
HELIUM	0.07	0.05	0.04
HEATING VALUE*	1047	1135	1157
SPECIFIC GRAVITY	0.602	0.648	0.664

	INDEX 10522 SAMPLE 11579	INDEX 10523 SAMPLE 14176	INDEX 10524 SAMPLE 7152
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	PARSELL	PARSELL S	PRITCHETT
WELL NAME	W. PARSELL NO. E-2	J. BRUSCE WATERFIELD NO. D-1	W. M. MARTIN NO. 1
LOCATION	SEC. 157, BLK. 42, H&TC SUR.	SEC. 112, BLK. C, GEM SUR.	SEC. 83, BLK. C, GEM SUR.
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	BAKER & TAYLOR DRILLING CO.
COMPLETED	06/05/68	05/20/74	07/22/59
SAMPLED	07/25/68	10/09/74	07/29/59
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10935	11773	9250
WELLHEAD PRESSURE, PSIG	4383	4342	1980
OPEN FLOW, MCFD	60500	16000	6000
COMPONENT, MOLE PCT			
METHANE	96.9	96.3	78.0
ETHANE	0.5	0.5	11.7
PROPANE	0.1	0.1	3.9
N-BUTANE	0.0	0.0	1.2
ISOBUTANE	0.0	0.0	0.9
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	1.1
CYCLOPENTANE	0.0	0.0	0.2
HEXANES PLUS	0.0	0.0	0.4
NITROGEN	0.4	0.4	2.5
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	2.5	1.0
HELIUM	0.03	0.03	0.05
HEATING VALUE*	993	987	1223
SPECIFIC GRAVITY	0.580	0.583	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10525 SAMPLE 5341	INDEX 10526 SAMPLE 5638	INDEX 10527 SAMPLE 5639
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	QUINDUNO	QUINDUNO	QUINDUNO
WELL NAME	J. HAGGARD NO. 5	AGATHA NO. 1	GAY NO. 1
LOCATION	SEC. 61, BLK. 2, I&GN SUR.	SEC. 8, BLK. 2, I&GN SUR.	SEC. 201, BLK. M-2, BS&F SUR
OWNER	GULF OIL CORP.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	12/04/52	02/01/54	02/11/54
SAMPLED	12/04/52	06/15/54	06/15/54
FORMATION	PERM-WICHITA-ALBANY	PERM-	PENN-ATOKA BYNUM
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4101	4004	3890
WELLHEAD PRESSURE, PSIG	1010	881	883
OPEN FLOW, MCFD	NOT GIVEN	27870	75000
COMPONENT, MOLE PCT			
METHANE	59.7	80.5	79.9
ETHANE	14.1	7.6	7.7
PROPANE	13.5	3.5	3.6
N-BUTANE	4.7	0.9	0.9
ISOBUTANE	2.4	0.5	0.5
N-PENTANE	1.2	0.2	0.3
ISOPENTANE	0.7	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.1	0.2
NITROGEN	2.9	6.2	6.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.1	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.06	0.14	0.14
HEATING VALUE*	1558	1112	1116
SPECIFIC GRAVITY	0.930	0.685	0.687

	INDEX 10528 SAMPLE 6605	INDEX 10529 SAMPLE 7019	INDEX 10530 SAMPLE 7357
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	QUINDUNO	QUINDUNO	QUINDUNO
WELL NAME	FAYE BEAN NO. 1	PENNINGTON B NO. 1	M. R. COWAN TRACT C NO. 6
LOCATION	SEC. 164, BLK. M-2, BS&F SUR	SEC. 17, BLK. 2, I&GN SUR.	SEC. 165, BLK. M-2, BS&F SUR
OWNER	CONSOLIDATED GAS & MINING	PHILLIPS PETROLEUM CO.	SINCLAIR OIL & GAS CO.
COMPLETED	04/26/58	02/16/59	11/02/59
SAMPLED	05/03/58	04/03/59	01/21/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	4032	4128	4067
WELLHEAD PRESSURE, PSIG	850	NOT GIVEN	870
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3800
COMPONENT, MOLE PCT			
METHANE	80.4	79.9	84.4
ETHANE	6.9	7.7	6.7
PROPANE	2.9	4.0	2.5
N-BUTANE	0.8	1.0	0.6
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.3	0.0	0.4
CYCLOPENTANE	0.1	0.5	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	7.5	5.7	4.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.1
HELIUM	0.20	0.14	0.10
HEATING VALUE*	1092	1139	1113
SPECIFIC GRAVITY	0.685	0.695	0.664

	INDEX 10531 SAMPLE 15529	INDEX 10532 SAMPLE 15867	INDEX 10533 SAMPLE 14757
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	RED DEER CREEK	RED DEER NE	RULER
WELL NAME	VOLLMENT NO. 1	EARP NO. 1	JONES "A" NO. 1
LOCATION	SEC. 32, BLK. 81 H&GN SUR.	SEC. 59, BLK. 1, H&GN SUR.	SEC. 1, BLK. A-2, EL&RR SUR.
OWNER	DAVIS OIL CO.	GETTY OIL CO.	AMARILLO OIL CO.
COMPLETED	--/--/00	08/02/79	09/06/75
SAMPLED	12/--/78	12/18/79	09/16/76
FORMATION	NOT GIVEN	PENN-MORROW	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	11039	9632
WELLHEAD PRESSURE, PSIG	NOT GIVEN	3687	2200
OPEN FLOW, MCFD	NOT GIVEN	12640	11000
COMPONENT, MOLE PCT			
METHANE	89.1	89.7	90.0
ETHANE	6.8	6.3	6.4
PROPANE	1.6	1.5	1.5
N-BUTANE	0.2	0.2	0.2
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.4	0.6	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.3	0.9
HELIUM	0.04	0.04	0.06
HEATING VALUE*	1090	1075	1085
SPECIFIC GRAVITY	0.628	0.621	0.620

	INDEX 10534 SAMPLE 14797	INDEX 10535 SAMPLE 14368	INDEX 10536 SAMPLE 14470
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	RULER	SHREIKEY	SHREIKEY
WELL NAME	MEMORDIE BROS. B-1	ETTA GILL NO. 1	BOB MCCOY B. NO. 2
LOCATION	SEC. 2, BLK. A-2, EL&RR SUR.	SEC. 16, BLK. M-2, H&GN SUR.	SEC. 14, BLK. M-2, H&GN SUR.
OWNER	EXXON CO., U.S.A.	SIDWELL OIL & GAS, INC.	J. M. HUBER CORP.
COMPLETED	07/28/76	01/19/75	09/16/74
SAMPLED	09/21/76	06/17/75	09/24/75
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9663	11401	11076
WELLHEAD PRESSURE, PSIG	2390	3200	3217
OPEN FLOW, MCFD	3150	10000	13800
COMPONENT, MOLE PCT			
METHANE	89.8	82.0	94.6
ETHANE	6.7	8.5	2.3
PROPANE	1.4	3.7	0.6
N-BUTANE	0.3	1.2	0.2
ISOBUTANE	0.0	0.7	0.1
N-PENTANE	0.2	0.9	TRACE
ISOPENTANE	0.1	0.9	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.5	0.1
NITROGEN	0.6	1.2	0.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	1.1
HELIUM	0.07	0.03	0.03
HEATING VALUE*	1094	1228	1035
SPECIFIC GRAVITY	0.628	0.714	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10537 SAMPLE 14537	INDEX 10538 SAMPLE 14686	INDEX 10539 SAMPLE 14571
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	SHREIKEY	SHREIKEY	ST. CLAIR
WELL NAME	BYRUM-COFFEE NO. 1	R. BYRUM NO. 1-36	JONES NO. 1
LOCATION	SEC. 12, BLK. M-2, H&GN SUR.	SEC. 36, BLK. M-2, H&GN SUR.	SEC. 85, BLK. C, G&M SUR.
OWNER	HOOVER & BRACKEN, INC.	GULF ENERGY & MINERALS CO.	PENNZOIL CO.
COMPLETED	05/25/74	03/22/76	04/17/75
SAMPLED	11/23/75	06/04/76	01/29/76
FORMATION	PENN-MORROW	PENN-MORROW	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	10844	10800	10200
WELLHEAD PRESSURE,PSIG	3600	3025	2026
OPEN FLOW, MCFD	150000	11200	16000
COMPONENT, MOLE PCT			
METHANE	93.2	92.2	77.7
ETHANE	3.7	3.7	12.2
PROPANE	0.8	0.8	5.4
N-BUTANE	0.2	0.2	1.2
ISOBUTANE	0.1	0.1	0.6
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.7	1.4	1.4
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	0.4
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1051	1041	1250
SPECIFIC GRAVITY	0.603	0.607	0.726

	INDEX 10540 SAMPLE 14593	INDEX 10541 SAMPLE 15574	INDEX 10542 SAMPLE 5068
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	ST. CLAIR	ST. CLAIR	WILDCAT
WELL NAME	CHRISTIE-TIPPS A NO. 1	CHRISTIE-TIPPS NO. 1	CUNNINGHAM AAA
LOCATION	SEC. 70, BLK. B-1, H&GN SUR.	SEC. 25, BLK. 1, H&GN SUR.	SEC. 74, BLK. 17-2
OWNER	ANADARKO PRODUCTION CO.	PARADOX PETROLEUM CO.	J. T. WHITLOCK
COMPLETED	06/16/75	--/--/00	04/13/39
SAMPLED	03/05/76	03/07/79	02/02/42
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	-DOLOMITE
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9529	NOT GIVEN	4400
WELLHEAD PRESSURE,PSIG	2114	1100	NOT GIVEN
OPEN FLOW, MCFD	11856	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.3	82.7	2.7
ETHANE	12.7	9.4	0.0
PROPANE	6.1	4.0	---
N-BUTANE	1.6	1.1	---
ISOBUTANE	0.7	0.5	---
N-PENTANE	0.4	0.3	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.3	---
NITROGEN	5.4	0.7	96.9
OXYGEN	1.2	0.0	0.2
ARGON	0.1	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.5	0.2
HELIUM	0.05	0.04	0.00
HEATING VALUE*	1208	1209	27
SPECIFIC GRAVITY	0.760	0.693	0.958

	INDEX 10543 SAMPLE 5800	INDEX 10544 SAMPLE 6334	INDEX 10545 SAMPLE 6408
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SHELL-FLOWERS NO. 1	PARSELL ESTATE NO. 1	MILL NO. 1-A
LOCATION	SEC. 75, BLK. C, G&M SUR.	SEC. 155, BLK. 42, H&TC SUR.	SEC. 146, BLK. 146, H&TC SUR
OWNER	CREE DRILLING CO.	SUN OIL CO.	PARKER PETROLEUM CO., INC.
COMPLETED	11/20/54	06/05/57	09/30/57
SAMPLED	04/06/55	06/05/57	10/04/57
FORMATION	PERM-WICHITA-ALBANY	PENN-MORROW L	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3742	11000	9832
WELLHEAD PRESSURE,PSIG	886	4310	3378
OPEN FLOW, MCFD	4500	8000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.5	96.0	89.9
ETHANE	5.6	1.5	6.5
PROPANE	2.3	0.2	1.7
N-BUTANE	0.7	0.1	0.2
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.1	0.2	0.2
OXYGEN	1.5	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.7	0.9
HELIUM	0.06	0.04	0.10
HEATING VALUE*	1025	1016	1101
SPECIFIC GRAVITY	0.681	0.586	0.627

	INDEX 10546 SAMPLE 6411	INDEX 10547 SAMPLE 13567	INDEX 10548 SAMPLE 15106
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	ROBERTS	ROBERTS
FIELD	WILDCAT	WILDCAT	WILLOW CREEK
WELL NAME	MILL NO. 1-A	R. A. FLOWERS NO. 1	BRAINARD NO. 2
LOCATION	SEC. 146, BLK. 42, H&TC SUR.	SEC. 69, BLK. C, BS&F SUR.	SEC. 4, BLK. A, H&GN SUR.
OWNER	PARKER PETROLEUM CO., INC.	AMARILLO OIL CO.	PARAMOUNT PRODUCING, INC.
COMPLETED	09/30/57	12/23/72	--/--/00
SAMPLED	10/04/57	03/21/73	09/23/77
FORMATION	PENN-MORROW L	PENN-MORROW L	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	9832	11994	NOT GIVEN
WELLHEAD PRESSURE,PSIG	3378	4771	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	7800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.6	96.0	90.0
ETHANE	3.9	0.8	4.1
PROPANE	1.3	0.1	1.7
N-BUTANE	0.3	TRACE	0.5
ISOBUTANE	0.4	TRACE	0.1
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.2	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	0.0	0.3	2.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	2.6	0.3
HELIUM	0.03	0.09	0.18
HEATING VALUE*	1083	989	1071
SPECIFIC GRAVITY	0.624	0.585	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10549 SAMPLE 15107	INDEX 10550 SAMPLE 16293	INDEX 10551 SAMPLE 4916
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ROBERTS	RUNNELS	RUNNELS
FIELD	WILLOW CREEK	COLLOM	ELM CREEK
WELL NAME	BRAINARD NO. 1	A. J. COLLOM A NO. 1	J. P. KNIGHT NO. 1
LOCATION	SEC. 3, BLK. E, M&CN SUR.	JULIANA V. CABRARA SUR. 514	BBB&C SUR. NO. 346
OWNER	PARAMOUNT PRODUCING, INC.	MARKIN OIL & GAS, INC.	KILLAM & HURD, LTD.
COMPLETED	--/--/00	12/20/80	06/03/50
SAMPLED	09/23/77	07/16/81	08/07/50
FORMATION	PENN-MORROW	ORDO-ELLENBURGER	PENN-STRAWN
GEOLOGIC PROVINCE CODE	360	425	425
DEPTH, FEET	NOT GIVEN	4352	3950
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1750	945
OPEN FLOW, MCFD	NOT GIVEN	6000	20000
COMPONENT, MOLE PCT			
METHANE	89.6	69.4	5.8
ETHANE	4.4	10.1	37.3
PROPANE	2.1	5.5	34.1
N-BUTANE	0.7	1.5	11.4
ISOBUTANE	0.2	0.7	4.9
N-PENTANE	0.2	0.4	2.5
ISOPENTANE	0.1	0.4	1.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.5	1.0
NITROGEN	1.9	11.0	0.0
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.2	0.9
HELIUM	0.15	0.38	TRACE
HEATING VALUE*	1058	1154	2398
SPECIFIC GRAVITY	0.633	0.763	1.443

	INDEX 10552 SAMPLE 13671	INDEX 10553 SAMPLE 12174	INDEX 10554 SAMPLE 13796
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUNNELS	RUNNELS	RUNNELS
FIELD	LOVE	ROWENA	ROWENA
WELL NAME	WILLEKE NO. 2	ROWENA-GARDENER NO. 1	CHARLES MATSCHEK NO. 1
LOCATION	WILLIAM WILSON SUR. 1	SEC. 113, PETER ZOBEL SUR.	FRANCIS HELMER SUR. 417
OWNER	JAMES L. ANDERSON	HUMBLE OIL & REFINING, ET AL	J. FRANK STRINGER
COMPLETED	07/24/72	12/22/69	06/19/72
SAMPLED	08/04/73	01/22/70	11/01/73
FORMATION	PENN-FRY	CRET-GARDNER	EDGE-JENNINGS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3146	4041	9066
WELLHEAD PRESSURE,PSIG	1060	1465	1575
OPEN FLOW, MCFD	2600	6400	4200
COMPONENT, MOLE PCT			
METHANE	78.5	71.3	75.1
ETHANE	6.6	8.9	7.3
PROPANE	3.4	6.2	4.8
N-BUTANE	0.9	1.4	1.6
ISOBUTANE	0.5	0.6	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.6	0.4
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	9.0	10.1	9.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.37	0.27	0.30
HEATING VALUE*	1075	1153	1124
SPECIFIC GRAVITY	0.691	0.752	0.725

	INDEX 10555 SAMPLE 5120	INDEX 10556 SAMPLE 12257	INDEX 10557 SAMPLE 5112
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUNNELS	RUNNELS	RUNNELS
FIELD	SYKES	WILDCAT	WINTERS
WELL NAME	B. R. THETFORD WELL NO. 1	REBECCA MILLER NO. 12	T. V. JENNINGS NO. 2
LOCATION	WHARTON CO. SUR. NO. 509	GC&SF SUR.	SEC. 332, H&TC SUR.
OWNER	MID-CONTINENT PETROLEUM CORP	TEXAS PACIFIC OIL CO., INC.	ANTON OIL CORP.
COMPLETED	08/02/51	10/22/69	06/04/51
SAMPLED	01/17/51	05/12/70	10/17/51
FORMATION	PENN-SYKES MORRIS	PENN-MORRIS	PENN-CADDO
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3682	3845	4444
WELLHEAD PRESSURE,PSIG	1516	1114	NOT GIVEN
OPEN FLOW, MCFD	7200	2700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.9	69.9	66.3
ETHANE	8.1	8.4	8.5
PROPANE	4.7	5.4	4.5
N-BUTANE	1.3	1.2	1.2
ISOBUTANE	0.4	0.7	0.5
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	14.0	13.3	10.7
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.0	7.2
HELIUM	0.34	0.35	0.34
HEATING VALUE*	1069	1090	1030
SPECIFIC GRAVITY	0.745	0.744	0.795

	INDEX 10558 SAMPLE 12658	INDEX 10559 SAMPLE 15092	INDEX 10560 SAMPLE 5621
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUNNELS	RUSK	RUSK
FIELD	WINTERS SW	BIG BARNETT	CARTAGE
WELL NAME	D. S. VANCIL NO. 1	DR. JOSEPH L. GOLDMAN NO. 1	TURLINGTON NO. 1
LOCATION	NOT GIVEN	E. TAYLOR SUR. A-771	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	ALAMO PETROLEUM CO.	CARTER-JONES DRILLING CO.
COMPLETED	10/30/61	05/10/75	04/03/54
SAMPLED	02/05/71	09/09/77	05/25/54
FORMATION	PENN-STRAWN	CRET-RODESSA	CRET-PETTIT L
GEOLOGIC PROVINCE CODE	425	260	260
DEPTH, FEET	4415	6993	6830
WELLHEAD PRESSURE,PSIG	1435	3057	3023
OPEN FLOW, MCFD	3350	3800	95000
COMPONENT, MOLE PCT			
METHANE	72.2	93.7	87.5
ETHANE	9.6	2.4	5.1
PROPANE	5.1	0.5	2.2
N-BUTANE	1.4	0.2	0.8
ISOBUTANE	0.6	0.1	0.7
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.4	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.5
NITROGEN	9.8	1.7	1.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.0	1.0
HELIUM	0.25	0.02	0.03
HEATING VALUE*	1151	1025	1141
SPECIFIC GRAVITY	0.745	0.596	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10561 SAMPLE 16482	INDEX 10562 SAMPLE 12477	INDEX 10563 SAMPLE 2473
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	CYRIL	DANVILLE	EAST TEXAS
WELL NAME	PEARL BARRON NO. 1	C. W. LEE NO. 1-U	RAS LACY NO. 1
LOCATION	JAMES SMITH SUR., A-709	HENRY WELLS SUR.	J. W. SPARKS SUR.
OWNER	MCGOLDRICK OIL CO.	TEXACO INC.	STANOLIND OIL & GAS CO.
COMPLETED	03/--/81	08/19/59	02/11/32
SAMPLED	04/06/82	10/23/70	02/29/32
FORMATION	JURA-COTTON VALLEY	CRET-PETTIT	CRET-WOODBINE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	10700	7372	3604
WELLHEAD PRESSURE,PSIG	4800	975	1570
OPEN FLOW, MCFD	500	1305	40000
COMPONENT, MOLE PCT			
METHANE	89.1	93.6	75.5
ETHANE	6.2	2.9	11.8
PROPANE	1.8	0.8	---
N-BUTANE	0.5	0.2	---
ISOBUTANE	0.5	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	0.3	0.4	11.4
OXYGEN	TRACE	0.0	0.7
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.1	1.2	0.6
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1117	1058	976
SPECIFIC GRAVITY	0.641	0.606	0.670

	INDEX 10564 SAMPLE 10740	INDEX 10565 SAMPLE 12469	INDEX 10566 SAMPLE 12470
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	SARRISON NE	HENDERSON	HENDERSON
WELL NAME	HAIRGROVE GAS UNIT NO. 1	FREEMAN MILLER NO. 1	T. W. BENNETT NO. 1
LOCATION	H. GRAHAM SUR. A-222	5 MI. N OF HENDERSON	4 MI. N OF HENDERSON
OWNER	PAN AMERICAN PETROLEUM CORP.	AMERICAN PETROFINA CO.	AMERICAN PETROFINA CO.
COMPLETED	05/28/65	--/--/00	--/--/00
SAMPLED	10/06/66	10/22/70	10/22/70
FORMATION	CRET-RODESSA	CRET-TRAVIS PEAK	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6012	7450	7250
WELLHEAD PRESSURE,PSIG	2626	550	600
OPEN FLOW, MCFD	5200	350	55
COMPONENT, MOLE PCT			
METHANE	93.4	88.4	87.7
ETHANE	2.6	3.7	5.5
PROPANE	0.8	1.6	2.2
N-BUTANE	0.1	0.6	0.6
ISOBUTANE	0.3	0.8	0.5
N-PENTANE	0.1	0.6	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.6	0.3
NITROGEN	0.6	2.5	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.9	1.0
HELIUM	TRACE	0.03	0.02
HEATING VALUE*	1041	1111	1189
SPECIFIC GRAVITY	0.606	0.656	0.650

	INDEX 10567 SAMPLE 12437	INDEX 10568 SAMPLE 14816	INDEX 10569 SAMPLE 17543
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	HENDERSON S	JARRELL CREEK	KILGORE S
WELL NAME	M. A. HUBBARD	ALFORD MARKET NO. 1	PAT-CHRISTIAN MCCRORY NO.1-P
LOCATION	2 MI. E OF HENDERSON	PERRY REESE SUR. A-657	M. FARMER SURVEY A-287
OWNER	SESCO PRODUCTION CO.	FAIR OIL CO., LTD	RAINBOW RESOURCES, INC.
COMPLETED	07/07/65	12/31/74	09/23/83
SAMPLED	10/13/70	--/--/00	--/--/00
FORMATION	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7506	7458	7518
WELLHEAD PRESSURE,PSIG	2907	2878	2633
OPEN FLOW, MCFD	14750	5600	2330
COMPONENT, MOLE PCT			
METHANE	90.2	89.7	75.1
ETHANE	2.8	3.0	4.2
PROPANE	1.3	1.7	1.6
N-BUTANE	0.6	0.7	0.7
ISOBUTANE	0.9	0.7	0.4
N-PENTANE	0.5	0.5	0.3
ISOPENTANE	0.0	0.2	0.4
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.5	0.7	0.4
NITROGEN	1.8	1.8	13.1
OXYGEN	0.0	0.0	2.9
ARGON	0.0	0.0	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.7	0.7
HELIUM	0.04	0.03	0.03
HEATING VALUE*	1099	1127	969
SPECIFIC GRAVITY	0.646	0.655	0.711

	INDEX 10570 SAMPLE 14315	INDEX 10571 SAMPLE 16418	INDEX 10572 SAMPLE 15351
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	MINDEN	MOUNT ENTERPRISE	OAKHILL
WELL NAME	C. C. BURKS NO. 1	TEMPLE NO. 2	G. W. BIRD NO. 1
LOCATION	DANIEL WOODLAND SUR. A-845	S.C. GLASSCOCK SUR., A-926	JAMES MCLAIN SUR. A-19
OWNER	JONES-O'BRIEN, INC.	HINION PRODUCTION CO.	MCCORMICK OIL & GAS CORP.
COMPLETED	01/29/75	08/01/81	11/18/76
SAMPLED	03/28/75	01/29/82	08/25/78
FORMATION	CRET-TRAVIS PEAK	CRET-PETTIT	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7108	7700	9075
WELLHEAD PRESSURE,PSIG	2711	1700	5200
OPEN FLOW, MCFD	4400	1000	4792
COMPONENT, MOLE PCT			
METHANE	88.3	91.3	95.3
ETHANE	5.1	3.5	1.6
PROPANE	2.3	1.5	0.3
N-BUTANE	0.7	0.6	0.1
ISOBUTANE	0.7	0.4	0.1
N-PENTANE	0.3	0.3	TRACE
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	1.5	1.2	0.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.6	2.1
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1122	1096	1014
SPECIFIC GRAVITY	0.652	0.629	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10573 SAMPLE 12440	INDEX 10574 SAMPLE 12540	INDEX 10575 SAMPLE 15077
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	PENN-GRIFFIN	PONE	RUFUS
WELL NAME	PRIOR NO. 1	PONE GAS UNIT NO. 3	KANGERGA NO. 1
LOCATION	HENDERSON	JOHN PILBURN SUR.	JOHN R. WHITE SUR. A-813
OWNER	W. R. HUGHEY OPERATING CO.	HUMBLE OIL & REFINING CO.	HINTON PRODUCTION CO.
COMPLETED	11/27/63	06/13/61	10/01/75
SAMPLED	10/10/70	11/11/70	08/12/77
FORMATION	CRET-PETTIT	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7360	7430	7256
WELLHEAD PRESSURE,PSIG	1800	1787	2581
OPEN FLOW, MCFD	897	6200	14000
COMPONENT, MOLE PCT			
METHANE	89.2	89.5	85.0
ETHANE	3.1	3.4	5.2
PROPANE	0.6	1.6	2.6
N-BUTANE	0.2	0.7	1.3
ISOBUTANE	0.3	0.6	1.1
N-PENTANE	0.1	0.3	0.9
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.4	0.9
NITROGEN	4.2	2.5	1.5
OXYGEN	1.5	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.8	1.1
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1015	1050	1197
SPECIFIC GRAVITY	0.627	0.643	0.702

	INDEX 10576 SAMPLE 15349	INDEX 10577 SAMPLE 12439	INDEX 10578 SAMPLE 13734
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	RUSK
FIELD	RUFUS	SHILOH	TRAWICK NE
WELL NAME	PRIOR UNIT NO. 1	MARLIN MARDIN NO. 1-C	TRAWICK NE G.U. NO. 1-1
LOCATION	4 MI. E OF MENDERSON	MARLIN MARDIN LEASE	MARIA F. MEJIAS SUR. A-14
OWNER	HINTON PRODUCTION CO.	W. R. HUGHEY OPERATING CO.	EXXON CO., U.S.A.
COMPLETED	08/05/77	10/11/70	10/26/72
SAMPLED	08/16/78	10/11/70	10/02/73
FORMATION	CRET-PETTIT	CRET-PETTIT	CRET-PETTIT
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	7036	6400	7174
WELLHEAD PRESSURE,PSIG	2300	900	3135
OPEN FLOW, MCFD	9100	5540	7800
COMPONENT, MOLE PCT			
METHANE	87.0	87.9	92.3
ETHANE	5.5	5.0	2.4
PROPANE	2.2	1.9	0.8
N-BUTANE	0.8	0.6	0.2
ISOBUTANE	0.5	0.7	0.3
N-PENTANE	0.3	0.4	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.1
NITROGEN	1.9	1.8	2.8
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.8	0.9
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1122	1120	1029
SPECIFIC GRAVITY	0.662	0.655	0.608

	INDEX 10579 SAMPLE 14178	INDEX 10580 SAMPLE 16436	INDEX 10581 SAMPLE 11971
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUSK	RUSK	SAN JACINTO
FIELD	TRAWICK NE	TRAWICK NW	MERCY S
WELL NAME	GAS UNIT 2 NO. 1	M.G. MOORE NO. 1	CENTRAL COAL&COKE CORP. NO.1
LOCATION	JOSE DURST SUR. A-8	JOSEPH E. PEYTON, A-639	J. ROBINSON SUR. A-45
OWNER	EXXON CO., U.S.A.	PETRUS OPERATING CO., INC.	COASTAL STATES GAS PROD. CO.
COMPLETED	01/23/73	02/25/82	05/05/68
SAMPLED	10/--/74	02/25/82	07/15/69
FORMATION	CRET-PETTIT	CRET-PETTIT	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	7494	7854	9464
WELLHEAD PRESSURE,PSIG	2175	3250	2212
OPEN FLOW, MCFD	1738	NOT GIVEN	6650
COMPONENT, MOLE PCT			
METHANE	91.4	88.4	81.6
ETHANE	3.2	2.7	6.4
PROPANE	1.2	1.8	6.0
N-BUTANE	0.4	0.8	1.0
ISOBUTANE	0.4	0.8	1.0
N-PENTANE	0.1	0.7	0.2
ISOPENTANE	0.2	0.5	0.4
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	1.0	0.2
NITROGEN	2.0	2.3	1.8
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	1.2
HELIUM	0.03	0.02	0.01
HEATING VALUE*	1059	1154	1204
SPECIFIC GRAVITY	0.619	0.677	0.714

	INDEX 10582 SAMPLE 16106	INDEX 10583 SAMPLE 4344	INDEX 10584 SAMPLE 13721
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	BRANNON	EDROY	HARVEY DEEP
WELL NAME	J. C. BRANNON NO. 1	MCGLOIN NO. 1	J. M. HARVEY NO. 4
LOCATION	P. BRYDDT SUR. A-52	NOT GIVEN	GEORGE SARGENT SUR. A-231
OWNER	WAINOCO OIL & GAS CO.	SOUTHERN MINERALS CORP.	JAKE L. HAMON
COMPLETED	01/31/79	06/09/47	03/16/72
SAMPLED	10/21/80	08/13/47	09/19/73
FORMATION	OLIG-FRIO	OLIG-	OLIG-FRIO GRIMSHAW
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10521	5956	10510
WELLHEAD PRESSURE,PSIG	6755	2300	2500
OPEN FLOW, MCFD	3537	330000	8100
COMPONENT, MOLE PCT			
METHANE	88.8	84.9	84.8
ETHANE	6.2	14.8	6.8
PROPANE	2.5	---	3.2
N-BUTANE	0.5	---	1.0
ISOBUTANE	0.6	---	0.9
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.1	---	0.3
CYCLOPENTANE	TRACE	---	0.2
HEXANES PLUS	0.1	---	0.7
NITROGEN	0.2	0.0	0.1
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.8	0.1	1.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1126	1125	1222
SPECIFIC GRAVITY	0.641	0.630	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10585 SAMPLE 13720	INDEX 10586 SAMPLE 6027	INDEX 10587 SAMPLE 13110
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	HARVEY E	MIDWAY S	MIDWAY S
WELL NAME	J. H. HARVEY NO. 6	STARK NO. 1	GLADYS HOSKINSON ET AL. NO.1
LOCATION	GEORGE SARGENT SUR. A-231	SEC. 92, G. H. PAUL SUBD.	SEC. 80, GEORGE H. PAUL
OWNER	JAKE L. HAMON	REPUBLIC NATURAL GAS CO.	GULF COAST PRODUCING CO.
COMPLETED	12/24/71	11/09/55	08/01/70
SAMPLED	09/15/73	02/17/56	12/09/71
FORMATION	OLIG-FRIO A-2	OLIG-STARK	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8970	9431	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1500	3300	NOT GIVEN
OPEN FLOW, MCFD	4800	7100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.3	89.3	88.8
ETHANE	6.6	5.1	5.0
PROPANE	3.4	2.4	2.7
N-BUTANE	0.9	0.8	0.7
ISOBUTANE	1.0	0.9	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	0.4	0.2	0.9
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.6
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1189	1157	1134
SPECIFIC GRAVITY	0.676	0.650	0.650

	INDEX 10588 SAMPLE 15455	INDEX 10589 SAMPLE 4682	INDEX 10590 SAMPLE 5171
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	MIDWAY S	MORGAN	NOT GIVEN
WELL NAME	SHELL A NO. 1	T. C. HILL NO. 2	E. H. WELDER NO. F-8
LOCATION	SAN PAT SCH LAND NO.3,A-235	NOT GIVEN	SEC. 31, WELDER RANCH SUBD.
OWNER	CITIES SERVICE CO.	SOUTHERN MINERALS CORP.	PLYMOUTH OIL CO.
COMPLETED	01/29/77	11/14/48	--/--/00
SAMPLED	10/19/78	04/15/49	02/27/52
FORMATION	OLIG-FRIO	OLIG-FRIO	MIOC-OAKVILLE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	13112	6684	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1375	2555	NOT GIVEN
OPEN FLOW, MCFD	3550	10000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.1	93.5	97.9
ETHANE	5.8	3.4	0.1
PROPANE	2.0	1.2	0.1
N-BUTANE	0.5	0.2	0.1
ISOBUTANE	0.4	TRACE	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	1.3	0.7	1.5
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.2	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1120	1019	999
SPECIFIC GRAVITY	0.644	0.605	0.566

	INDEX 10591 SAMPLE 11897	INDEX 10592 SAMPLE 4095	INDEX 10593 SAMPLE 12731
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	ODEM	ONEIL	PLYMOUTH
WELL NAME	J. F. WELDER C-10	WELDER RANCH LANDS NO. 2	E. H. WELDER C NO. 151
LOCATION	JOHN HART & SONS SUR. A-10	NOT GIVEN	SEC. 48, WELDER RANCH S/D
OWNER	TEXACO INC.	STANOLIND OIL & GAS CO.	MARATHON OIL CO.
COMPLETED	09/13/68	02/18/45	12/11/68
SAMPLED	05/20/69	06/11/45	03/23/71
FORMATION	OLIG-VICKSBURG	MIOC-	OLIG-5820 FT.
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7990	3368	5789
WELLHEAD PRESSURE,PSIG	5439	1470	NOT GIVEN
OPEN FLOW, MCFD	7600	7400	5180
COMPONENT, MOLE PCT			
METHANE	91.6	98.3	91.2
ETHANE	3.7	1.2	4.3
PROPANE	1.4	---	1.4
N-BUTANE	0.7	---	0.3
ISOBUTANE	0.5	---	0.6
N-PENTANE	0.3	---	0.2
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	0.2	---	0.1
HEXANES PLUS	0.8	---	0.3
NITROGEN	0.3	0.0	1.1
OXYGEN	0.1	0.0	0.2
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.5	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1116	1017	1099
SPECIFIC GRAVITY	0.643	0.565	0.626

	INDEX 10594 SAMPLE 14271	INDEX 10595 SAMPLE 15406	INDEX 10596 SAMPLE 15056
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	PORTILLA	PORTILLA	PORTLAND N
WELL NAME	MINNIE S. WELDER NO. 40	M. S. WELDER NO 55	SIMONS G.U. NO. B-2
LOCATION	SEC. 23, PORTILLA GRANT	E. PORTILLA GR. A-25	W. B. RHEW SUR. A-318
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	GALAXY OIL CO.
COMPLETED	01/03/75	05/06/76	01/09/75
SAMPLED	02/20/75	10/11/78	07/19/77
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6974	7052	10550
WELLHEAD PRESSURE,PSIG	930	1531	5600
OPEN FLOW, MCFD	291	8808	18000
COMPONENT, MOLE PCT			
METHANE	89.7	90.1	88.5
ETHANE	4.7	4.8	6.2
PROPANE	2.7	2.4	2.3
N-BUTANE	0.7	0.6	0.5
ISOBUTANE	0.7	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.4	0.3	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.5	0.7	0.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.8
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1150	1128	1123
SPECIFIC GRAVITY	0.647	0.636	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10597 SAMPLE 11194	INDEX 10598 SAMPLE 3871	INDEX 10599 SAMPLE 11195
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	ROOKE	SINTON	SINTON N
WELL NAME	WELDER F NO. 1	SAN ANTONIO LOAN&TRUST NO. 1	R. H. WELDER C NO. 5
LOCATION	SEC. 40, E.H.WELDER F LEASE	3 MI. SW OF SINTON	2 MI. N SINTON, TEX.
OWNER	MARATHON OIL CO.	TIDEWATER ASSOC. OIL CO.	J. RAY MCDERMOTT & CO., INC.
COMPLETED	06/16/66	12/22/41	--/--/00
SAMPLED	10/27/66	08/27/44	10/31/67
FORMATION	MIOC-6100 FT. SAND	OLIG-FRIO	MIOC-2300 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6210	6663	2300
WELLHEAD PRESSURE,PSIG	1889	NOT GIVEN	920
OPEN FLOW, MCFD	33000	2530	58000
COMPONENT, MOLE PCT			
METHANE	90.6	91.4	99.0
ETHANE	4.0	7.5	0.1
PROPANE	2.0	---	TRACE
N-BUTANE	0.7	---	0.0
ISOBUTANE	0.6	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.3	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.3	---	0.0
NITROGEN	0.8	---	0.7
OXYGEN	0.1	0.4	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.1	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.8
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1122	1060	1005
SPECIFIC GRAVITY	0.634	0.601	0.558

	INDEX 10600 SAMPLE 14275	INDEX 10601 SAMPLE 15206	INDEX 10602 SAMPLE 13868
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	TAFT W	TRIPLE A	WHITE POINT E
WELL NAME	MAYO NO. 1	OLA MCCANN NO. 1	SOLAR FICKE DEEP G.U. NO. 1
LOCATION	T. T. WILLIAMSON SUR. A-151	J. GARCIA SUR. A-129	SEC. 47, GEO. H. PAUL SUBD.
OWNER	EDWIN L. COX	C & K PETROLEUM, INC.	MARATHON OIL CO.
COMPLETED	01/22/73	01/25/76	02/13/72
SAMPLED	02/10/75	01/25/78	01/17/74
FORMATION	MIOC-CATAHOULA	OLIG-FRIO	TERT-8750 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3900	9211	8736
WELLHEAD PRESSURE,PSIG	1447	3866	1700
OPEN FLOW, MCFD	3000	4700	6200
COMPONENT, MOLE PCT			
METHANE	98.3	79.8	89.1
ETHANE	0.1	4.2	5.0
PROPANE	0.1	4.2	2.4
N-BUTANE	0.1	1.7	0.6
ISOBUTANE	TRACE	2.4	0.8
N-PENTANE	0.1	0.8	0.2
ISOPENTANE	0.1	1.3	0.3
CYCLOPENTANE	TRACE	0.4	0.1
HEXANES PLUS	0.1	1.7	0.3
NITROGEN	1.0	2.5	0.5
OXYGEN	0.0	0.8	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.591	0.01	0.01
HEATING VALUE*	1017	1322	1142
SPECIFIC GRAVITY	0.569	0.784	0.651

	INDEX 10603 SAMPLE 13869	INDEX 10604 SAMPLE 13874	INDEX 10605 SAMPLE 13875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SAN PATRICIO	SAN PATRICIO
FIELD	WHITE POINT E	WHITE POINT E	WHITE POINT E
WELL NAME	F. H. FICKE NO. 11J	MAYO-OWENS G.U. NO. 1	MAYO-OWENS G.U. NO. 1
LOCATION	SEC. 50, G.H. PAUL SUBD.	SEC. 62, H.S.DAY SUR. A-102	SEC. 62, H.S.DAY SUR. A-102
OWNER	MARATHON OIL CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	03/14/72	02/04/72	02/04/72
SAMPLED	01/17/74	01/18/74	01/18/74
FORMATION	TERT-2850 FT. SAND	OLIG-FRIO (OWENS)	OLIG-FRIO (MAYO)
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2837	10294	10158
WELLHEAD PRESSURE,PSIG	1107	6838	5692
OPEN FLOW, MCFD	35000	5000	16500
COMPONENT, MOLE PCT			
METHANE	98.8	89.3	87.7
ETHANE	0.1	5.6	6.1
PROPANE	TRACE	2.3	2.7
N-BUTANE	0.0	0.5	0.6
ISOBUTANE	0.0	0.5	1.0
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	1.0	0.3	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.2	0.8
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1003	1112	1149
SPECIFIC GRAVITY	0.558	0.640	0.657

	INDEX 10606 SAMPLE 15174	INDEX 10607 SAMPLE 14105	INDEX 10608 SAMPLE 11187
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SAN PATRICIO	SCHLEICHER	SCHLEICHER
FIELD	WHITE POINT E	BLK. 56	CODY BELL
WELL NAME	MAYO KOONCE UNIT NO. 1	UNIV. LANDS Y NO. 1	C. M. BELL NO. 1
LOCATION	H. S. DAY SUR. A-102	SEC. 7, BLK. 56, U L SUR.	SEC. 101, BLK. LL, TCRR SUR.
OWNER	MARATHON OIL CO.	PHILLIPS PETROLEUM CO.	SKELLY OIL CO.
COMPLETED	09/11/76	08/14/73	08/23/67
SAMPLED	12/22/77	07/09/74	10/23/67
FORMATION	OLIG-FRIO	ORDO-ELLENBURGER	PENN-CANYON D
GEOLOGIC PROVINCE CODE	220	430	430
DEPTH, FEET	10994	8264	6445
WELLHEAD PRESSURE,PSIG	1100	2480	2122
OPEN FLOW, MCFD	5200	600	3000
COMPONENT, MOLE PCT			
METHANE	89.0	76.1	74.7
ETHANE	5.6	12.1	8.8
PROPANE	2.9	5.1	5.8
N-BUTANE	0.6	1.3	1.2
ISOBUTANE	0.5	0.6	0.9
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.1	0.4	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.5	3.2	6.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.9
HELIUM	TRACE	0.08	0.12
HEATING VALUE*	1129	1228	1173
SPECIFIC GRAVITY	0.645	0.729	0.741

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10609 SAMPLE 12946	INDEX 10610 SAMPLE 9589	INDEX 10611 SAMPLE 11033
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	CODY BELL E	ELDORADO	ELDORADO
WELL NAME	MORA LEE WEST ET AL. NO. 1	PARKER NO. 1	L. I. WHITTEN NO. 1
LOCATION	SEC. 43, BLK. TT, TCRR SUR.	SEC. 40, BLK. 11, TCRR SUR.	SEC. 25, BLK. LL, TCRR SUR.
OWNER	WESLEY WEST	DELTA DRILLING CO., ET AL.	SKELLY OIL CO.
COMPLETED	09/20/70	08/02/64	06/23/66
SAMPLED	08/05/71	09/25/64	07/19/67
FORMATION	PENN-CANYON	PENN-CANYON	PENN-CANYON A
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6075	6296	6199
WELLHEAD PRESSURE, PSIG	2200	2100	1960
OPEN FLOW, MCFD	3300	1900	6600
COMPONENT, MOLE PCT			
METHANE	77.5	73.3	31.1
ETHANE	7.8	9.8	20.4
PROPANE	5.5	6.3	29.9
N-BUTANE	1.0	1.9	6.7
ISOBUTANE	0.7	0.8	4.1
N-PENTANE	0.1	0.4	1.3
ISOPENTANE	0.2	0.7	2.6
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.2	0.6	0.7
NITROGEN	6.6	5.2	2.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.8
HELIUM	0.14	0.11	0.04
HEATING VALUE*	1152	1258	1991
SPECIFIC GRAVITY	0.715	0.773	1.215

	INDEX 10612 SAMPLE 12457	INDEX 10613 SAMPLE 10852	INDEX 10614 SAMPLE 11032
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	ELDORADO E	ELDORADO N	ELDORADO N
WELL NAME	JOHN E. DYER NO. 1	MATTIE ROYSTER NO. 1	L. I. WHITTEN NO. 1
LOCATION	SEC. 20, BLK. A, H&WTRY SUR.	SEC. 23, BLK. LL, TCRY SUR.	SEC. 25, BLK. LL, TCRR SUR.
OWNER	TUCKER DRILLING CO., INC.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	06/04/69	08/18/66	08/13/66
SAMPLED	10/15/70	01/25/67	07/19/67
FORMATION	PENN-CANYON	PENN-CANYON A	PENN-CANYON B
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5982	6295	6380
WELLHEAD PRESSURE, PSIG	800	2114	2050
OPEN FLOW, MCFD	5100	7700	920
COMPONENT, MOLE PCT			
METHANE	74.5	75.5	74.2
ETHANE	10.2	9.2	8.6
PROPANE	6.2	5.4	5.9
N-BUTANE	1.3	1.3	1.8
ISOBUTANE	0.9	1.1	1.1
N-PENTANE	0.4	0.5	0.6
ISOPENTANE	0.2	0.1	0.9
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.3	0.4	0.8
NITROGEN	5.4	5.6	5.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.3
HELIUM	0.14	0.13	0.13
HEATING VALUE*	1214	1200	1273
SPECIFIC GRAVITY	0.743	0.743	0.778

	INDEX 10615 SAMPLE 13780	INDEX 10616 SAMPLE 12691	INDEX 10617 SAMPLE 12695
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	ELDORADO N	FORT MCKAVETT	FORT MCKAVETT
WELL NAME	PAGE BROS. NO. 1	SHEEN NO. 1-C	ANGIE WEBSTER NO. 1
LOCATION	LGE. 2, CONCHO CSL SUR.	NOT GIVEN	SEC. 2, BLK. 8, TW&NG SUR.
OWNER	TUCKER DRILLING CO., INC.	EL PASO NATURAL GAS CO.	SKELLY OIL CO.
COMPLETED	07/03/72	09/21/64	09/23/65
SAMPLED	10/--/73	02/23/71	03/01/71
FORMATION	PENN-CANYON	PENN-CANYON	PENN-4270 FT. LIME
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6543	4058	4172
WELLHEAD PRESSURE, PSIG	2100	1186	750
OPEN FLOW, MCFD	3800	3675	7000
COMPONENT, MOLE PCT			
METHANE	74.5	79.2	79.3
ETHANE	9.8	6.3	5.9
PROPANE	6.2	3.3	2.7
N-BUTANE	1.8	0.8	0.6
ISOBUTANE	0.9	0.6	0.5
N-PENTANE	0.5	0.3	0.0
ISOPENTANE	0.6	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	0.1
NITROGEN	4.6	9.0	9.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	1.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	0.13	0.20	0.27
HEATING VALUE*	1253	1071	1029
SPECIFIC GRAVITY	0.761	0.688	0.663

	INDEX 10618 SAMPLE 7557	INDEX 10619 SAMPLE 14317	INDEX 10620 SAMPLE 10721
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	MULLDALE	MULLDALE W	JUDYALICE
WELL NAME	THOMSON	BYARS NO. 1	WHITEHEAD CO. NO. 2
LOCATION	NOT GIVEN	T. J. ALLCORN SUR. 79-1/2	SEC. 14, BLK. H, GH&SARR CO. SUR.
OWNER	OHIO OIL CO.	IKE LOVELADY, INC.	JAMES M. ANDERSON, ET AL.
COMPLETED	--/--/52	07/23/74	03/25/65
SAMPLED	05/17/60	04/09/75	09/13/66
FORMATION	PENN-STRAWN	PENN-HARKEY	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5600	5462	4489
WELLHEAD PRESSURE, PSIG	NOT GIVEN	1850	1459
OPEN FLOW, MCFD	NOT GIVEN	5880	5000
COMPONENT, MOLE PCT			
METHANE	54.5	77.1	75.3
ETHANE	19.2	6.4	5.5
PROPANE	13.2	4.5	3.2
N-BUTANE	4.5	1.0	0.9
ISOBUTANE	2.5	0.7	0.4
N-PENTANE	0.8	0.2	0.2
ISOPENTANE	1.2	0.2	0.3
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.6	0.1	0.3
NITROGEN	1.2	9.5	13.5
OXYGEN	0.2	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	TRACE	TRACE
HELIUM	0.02	0.25	0.29
HEATING VALUE*	1598	1092	1029
SPECIFIC GRAVITY	0.968	0.705	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10621 SAMPLE 10722	INDEX 10622 SAMPLE 15348	INDEX 10623 SAMPLE 15555
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	JUDYALICE	KAMA	KAMA
WELL NAME	WHITEHEAD CO. NO. 2	JEFFERS 18 NO. 1	JEFFERS 18 NO. 1
LOCATION	SEC.14,BLK.H,GH&SARR CO.SUR.	SEC. 18, BLK. 2, GC&SF SUR.	SEC. 18, BLK. 2, GC&SF SUR.
OWNER	JAMES K. ANDERSON, ET AL.	MITCHELL ENERGY CORP.	MITCHELL ENERGY CORP.
COMPLETED	06/08/65	11/26/76	12/03/76
SAMPLED	09/13/66	08/16/78	01/--/79
FORMATION	PENN-GOEN	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4772	7396	7396
WELLHEAD PRESSURE,PSIG	1468	2451	2464
OPEN FLOW, MCFD	4200	7000	7000
COMPONENT, MOLE PCT			
METHANE	73.5	29.1	41.0
ETHANE	7.4	12.8	8.3
PROPANE	4.5	28.8	19.2
N-BUTANE	1.2	12.0	7.0
ISOBUTANE	0.5	5.2	3.1
N-PENTANE	0.3	2.0	1.5
ISOPENTANE	0.3	2.8	2.2
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.3	0.8	1.0
NITROGEN	10.5	0.6	2.2
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	5.6	17.9
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.2	TRACE
HELIUM	0.38	0.05	0.06
HEATING VALUE*	1096	2124	1578
SPECIFIC GRAVITY	0.740	1.262	0.926

	INDEX 10624 SAMPLE 14674	INDEX 10625 SAMPLE 5722	INDEX 10626 SAMPLE 7176
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	D'HARROW	TILLERY S	TOE NAIL
WELL NAME	D'HARROW NO. 1	POWELL NO. 3	HARKEY A NO. 1
LOCATION	SEC. 68, BLK. H, GH&SA SUR.	SEC. 3, BLK. A, AB&M SUR.	SEC. 74, BLK. H, GH&SA SUR.
OWNER	IKE LOVELADY, INC.	SOUTHERN MINERALS CORP.	SHELL OIL CO.
COMPLETED	03/05/75	02/17/54	11/04/58
SAMPLED	05/17/76	10/26/54	08/15/59
FORMATION	PENN-CANYON	PENN-CANYON	PENN-HARKEY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5056	4031	4690
WELLHEAD PRESSURE,PSIG	1460	1576	1371
OPEN FLOW, MCFD	3150	4600	11800
COMPONENT, MOLE PCT			
METHANE	77.4	78.6	75.4
ETHANE	6.0	5.8	9.2
PROPANE	3.2	2.8	4.2
N-BUTANE	0.8	0.8	1.1
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.3	0.3	0.7
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	11.0	10.1	8.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.31	0.22	0.20
HEATING VALUE*	1050	1052	1132
SPECIFIC GRAVITY	0.697	0.689	0.720

	INDEX 10627 SAMPLE 12768	INDEX 10628 SAMPLE 12769	INDEX 10629 SAMPLE 10472
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	TOE NAIL	TOE NAIL	TUCKER-WRIGHT
WELL NAME	A. B. THOMERSON NO. 2	R. L. STANSBERRY NO. 3	ROBERT MILLIGAN
LOCATION	20 MI. NE OF ELDORADO	20 MI. NE OF ELDORADO	SEC. 71, BLK. LL, TCRR SUR.
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	TUCKER DRILLING CO., INC.
COMPLETED	--/--/59	--/--/59	12/08/65
SAMPLED	04/19/71	04/20/71	03/19/66
FORMATION	PENN-HARKEY	PENN-CANYON	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4590	4644	5806
WELLHEAD PRESSURE,PSIG	490	NOT GIVEN	1704
OPEN FLOW, MCFD	800	1500	6200
COMPONENT, MOLE PCT			
METHANE	72.2	72.0	71.0
ETHANE	9.8	10.1	8.9
PROPANE	5.2	5.6	5.8
N-BUTANE	1.3	1.5	1.7
ISOBUTANE	0.7	0.9	0.9
N-PENTANE	0.2	0.7	0.4
ISOPENTANE	0.2	0.0	0.5
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	9.1	8.2	8.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.7
HELIUM	0.25	0.22	0.19
HEATING VALUE*	1163	1186	1201
SPECIFIC GRAVITY	0.749	0.755	0.772

	INDEX 10630 SAMPLE 15129	INDEX 10631 SAMPLE 15148	INDEX 10632 SAMPLE 10394
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	UNIVERSITY 53	UNIVERSITY 53	VELREX SW
WELL NAME	STATE "TM" NO. 18-53	STATE "TI" 18-53	J. I. CASE NO. 1
LOCATION	SEC. 18, BLK. 53, UL SUR.	SEC. 18, BLK. 53, UL SUR.	SEC. 25, BLK. TT, TC RR SUR.
OWNER	GULF ENERGY & MINERALS CO.	GULF ENERGY & MINERALS CO.	TUCKER DRILLING CO., INC.
COMPLETED	03/15/76	10/26/76	10/05/65
SAMPLED	10/25/77	11/17/77	02/11/66
FORMATION	ORDO-ELLENBURGER	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7806	7046	7346
WELLHEAD PRESSURE,PSIG	2315	1140	2280
OPEN FLOW, MCFD	14000	2600	18000
COMPONENT, MOLE PCT			
METHANE	75.8	77.0	77.2
ETHANE	11.8	9.1	9.3
PROPANE	5.1	5.7	4.7
N-BUTANE	1.4	2.6	1.2
ISOBUTANE	0.5	0.9	0.8
N-PENTANE	0.3	0.4	0.6
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.2	0.1	0.6
NITROGEN	3.8	3.5	4.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.6
HELIUM	0.09	0.10	0.11
HEATING VALUE*	1215	1236	1206
SPECIFIC GRAVITY	0.731	0.739	0.734

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10633 SAMPLE 10395	INDEX 10634 SAMPLE 15147	INDEX 10635 SAMPLE 10564
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCHLEICHER
FIELD	VELREX SW	VELREX SW	X-BAR
WELL NAME	J. I. CASE NO. 1	W. E. DELONG NO. 1	C. L. MEADOR NO. 1
LOCATION	SEC. 25, BLK. TT, TC RR SUR.	SEC. 6, BLK. TT, TCRR SUR.	SEC. 66, BLK. D, GC&SF SUR.
OWNER	TUCKER DRILLING CO., INC.	GULF ENERGY & MINERALS CO.	CABOT CORP.
COMPLETED	10/05/65	10/10/76	08/12/64
SAMPLED	02/11/66	11/01/77	05/12/66
FORMATION	PENN-CANYON	PENN-STRAWN	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6616	7257	6652
WELLHEAD PRESSURE, PSIG	1983	1870	1502
OPEN FLOW, MCFD	1475	4800	2000
COMPONENT, MOLE PCT			
METHANE	75.7	78.2	81.5
ETHANE	9.6	9.7	8.9
PROPANE	4.6	4.6	3.1
N-BUTANE	1.5	1.4	0.8
ISOBUTANE	0.7	0.4	0.2
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	0.9	0.3	0.3
CYCLOPENTANE	0.4	0.1	0.1
HEXANES PLUS	0.9	0.3	0.2
NITROGEN	4.2	3.7	2.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.7
CARBON DIOXIDE	1.0	0.8	0.4
HELIUM	0.10	0.09	0.14
HEATING VALUE*	1249	1195	1139
SPECIFIC GRAVITY	0.763	0.721	0.675

	INDEX 10636 SAMPLE 3764	INDEX 10637 SAMPLE 8151	INDEX 10638 SAMPLE 3766
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHACKELFORD	SHACKELFORD	SHACKELFORD
FIELD	BLUFF CREEK	CHASTAIN	HENDRICK
WELL NAME	J. P. MORRIS EST. NO. 28	R. B. WEDDINGTON NO. 1	T. G. HENDRICK NO. 1
LOCATION	SEC. 166	UNIVERSITY LAND SUR.	SEC. 1, BLK. A, AB&M SUR.
OWNER	KLEINER & WELTZEL	BEN WIRKKALA	KITTERY OIL CO.
COMPLETED	08/31/43	09/1?/49	10/16/40
SAMPLED	03/27/44	08/10/61	04/08/44
FORMATION	PENN-CISCO	PENN-LAKE	PENN-COOK
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	1490	3703	1598
WELLHEAD PRESSURE, PSIG	400	NOT GIVEN	145
OPEN FLOW, MCFD	1860	1300	500
COMPONENT, MOLE PCT			
METHANE	70.6	71.0	66.8
ETHANE	5.4	10.7	7.5
PROPANE	---	5.6	---
N-BUTANE	---	2.2	---
ISOBUTANE	---	1.1	---
N-PENTANE	---	0.5	---
ISOPENTANE	---	0.8	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.6	---
NITROGEN	22.4	6.8	24.4
OXYGEN	0.4	TRACE	0.2
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	1.01	0.25	0.91
HEATING VALUE*	812	1261	811
SPECIFIC GRAVITY	0.674	0.787	0.692

	INDEX 10639 SAMPLE 12717	INDEX 10640 SAMPLE 12282	INDEX 10641 SAMPLE 12283
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHACKELFORD	SHACKELFORD	SHACKELFORD
FIELD	IDEL	LEA ANNE	LEA ANNE
WELL NAME	GURNEY NO. 1	WALKER-BUCKLER NO. 2	WALKER-BUCKLER NO. 2
LOCATION	SEC. 49, BAL SUR.	SEC. 380, TE&L SUR.	SEC. 380, TE&L SUR.
OWNER	PETROLEUM CORP. OF TEXAS	A. V. JONES & SONS	A. V. JONES & SONS
COMPLETED	10/27/66	03/29/69	03/29/69
SAMPLED	--/--/00	06/--/70	06/--/70
FORMATION	PENN-CADDO	PENN-CADDO	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3498	3902	4158
WELLHEAD PRESSURE, PSIG	100	1246	1566
OPEN FLOW, MCFD	1600	21000	14500
COMPONENT, MOLE PCT			
METHANE	64.8	70.5	66.5
ETHANE	12.6	10.3	11.7
PROPANE	10.0	7.5	8.3
N-BUTANE	3.3	1.8	2.7
ISOBUTANE	1.4	0.6	1.0
N-PENTANE	0.7	TRACE	0.6
ISOPENTANE	0.9	1.1	0.8
CYCLOPENTANE	0.3	TRACE	0.2
HEXANES PLUS	0.6	0.1	0.4
NITROGEN	4.9	7.4	7.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.4	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.3
HELIUM	0.05	0.16	0.12
HEATING VALUE*	1411	1228	1313
SPECIFIC GRAVITY	0.862	0.768	0.824

	INDEX 10642 SAMPLE 12284	INDEX 10643 SAMPLE 116	INDEX 10644 SAMPLE 13279
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHACKELFORD	SHACKELFORD	SHACKELFORD
FIELD	LEA ANNE	MORAN	MORAN E
WELL NAME	WALKER-BUCKLER NO. 2	J. D. FITE NO. 1	TERRY JENNINGS NO. 1
LOCATION	SEC. 380, TE&L SUR.	SEC. 37	SEC. 56, UNIV. LAND
OWNER	A. V. JONES & SONS	TEXAS CO.	O. P. LEONARD
COMPLETED	03/29/69	11/--/14	--/--/00
SAMPLED	06/--/70	03/04/20	06/24/72
FORMATION	MISS-	PENN-STRAWN	EOCE-JENNINGS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4590	2865	2300
WELLHEAD PRESSURE, PSIG	700	125	600
OPEN FLOW, MCFD	NOT GIVEN	962	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.6	75.6	70.1
ETHANE	16.4	9.1	8.9
PROPANE	9.0	---	5.9
N-BUTANE	1.4	---	1.6
ISOBUTANE	0.5	---	0.8
N-PENTANE	0.3	---	0.5
ISOPENTANE	0.5	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.1	---	0.3
NITROGEN	5.5	12.6	11.4
OXYGEN	0.5	2.6	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.3	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.4	0.1
HELIUM	0.02	0.12	0.30
HEATING VALUE*	1304	929	1148
SPECIFIC GRAVITY	0.801	0.665	0.762

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10645 SAMPLE 14127	INDEX 10646 SAMPLE 11884	INDEX 10647 SAMPLE 11885
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHACKELFORD	SHACKELFORD	SHACKELFORD
FIELD	MORAN-BURTON	ONETA	ONETA
WELL NAME	ALTON BURTON NO. 1	TRICE NO. 1	TRICE NO. 1
LOCATION	SEC. 71-UNIV. LAND SUR.	SEC. 817, TE&L SUR.	SEC. 817, TE&L SUR.
OWNER	PREWITT OIL CORP.	PREWITT & CHANCELLOR	PREWITT & CHANCELLOR
COMPLETED	02/22/73	05/17/68	05/17/68
SAMPLED	07/31/74	05/15/69	05/15/69
FORMATION	PENN-CONGLOMERATE	PENN-MARBLE FALLS	MISS-
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3944	4158	4330
WELLHEAD PRESSURE,PSIG	1577	2080	520
OPEN FLOW, MCFD	3950	5390	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.7	74.3	73.1
ETHANE	9.6	9.2	9.7
PROPANE	4.1	5.2	4.4
N-BUTANE	1.1	1.5	1.3
ISOBUTANE	0.4	0.6	0.3
N-PENTANE	0.2	0.5	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	8.8	7.6	9.8
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.34	0.21	0.25
HEATING VALUE*	1121	1172	1114
SPECIFIC GRAVITY	0.718	0.740	0.727

	INDEX 10648 SAMPLE 10849	INDEX 10649 SAMPLE 10850	INDEX 10650 SAMPLE 16091
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHACKELFORD	SHACKELFORD	SHACKELFORD
FIELD	PALM	PALM	ROCKWELL S
WELL NAME	F. N. PALM NO. 2	F. N. PALM NO. 2	WALKER BUCKLER 78 NO. 1
LOCATION	SEC. 67, LAL SUR.	SEC. 67, LAL SUR.	SEC. 78, BLK. 12, T&PRR SUR.
OWNER	M. R. STASNEY	M. R. STASNEY	JONES CO.
COMPLETED	07/22/66	07/22/66	10/11/79
SAMPLED	01/23/67	01/23/67	10/10/80
FORMATION	MISS-	PENN-CADDO	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4060	3511	4578
WELLHEAD PRESSURE,PSIG	1700	1550	1383
OPEN FLOW, MCFD	NOT GIVEN	38000	7500
COMPONENT, MOLE PCT			
METHANE	71.8	72.8	70.6
ETHANE	10.0	8.7	10.5
PROPANE	4.6	5.0	5.5
N-BUTANE	1.2	1.4	1.4
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	10.5	10.8	10.8
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	0.1
HELIUM	0.31	0.25	0.27
HEATING VALUE*	1119	1119	1162
SPECIFIC GRAVITY	0.737	0.743	0.757

	INDEX 10651 SAMPLE 4173	INDEX 10652 SAMPLE 5680	INDEX 10653 SAMPLE 11932
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHELBY	SHELBY	SHELBY
FIELD	HUXLEY	JOAQUIN	JOAQUIN
WELL NAME	PICKERING LUMBER CORP. NO. 1	HANSON NO. 1	PICKERING LBR. CO. NO. B-4
LOCATION	ST. FRANCES SUR.	NOT GIVEN	DAN S. HAIGHT SUR. A-354
OWNER	HUMBLE OIL & REFINING CO.	LION OIL CO.	SOUTHERN NATURAL GAS CO.
COMPLETED	03/26/46	11/29/50	07/06/68
SAMPLED	11/26/46	08/25/54	06/13/69
FORMATION	CRET-L	CRET-PETTIT	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6606	6176	6299
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1240
OPEN FLOW, MCFD	NOT GIVEN	1000	24000
COMPONENT, MOLE PCT			
METHANE	96.0	71.9	94.9
ETHANE	2.6	9.8	1.9
PROPANE	---	4.2	0.3
N-BUTANE	---	2.9	0.1
ISOBUTANE	---	2.8	0.1
N-PENTANE	---	2.3	0.1
ISOPENTANE	---	0.4	0.0
CYCLOPENTANE	---	0.4	TRACE
HEXANES PLUS	---	3.0	0.1
NITROGEN	0.0	0.8	1.8
OXYGEN	0.5	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	1.3	0.7
HELIUM	0.03	TRACE	0.02
HEATING VALUE*	1019	1497	1019
SPECIFIC GRAVITY	0.579	0.879	0.588

	INDEX 10654 SAMPLE 12449	INDEX 10655 SAMPLE 15531	INDEX 10656 SAMPLE 15532
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHELBY	SHELBY	SHELBY
FIELD	JOAQUIN	JOAQUIN	JOAQUIN
WELL NAME	J. S. PRICE UNIT NO. 1	W. M. TAYLOR NO. 1	W. M. TAYLOR NO. 1
LOCATION	J. M. WHITE SUR.	S. O. PENNINGTON SUR. A-555	S. O. PENNINGTON SUR. A-555
OWNER	ATLANTIC RICHFIELD CO.	KEY PRODUCTION CO.	KEY PRODUCTION CO.
COMPLETED	02/09/81	10/05/76	10/05/76
SAMPLED	10/15/70	12/06/78	12/06/78
FORMATION	CRET-JETER	CRET-TRAVIS PEAK	CRET-PETTIT & TRAVIS PEAK
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	4935	6192	6192
WELLHEAD PRESSURE,PSIG	565	2763	2763
OPEN FLOW, MCFD	1985	1500	1500
COMPONENT, MOLE PCT			
METHANE	89.2	93.8	94.0
ETHANE	2.5	2.0	2.0
PROPANE	0.7	0.4	0.4
N-BUTANE	0.3	0.1	0.2
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	5.4	2.3	2.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.7	0.8
HELIUM	0.05	0.02	0.02
HEATING VALUE*	995	1018	1018
SPECIFIC GRAVITY	0.621	0.593	0.595

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10657 SAMPLE 17207	INDEX 10658 SAMPLE 14955	INDEX 10659 SAMPLE 10523
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHELBY	SHELBY	SHELBY
FIELD	MEI	STOCKMAN	TENAHA
WELL NAME	HOWARD NO. 1	GRANT NO. 1	K. POLLARD NO. 1
LOCATION	J. E. MYRICK SUR., A-472	ARCADIA, TEXAS	JESSIE SULLINS SUR. A-636
OWNER	MARSHALL EXPLORATION, INC.	ARKLA EXPLORATION CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/08/83	01/14/77	09/27/65
SAMPLED	03/13/84	03/24/77	03/06/66
FORMATION	CRET-PETTIT	JURA-COTTON VALLEY	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	6508	10281	10745
WELLHEAD PRESSURE,PSIG	3340	4100	4775
OPEN FLOW, MCFD	14628	757	7300
COMPONENT, MOLE PCT			
METHANE	96.6	92.6	88.6
ETHANE	0.8	3.6	2.4
PROPANE	0.2	0.6	0.2
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.8	0.2	5.1
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	1.0
CARBON DIOXIDE	0.8	2.4	3.4
HELIUM	0.02	TRACE	0.04
HEATING VALUE*	1023	1041	946
SPECIFIC GRAVITY	0.582	0.613	0.624

	INDEX 10660 SAMPLE 16689	INDEX 10661 SAMPLE 6998	INDEX 10662 SAMPLE 14548
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHELBY	SHERMAN	SHERMAN
FIELD	TENAHA	CATOR	COLD WATER CREEK
WELL NAME	SPRING VALLEY RANCH NO. 1	CLARINE F. BROWN NO. 1	MURPHY NO. G-1
LOCATION	JESSE SULLINS SUR., A-636	SEC. 75, BLK. 3-T, T&NO SUR.	SEC. 128, BLK. 1C, GH&H SUR.
OWNER	SUN PRODUCTION CO.	SHAMROCK OIL & GAS CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	04/10/82	03/10/59	08/28/75
SAMPLED	10/--/82	03/12/59	12/17/75
FORMATION	CRET-PALUXY SD	PERM-TUBB	PENN-MARMATON
GEOLOGIC PROVINCE CODE	260	360	360
DEPTH, FEET	3480	1925	5338
WELLHEAD PRESSURE,PSIG	1620	600	1291
OPEN FLOW, MCFD	8100	600	42000
COMPONENT, MOLE PCT			
METHANE	84.0	62.2	73.7
ETHANE	2.3	3.9	8.8
PROPANE	0.7	2.1	5.5
N-BUTANE	0.2	0.5	2.5
ISOBUTANE	0.2	0.3	0.6
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.1	0.0	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	11.8	30.2	8.8
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.07	0.40	0.22
HEATING VALUE*	952	791	1153
SPECIFIC GRAVITY	0.640	0.733	0.737

	INDEX 10663 SAMPLE 3482	INDEX 10664 SAMPLE 3483	INDEX 10665 SAMPLE 3484
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	G. BRYAN NO. 1-A	S. J. CALVIRD NO. 1	MOLLIE DAVIS NO. 1
LOCATION	SEC. 69, BLK. 1T, T&NO SUR.	SEC. 382, BLK. 1-T, T&NO SUR.	SEC. 404, BLK. 1-T, T&NO SUR.
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	08/12/40	09/27/41	04/18/38
SAMPLED	06/02/42	06/02/42	06/02/42
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2270	2088	2550
WELLHEAD PRESSURE,PSIG	450	430	430
OPEN FLOW, MCFD	27500	48000	43000
COMPONENT, MOLE PCT			
METHANE	61.4	62.8	62.2
ETHANE	20.7	19.4	20.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	16.4	16.3	15.9
OXYGEN	0.5	0.4	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.82	0.81	0.85
HEATING VALUE*	993	994	994
SPECIFIC GRAVITY	0.726	0.720	0.721

	INDEX 10666 SAMPLE 3835	INDEX 10667 SAMPLE 4111	INDEX 10668 SAMPLE 4112
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	SEELEY NO. 1	FLOREY NO. 1	PRICE NO. 3
LOCATION	SEC.413, BLK. 1-T, T&NO SUR.	SEC. 8, BLK. 2-T, T&NO SUR.	SEC. 20, BLK. 2-B, GH&H SUR.
OWNER	KEALY-8 OIL CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	--/--/00	04/25/45	--/--/00
SAMPLED	05/18/44	08/--/46	08/--/46
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3713	3290	3220
WELLHEAD PRESSURE,PSIG	413	423	418
OPEN FLOW, MCFD	4800	26000	11500
COMPONENT, MOLE PCT			
METHANE	63.4	65.2	61.0
ETHANE	20.2	21.2	20.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.1	12.6	17.2
OXYGEN	0.4	0.0	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.76	0.82	0.61
HEATING VALUE*	1004	1040	991
SPECIFIC GRAVITY	0.718	0.710	0.730

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10669 SAMPLE 4309	INDEX 10670 SAMPLE 4310	INDEX 10671 SAMPLE 4311
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	T. E. DURHAM NO. 1	H. BASKIN NO. 1	MAUD SEATON NO. 1
LOCATION	SEC.335, BLK.1-T, T&NORR SUR.	SEC.444, BLK.1-T, T&NORR SUR.	SEC. 5, BLK. 2-T, T&NORR SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/17/46	01/14/47	01/13/47
SAMPLED	05/28/47	05/28/47	05/28/47
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2435	2905	2930
WELLHEAD PRESSURE,PSIG	424	424	424
OPEN FLOW, MCFD	31600	14200	22700
COMPONENT, MOLE PCT			
METHANE	60.9	60.0	61.0
ETHANE	21.9	22.5	22.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.8	16.1	15.2
OXYGEN	0.3	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.78	0.81	0.77
HEATING VALUE*	1009	1011	1021
SPECIFIC GRAVITY	0.729	0.733	0.729

	INDEX 10672 SAMPLE 4314	INDEX 10673 SAMPLE 4857	INDEX 10674 SAMPLE 4858
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	CLUCK NO. 1	M. E. RANSDELL NO. 1	WALTER LASLEY NO. 1
LOCATION	SEC. 9, BLK. 3-B, GH&H SUR.	SEC. 125, BLK. 1-C, GH&H SUR	SEC. 126, BLK. 1-C, GH&H SUR
OWNER	PHILLIPS PETROLEUM CO.	STANOLIND OIL & GAS CO.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/47	01/21/50	01/21/50
SAMPLED	05/22/47	03/24/50	03/24/50
FORMATION	PERM-CHASE GROUP	PERM-	PERM-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3015	2893	2992
WELLHEAD PRESSURE,PSIG	428	416	423
OPEN FLOW, MCFD	9700	2	3
COMPONENT, MOLE PCT			
METHANE	61.6	72.3	73.0
ETHANE	21.8	6.3	6.4
PROPANE	---	3.6	3.7
N-BUTANE	---	1.1	1.1
ISOBUTANE	---	0.2	0.4
N-PENTANE	---	0.2	0.3
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	14.8	15.0	13.9
OXYGEN	0.1	0.1	0.1
ARGON	---	0.1	0.1
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.9	0.1	0.3
HELIUM	0.82	0.68	0.58
HEATING VALUE*	1015	1007	1026
SPECIFIC GRAVITY	0.729	0.713	0.719

	INDEX 10675 SAMPLE 5049	INDEX 10676 SAMPLE 5278	INDEX 10677 SAMPLE 5279
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	RAY NO. 1	DOOLEY NO. 3	POLLAN NO. 1
LOCATION	SEC. 66, BLK. 1-C, GH&H SUR.	SEC. 68, BLK. 3-T, T&NO SUR.	BLK. 3-T, T&NO SUR.
OWNER	TASCOSA GAS CO.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	--/--/00	09/25/52	05/08/52
SAMPLED	04/23/51	09/30/52	09/19/52
FORMATION	PERM-CLEARFORK M	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1875	3335	3136
WELLHEAD PRESSURE,PSIG	NOT GIVEN	414	417
OPEN FLOW, MCFD	NOT GIVEN	482	1367
COMPONENT, MOLE PCT			
METHANE	2.4	70.3	70.8
ETHANE	0.2	6.6	6.7
PROPANE	0.2	3.8	3.8
N-BUTANE	0.2	0.9	0.9
ISOBUTANE	TRACE	0.6	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	95.6	16.5	16.1
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	0.1	0.1
HELIUM	0.20	0.76	0.74
HEATING VALUE*	48	993	998
SPECIFIC GRAVITY	0.967	0.721	0.719

	INDEX 10678 SAMPLE 5281	INDEX 10679 SAMPLE 5282	INDEX 10680 SAMPLE 5294
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	PRICE NO. B-1	AMEND NO. 1	DOOLEY NO. 1
LOCATION	SEC. 25, BLK. 2-B, GH&H SUR.	SEC. 2, BLK. 3, GH&H SUR.	SEC. 67, BLK. 3-T, T&NO SUR.
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	05/21/52	06/18/52	08/05/52
SAMPLED	09/19/52	09/30/52	09/30/52
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3205	3170	3350
WELLHEAD PRESSURE,PSIG	368	419	425
OPEN FLOW, MCFD	1407	363	2579
COMPONENT, MOLE PCT			
METHANE	67.1	75.7	70.5
ETHANE	6.3	6.6	6.5
PROPANE	3.7	3.3	3.7
N-BUTANE	0.9	0.3	1.0
ISOBUTANE	0.6	0.3	0.5
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.6	11.7	16.4
OXYGEN	0.2	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.96	0.76	0.77
HEATING VALUE*	957	1034	995
SPECIFIC GRAVITY	0.733	0.694	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10681 SAMPLE 5311	INDEX 10682 SAMPLE 5326	INDEX 10683 SAMPLE 5362
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	DOOLEY NO. 4	CAPROCK NO. 1	PRONGER NO. A-1
LOCATION	SEC. 83, BLK. 3-T, T&NO SUR.	SEC. 173, BLK. 1-T, T&NO SUR	SEC. 359, BLK. 1-T, T&NO SUR
OWNER	SHAMROCK OIL & GAS CORP.	TASCOSA GAS CO.	AMERICAN GAS PRODUCTION CO.
COMPLETED	08/14/52	02/14/51	09/15/52
SAMPLED	11/13/52	11/19/52	12/18/52
FORMATION	PERM-CHASE GROUP	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3167	2838	2430
WELLHEAD PRESSURE,PSIG	410	398	357
OPEN FLOW, MCFD	636	NOT GIVEN	31803
COMPONENT, MOLE PCT			
METHANE	50.3	64.9	68.8
ETHANE	4.4	5.7	6.1
PROPANE	6.0	3.8	4.0
N-BUTANE	0.7	1.2	1.1
ISOBUTANE	0.0	0.5	0.6
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	33.6	22.0	17.5
OXYGEN	4.4	0.3	TRACE
ARGON	0.3	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.29	0.78	0.83
HEATING VALUE*	772	936	990
SPECIFIC GRAVITY	0.814	0.747	0.732

	INDEX 10684 SAMPLE 5365	INDEX 10685 SAMPLE 5423	INDEX 10686 SAMPLE 5424
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	COFFMAN NO. 1	A. D. FOREMAN NO. 1	PRYMECK NO. 1
LOCATION	SEC. 181, BLK. 1-C, GH&H SUR	SEC. 446, BLK. 1-T, T&NO SUR	SEC. 122, BLK. 1-C, GH&H SUR
OWNER	UNITED PRODUCING CO., INC.	STANOLIND OIL & GAS CO.	KERR-MCGEE OIL IND., INC.
COMPLETED	07/01/52	01/02/53	10/31/52
SAMPLED	01/10/53	03/23/53	03/23/53
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2851	2965	NOT GIVEN
WELLHEAD PRESSURE,PSIG	364	362	392
OPEN FLOW, MCFD	2176	9927	943
COMPONENT, MOLE PCT			
METHANE	70.5	72.1	70.9
ETHANE	6.1	6.0	5.5
PROPANE	4.1	3.0	3.7
N-BUTANE	1.2	0.9	1.1
ISOBUTANE	0.5	0.7	0.3
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	15.9	15.5	16.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.0
HELIUM	0.77	0.70	0.84
HEATING VALUE*	1023	1001	986
SPECIFIC GRAVITY	0.735	0.719	0.719

	INDEX 10687 SAMPLE 5783	INDEX 10688 SAMPLE 5784	INDEX 10689 SAMPLE 6477
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	BROWDER A-1	PRICE E-1	BIVINS NO. 2
LOCATION	SEC. 54, BLK. 3-T, T&NO SUR.	SEC. 38, BLK. 3-T, T&NO SUR.	SEC. 50, BLK. 38, GH&H SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	SMITH & CREE
COMPLETED	11/11/53	07/06/54	--/--/00
SAMPLED	03/01/55	03/01/55	01/17/58
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3110	3166	NOT GIVEN
WELLHEAD PRESSURE,PSIG	404	399	NOT GIVEN
OPEN FLOW, MCFD	6944	2030	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.6	69.7	68.5
ETHANE	6.3	6.2	5.7
PROPANE	3.5	3.1	4.6
N-BUTANE	0.9	0.7	1.1
ISOBUTANE	0.6	0.5	0.4
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	16.7	18.1	18.2
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.83	0.95	0.90
HEATING VALUE*	988	947	984
SPECIFIC GRAVITY	0.721	0.712	0.732

	INDEX 10690 SAMPLE 6657	INDEX 10691 SAMPLE 7857	INDEX 10692 SAMPLE 7858
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	BATSHORE NO. 1	EDEN NO. 1	ROSS NO. 1
LOCATION	NOT GIVEN	SEC. 101	SEC. 66
OWNER	PHILLIPS PETROLEUM CO.	J. M. OIL CORP.	J. M. OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/--/58	02/15/61	02/15/61
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	248	262
OPEN FLOW, MCFD	NOT GIVEN	452	187
COMPONENT, MOLE PCT			
METHANE	80.9	63.9	60.5
ETHANE	6.4	6.0	5.7
PROPANE	3.8	3.8	4.0
N-BUTANE	1.2	1.2	1.2
ISOBUTANE	0.8	0.7	0.7
N-PENTANE	0.3	0.5	0.3
ISOPENTANE	0.4	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	5.6	22.6	26.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.1
HELIUM	0.20	1.00	0.60
HEATING VALUE*	1144	945	914
SPECIFIC GRAVITY	0.698	0.758	0.775

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10693 SAMPLE 7891	INDEX 10694 SAMPLE 8709	INDEX 10695 SAMPLE 8711
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	JOHNSON NO. 1	BASKIN NO. 1	PRONGER C NO. 1
LOCATION	SEC. 3, T3N, T&NO SUR.	SEC. 444, BLK. 1-T, T&NO SUR	SEC. 299, BLK. 1T, T&NO SUR.
OWNER	MOLBERT OPERATING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	02/20/61	01/14/47	01/08/48
SAMPLED	05/04/61	10/10/62	10/10/62
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3198	2905	2504
WELLHEAD PRESSURE,PSIG	410	155	165
OPEN FLOW, MCFD	500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.0	69.2	64.8
ETHANE	4.6	6.6	5.7
PROPANE	1.8	4.3	3.8
N-BUTANE	0.2	1.8	1.3
ISOBUTANE	0.3	0.7	0.6
N-PENTANE	TRACE	0.2	0.2
ISOPENTANE	TRACE	0.4	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	33.9	15.8	20.8
OXYGEN	0.0	0.3	1.2
ARGON	0.1	TRACE	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	1.90	0.71	0.65
HEATING VALUE*	723	1038	961
SPECIFIC GRAVITY	0.736	0.743	0.761

	INDEX 10696 SAMPLE 8712	INDEX 10697 SAMPLE 8713	INDEX 10698 SAMPLE 8714
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	R. C. BUCKLES NO. 1	T. H. DURHAM NO. 1	LN PRICE NO. 1
LOCATION	SEC. 453, BLK. 1-T, T&NO SUR	SEC. 335, BLK. 1-T, T&NO SUR	SEC. 372, BLK. 1-T, T&NO SUR
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/06/48	12/17/46	11/07/47
SAMPLED	10/10/62	10/10/62	10/10/62
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2849	2435	2726
WELLHEAD PRESSURE,PSIG	155	160	165
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.5	65.0	68.4
ETHANE	6.5	5.9	6.5
PROPANE	4.3	3.8	4.4
N-BUTANE	1.4	1.1	1.5
ISOBUTANE	0.7	0.6	0.9
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.3	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.6	20.4	16.2
OXYGEN	TRACE	1.3	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.75	0.69	0.73
HEATING VALUE*	1038	950	1049
SPECIFIC GRAVITY	0.741	0.752	0.755

	INDEX 10699 SAMPLE 11858	INDEX 10700 SAMPLE 11860	INDEX 10701 SAMPLE 11861
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	L. M. PRICE NO. 2	W. A. WHORTON NO. 2	W. A. SPURLOCK NO. 2
LOCATION	SEC. 309, BLK. 1T, T&NO SUR.	SEC. 104, BLK. 1T, T&NO SUR.	SEC. 25, BLK. 28, GH&H SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	11/29/47	11/29/48	12/06/47
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2960	2865	3303
WELLHEAD PRESSURE,PSIG	106	158	100
OPEN FLOW, MCFD	511	104	698
COMPONENT, MOLE PCT			
METHANE	68.2	65.8	67.6
ETHANE	6.5	6.0	6.5
PROPANE	4.6	4.1	4.2
N-BUTANE	1.4	1.2	1.1
ISOBUTANE	0.8	0.7	0.7
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	16.4	20.4	18.4
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.76	0.87	0.99
HEATING VALUE*	1059	980	998
SPECIFIC GRAVITY	0.754	0.754	0.742

	INDEX 10702 SAMPLE 11862	INDEX 10703 SAMPLE 11863	INDEX 10704 SAMPLE 11865
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	W. A. SPURLOCK NO. 1	H. J. COLLIER NO. 1	L. M. PRICE NO. 1
LOCATION	SEC. 26, BLK. 28, GH&H SUR.	SEC. 179, BLK. 1C, SH&H SUR.	SEC. 60, BLK. 28, GH&H SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	11/22/69	09/08/50	02/21/48
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3041	2932	2990
WELLHEAD PRESSURE,PSIG	234	100	100
OPEN FLOW, MCFD	289	499	444
COMPONENT, MOLE PCT			
METHANE	70.6	68.8	68.0
ETHANE	6.5	6.7	6.6
PROPANE	4.5	5.0	4.3
N-BUTANE	1.0	1.5	1.5
ISOBUTANE	0.4	1.2	0.6
N-PENTANE	0.2	0.8	0.3
ISOPENTANE	0.2	0.9	0.5
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.4	0.3
NITROGEN	16.5	14.7	16.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.88	0.60	0.81
HEATING VALUE*	992	1096	1043
SPECIFIC GRAVITY	0.720	0.763	0.756

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10705 SAMPLE 11866	INDEX 10706 SAMPLE 11867	INDEX 10707 SAMPLE 11869
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	W. A. WHARTON NO. 1	R. M. COFFMAN NO. 1	M. WHORTON NO. 1
LOCATION	SEC. 137, BLK. 1T, T&NO SUR.	SEC. 181, BLK. 1C, GH&H SUR.	SEC. 188, BLK. 1C, GH&H SUR.
OWNER	TERRELL & STALLTER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	10/15/48	07/01/52	10/29/48
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	2851	2840
WELLHEAD PRESSURE,PSIG	NOT GIVEN	98	119
OPEN FLOW, MCFD	NOT GIVEN	285	298
COMPONENT, MOLE PCT			
METHANE	66.4	69.2	69.7
ETHANE	6.0	6.5	6.3
PROPANE	4.0	4.1	3.9
N-BUTANE	1.2	1.4	1.3
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.4	0.5	0.2
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	19.9	16.2	16.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.87	0.75	0.69
HEATING VALUE*	977	1036	1017
SPECIFIC GRAVITY	0.746	0.746	0.737

	INDEX 10708 SAMPLE 11870	INDEX 10709 SAMPLE 11871	INDEX 10710 SAMPLE 11872
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	J. W. STERL NO. 1	L. B. HAILE NO. 1	NANNIE NO. 1
LOCATION	SEC. 135, BLK. 1T, T&NO SUR.	SEC. 182, BLK. 1C, GH&H SUR.	SEC. 207, BLK. 1T, T&NO SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	02/07/69	10/10/50	05/21/51
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2802	2862	2878
WELLHEAD PRESSURE,PSIG	174	95	80
OPEN FLOW, MCFD	112	221	366
COMPONENT, MOLE PCT			
METHANE	63.9	69.0	65.1
ETHANE	5.9	6.6	6.4
PROPANE	4.2	5.0	4.8
N-BUTANE	1.7	1.6	1.6
ISOBUTANE	0.7	1.2	1.1
N-PENTANE	0.4	0.7	0.6
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.5	0.3
NITROGEN	22.0	14.4	18.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.93	0.64	0.72
HEATING VALUE*	974	1101	1047
SPECIFIC GRAVITY	0.766	0.764	0.778

	INDEX 10711 SAMPLE 11873	INDEX 10712 SAMPLE 11874	INDEX 10713 SAMPLE 11875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
WELL NAME	J. L. HASS NO. 1	W. M. LASLEY NO. 1	SAM LASLEY NO. 1
LOCATION	SEC. 215, BLK. 1C, GH&H SUR.	SEC. 172, BLK. 1C, GH&H SUR.	SEC. 184, BLK. 1C, GH&H SUR.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.
COMPLETED	01/20/48	12/17/48	01/06/48
SAMPLED	05/13/69	05/13/69	05/13/69
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	2769	NOT GIVEN	8
WELLHEAD PRESSURE,PSIG	84	186	76
OPEN FLOW, MCFD	154	249	389
COMPONENT, MOLE PCT			
METHANE	64.1	67.9	66.7
ETHANE	6.2	6.4	7.3
PROPANE	4.3	4.0	5.6
N-BUTANE	1.7	1.2	2.2
ISOBUTANE	0.5	0.8	1.3
N-PENTANE	0.5	0.3	0.8
ISOPENTANE	0.4	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.2	0.6
NITROGEN	20.6	18.1	14.4
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.82	0.70	0.52
HEATING VALUE*	1009	1005	1156
SPECIFIC GRAVITY	0.775	0.746	0.799

	INDEX 10714 SAMPLE 13022	INDEX 10715 SAMPLE 7836	INDEX 10716 SAMPLE 7843
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	PALO DURO CREEK	PALO DURO CREEK
WELL NAME	DEAR NO. 1	WILLCLO NO. 2	KATHRYN A NO. 1
LOCATION	SEC. 11, BLK. 2T, T&NO SUR.	SEC. 15, BLK. J, T&NO SUR.	SEC. 8, BLK. 3-B, GH&H SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/00	06/05/50	04/08/49
SAMPLED	09/20/71	02/01/61	02/07/61
FORMATION	PERM-CHASE GROUP	PENN-KATHRYN	PENN-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	5343	5312
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1241	1110
OPEN FLOW, MCFD	NOT GIVEN	27984	25000
COMPONENT, MOLE PCT			
METHANE	70.3	77.3	77.2
ETHANE	6.2	8.1	7.6
PROPANE	4.6	3.9	3.7
N-BUTANE	1.1	1.1	1.2
ISOBUTANE	0.7	0.9	0.5
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.5	0.6	0.1
CYCLOPENTANE	0.1	0.4	0.1
HEXANES PLUS	0.2	1.2	0.1
NITROGEN	15.2	5.5	8.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.73	0.20	0.30
HEATING VALUE*	1043	1212	1098
SPECIFIC GRAVITY	0.738	0.740	0.706

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10717 SAMPLE 8228	INDEX 10718 SAMPLE 17387	INDEX 10719 SAMPLE 5609
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	PALO DURO CREEK	PALO DURO CREEK	STRATFORD
WELL NAME	MORRIS C NO. 1	KATHRYN "A" NO.2	STRATFORD G.U. NO. 2
LOCATION	SEC. 23, BLK. 2, GM&N SUR.	SEC. 8, BLK.38, GM&N SUR.	SEC. 61, BLK.1-T,T&NO SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	HUMBLE OIL & REFINING CO.
COMPLETED	06/11/61	01/16/84	04/23/54
SAMPLED	10/02/61	08/21/84	04/20/54
FORMATION	PENN-LIME	MISS-ST. LOUIS	PENN-CISCO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	5364	6062	3260
WELLHEAD PRESSURE,PSIG	1223	1515	473
OPEN FLOW, MCFD	64529	5300	14000
COMPONENT, MOLE PCT			
METHANE	72.8	87.8	72.4
ETHANE	8.2	3.8	5.9
PROPANE	4.2	1.9	3.7
N-BUTANE	1.1	0.7	1.3
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	11.6	4.1	14.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.27	0.23	0.55
HEATING VALUE*	1084	1088	1027
SPECIFIC GRAVITY	0.728	0.647	0.723

	INDEX 10720 SAMPLE 5610	INDEX 10721 SAMPLE 7044	INDEX 10722 SAMPLE 7163
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	STRATFORD	STRATFORD	STRATFORD
WELL NAME	STRATFORD G.U. NO. 1	JUDD A NO. 1	LEROY JUDD NO. 1
LOCATION	SEC. 79, BLK.1-T, T&NO SUR.	SEC. 3, BLK. 1, PSL SUR.	SEC. 13, BLK. 1-T, T&NO SUR.
OWNER	HUMBLE OIL & REFINING CO.	PHILLIPS PETROLEUM CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	04/03/54	02/26/59	06/12/59
SAMPLED	04/20/54	04/27/59	08/06/59
FORMATION	PENN-CISCO	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3273	3272	3500
WELLHEAD PRESSURE,PSIG	468	464	398
OPEN FLOW, MCFD	21500	1340	3160
COMPONENT, MOLE PCT			
METHANE	71.8	76.1	74.3
ETHANE	6.0	5.4	5.7
PROPANE	3.7	3.3	3.3
N-BUTANE	1.3	1.3	1.2
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.3	0.3	0.1
ISOPENTANE	0.2	0.2	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.2	11.8	13.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.57	0.60	0.60
HEATING VALUE*	1021	1053	1045
SPECIFIC GRAVITY	0.724	0.707	0.716

	INDEX 10723 SAMPLE 7236	INDEX 10724 SAMPLE 7297	INDEX 10725 SAMPLE 7307
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	STRATFORD	STRATFORD	STRATFORD
WELL NAME	O'BRIEN NO. 1	W. G. O'BRIEN ESTATE NO. 1	MORRIS SMITH NO. 1
LOCATION	SEC. 8, BLK.1-T, T&NORR SUR.	SEC. 29, BLK. 1-T, T&NO SUR.	SEC. 24, BLK. 1-T, T&NO SUR.
OWNER	SHAMROCK OIL & GAS CORP.	HUMBLE OIL & REFINING CO.	SHAMROCK OIL & GAS CORP.
COMPLETED	07/30/59	06/18/58	10/20/59
SAMPLED	10/08/59	12/04/59	12/10/59
FORMATION	PENN-CISCO	PENN-CISCO	PENN-CISCO
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3328	3291	3518
WELLHEAD PRESSURE,PSIG	456	472	398
OPEN FLOW, MCFD	2800	820	117
COMPONENT, MOLE PCT			
METHANE	77.7	76.5	73.1
ETHANE	5.2	5.1	5.6
PROPANE	2.8	3.2	3.5
N-BUTANE	1.0	1.2	1.5
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	TRACE	0.3	0.4
ISOPENTANE	0.6	0.3	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	11.1	11.9	14.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.1
HELIUM	0.50	0.60	0.60
HEATING VALUE*	1043	1041	1028
SPECIFIC GRAVITY	0.696	0.700	0.719

	INDEX 10726 SAMPLE 7427	INDEX 10727 SAMPLE 12171	INDEX 10728 SAMPLE 13754
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	STRATFORD	STRATFORD	WILDCAT
WELL NAME	W. G. O'BRIEN NO. 2-A	M. DORTCH NO. 1	CALVIRD-A NO. 2
LOCATION	SEC. 7, BLK. 1-T, T&NO SUR.	SEC. 25, BLK. 1-T, T&NO SUR.	SEC. 282, BLK. 1T, T&NO SUR.
OWNER	SHAMROCK OIL & GAS CORP.	W. W. HARLOW, ET AL.	CITIES SERVICE OIL CO.
COMPLETED	12/23/59	--/--/00	08/09/73
SAMPLED	02/29/60	01/17/70	10/16/73
FORMATION	PENN-CISCO	PERM-RED CAVE	PENN-LIME
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	3361	1720	3010
WELLHEAD PRESSURE,PSIG	462	400	84
OPEN FLOW, MCFD	1140	206	13300
COMPONENT, MOLE PCT			
METHANE	76.3	90.3	68.8
ETHANE	5.2	4.6	6.6
PROPANE	3.0	3.6	4.8
N-BUTANE	1.1	0.9	1.5
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	12.6	98.9	16.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.2	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.4
HELIUM	0.50	0.75	0.80
HEATING VALUE*	1020	647	1054
SPECIFIC GRAVITY	0.696	0.842	0.758

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10729 SAMPLE 4141	INDEX 10730 SAMPLE 12442	INDEX 10731 SAMPLE 12443
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SMITH	SMITH	SMITH
FIELD	CHAPEL HILL	CHAPEL HILL	CHAPEL HILL
WELL NAME	B. MOSLEY NO. 1	L. RUDMAN NO. 1	BISHOP MOSLEY NO. 1
LOCATION	LEVI HINDS SUR.	THOMAS PAYNE SUR.	LEVI HINDS SUR.
OWNER	SHELL OIL CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	10/13/40	09/10/43	03/05/41
SAMPLED	09/18/46	10/14/70	10/14/70
FORMATION	CRET-PALUXY	CRET-RODESSA	CRET-PALUXY
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5785	7295	5778
WELLHEAD PRESSURE,PSIG	1725	NOT GIVEN	837
OPEN FLOW, MCFD	6600	NOT GIVEN	2250
COMPONENT, MOLE PCT			
METHANE	73.4	78.7	74.9
ETHANE	24.2	8.5	13.6
PROPANE	---	5.8	6.9
N-BUTANE	---	1.9	0.6
ISOBUTANE	---	1.5	0.6
N-PENTANE	---	0.9	0.1
ISOPENTANE	---	0.4	TRACE
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	1.2	0.2
NITROGEN	1.0	0.5	2.2
OXYGEN	0.6	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.7
HELIUM	0.05	0.02	0.04
HEATING VALUE*	1177	1319	1240
SPECIFIC GRAVITY	0.688	0.767	0.733

	INDEX 10732 SAMPLE 12480	INDEX 10733 SAMPLE 14177	INDEX 10734 SAMPLE 14794
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SMITH	SMITH	SMITH
FIELD	CHAPEL HILL W	OVERTON	OVERTON
WELL NAME	THEOTIS WARREN G.U. NO. 1	OVERTON G.U. 1 NO. 1	OVERTON G.U. 2 NO. 1
LOCATION	J. A. BROCK SUR.	M. G. MERIQUEZ SUR.	E. DANIELS SUR. A-329
OWNER	TEXACO INC.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	06/07/60	--/--/00	12/03/74
SAMPLED	10/22/70	10/--/74	10/01/76
FORMATION	CRET-PALUXY	JURA-HAYNESVILLE	JURA-HAYNESVILLE
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	5910	12000	12034
WELLHEAD PRESSURE,PSIG	840	5205	5400
OPEN FLOW, MCFD	1200	7800	16000
COMPONENT, MOLE PCT			
METHANE	81.4	95.9	96.5
ETHANE	8.6	0.7	1.1
PROPANE	4.8	0.1	0.2
N-BUTANE	1.6	TRACE	0.1
ISOBUTANE	1.3	TRACE	0.1
N-PENTANE	0.7	TRACE	TRACE
ISOPENTANE	0.5	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.8	1.2	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	2.0	1.4
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1254	992	1019
SPECIFIC GRAVITY	0.720	0.586	0.585

	INDEX 10735 SAMPLE 14803	INDEX 10736 SAMPLE 12550	INDEX 10737 SAMPLE 12605
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SMITH	SMITH	SMITH
FIELD	OVERTON	RED SPRINGS	TYLER
WELL NAME	OVERTON G.U. NO. 1	RED SPRINGS G.U. 6 NO. 1	ELKTON GAS UNIT NO. 2
LOCATION	M. A. HENRIQUEZ A-11 SUR.	CASSEY GREEN&N.&G.ESTRADA SUR	1-1/2 MI. S TYLER
OWNER	EXXON CO., U.S.A.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/17/74	12/30/50	09/09/63
SAMPLED	10/09/76	11/21/70	12/17/70
FORMATION	JURA-HAYNESVILLE A-11	CRET-RODESSA L	CRET-RODESSA
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	12012	9564	9600
WELLHEAD PRESSURE,PSIG	5190	430	4600
OPEN FLOW, MCFD	7800	684	6515
COMPONENT, MOLE PCT			
METHANE	96.3	85.0	93.7
ETHANE	0.9	5.5	2.8
PROPANE	0.1	2.9	0.7
N-BUTANE	0.0	1.0	0.2
ISOBUTANE	0.0	1.0	0.3
N-PENTANE	0.0	0.6	0.1
ISOPENTANE	0.0	0.3	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.7	0.1
NITROGEN	1.1	0.9	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	1.9	1.4
HELIUM	0.01	0.02	0.01
HEATING VALUE*	994	1181	1048
SPECIFIC GRAVITY	0.580	0.699	0.605

	INDEX 10738 SAMPLE 4675	INDEX 10739 SAMPLE 13340	INDEX 10740 SAMPLE 15204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SMITH	SMITH	STARR
FIELD	TYLER S	WILDCAT	ARKANSAS CITY
WELL NAME	MCMINN NO. 1	LAVELLE RHODES NO. 1-A	P. H. LONGORIA NO. 1
LOCATION	M. M. LONG SUR.	THOMAS QUEVADO SUR. A-18	J. WOODRIDGE SUR. 286, A-273
OWNER	PHILLIPS PETROLEUM CO.	FAIR OIL CO., LTD	HARKINS & CO.
COMPLETED	01/26/49	10/05/71	06/29/76
SAMPLED	04/12/49	07/31/72	01/24/78
FORMATION	CRET-RODESSA	CRET-PALUXY	OL16-FRIO
GEOLOGIC PROVINCE CODE	260	260	220
DEPTH, FEET	9550	7498	5106
WELLHEAD PRESSURE,PSIG	2390	2900	1546
OPEN FLOW, MCFD	1700	16000	13000
COMPONENT, MOLE PCT			
METHANE	91.9	90.3	84.1
ETHANE	5.0	4.2	4.5
PROPANE	1.4	1.5	2.0
N-BUTANE	0.5	0.5	0.7
ISOBUTANE	0.2	0.6	0.8
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.6	0.2
NITROGEN	0.3	1.3	5.4
OXYGEN	0.1	0.0	1.3
ARGON	0.0	0.0	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	0.5	0.3
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	1089	1118	1075
SPECIFIC GRAVITY	0.628	0.641	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10741 SAMPLE 17913	INDEX 10742 SAMPLE 13451	INDEX 10743 SAMPLE 15526
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	BAYLOR	BORDSA S	BORDSA S
WELL NAME	R. GUERRA NO. 1	T. B. SLICK EST. "A" NO. 2	T. B. SLICK EST. "A" NO. 1
LOCATION	SAN JOSE GRANT A-78	16 MI. NE RIO GRANDE CITY	SEC. 531, CCSD&RGN RR SUR.
OWNER	MARK IV ENERGY	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	01/05/85	--/--/00	12/04/71
SAMPLED	11/15/85	10/16/72	02/07/73
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6657	NOT GIVEN	6300
WELLHEAD PRESSURE,PSIG	600	NOT GIVEN	2473
OPEN FLOW, MCFD	25200	72000	16400
COMPONENT, MOLE PCT			
METHANE	36.7	89.6	84.5
ETHANE	2.5	6.1	6.3
PROPANE	0.9	2.2	3.9
N-BUTANE	0.3	0.5	1.3
ISOBUTANE	0.2	0.7	1.5
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.1	0.1	0.9
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.7
NITROGEN	45.5	0.2	0.3
OXYGEN	12.3	TRACE	0.0
ARGON	0.6	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	489	1137	1259
SPECIFIC GRAVITY	0.860	0.638	0.713

	INDEX 10744 SAMPLE 4586	INDEX 10745 SAMPLE 13928	INDEX 10746 SAMPLE 16775
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	BOYLE	CAMERON NW	CAPRICORN
WELL NAME	M. M. GARCIA D-14	DALLAS LAND BANK NO. 1	BARRERA EST. NCT-1 NO. 1
LOCATION	SEC. 908	CCSD & RGNS SUR. 509	F. DE LA GARZA 78, A-92
OWNER	CONTINENTAL OIL CO.	TENNECO OIL CO.	TEXACO INC.
COMPLETED	03/25/48	11/15/71	05/20/82
SAMPLED	10/12/48	02/27/74	02/22/83
FORMATION	OLIG-FRIO	OLIG-FRIO	EOCE-QUEEN CITY 1ST
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3782	4480	6240
WELLHEAD PRESSURE,PSIG	1450	470	4025
OPEN FLOW, MCFD	1750	270	7505
COMPONENT, MOLE PCT			
METHANE	79.2	86.0	91.7
ETHANE	19.5	6.6	3.7
PROPANE	---	3.7	1.3
N-BUTANE	---	0.9	0.3
ISOBUTANE	---	1.4	0.3
N-PENTANE	---	0.3	0.0
ISOPENTANE	---	0.5	0.4
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.4	0.1
NITROGEN	1.3	0.1	0.5
OXYGEN	0.0	TRACE	0.2
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.3
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	1.0
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1152	1221	1076
SPECIFIC GRAVITY	0.656	0.686	0.618

	INDEX 10747 SAMPLE 3677	INDEX 10748 SAMPLE 4689	INDEX 10749 SAMPLE 10533
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	COMEVON	DOSS	EL BENADITO
WELL NAME	W. I. COMEVON NO. 2	AUSTIN ESTATE NO. 1	F. V. W. HEARD NO. 1
LOCATION	SEC. 138, G. W. SMITH SUR.	PORCION 39	SEC. 21, BLK. A, MELTONS SUB.
OWNER	CONTINENTAL OIL CO.	SUN OIL CO.	LANDA OIL CO.
COMPLETED	09/23/43	10/30/48	09/12/63
SAMPLED	10/08/43	02/07/49	04/20/66
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4126	3723	9264
WELLHEAD PRESSURE,PSIG	1716	1659	6663
OPEN FLOW, MCFD	NOT GIVEN	9000	4500
COMPONENT, MOLE PCT			
METHANE	62.7	93.4	91.2
ETHANE	36.8	4.2	4.8
PROPANE	---	1.1	1.7
N-BUTANE	---	0.3	0.4
ISOBUTANE	---	0.2	0.6
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.2	0.3
NITROGEN	0.1	0.2	0.3
OXYGEN	0.3	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	TRACE	0.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1295	1069	1120
SPECIFIC GRAVITY	0.740	0.605	0.629

	INDEX 10750 SAMPLE 5116	INDEX 10751 SAMPLE 15399	INDEX 10752 SAMPLE 13910
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	EL JAVALI	EL STAGG	FLORES
WELL NAME	BESSIE M. COCKE NO. 1	RAFAEL A GUERRA NO. 1	S. D. BLOOMBERG NO. 1
LOCATION	NOT GIVEN	SAN JOSE GRANT A-78	X. ZAMORA PORCIAN 41, A-77
OWNER	CHICAGO CORP.	GEORGE M. COATES ESTATE	TEXACO INC.
COMPLETED	06/15/51	09/23/76	04/09/58
SAMPLED	11/02/51	10/--/78	02/--/79
FORMATION	EOCE-COCKFIELD	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2223	7320	5627
WELLHEAD PRESSURE,PSIG	915	3575	500
OPEN FLOW, MCFD	8200	19000	300
COMPONENT, MOLE PCT			
METHANE	97.0	88.2	90.6
ETHANE	0.8	5.7	5.3
PROPANE	0.1	2.1	1.9
N-BUTANE	0.1	0.5	0.4
ISOBUTANE	0.1	0.6	0.6
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	0.4	1.3	0.3
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.1
HELIUM	0.40	TRACE	TRACE
HEATING VALUE*	1010	1118	1132
SPECIFIC GRAVITY	0.574	0.649	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10753 SAMPLE 3815	INDEX 10754 SAMPLE 2658	INDEX 10755 SAMPLE 2659
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	GARCIA	GUERRA	GUERRA
WELL NAME	Z. SOLIS A NO. 1	GUERRA NO. 1-C	NO. C-2
LOCATION	2 MI. S OF FROST FIELD	SACATOSA GRANT	SACATOSA GRANT
OWNER	SUN OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	02/13/44	08/21/33	11/01/33
SAMPLED	04/20/44	11/14/33	11/14/33
FORMATION	OLIG-FRIO	EOCE-JACKSON L	EOCE-JACKSON L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4070	2141	2160
WELLHEAD PRESSURE,PSIG	1500	810	800
OPEN FLOW, MCFD	2000	10000	3000
COMPONENT, MOLE PCT			
METHANE	80.6	92.6	91.0
ETHANE	14.2	5.9	7.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	4.7	0.4	1.1
OXYGEN	0.4	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1071	1044	1056
SPECIFIC GRAVITY	0.647	0.594	0.599

	INDEX 10756 SAMPLE 5126	INDEX 10757 SAMPLE 4956	INDEX 10758 SAMPLE 13549
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	JAY SIMMONS S	KELSEY S	LA REFORMA
WELL NAME	MINAJOSA NO. 1	ALVAREZ NO. 1	Co. Vs. DE LOPEZ "A" NO. 2
LOCATION	SANTA CRUZ GRANT	SANTA TERESA GRANT	SANTA CRUZ SUR. A-79
OWNER	SUN OIL CO.	MUGH, KIRKPATRICK, ET AL.	SUN OIL CO.
COMPLETED	08/18/51	06/17/50	03/27/71
SAMPLED	11/24/51	11/23/50	02/23/73
FORMATION	OLIG-	OLIG-FRIO	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6137	4590	7989
WELLHEAD PRESSURE,PSIG	2810	2110	3065
OPEN FLOW, MCFD	11000	NOT GIVEN	7255
COMPONENT, MOLE PCT			
METHANE	89.8	88.8	88.8
ETHANE	5.2	5.7	5.4
PROPANE	2.2	2.3	2.4
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.6	0.5	0.7
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.4
NITROGEN	0.9	0.7	0.8
OXYGEN	0.1	0.2	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1123	1138	1151
SPECIFIC GRAVITY	0.636	0.646	0.652

	INDEX 10759 SAMPLE 3727	INDEX 10760 SAMPLE 16097	INDEX 10761 SAMPLE 3676
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	LOCKHART	NOT GIVEN	RINCON
WELL NAME	DOMINGO-GARZA NO. 2	I.V.MONTALVO "C" NO.39L	T. B. SLICK E 9
LOCATION	SEC. 80	LOS RETACHEZ GRANT A-347	SEC. 37, CCSD & RGNG SUR.
OWNER	LOCKHART & DAVENPORT	SUN GAS CO.	CONTINENTAL OIL CO.
COMPLETED	09/02/43	--/--/00	08/19/43
SAMPLED	03/22/44	10/14/80	10/05/43
FORMATION	EOCE-	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4014	7140	3830
WELLHEAD PRESSURE,PSIG	1500	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	3222	17000
COMPONENT, MOLE PCT			
METHANE	81.4	91.1	87.0
ETHANE	17.8	4.6	12.5
PROPANE	---	2.0	---
N-BUTANE	---	0.6	---
ISOBUTANE	---	0.5	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.3	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	---
NITROGEN	0.4	0.2	0.1
OXYGEN	0.3	TRACE	0.4
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	1144	1135	1105
SPECIFIC GRAVITY	0.647	0.633	0.619

	INDEX 10762 SAMPLE 4646	INDEX 10763 SAMPLE 12056	INDEX 10764 SAMPLE 4669
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	RINCON	RINCON	RINCON N
WELL NAME	DEE DAVENPORT NO. 5	M. M. GARCIA B538 NO. 20	R. W. MOORE NO. 1
LOCATION	SEC. 280, S-2	CCSD SUR. NO. 538	SEC. 513
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	LA GLORIA CORP.
COMPLETED	10/31/48	01/24/68	09/10/48
SAMPLED	12/30/48	10/01/69	01/19/49
FORMATION	OLIG-FRIO	OLIG-VICKSBURG	OLIG-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4245	6860	3287
WELLHEAD PRESSURE,PSIG	1854	2000	1500
OPEN FLOW, MCFD	14000	5000	12000
COMPONENT, MOLE PCT			
METHANE	58.2	74.9	97.0
ETHANE	39.9	6.8	1.5
PROPANE	---	5.6	0.3
N-BUTANE	---	2.4	0.1
ISOBUTANE	---	1.5	0.2
N-PENTANE	---	1.4	TRACE
ISOPENTANE	---	1.3	0.0
CYCLOPENTANE	---	0.8	0.1
HEXANES PLUS	---	2.9	0.2
NITROGEN	0.8	0.4	0.6
OXYGEN	0.6	TRACE	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.5	0.0	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1305	1519	1038
SPECIFIC GRAVITY	0.763	0.873	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10765 SAMPLE 15379	INDEX 10766 SAMPLE 3757	INDEX 10767 SAMPLE 12212
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	RINCON N	ROSS	ROSS N
WELL NAME	F. F. MARTINEZ NO. 1	GARZA NO. 2	D. L. GARZA B NO. 1
LOCATION	E. RANGEL SUR. 546, A-1015	SEC. 44, PORCION 88	11 MI. NE RIO GRANDE CITY
OWNER	HARKINS & CO.	W. L. GOLDSTON	SOUTH STATES OIL & GAS CO.
COMPLETED	07/07/77	12/03/43	05/12/56
SAMPLED	09/19/78	03/31/44	02/25/70
FORMATION	OLIG-VICKSBURG	OLIG-VICKSBURG	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7074	2775	2453
WELLHEAD PRESSURE,PSIG	3690	900	287
OPEN FLOW, MCFD	5000	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	81.9	96.0	90.7
ETHANE	7.6	1.6	4.1
PROPANE	3.9	---	0.5
N-BUTANE	0.9	---	0.2
ISOBUTANE	1.9	---	0.0
N-PENTANE	0.2	---	0.3
ISOPENTANE	0.3	---	0.1
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.2	---	0.1
NITROGEN	3.1	1.9	0.7
OXYGEN	0.7	0.4	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.1	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.1	3.1
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1163	1001	1038
SPECIFIC GRAVITY	0.690	0.573	0.627

	INDEX 10768 SAMPLE 12213	INDEX 10769 SAMPLE 11169	INDEX 10770 SAMPLE 13547
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	ROSS N	SAN ROMAN W	SUN
WELL NAME	D. L. GARZA B NO. 3	M. P. GUERRA NO. 2	LEE M. GREEN NO. 1
LOCATION	10 MI. NE RIO GRANDE CITY	PORCION 109, SUR. A-97	SANTA TERESA GRANT A-220
OWNER	SOUTH STATES OIL & GAS CO.	MOKEEN OIL CO.	COASTAL STATES GAS PROD. CO.
COMPLETED	01/23/69	09/28/66	01/30/71
SAMPLED	02/25/70	10/15/67	02/21/73
FORMATION	OLIG-FRIO	EOCE-2600 FT. SAND	OLIG-VICKSBURG I-4
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2488	4012	6773
WELLHEAD PRESSURE,PSIG	498	1014	2615
OPEN FLOW, MCFD	1720	6000	7400
COMPONENT, MOLE PCT			
METHANE	95.1	95.8	89.1
ETHANE	2.8	3.6	4.2
PROPANE	0.4	0.1	1.6
N-BUTANE	0.1	0.0	0.4
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.8	0.3	3.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.5
HELIUM	TRACE	0.03	0.01
HEATING VALUE*	1028	1038	1063
SPECIFIC GRAVITY	0.583	0.575	0.630

	INDEX 10771 SAMPLE 13548	INDEX 10772 SAMPLE 13524	INDEX 10773 SAMPLE 13525
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	SUN	SUN E	SUN E
WELL NAME	LEE M. GREEN NO. 1	LAUREL NO. 1	LAUREL NO. 1
LOCATION	SANTA TERESA GRANT A-220	CCSD&RGNG RR SUR NO 241,A202	CCSD&RGNG RR SUR. A-202
OWNER	COASTAL STATES GAS PROD. CO.	BOBBIE M. BURNS, ET AL.	BOBBIE M. BURNS, ET AL.
COMPLETED	01/30/71	10/16/71	10/16/71
SAMPLED	02/21/73	02/04/73	02/04/73
FORMATION	OLIG-VICKSBURG J-1	OLIG-VICKSBURG	OLIG-VICKSBURG
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7417	6390	6390
WELLHEAD PRESSURE,PSIG	2865	2360	2380
OPEN FLOW, MCFD	8500	2500	2500
COMPONENT, MOLE PCT			
METHANE	88.8	93.2	93.0
ETHANE	4.2	3.8	3.8
PROPANE	1.6	1.4	1.5
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.5	0.4	0.5
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.0	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1058	1095	1091
SPECIFIC GRAVITY	0.630	0.610	0.609

	INDEX 10774 SAMPLE 4305	INDEX 10775 SAMPLE 4481	INDEX 10776 SAMPLE 12525
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STARR	STARR
FIELD	SUN N	SUN N	SUN N
WELL NAME	LEE M. GREEN NO. 4	RAMON OLIVARES NO. 1	D. JUAREZ NO. 2
LOCATION	SANTA TERESA GRANT	3 MI. SE OF SANTA ELENA	SANTA TERESA GRANT A-220
OWNER	SUN OIL CO.	SUN OIL CO.	SUN OIL CO.
COMPLETED	02/21/47	01/07/48	01/11/69
SAMPLED	05/09/47	03/30/48	11/06/69
FORMATION	OLIG-	OLIG-FRIO	OLIG-FRIO F.2
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6460	4500	5500
WELLHEAD PRESSURE,PSIG	2918	2402	1200
OPEN FLOW, MCFD	7800	10500	10200
COMPONENT, MOLE PCT			
METHANE	84.7	84.0	91.5
ETHANE	14.9	15.0	4.5
PROPANE	---	---	1.8
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.0	0.2	0.4
OXYGEN	0.3	0.3	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.5	TRACE
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1125	1120	1119
SPECIFIC GRAVITY	0.631	0.636	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10777 SAMPLE 4820	INDEX 10778 SAMPLE 10143	INDEX 10779 SAMPLE 10144
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STARR	STEPHENS	STEPHENS
FIELD	YZAGUIRRE	AKIN	AKIN
WELL NAME	T. B. SLICK NO. 2	N. J. BROOKS 13-F	N. J. BROOKS 13-D
LOCATION	SEC. 230	SEC. 3390 TE&L SUR.	SEC. 3390 TE&L SUR.
OWNER	BRITISH AMERICAN OIL CO. LTD	TEXACO INC.	TEXACO INC.
COMPLETED	05/12/49	05/27/63	05/27/63
SAMPLED	12/30/49	09/22/65	09/22/65
FORMATION	OLIG-FRIO	PENN-BUCK CREEK	PENN-BRANNONBRIDGE
GEOLOGIC PROVINCE CODE	220	425	425
DEPTH, FEET	4889	2020	2366
WELLHEAD PRESSURE,PSIG	2103	540	680
OPEN FLOW, MCFD	5800	2200	1050
COMPONENT, MOLE PCT			
METHANE	90.2	84.6	83.9
ETHANE	5.4	8.5	3.3
PROPANE	2.0	0.4	2.7
N-BUTANE	0.5	0.3	1.0
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.4	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.5	13.9	7.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	TRACE	0.30	0.18
HEATING VALUE*	1134	899	1062
SPECIFIC GRAVITY	0.634	0.627	0.668

	INDEX 10780 SAMPLE 10145	INDEX 10781 SAMPLE 139	INDEX 10782 SAMPLE 140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	AKIN	BRECKENRIDGE	BRECKENRIDGE
WELL NAME	N. J. BROOKS 13-G	J. M. PARKS NO. A6	J. C. CURRY NO. 2
LOCATION	SEC. 3390 TE&L SUR.	SEC. 3373, T.&L.&E. CO. LEASE	SEC. 3391
OWNER	TEXACO INC.	TEXAS CO.	TEXAS CO.
COMPLETED	05/27/63	01/21/20	07/01/19
SAMPLED	09/22/65	03/12/20	03/12/20
FORMATION	PENN-MARBLE FALLS	-BLACK LIME	-GREY LIME
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3908	3088	3286
WELLHEAD PRESSURE,PSIG	1680	1150	800
OPEN FLOW, MCFD	2800	18578	10000
COMPONENT, MOLE PCT			
METHANE	76.8	73.2	72.7
ETHANE	9.8	21.6	21.3
PROPANE	4.4	---	---
N-BUTANE	1.3	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.4	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	6.2	4.5	4.0
OXYGEN	0.0	0.4	0.8
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.1	0.0
HELIUM	0.20	0.17	0.14
HEATING VALUE*	1177	1129	1118
SPECIFIC GRAVITY	0.729	0.682	0.674

	INDEX 10783 SAMPLE 143	INDEX 10784 SAMPLE 1791	INDEX 10785 SAMPLE 4575
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	BRECKENRIDGE	BRECKENRIDGE	BRECKENRIDGE
WELL NAME	J. R. SMITH NO. 1	ROSS ELLIOTT NO. 2	A. M. MOON NO. 1
LOCATION	SEC. 1	NOT GIVEN	SEC. 1306, T.E.L. SUR.
OWNER	TEXAS CO.	LONE STAR GAS CO.	TEXAS CO.
COMPLETED	06/14/19	--/--/00	06/01/48
SAMPLED	03/12/20	06/07/29	10/11/48
FORMATION	-GREY GAS SAND	NOT GIVEN	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3099	2187	4130
WELLHEAD PRESSURE,PSIG	820	840	1583
OPEN FLOW, MCFD	8000	9000	11000
COMPONENT, MOLE PCT			
METHANE	76.5	69.3	69.6
ETHANE	19.7	18.7	25.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.5	11.4	4.6
OXYGEN	0.1	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.2
HELIUM	0.21	0.40	0.21
HEATING VALUE*	1128	1037	1155
SPECIFIC GRAVITY	0.666	0.697	0.700

	INDEX 10786 SAMPLE 3732	INDEX 10787 SAMPLE 8122	INDEX 10788 SAMPLE 8123
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	BROWNSVILLE	ECHOLS	ECHOLS
WELL NAME	JESSE BROWN C NO. 2	M. O. KENNEDY	WEST NO. 4
LOCATION	SEC. 114, GARRETT SUR. A-68	SEC. 10, T3, SPRR SUR.	ED. ROMERSHAURSER SUR.
OWNER	TEXAS PACIFIC COAL & OIL CO.	AMBASSADOR OIL CORP.	C. K. WEST
COMPLETED	12/11/43	01/14/55	05/23/60
SAMPLED	03/25/44	08/08/61	08/08/61
FORMATION	NOT GIVEN	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3978	3914	4032
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1440	1550
OPEN FLOW, MCFD	5700	2777	2416
COMPONENT, MOLE PCT			
METHANE	67.6	81.8	79.2
ETHANE	24.3	9.0	9.5
PROPANE	---	3.7	4.1
N-BUTANE	---	1.1	1.1
ISOBUTANE	---	0.5	0.6
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.3	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.2	0.2
NITROGEN	7.4	2.1	4.1
OXYGEN	0.1	TRACE	TRACE
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.26	0.10	0.10
HEATING VALUE*	1120	1175	1171
SPECIFIC GRAVITY	0.711	0.689	0.702

* CALCULATED GROSS BTU PER CU.FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10789 SAMPLE 8124	INDEX 10790 SAMPLE 8118	INDEX 10791 SAMPLE 5370
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	ECHOLS	ELIASVILLE N	FLUX-E
WELL NAME	ECHOLS B-1	PRATT A-2U.T.	L. T. WILD NO. 1
LOCATION	SEC. 9, BLK. 3, SPRR SUR.	SEC. 1119, TE&L SUR.	SEC. 58, B&L SUR.
OWNER	GEORGE W. GRAHAM	CURRY OIL CO.	IBEX CO.
COMPLETED	07/31/51	11/08/60	09/29/52
SAMPLED	08/08/61	08/08/61	01/05/53
FORMATION	PENN-LAKE	PENN-CONGLOMERATE	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3850	3992	2383
WELLHEAD PRESSURE,PSIG	950	1360	955
OPEN FLOW, MCFD	1337	1650	2000
COMPONENT, MOLE PCT			
METHANE	79.5	78.1	76.9
ETHANE	9.6	8.8	2.8
PROPANE	4.1	4.2	1.1
N-BUTANE	1.2	1.2	0.2
ISOBUTANE	0.5	0.5	0.1
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	4.1	6.0	17.6
OXYGEN	TRACE	TRACE	0.2
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.10	0.20	0.96
HEATING VALUE*	1173	1150	882
SPECIFIC GRAVITY	0.702	0.707	0.665

	INDEX 10792 SAMPLE 4973	INDEX 10793 SAMPLE 8143	INDEX 10794 SAMPLE 8145
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	GREEN CADDO	LEE RAT	LEE RAT
WELL NAME	W. H. GREEN NO. 1	J. S. MCKEE NO. 1	R. W. BROOKS NO. 3
LOCATION	A. J. ROE SUR.	SEC. 41, TP&RR SUR.	SEC. 54, BLK. 7, TP&RR SUR.
OWNER	G. CREE	LONE STAR GAS CO.	LONE STAR GAS CO.
COMPLETED	03/27/50	08/01/38	04/24/59
SAMPLED	09/28/50	08/10/61	08/30/61
FORMATION	PENN-CADDO	PENN-BOND	PENN-LAKE
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3572	3723	3562
WELLHEAD PRESSURE,PSIG	1475	440	325
OPEN FLOW, MCFD	3000	415	5500
COMPONENT, MOLE PCT			
METHANE	71.3	74.1	72.4
ETHANE	6.9	10.6	10.9
PROPANE	4.5	5.3	6.2
N-BUTANE	1.1	1.5	1.8
ISOBUTANE	0.4	0.7	1.0
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	TRACE	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	14.2	6.5	5.9
OXYGEN	0.4	TRACE	TRACE
ARGON	0.1	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.21	0.20	0.20
HEATING VALUE*	1038	1196	1242
SPECIFIC GRAVITY	0.732	0.742	0.765

	INDEX 10795 SAMPLE 8146	INDEX 10796 SAMPLE 12648	INDEX 10797 SAMPLE 12649
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	LEE RAT	MOON	MOON
WELL NAME	J. A. CALLOWAY NO. 6	A. M. MOON NO. 1	L. R. COCKRELL NO. 1
LOCATION	SEC. 381, BLK. C, SP&RR SUR.	SEC. 1306, TE&L SUR.	TE&L SUR.
OWNER	LONE STAR GAS CO.	TEXACO INC.	TEXACO INC.
COMPLETED	04/24/48	03/29/48	05/07/51
SAMPLED	08/10/61	02/22/71	02/02/71
FORMATION	PENN-CADDO	PENN-MARBLE FALLS	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3302	4145	4152
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1490	1430
OPEN FLOW, MCFD	NOT GIVEN	8030	1950
COMPONENT, MOLE PCT			
METHANE	67.8	77.9	78.2
ETHANE	10.8	9.3	8.7
PROPANE	7.8	4.4	4.4
N-BUTANE	3.0	1.2	1.2
ISOBUTANE	1.4	0.5	0.5
N-PENTANE	0.7	0.3	0.2
ISOPENTANE	0.9	0.4	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.6	0.2	0.2
NITROGEN	6.1	5.4	6.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.10	0.17	0.18
HEATING VALUE*	1338	1171	1155
SPECIFIC GRAVITY	0.831	0.715	0.709

	INDEX 10798 SAMPLE 12628	INDEX 10799 SAMPLE 12634	INDEX 10800 SAMPLE 4577
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	NECESSITY	SEAMAN	STEPHENS COUNTY REGULAR
WELL NAME	B. F. SATTERWHITE NO. 1	SEAMAN RANCH NO. 2-C	C. L. TRAMMELL NO. 1
LOCATION	SEC. 15, BLK. 6, T&PRR SUR.	8 MI. SE OF IVAN	SEC. 42, BLK. 8, T&P RR SUR.
OWNER	GULF OIL CO.- U.S.	GEORGE MITCHELL & ASSOC. INC	TEXAS PACIFIC COAL & OIL CO.
COMPLETED	08/11/55	--/--/00	05/03/48
SAMPLED	01/11/71	01/18/71	10/02/48
FORMATION	PENN-DUFFER	PENN-ATOKA	MISS-LIME
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3943	3851	4098
WELLHEAD PRESSURE,PSIG	NOT GIVEN	425	1700
OPEN FLOW, MCFD	NOT GIVEN	100000	17839
COMPONENT, MOLE PCT			
METHANE	73.3	75.2	68.9
ETHANE	12.9	11.6	24.5
PROPANE	5.1	5.4	---
N-BUTANE	1.5	1.5	---
ISOBUTANE	0.9	0.7	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	0.5	0.4	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	0.2	---
NITROGEN	4.5	0.1	5.5
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.6	0.3	0.7
HELIUM	0.10	0.11	0.18
HEATING VALUE*	1235	1224	1157
SPECIFIC GRAVITY	0.752	0.737	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10801 SAMPLE 4626	INDEX 10802 SAMPLE 4837	INDEX 10803 SAMPLE 12719
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	STEPHENS COUNTY REGULAR	STEPHENS COUNTY REGULAR	STEPHENS COUNTY REGULAR
WELL NAME	CLAUD MCCAULEY	O. TOMLIN NO. 1	W. B. STEVENSON NO. 1
LOCATION	SEC. 18, BLK. 6, T&P RY SUR.	SEC. 70, BLIND ASYLUM LANDS	SEC. 14, LAL SUR.
OWNER	WARREN OIL CORP.	TEXAS CO.	PETROLEUM CORP. OF TEXAS
COMPLETED	08/25/48	09/13/49	09/26/67
SAMPLED	11/17/48	12/06/49	03/--/71
FORMATION	PENN-MARBLE FALLS	PENN-LAKE	PENN-CADDO
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3955	3610	3192
WELLHEAD PRESSURE,PSIG	1615	1550	120
OPEN FLOW, MCFD	4100	4100	1500
COMPONENT, MOLE PCT			
METHANE	72.7	71.1	38.6
ETHANE	21.9	8.7	19.8
PROPANE	----	6.1	21.6
N-BUTANE	----	2.4	8.3
ISOBUTANE	----	1.2	3.0
N-PENTANE	----	0.9	2.1
ISOPENTANE	----	0.1	2.2
CYCLOPENTANE	----	0.1	0.6
HEXANES PLUS	----	0.6	1.4
NITROGEN	3.8	8.2	2.2
OXYGEN	0.4	0.1	0.1
ARGON	----	TRACE	0.0
HYDROGEN	----	TRACE	0.1
HYDROGEN SULFIDE**	----	----	0.0
CARBON DIOXIDE	1.0	0.3	0.1
HELIUM	0.24	0.21	0.03
HEATING VALUE*	1129	1230	1966
SPECIFIC GRAVITY	0.690	0.786	1.180

	INDEX 10804 SAMPLE 13009	INDEX 10805 SAMPLE 8142	INDEX 10806 SAMPLE 8119
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	STEPHENS COUNTY REGULAR	TRAMMELL	WALKER-DAVIS
WELL NAME	EAST GREEN B NO. 1	C. L. TRAMELL NO. 1	ALICE WALKER A-1-C
LOCATION	W. E. BAKER SUR. A-22	SEC. 42, BLK. 8, TP&RR SUR.	SEC. 1324, T&L SUR.
OWNER	A. V. JONES & SONS	TEXAS PACIFIC COAL & OIL CO.	WOODSON OIL CO.
COMPLETED	09/02/70	03/02/48	03/30/58
SAMPLED	08/31/71	08/10/61	08/08/61
FORMATION	PENN-CONGLOMERATE	MISS-	PENN-DUFFER
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4140	4127	3943
WELLHEAD PRESSURE,PSIG	1483	590	1440
OPEN FLOW, MCFD	10931	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.9	75.3	80.6
ETHANE	8.2	11.3	8.6
PROPANE	5.0	4.7	3.5
N-BUTANE	1.1	1.4	1.0
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	9.4	5.3	4.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.3	0.2
HELIUM	0.24	0.20	0.20
HEATING VALUE*	1119	1194	1134
SPECIFIC GRAVITY	0.721	0.750	0.685

	INDEX 10807 SAMPLE 8120	INDEX 10808 SAMPLE 8121	INDEX 10809 SAMPLE 3990
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STEPHENS	STEPHENS
FIELD	WALKER-DAVIS	WALKER-DAVIS	WILDCAT
WELL NAME	ALICE WALKER A-1-T	COOPER NO. 1	ADAMS NO. 1
LOCATION	SEC. 1324, T&L SUR.	SEC. 1335, T&L SUR.	BLK. 2955, T&L SUR.
OWNER	WOODSON OIL CO.	TEXOMA PRODUCTION CO.	MUDGE OIL CO.
COMPLETED	03/30/58	09/15/58	12/21/44
SAMPLED	08/08/61	08/08/61	03/07/45
FORMATION	PENN-MARBLE FALLS	PENN-CADDO	PENN-MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4030	3058	3870
WELLHEAD PRESSURE,PSIG	1545	750	1340
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	987
COMPONENT, MOLE PCT			
METHANE	79.6	76.2	51.0
ETHANE	8.2	8.3	46.1
PROPANE	3.1	4.4	----
N-BUTANE	0.9	1.2	----
ISOBUTANE	0.5	0.5	----
N-PENTANE	0.1	0.2	----
ISOPENTANE	0.2	0.3	----
CYCLOPENTANE	TRACE	0.1	----
HEXANES PLUS	0.1	0.1	----
NITROGEN	6.8	8.4	1.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	----
HYDROGEN	0.0	0.0	----
HYDROGEN SULFIDE**	0.0	0.0	----
CARBON DIOXIDE	0.2	0.1	0.9
HELIUM	0.30	0.30	0.24
HEATING VALUE*	1099	1122	1343
SPECIFIC GRAVITY	0.684	0.714	0.798

	INDEX 10810 SAMPLE 4992	INDEX 10811 SAMPLE 14248	INDEX 10812 SAMPLE 16022
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	STERLING	STERLING
FIELD	WILDCAT	CONGER	STERLING CITY
WELL NAME	GREEN B NO. 1	FOSTER CONGER NO. 1	WILLIAMS NO. 2-4
LOCATION	SEC. 1505, T&L SUR.	SEC. 5, BLK. 23, H&TCRR SUR.	SEC. 4, BLK. T, T&P SUR.
OWNER	MCELROY RANCH CO.	DORCHESTER EXPLORATION, INC.	MESA PETROLEUM CO.
COMPLETED	09/25/50	05/31/74	05/13/79
SAMPLED	01/20/51	12/26/74	07/30/80
FORMATION	PENN-L	PENN-CANYON	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	425	430	430
DEPTH, FEET	3988	7301	8400
WELLHEAD PRESSURE,PSIG	1920	1735	2398
OPEN FLOW, MCFD	1358	7200	3400
COMPONENT, MOLE PCT			
METHANE	72.7	70.2	66.0
ETHANE	8.5	9.6	15.8
PROPANE	4.5	9.1	7.3
N-BUTANE	1.3	3.2	1.8
ISOBUTANE	0.4	1.4	0.8
N-PENTANE	0.4	0.9	0.3
ISOPENTANE	0.0	0.9	0.3
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.3	0.7	0.2
NITROGEN	6.5	3.5	6.3
OXYGEN	0.1	TRACE	0.4
ARGON	TRACE	0.0	TRACE
HYDROGEN	----	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	5.2	0.2	0.7
HELIUM	0.21	0.09	0.03
HEATING VALUE*	1098	1358	1268
SPECIFIC GRAVITY	0.761	0.837	0.799

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10813 SAMPLE 12945	INDEX 10814 SAMPLE 7994	INDEX 10815 SAMPLE 9140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STERLING	STONEWALL	SUTTON
FIELD	WAM S	DOVE CREEK	DENISON
WELL NAME	E. R. FOSTER NO. 2	NO. C-6	G. B. HILL NO. 1
LOCATION	SEC. 5, BLK. 7, H&TC SUR.	SEC. 183, BLK. F, H&TC SUR.	SEC. 2, BLK. CC, DENISON SUR
OWNER	SKELLY OIL CO.	WILLIAM SPRINGER, JR.	CONTINENTAL OIL CO.
COMPLETED	03/06/66	--/--/55	10/20/62
SAMPLED	08/03/71	05/25/61	11/01/63
FORMATION	SILU-FUSSELMAN	PERM-	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8583	NOT GIVEN	8138
WELLHEAD PRESSURE,PSIG	625	NOT GIVEN	2900
OPEN FLOW, MCFD	8500	NOT GIVEN	14000
COMPONENT, MOLE PCT			
METHANE	61.0	2.1	95.9
ETHANE	18.4	TRACE	1.9
PROPANE	10.7	TRACE	0.2
N-BUTANE	2.9	0.0	0.0
ISOBUTANE	1.2	0.0	0.0
N-PENTANE	0.9	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.4	0.0	0.0
NITROGEN	3.4	95.9	1.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	1.2	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.8
HELIUM	0.03	0.60	0.10
HEATING VALUE*	1439	21	1011
SPECIFIC GRAVITY	0.868	0.958	0.578

	INDEX 10816 SAMPLE 12675	INDEX 10817 SAMPLE 12888	INDEX 10818 SAMPLE 17896
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	DENISON	FORT TERRETT RANCH	MALBERT
WELL NAME	G. B. HILL NO. 1	W. E. ADAMS A NO. 1	ASKEW "77" NO. 2
LOCATION	SEC. 2, BLK. CC, DENISON SUR	SEC. 69, BLK. A, GWT&P SUR.	SEC. 77, BLK. 9, TW&NG SUR.
OWNER	CONTINENTAL OIL CO.	LONE STAR PRODUCING CO.	DIAMOND SHAMROCK EXPL. CO.
COMPLETED	10/20/62	10/13/66	04/18/85
SAMPLED	02/05/71	06/18/71	10/25/85
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8138	2992	5530
WELLHEAD PRESSURE,PSIG	1005	1031	1743
OPEN FLOW, MCFD	1343	5803	33000
COMPONENT, MOLE PCT			
METHANE	95.7	80.6	75.8
ETHANE	1.8	4.7	7.8
PROPANE	0.2	2.0	4.1
N-BUTANE	0.0	0.5	1.2
ISOBUTANE	0.0	0.1	0.4
N-PENTANE	0.0	TRACE	0.3
ISOPENTANE	0.0	0.2	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.3
NITROGEN	1.1	11.2	8.0
OXYGEN	0.0	0.2	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	1.2
HELIUM	0.05	0.31	0.27
HEATING VALUE*	1007	986	1115
SPECIFIC GRAVITY	0.582	0.660	0.723

	INDEX 10819 SAMPLE 13486	INDEX 10820 SAMPLE 14432	INDEX 10821 SAMPLE 4107
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	HOLMAN RANCH N	KEN	MIERS
WELL NAME	MORRISS NO. 1-83	ADAMS NO. 1	DUKE WILSON NO. 1
LOCATION	SEC. 83, BLK. C, ME&WTRR SUR	SEC. 59, BLK. A, GWT&P SUR.	SEC. 38, BLK. 14, TW&NG SUR.
OWNER	HNG OIL CO.	ESTORIL PRODUCING CORP.	SHELL OIL CO.
COMPLETED	05/29/72	03/12/74	05/23/46
SAMPLED	12/11/72	08/02/75	07/09/46
FORMATION	PENN-HOLMAN	PENN-CROSS CUT	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6256	3065	4190
WELLHEAD PRESSURE,PSIG	2300	650	1425
OPEN FLOW, MCFD	11000	5000	9200
COMPONENT, MOLE PCT			
METHANE	84.3	80.6	74.9
ETHANE	6.9	5.1	12.6
PROPANE	3.5	2.4	---
N-BUTANE	0.6	0.4	---
ISOBUTANE	0.6	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.3	TRACE	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.3	TRACE	---
NITROGEN	2.6	10.6	8.6
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.1	3.4
HELIUM	0.10	0.32	0.26
HEATING VALUE*	1156	998	985
SPECIFIC GRAVITY	0.678	0.659	0.685

	INDEX 10822 SAMPLE 5220	INDEX 10823 SAMPLE 5221	INDEX 10824 SAMPLE 8168
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	MIERS	MIERS	MIERS
WELL NAME	W. A. MIERS NO. 3	W. A. MIERS NO. 1	WILSON NO. 1-7
LOCATION	SEC. 54, BLK. 14, TW&NG SUR.	SEC. 54, BLK. 14, TW&NG SUR.	TW&NG RR SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	10/--/51	11/13/51	04/--/46
SAMPLED	03/18/52	03/18/52	08/14/61
FORMATION	PENN-DES MOINES	PENN-DES MOINES	PENN-DES MOINES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4284	4333	4195
WELLHEAD PRESSURE,PSIG	1442	1439	820
OPEN FLOW, MCFD	12500	22500	1674
COMPONENT, MOLE PCT			
METHANE	79.5	73.1	82.4
ETHANE	5.9	5.9	5.9
PROPANE	2.4	3.6	1.9
N-BUTANE	0.9	2.3	0.4
ISOBUTANE	0.3	1.2	0.3
N-PENTANE	0.1	0.8	0.1
ISOPENTANE	0.5	1.8	0.1
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.3	0.8	0.1
NITROGEN	8.7	8.2	7.3
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	1.4	1.6	1.1
HELIUM	0.33	0.27	0.26
HEATING VALUE*	1042	1221	1027
SPECIFIC GRAVITY	0.688	0.797	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10825 SAMPLE 8169	INDEX 10826 SAMPLE 11896	INDEX 10827 SAMPLE 14709
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	MIERS	MIERS E	MIERS E
WELL NAME	J. M. VANDERSTUCKEN NO. 1	VANDERSTUCKEN NO. 1	WALLACE NO. 1
LOCATION	TW&NG RR SUR.	SEC. 67, BLK. 7, TW&NG SUR.	SEC. 68, BLK. 7, TW&NG SUR.
OWNER	CLAUDE E. AIKMAN	SOUTHWESTERN NATURAL GAS INC	TRINIDAD PETROLEUM CORP.
COMPLETED	07/07/52	04/19/68	08/10/74
SAMPLED	08/24/61	05/17/69	06/10/76
FORMATION	PENN-CANYON	PENN-CISCO A	PENN-CISCO A
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	3610	2901	2850
WELLHEAD PRESSURE,PSIG	990	719	800
OPEN FLOW, MCFD	2135	4100	3700
COMPONENT, MOLE PCT			
METHANE	86.5	88.8	87.6
ETHANE	5.6	1.9	2.3
PROPANE	1.6	1.3	1.0
N-BUTANE	0.4	0.0	0.2
ISOBUTANE	0.4	0.0	0.1
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	4.8	7.2	7.8
OXYGEN	TRACE	0.2	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.20	0.34	0.37
HEATING VALUE*	1019	967	969
SPECIFIC GRAVITY	0.633	0.606	0.617

	INDEX 10828 SAMPLE 14710	INDEX 10829 SAMPLE 14170	INDEX 10830 SAMPLE 12619
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	MIERS E	NOT GIVEN	SAWYER
WELL NAME	WALLACE NO. 1	MOLL NO.1	SHURLEY NO. 1
LOCATION	SEC. 68, BLK. 7, TW&NG SUR.	SEC. 121, BLK. A, ME&WT SUR.	SEC. 98, BLK. C, ME&WT SUR.
OWNER	TRINIDAD PETROLEUM CORP.	PETROLEUM CORP. OF TEXAS	DELTA DRILLING CO.
COMPLETED	09/08/74	02/17/73	10/20/63
SAMPLED	06/--/76	10/10/74	05/07/71
FORMATION	PENN-STRAWN	PENN-CANYON	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4100	5723	5380
WELLHEAD PRESSURE,PSIG	600	1440	520
OPEN FLOW, MCFD	1700	4500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.9	82.7	76.5
ETHANE	2.3	8.2	6.6
PROPANE	1.0	3.6	3.7
N-BUTANE	0.2	0.8	0.9
ISOBUTANE	0.1	0.6	1.0
N-PENTANE	0.0	0.1	0.5
ISOPENTANE	0.1	0.3	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	7.5	2.8	8.2
OXYGEN	TRACE	TRACE	1.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	1.0
HELIUM	0.37	0.10	0.06
HEATING VALUE*	972	1153	1089
SPECIFIC GRAVITY	0.613	0.682	0.721

	INDEX 10831 SAMPLE 13122	INDEX 10832 SAMPLE 13633	INDEX 10833 SAMPLE 14052
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	SAWYER	SAWYER	SAWYER
WELL NAME	ESPY NO. 41-1	DAVID 109 NO. 1	REINHAROT "6" NO. 2
LOCATION	NOT GIVEN	SEC. 109, BLK. 14, TW&NG SUR	G.C. CORBIN SUR.
OWNER	RODEN OIL CO.	MNG OIL CO.	MNG OIL CO.
COMPLETED	12/07/71	05/11/73	02/04/74
SAMPLED	12/23/71	06/26/73	07/17/74
FORMATION	PENN-CANYON	PENN-CANYON	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	5365	3840	8036
WELLHEAD PRESSURE,PSIG	1120	1502	2800
OPEN FLOW, MCFD	NOT GIVEN	2180	14000
COMPONENT, MOLE PCT			
METHANE	86.0	85.7	87.7
ETHANE	7.1	7.5	5.8
PROPANE	3.0	3.1	2.9
N-BUTANE	0.7	0.7	0.5
ISOBUTANE	0.5	0.6	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.7	1.5	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	1.8
HELIUM	0.08	0.09	0.06
HEATING VALUE*	1140	1145	1109
SPECIFIC GRAVITY	0.660	0.659	0.656

	INDEX 10834 SAMPLE 14037	INDEX 10835 SAMPLE 4949	INDEX 10836 SAMPLE 5791
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	SAWYER CANYON	SECO	SHURLEY
WELL NAME	CUSENBARY "60" NO. 1	S. B. ROBERTS NO. 1	C. SHURLEY NO. 1
LOCATION	SEC. 60, CCSD&RGNG SUR.	SEC. 7, BLK. 7, TWNG SUR.	SEC. 73, BLK. C, ME&WT SUR.
OWNER	W. B. OSBORN, OPERATOR	SHELL OIL CO.	EL PASO NATURAL GAS CO.
COMPLETED	03/30/74	08/29/49	11/01/54
SAMPLED	06/26/74	06/03/50	03/09/55
FORMATION	PENN-CANYON	PENN-STRAWN	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	4416	3408	5166
WELLHEAD PRESSURE,PSIG	900	1200	1398
OPEN FLOW, MCFD	500	165	2000
COMPONENT, MOLE PCT			
METHANE	87.0	85.5	85.5
ETHANE	5.3	4.5	6.7
PROPANE	3.2	1.7	3.0
N-BUTANE	0.9	0.4	0.7
ISOBUTANE	0.7	0.1	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.7	5.6	1.9
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.7	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.9	0.6
HELIUM	0.12	0.17	0.08
HEATING VALUE*	1149	1024	1140
SPECIFIC GRAVITY	0.663	0.637	0.664

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10837 SAMPLE 14934	INDEX 10838 SAMPLE 5968	INDEX 10839 SAMPLE 12692
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SUTTON	SUTTON	SUTTON
FIELD	SHURLEY RANCH	SONORA	SONORA
WELL NAME	GENONI "39" NO. 1	DE BERRY NO. 1	DE BERRY NO. 1
LOCATION	SEC. 39, TTRR SUR., A-759	SEC. 90, BLK. D, HE&WTRR SUR	NOT GIVEN
OWNER	MITCHELL ENERGY CORP.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	05/15/76	05/20/55	05/20/55
SAMPLED	05/08/77	11/08/55	02/23/71
FORMATION	PENN-STRAWN	PENN-CANYON	PENN-CANYON U
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	8301	5479	5471
WELLHEAD PRESSURE,PSIG	1499	1473	1473
OPEN FLOW, MCFD	2650	7300	7300
COMPONENT, MOLE PCT			
METHANE	85.6	85.0	85.4
ETHANE	7.0	6.6	6.5
PROPANE	2.1	3.2	3.0
N-BUTANE	0.6	0.8	0.7
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	2.3	2.1	2.5
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.6	0.5
HELIUM	0.04	0.08	0.08
HEATING VALUE*	1113	1147	1131
SPECIFIC GRAVITY	0.662	0.671	0.664

	INDEX 10840 SAMPLE 9936	INDEX 10841 SAMPLE 9934	INDEX 10842 SAMPLE 6534
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TAYLOR	TAYLOR	TERRELL
FIELD	INKUM	PROCTOR	BROWN-BASSETT
WELL NAME	EDGAR DAVIS NO. 2	L. CARTWRIGHT NO. 1	BROWN-BASSETT NO. 1
LOCATION	SEC. 296, BLK. 64, H&TC SUR.	THEO D. MALTBY SUR. 270	SEC. 218, BLK. Y, TC&RR SUR.
OWNER	HORIZON OIL & GAS CO.	SUN OIL CO.	WESTERN NATURAL GAS CO. & MA
COMPLETED	03/07/64	04/14/56	02/25/58
SAMPLED	06/23/65	06/22/65	03/26/58
FORMATION	ECOE-JENNINGS	PENN-GRAY	SILU-NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	430
DEPTH, FEET	5054	4610	12387
WELLHEAD PRESSURE,PSIG	1575	350	5045
OPEN FLOW, MCFD	6183	2290	72000
COMPONENT, MOLE PCT			
METHANE	67.5	69.3	95.9
ETHANE	9.6	10.9	0.5
PROPANE	6.0	5.3	0.0
N-BUTANE	1.9	1.3	TRACE
ISOBUTANE	0.7	0.8	TRACE
N-PENTANE	0.4	0.2	0.0
ISOPENTANE	0.6	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.4	0.2	TRACE
NITROGEN	12.1	11.1	0.4
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	3.0
HELIUM	0.25	0.27	0.04
HEATING VALUE*	1166	1153	980
SPECIFIC GRAVITY	0.784	0.754	0.587

	INDEX 10843 SAMPLE 7143	INDEX 10844 SAMPLE 7830	INDEX 10845 SAMPLE 8226
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TERRELL	TERRELL	TERRELL
FIELD	BROWN-BASSETT	BROWN-BASSETT	BROWN-BASSETT
WELL NAME	GOODE ESTATE NO. 2	BROWN-BASSETT NO. 1-LT	NO. 1 LT
LOCATION	SEC. 1, BLK. R, TCRY SUR.	SEC. 227, BLK. Y, TCRR SUR.	SEC. 21, BLK. 1, TCRR SUR.
OWNER	MAGNOLIA PETROLEUM CO.	CONTINENTAL OIL CO.	SINCLAIR OIL & GAS CO.
COMPLETED	06/25/59	12/29/60	11/16/60
SAMPLED	07/10/59	01/27/61	10/02/61
FORMATION	ORDO-ELLENBURGER	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	13888	13924	14008
WELLHEAD PRESSURE,PSIG	3139	4025	2883
OPEN FLOW, MCFD	2950	28750	4000
COMPONENT, MOLE PCT			
METHANE	60.6	45.9	88.5
ETHANE	0.4	0.2	5.0
PROPANE	0.0	0.1	2.8
N-BUTANE	0.0	0.0	0.8
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.3
NITROGEN	0.6	0.5	1.3
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	38.4	53.2	0.2
HELIUM	0.10	0.03	0.06
HEATING VALUE*	671	471	1139
SPECIFIC GRAVITY	0.933	1.077	0.651

	INDEX 10846 SAMPLE 8379	INDEX 10847 SAMPLE 8376	INDEX 10848 SAMPLE 12961
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TERRELL	TERRELL	TERRELL
FIELD	BROWN-BASSETT	BROWN-BASSETT	UNIVERSITY BLK. 34
WELL NAME	ALMA M. POULTER NO. 1	ALMA M. POULTER NO. 1	CITGO UNIVERSITY NO. 1
LOCATION	SEC. 21, BLK. 1, TC&RR SUR.	SEC. 21, BLK. 1, TC&RR SUR.	SEC. 13, BLK. 34
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SKELLY OIL CO.
COMPLETED	05/02/61	05/02/61	08/07/70
SAMPLED	01/17/62	01/17/62	08/16/71
FORMATION	ORDO-ELLENBURGER	PERM-WICHITA-ALBANY	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14030	6221	11448
WELLHEAD PRESSURE,PSIG	2683	2263	2679
OPEN FLOW, MCFD	10500	4850	3500
COMPONENT, MOLE PCT			
METHANE	38.7	88.7	94.6
ETHANE	0.2	4.6	2.7
PROPANE	0.2	2.7	0.5
N-BUTANE	TRACE	0.8	0.2
ISOBUTANE	0.0	0.5	0.0
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	0.4	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	10.5	1.5	0.9
OXYGEN	2.6	TRACE	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	47.5	0.3	0.8
HELIUM	0.02	0.06	0.02
HEATING VALUE*	401	1131	1048
SPECIFIC GRAVITY	1.078	0.649	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10849 SAMPLE 9618	INDEX 10850 SAMPLE 15573	INDEX 10851 SAMPLE 13346
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TERRELL	TERRY	THROCKMORTON
FIELD	WILDCAT	BECKER	BRAMLETT
WELL NAME	GEORGE K. MITCHELL NO. 1	HOFFMAN NO. 1-A	WALKER BUCKLER TRUST NO. 1
LOCATION	SEC. 11, BLK. 1, CCSD&RGNG SUR	SEC. 41, BLK. DD, JH GIBSON	BRAMLETT SUR. NO. 5, A-26
OWNER	SOCONY MOBIL OIL CO., INC.	NRM PETROLEUM CORP.	GULF OIL CO.- U.S.
COMPLETED	11/06/63	02/09/78	02/05/71
SAMPLED	10/26/64	03/01/79	07/28/72
FORMATION	PENN-STRAWN L	PERM-YATES	PENN-CADDO
GEOLOGIC PROVINCE CODE	430	430	425
DEPTH, FEET	11050	3123	4218
WELLHEAD PRESSURE,PSIG	4700	2400	1686
OPEN FLOW, MCFD	3000	21800	4000
COMPONENT, MOLE PCT			
METHANE	89.9	43.9	69.4
ETHANE	5.8	6.8	10.0
PROPANE	1.9	2.3	5.3
N-BUTANE	0.6	0.6	1.1
ISOBUTANE	0.2	0.2	0.5
N-PENTANE	0.1	0.2	0.3
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	0.3	45.4	12.4
OXYGEN	0.0	0.0	0.5
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.2
HELIUM	0.02	0.03	0.21
HEATING VALUE*	1127	681	1092
SPECIFIC GRAVITY	0.636	0.823	0.745

	INDEX 10852 SAMPLE 12276	INDEX 10853 SAMPLE 12277	INDEX 10854 SAMPLE 4993
STATE	TEXAS	TEXAS	TEXAS
COUNTY	THROCKMORTON	THROCKMORTON	THROCKMORTON
FIELD	THROCKMORTON COUNTY REGULAR	THROCKMORTON COUNTY REGULAR	WILDCAT
WELL NAME	MATTHEWS RANCH NO. 5	MATTHEWS RANCH NO. 28-B	WATT R. MATTHEWS B NO. 1
LOCATION	SEC. 25, BLK. 1-T, T&NO SUR.	SEC. 6, BLK. X, AB&M SUR.	THOMAS MOUNTS SUR. A-229
OWNER	C. E. JACOBS	C. E. JACOBS	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	10/02/50
SAMPLED	06/02/70	06/02/70	01/23/51
FORMATION	PENN-AVIS	PENN-BLUFF CREEK	MISS-LIME
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	NOT GIVEN	960	4542
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	2400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	14700
COMPONENT, MOLE PCT			
METHANE	72.8	72.9	66.6
ETHANE	1.2	0.8	11.9
PROPANE	0.6	0.3	5.9
N-BUTANE	0.2	0.1	1.4
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.1	TRACE	0.4
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	23.4	24.4	11.8
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.2	0.2	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.0	0.8
HELIUM	0.84	0.93	0.34
HEATING VALUE*	813	771	1139
SPECIFIC GRAVITY	0.676	0.662	0.775

	INDEX 10855 SAMPLE 6274	INDEX 10856 SAMPLE 9691	INDEX 10857 SAMPLE 8167
STATE	TEXAS	TEXAS	TEXAS
COUNTY	THROCKMORTON	TOM GREEN	TOM GREEN
FIELD	WILDCAT	BTU	CARLSBAD
WELL NAME	TCSC 38 - NO. 1	BILL UPTON NO. 2-A	KENNEMER NO. 1
LOCATION	BLK. 38, TRAVIS CO. SCHL. LD	SEC. 3, BLK 8	H&TC SUR.
OWNER	ANDERSON-PRICHARD OIL CORP.	TUCKER DRILLING & SUN OIL	PERKINS & PROTHRO
COMPLETED	01/09/57	09/16/63	02/03/58
SAMPLED	01/08/57	01/18/65	08/14/61
FORMATION	PENN-TANNEHILL	PENN-HARKEY	PENN-STRAWN
GEOLOGIC PROVINCE CODE	425	430	430
DEPTH, FEET	700	4087	5640
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1395	1850
OPEN FLOW, MCFD	NOT GIVEN	1200	14410
COMPONENT, MOLE PCT			
METHANE	53.0	72.9	72.3
ETHANE	0.5	5.2	12.1
PROPANE	0.2	2.3	6.2
N-BUTANE	0.3	2.9	1.0
ISOBUTANE	0.3	1.2	0.6
N-PENTANE	0.1	0.9	TRACE
ISOPENTANE	0.1	0.6	0.2
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.8	TRACE
NITROGEN	43.3	12.7	7.2
OXYGEN	0.2	TRACE	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.3
HELIUM	1.53	0.32	0.10
HEATING VALUE*	585	1143	1172
SPECIFIC GRAVITY	0.750	0.769	0.737

	INDEX 10858 SAMPLE 17272	INDEX 10859 SAMPLE 15708	INDEX 10860 SAMPLE 17273
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TOM GREEN	TOM GREEN	TOM GREEN
FIELD	FONTSON-BURKE	HAZEL JONES	MUNN-WESTEX
WELL NAME	MUNN NO. 1	HAZEL JONES NO. 1	MUNN NO. 2-A
LOCATION	SEC. 1119, TTRR SUR.-A-4367	SEC. 22, BLK. 24, H&TC SUR.	SEC. 1119, TTRR SUR.
OWNER	HEXAGON OIL & GAS, INC.	SIMPSON-MANN OIL PROD.	HEXAGON OIL & GAS, INC.
COMPLETED	06/13/83	04/19/79	09/12/83
SAMPLED	05/02/84	07/23/79	05/02/84
FORMATION	PENN-CANYON	PENN-STRAWN	PENN-CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6253	5501	6355
WELLHEAD PRESSURE,PSIG	2060	1680	2110
OPEN FLOW, MCFD	9652	2414	1713
COMPONENT, MOLE PCT			
METHANE	66.3	74.1	70.6
ETHANE	12.4	8.9	12.6
PROPANE	7.3	4.8	6.2
N-BUTANE	1.8	1.2	1.3
ISOBUTANE	1.5	0.6	0.7
N-PENTANE	0.6	0.3	0.3
ISOPENTANE	0.6	0.2	0.2
CYCLOPENTANE	1.0	0.1	0.3
HEXANES PLUS	1.7	0.2	0.6
NITROGEN	6.4	8.9	6.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.11	0.29	0.12
HEATING VALUE*	1370	1131	1233
SPECIFIC GRAVITY	0.851	0.730	0.770

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10861 SAMPLE 9967	INDEX 10862 SAMPLE 4665	INDEX 10863 SAMPLE 5146
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TOM GREEN	TYLER	TYLER
FIELD	WALL NE	MILLISTER E	NOT GIVEN
WELL NAME	J. WEISHUHN NO. 1	WM. RICE INSTITUTE NO. 1	HEAD, ET AL. NO. 1
LOCATION	SEC. 84, DIST. &I. SPRR SUR.	ARTHUR HUTCHINS SUR. A-846	BBB & C SUR. NO. A-109
OWNER	TEXACO INC.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	09/29/64	10/27/48	--/--/00
SAMPLED	07/08/65	02/25/49	01/24/52
FORMATION	PENN-MARKEY	EOCE-WILCOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	4222	8260	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1442	2975	NOT GIVEN
OPEN FLOW, MCFD	860	16400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	39.2	74.7	85.2
ETHANE	31.5	8.5	7.0
PROPANE	18.6	8.7	3.0
N-BUTANE	5.0	2.9	0.7
ISOBUTANE	2.5	1.9	0.4
N-PENTANE	0.7	0.5	0.2
ISOPENTANE	0.9	0.6	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.4	0.2
NITROGEN	0.6	1.3	0.7
OXYGEN	0.0	0.3	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.5	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.0	0.9	2.0
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1793	1342	1141
SPECIFIC GRAVITY	1.055	0.793	0.672

	INDEX 10864 SAMPLE 14877	INDEX 10865 SAMPLE 14892	INDEX 10866 SAMPLE 4522
STATE	TEXAS	TEXAS	TEXAS
COUNTY	TYLER	TYLER	TYLER
FIELD	PAVEY-KIRBY	SUGAR CREEK	WILDCAT
WELL NAME	KIRBY LUMBER CO. NO. 1	ARCO ABBOTT G.U. NO. 1	C. C. HOOKS NO. 1
LOCATION	F. HELFONSTEIN SUR. A-352	MARTIN L ABBOTT SUR. A-742	BBB&C RR CO. SUR. AB-113
OWNER	SHELL OIL CO.	C & K PETROLEUM, INC.	AMERADA PETROLEUM CORP.
COMPLETED	07/25/74	10/08/75	09/30/47
SAMPLED	12/30/76	01/27/77	05/10/48
FORMATION	EOCE-WILCOX	CRET-WOODBINE	EOCE-COCKFIELD 2ND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10883	11008	4925
WELLHEAD PRESSURE,PSIG	2100	3500	2130
OPEN FLOW, MCFD	3500	8700D	30000
COMPONENT, MOLE PCT			
METHANE	85.6	87.4	80.7
ETHANE	6.8	3.4	17.5
PROPANE	2.8	0.8	---
N-BUTANE	0.7	0.2	---
ISOBUTANE	0.5	0.2	---
N-PENTANE	0.2	0.0	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.2	TRACE	---
NITROGEN	0.9	2.7	0.8
OXYGEN	TRACE	0.3	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.4	4.7	0.8
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1137	989	1131
SPECIFIC GRAVITY	0.676	0.647	0.653

	INDEX 10867 SAMPLE 16270	INDEX 10868 SAMPLE 12130	INDEX 10869 SAMPLE 12681
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPSHUR	UPSHUR	UPTON
FIELD	DELROSE	GILMER	ADAMS
WELL NAME	NEO PARRISH NO. 1	INDIAN ROCK GAS UNIT NO. 1	ADAMS UNIT NO. D-362
LOCATION	W. B. HICKS SUR. A-211	2 MI. SE OF GILMER	SEC. 187, BLK.F, TCSD&RGNGRR
OWNER	EXXON CO., U.S.A.	MRS. D. MCBEE	GULF OIL CORP.
COMPLETED	03/08/79	--/--/00	--/--/00
SAMPLED	05/19/81	12/03/69	02/03/71
FORMATION	JURA-HAYNESVILLE	JURA-COTTON VALLEY	DEVO-
GEOLOGIC PROVINCE CODE	260	260	430
DEPTH, FEET	11472	11600	NOT GIVEN
WELLHEAD PRESSURE,PSIG	6252	5860	NOT GIVEN
OPEN FLOW, MCFD	4000	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.8	88.5	68.5
ETHANE	3.6	4.4	15.5
PROPANE	1.2	1.5	7.8
N-BUTANE	0.4	0.5	2.4
ISOBUTANE	0.5	0.7	1.0
N-PENTANE	0.2	0.3	0.7
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.4	0.3
NITROGEN	0.5	1.1	3.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	2.4	0.4
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1038	1038	1351
SPECIFIC GRAVITY	0.626	0.652	0.808

	INDEX 10870 SAMPLE 12688	INDEX 10871 SAMPLE 15292	INDEX 10872 SAMPLE 9922
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	AMACKER-TIPPETT	AMACKER-TIPPETT S	BENEDUM
WELL NAME	AMACKER-TIPPETT NO. 5	LANE "B" NO. 2	D. L. ALFORD NO. 1
LOCATION	SEC. 186	SEC. 13, BLK. 2, MK&T SUR.	SEC. 50, P. B. SCOTT SUR.
OWNER	HUM OIL CO.	COTTON PETROLEUM CORP.	SINCLAIR OIL & GAS CO.
COMPLETED	--/--/00	11/17/75	12/28/63
SAMPLED	02/--/71	--/--/00	06/14/65
FORMATION	DEVO-	DEVO-	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	11275	10002
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2797	2435
OPEN FLOW, MCFD	NOT GIVEN	2700	2100
COMPONENT, MOLE PCT			
METHANE	76.5	71.6	78.1
ETHANE	13.4	15.9	11.5
PROPANE	5.1	7.3	4.5
N-BUTANE	1.2	2.3	1.5
ISOBUTANE	0.4	0.6	0.7
N-PENTANE	TRACE	0.4	0.4
ISOPENTANE	0.9	0.5	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.3	0.5
NITROGEN	1.5	0.6	1.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.4	0.9
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1249	1355	1257
SPECIFIC GRAVITY	0.732	0.783	0.737

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10873 SAMPLE 12728	INDEX 10874 SAMPLE 12729	INDEX 10875 SAMPLE 12938
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	BENEDUM	BENEDUM	BFP
WELL NAME	GORDON A NO. 1	W. F. NEAL B NO. 1	BELL PETROLEUM NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 2, F. COOMER SUR.
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	TEXAS OIL & GAS CORP.
COMPLETED	--/--/00	--/--/00	09/14/70
SAMPLED	03/18/71	03/19/71	07/19/71
FORMATION	ORDO-ELLENBURGER	SILU-FUSSELMAN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12000	11500	8856
WELLHEAD PRESSURE,PSIG	NOT GIVEN	400	2400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7100
COMPONENT, MOLE PCT			
METHANE	63.2	68.3	79.6
ETHANE	16.5	14.5	10.7
PROPANE	9.5	8.0	4.5
N-BUTANE	3.2	2.7	0.9
ISOBUTANE	1.7	1.3	0.8
N-PENTANE	1.0	0.8	0.3
ISOPENTANE	0.6	0.6	0.5
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	0.6	0.5	0.5
NITROGEN	3.3	2.9	1.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.07	0.06	0.06
HEATING VALUE*	1454	1383	1239
SPECIFIC GRAVITY	0.871	0.822	0.717

	INDEX 10876 SAMPLE 12682	INDEX 10877 SAMPLE 15322	INDEX 10878 SAMPLE 13859
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	FRADEAN	FULMER	HADACOL CORNER
WELL NAME	KING RANCH O & L CO. NO. 6-1	CHRISTY NO. 1	JOHN H. HUTT ESTATE NO. 1
LOCATION	SEC. 26, BLK. 2, MK&TRR SUR.	SEC. 36, BLK. B, C&M SUR.	SEC. 17, BLK.38, T&P SUR.
OWNER	GULF OIL CORP.	BELCO PETROLEUM CORP.	GENERAL CRUDE OIL CO.
COMPLETED	--/--/00	12/01/76	01/30/72
SAMPLED	02/05/71	07/19/78	01/02/74
FORMATION	DEVO-	PENN-BEND	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	10442	12372
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2865	1180
OPEN FLOW, MCFD	NOT GIVEN	6800	1548
COMPONENT, MOLE PCT			
METHANE	73.3	82.2	78.1
ETHANE	13.8	9.4	11.7
PROPANE	6.5	3.5	5.2
N-BUTANE	1.5	0.8	1.5
ISOBUTANE	1.1	0.5	0.7
N-PENTANE	0.7	0.2	0.5
ISOPENTANE	0.5	0.3	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	2.0	2.1	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.2
HELIUM	0.05	0.04	0.06
HEATING VALUE*	1301	1171	1254
SPECIFIC GRAVITY	0.767	0.686	0.724

	INDEX 10879 SAMPLE 12680	INDEX 10880 SAMPLE 12650	INDEX 10881 SAMPLE 12651
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	KING
FIELD	JACK MEARBERT	KING MOUNTAIN	KING MOUNTAIN
WELL NAME	MCELROY RANCH CO. L NO.8-U	ROSA BARNET "A" NO. 3	W. W. MC CLURE NO. 7
LOCATION	SEC. 109, BLK.D, CCSD&RGNGRR	SEC. 20, BLK. 2, MK&TRR SUR.	SEC.18,BLK.4-1/2,GC&SFRR SUR
OWNER	GULF OIL CORP.	TEXAS PACIFIC OIL CO., INC.	TEXAS PACIFIC OIL CO., INC.
COMPLETED	--/--/00	08/03/64	01/31/58
SAMPLED	02/04/71	02/03/71	02/03/71
FORMATION	PENN-STRAWN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	8613	8735
WELLHEAD PRESSURE,PSIG	NOT GIVEN	748	482
OPEN FLOW, MCFD	NOT GIVEN	406	272
COMPONENT, MOLE PCT			
METHANE	76.8	76.2	78.1
ETHANE	11.1	13.2	12.0
PROPANE	5.8	5.3	4.5
N-BUTANE	1.8	1.2	0.7
ISOBUTANE	1.1	0.5	0.5
N-PENTANE	0.5	0.1	0.2
ISOPENTANE	0.3	0.5	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	1.7	2.3	2.8
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.2	0.1
HELIUM	0.03	0.05	0.06
HEATING VALUE*	1287	1243	1208
SPECIFIC GRAVITY	0.750	0.727	0.711

	INDEX 10882 SAMPLE 2051	INDEX 10883 SAMPLE 14496	INDEX 10884 SAMPLE 2050
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	UPTON	UPTON
FIELD	MCCAMEY	PEGASUS S	SHIRK
WELL NAME	RICKER NO. 2, OIL WELL	VIRGIL POWELL NO. 10-1	C. SHERK NO. 1
LOCATION	SEC. 5, MARY S. DENTON SUR.	SEC.10, BLK 41, T5S, T&P SUR	SEC. 35, BLK. 1
OWNER	HUMBLE OIL & REFINING CO.	CLINTON OIL CO.	GULF PRODUCTION CO.
COMPLETED	02/26/27	05/21/75	12/07/26
SAMPLED	06/17/30	10/21/75	06/17/30
FORMATION	PERM-GRAYBURG	DEVO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2160	12010	2290
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3307	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4550	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.7	79.4	4.7
ETHANE	13.0	12.5	86.3
PROPANE	---	5.9	---
N-BUTANE	---	0.8	---
ISOBUTANE	---	0.4	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	2.3	1.6	2.9
OXYGEN	0.3	0.0	0.3
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	2.7	0.9	6.7
HELIUM	TRACE	0.03	0.00
HEATING VALUE*	1059	1188	1594
SPECIFIC GRAVITY	0.651	0.697	1.057

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10885 SAMPLE 14905		INDEX 10886 SAMPLE 7144		INDEX 10887 SAMPLE 16071	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	VAL VERDE		VAL VERDE		VAL VERDE	
FIELD	DEVIL'S RIVER		L. M. MORRISON		MASSIE	
WELL NAME	J. W. DRISDALE NO. 1		L. M. MORRISON NO. 1		WEST A NO. 1	
LOCATION	SEC. 1, BLK. E, GWT&P SUR A-933		SEC. 10, BLK. 10, TCRY SUR.		SEC. 13, BLK. O, GH&SA SUR.	
OWNER	NATIONAL EXPLORATION CO.		MAGNOLIA PETROLEUM CO.		CITIES SERVICE CO.	
COMPLETED	04/13/75		03/29/56		07/10/80	
SAMPLED	02/16/77		07/10/59		09/16/80	
FORMATION	PENN-STRAWN		ORDO-ELLENBURGER		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	10223		13944		11100	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		5571		4200	
OPEN FLOW, MCFD	4835		1250		3975	
COMPONENT, MOLE PCT						
METHANE	95.4		84.6		93.4	
ETHANE	0.3		0.2		0.3	
PROPANE	TRACE		0.0		TRACE	
N-BUTANE	0.0		0.0		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.1		0.0	
ISOPENTANE	0.0		0.0		0.0	
CYCLOPENTANE	0.0		TRACE		0.0	
HEXANES PLUS	0.0		TRACE		0.0	
NITROGEN	0.9		1.5		1.1	
OXYGEN	0.0		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE	0.0		0.0		0.0	
CARBON DIOXIDE	3.3		13.4		4.9	
HELIUM	0.06		0.02		0.06	
HEATING VALUE*	972		865		952	
SPECIFIC GRAVITY	0.591		0.694		0.608	

	INDEX 10888 SAMPLE 17884		INDEX 10889 SAMPLE 5978		INDEX 10890 SAMPLE 5164	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	VAL VERDE		VAL VERDE		VAL VERDE	
FIELD	SIMPSON MANN (CANYON)		WINEGARROON		WILDCAT	
WELL NAME	TENNECO FEE NO. 1		CAUTHORN NO. 1		GUIDA ROSE NO. 1	
LOCATION	SEC. 9, BLK. Q-5, TC&RR SUR.		SEC. 49, BLK. A, C&M SUR.		SEC. 2, GS&SF SUR.	
OWNER	SIMPSON MANN, INC.		PHILLIPS PETROLEUM CO.		WESTERN NATURAL GAS CO., ET	
COMPLETED	09/01/84		04/07/55		05/17/51	
SAMPLED	12/29/85		11/30/55		01/28/52	
FORMATION	PENN-CANYON		PENN-STRAWN		PENN-STRAWN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	4217		9982		10050	
WELLHEAD PRESSURE,PSIG	1550		5019		6665	
OPEN FLOW, MCFD	4600		42000		3519	
COMPONENT, MOLE PCT						
METHANE	87.4		96.4		91.6	
ETHANE	5.4		0.8		0.9	
PROPANE	3.1		0.1		0.1	
N-BUTANE	1.0		0.1		TRACE	
ISOBUTANE	0.2		0.0		TRACE	
N-PENTANE	0.4		0.0		0.0	
ISOPENTANE	0.3		0.0		0.0	
CYCLOPENTANE	0.2		TRACE		0.0	
HEXANES PLUS	0.5		0.1		0.1	
NITROGEN	1.1		0.6		4.8	
OXYGEN	TRACE		0.1		1.1	
ARGON	0.0		0.0		0.1	
HYDROGEN	TRACE		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.3		1.6		1.3	
HELIUM	0.05		0.02		0.02	
HEATING VALUE*	1166		1003		954	
SPECIFIC GRAVITY	0.667		0.581		0.602	

	INDEX 10891 SAMPLE 15170		INDEX 10892 SAMPLE 15194		INDEX 10893 SAMPLE 12499	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	VAL VERDE		VAL VERDE		VAN ZANDT	
FIELD	WILL-O		WILL-O		EDGEWOOD	
WELL NAME	MILLS MINERAL TRUST NO. 1		EXXON MILLS NO. 1		PARKER G.U. A NO. 1	
LOCATION	SEC. 29, BLK. Q-3, TCRR SUR.		SEC. 16, BLK. Q4, TCRR SUR.		J. M. PARKER TRACT	
OWNER	MOBIL OIL CORP.		C & K PETROLEUM, INC.		PAN AMERICAN PETROLEUM CORP.	
COMPLETED	07/11/75		07/10/76		09/--/61	
SAMPLED	12/--/77		01/23/78		10/25/70	
FORMATION	ORDO-ELLENBURGER		ORDO-ELLENBURGER		JURA-SMACKOVER	
GEOLOGIC PROVINCE CODE	430		430		260	
DEPTH, FEET	14695		14208		12834	
WELLHEAD PRESSURE,PSIG	4710		4826		3662	
OPEN FLOW, MCFD	7900 D		9600		19600	
COMPONENT, MOLE PCT						
METHANE	83.4		85.9		57.1	
ETHANE	0.2		0.2		6.5	
PROPANE	TRACE		TRACE		2.9	
N-BUTANE	0.0		0.0		0.9	
ISOBUTANE	0.0		0.0		1.1	
N-PENTANE	0.0		0.0		0.2	
ISOPENTANE	0.0		0.0		0.4	
CYCLOPENTANE	0.0		0.0		0.1	
HEXANES PLUS	0.0		0.0		0.3	
NITROGEN	0.4		0.7		3.4	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		24.0	
CARBON DIOXIDE	15.9		13.2		3.0	
HELIUM	0.03		0.03		0.02	
HEATING VALUE*	848		874		1057	
SPECIFIC GRAVITY	0.711		0.687		0.862	

	INDEX 10894 SAMPLE 12501		INDEX 10895 SAMPLE 2278		INDEX 10896 SAMPLE 2610	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	VAN ZANDT		VAN ZANDT		VAN ZANDT	
FIELD	EDGEWOOD NE		VAN		VAN	
WELL NAME	PARKER G.U. 8 NO. 1		R. S. BLAKE NO. 5		WHITE 500 NO. 5	
LOCATION	J. R. CHISUM A-157 SUR.		JOHN WALLING SUR.		NACOGDOCHES SCHOOL LAND SUR.	
OWNER	PAN AMERICAN PETROLEUM CORP.		HUMBLE OIL & REFINING CO.		TEXAS CO.	
COMPLETED	06/--/62		12/10/30		12/19/32	
SAMPLED	10/25/70		02/10/31		02/23/33	
FORMATION	JURA-SMACKOVER		CRET-WOODBINE		CRET-WOODBINE	
GEOLOGIC PROVINCE CODE	260		260		260	
DEPTH, FEET	12583		2605		2756	
WELLHEAD PRESSURE,PSIG	5526		NOT GIVEN		1200	
OPEN FLOW, MCFD	78460		1000		3864	
COMPONENT, MOLE PCT						
METHANE	57.6		41.4		89.3	
ETHANE	8.5		57.7		9.5	
PROPANE	3.3		---		---	
N-BUTANE	1.0		---		---	
ISOBUTANE	1.0		---		---	
N-PENTANE	0.3		---		---	
ISOPENTANE	0.4		---		---	
CYCLOPENTANE	0.1		---		---	
HEXANES PLUS	0.3		---		---	
NITROGEN	3.1		0.0		0.3	
OXYGEN	TRACE		0.4		0.7	
ARGON	0.0		---		---	
HYDROGEN	0.2		---		---	
HYDROGEN SULFIDE**	21.6		---		---	
CARBON DIOXIDE	2.7		0.5		0.4	
HELIUM	0.01		0.00		0.03	
HEATING VALUE*	1077		1453		1071	
SPECIFIC GRAVITY	0.859		0.847		0.609	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10897 SAMPLE 3991	INDEX 10898 SAMPLE 11996	INDEX 10899 SAMPLE 4645
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	ANAQUA	ANAQUA N	COLETTO CREEK
WELL NAME	MARY SIMMONS NO. 1	KEMPER WILLIAMS NO. 1-C	J. H. FLEMING NO. 1
LOCATION	15 MI. N OF MCFADDIN N FIELD	DE LA GARZA SUR. A-46	BLK. A-61, F.O. HIDALGO SUR.
OWNER	GULF OIL CO.	MARKINS & CO., ET AL.	JERGINS OIL CO.
COMPLETED	--/--/00	07/17/68	09/02/48
SAMPLED	03/08/45	08/14/69	01/06/49
FORMATION	OLIG-FRIO	OLIG-FRIO	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5350	5374	3264
WELLHEAD PRESSURE,PSIG	2050	1800	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	29000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.5	92.3	97.6
ETHANE	15.1	2.8	1.3
PROPANE	---	TRACE	---
N-BUTANE	---	0.2	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.7	---
ISOPENTANE	---	0.4	---
CYCLOPENTANE	---	0.3	---
HEXANES PLUS	---	0.5	---
NITROGEN	0.0	2.0	0.6
OXYGEN	0.2	0.3	0.4
ARGON	---	TRACE	---
HYDROGEN	---	0.2	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.00	0.01	0.01
HEATING VALUE*	1127	1076	1012
SPECIFIC GRAVITY	0.632	0.622	0.566

	INDEX 10900 SAMPLE 4744	INDEX 10901 SAMPLE 11618	INDEX 10902 SAMPLE 17907
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	COLETTO CREEK	ELOISE	GARCITAS CREEK N
WELL NAME	KATIE WILLEMIN NO. 2-1	J. F. PETTY NO. 1	KOLLE KUTCHKA NO. 1
LOCATION	PEDRO GALLARDO SUR.	A. B. WILLIAMS SUR. A-353	W. M. ALLEN SUR., A-389
OWNER	JERGINS OIL CO. OF TEXAS	CROWN CENTRAL PETROLEUM CORP	ARCO OIL & GAS CO.
COMPLETED	02/27/49	06/22/67	01/--/85
SAMPLED	05/17/49	08/06/68	11/11/85
FORMATION	OLIG-FRIO	OLIG-NOSES	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4522	5660	3782
WELLHEAD PRESSURE,PSIG	1850	1400	1049
OPEN FLOW, MCFD	742	12600	2118
COMPONENT, MOLE PCT			
METHANE	96.3	95.3	97.9
ETHANE	1.6	1.8	0.7
PROPANE	0.3	0.5	0.1
N-BUTANE	0.1	0.2	TRACE
ISOBUTANE	0.3	0.1	0.0
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.8	1.5	0.8
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1042	1051	1017
SPECIFIC GRAVITY	0.587	0.595	0.568

	INDEX 10903 SAMPLE 10171	INDEX 10904 SAMPLE 12490	INDEX 10905 SAMPLE 12491
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	HELEN GOLKE SW	HEYSER	HEYSER
WELL NAME	HAMILTON NURSERY RANCH NO. 1	W. H. BENNETT NO. 12	W. H. BENNETT NO. 12
LOCATION	S&ME SUR. NO. 18, A-326	JOSE ESTEVAN GALBAN SUR.A-34	JOSE ESTEVAN GALBAN SUR.A-34
OWNER	EDWARDS, HAMILTON AND FORD	SUN OIL CO.	SUN OIL CO.
COMPLETED	07/02/54	03/15/69	03/15/69
SAMPLED	09/01/65	10/26/70	10/26/70
FORMATION	EOCE-SLICK	MIOC-3700 FT. SAND	MIOC-3800 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8512	3655	3760
WELLHEAD PRESSURE,PSIG	3300	1383	1551
OPEN FLOW, MCFD	88000	74000	15000
COMPONENT, MOLE PCT			
METHANE	88.9	99.2	99.2
ETHANE	5.5	0.2	0.1
PROPANE	2.4	TRACE	TRACE
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.0	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	0.1	0.1
HELIUM	0.01	0.01	0.09
HEATING VALUE*	1087	1009	1007
SPECIFIC GRAVITY	0.640	0.558	0.558

	INDEX 10906 SAMPLE 9649	INDEX 10907 SAMPLE 4528	INDEX 10908 SAMPLE 4590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	IDA WEITZ	INEZ	INEZ
WELL NAME	IDA WEITZ NO. 1-T	BAKER NO. 1	BAKER NO. 2
LOCATION	F. BUENO LEAGUE SUR.	LOT NO.55, A-45 GARCIA GRANT	NOT GIVEN
OWNER	SUN OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	05/04/63	03/28/48	06/14/48
SAMPLED	11/25/64	06/01/48	10/14/48
FORMATION	OLIG-FRIO	OLIG-INEZ SOUTH	OLIG-INEZ SOUTH
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3512	5238	5116
WELLHEAD PRESSURE,PSIG	1030	2350	2575
OPEN FLOW, MCFD	2600	10300	93000
COMPONENT, MOLE PCT			
METHANE	99.0	96.5	87.0
ETHANE	0.2	3.4	10.5
PROPANE	0.0	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.3	0.7	1.4
OXYGEN	0.0	0.2	0.6
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.5	0.2	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1006	1028	1069
SPECIFIC GRAVITY	0.562	0.577	0.620

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10909 SAMPLE 9591	INDEX 10910 SAMPLE 2367	INDEX 10911 SAMPLE 4186
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	KOONTZ	MCFADDIN	MCFADDIN
WELL NAME	KEERAN RANCH NO. 1-UT	MCFADDIN NO. 4-A	E. T. MORROW NO. 1
LOCATION	MARTIN DELEON GRANT	NOT GIVEN	EO PERRY SUR. A-48
OWNER	MOBIL OIL CORP.	UNITED PRODUCTION CORP.	BARNSDALL OIL CO.
COMPLETED	09/20/51	07/15/31	09/13/46
SAMPLED	09/05/64	08/03/31	11/22/46
FORMATION	OLIG-FRIO	MIOC-CATAHOULA	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5272	3716	2250
WELLHEAD PRESSURE,PSIG	1815	1650	926
OPEN FLOW, MCFD	4600	1000	60000
COMPONENT, MOLE PCT			
METHANE	96.2	91.2	99.5
ETHANE	2.5	2.6	0.0
PROPANE	0.4	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.1	4.6	0.0
OXYGEN	TRACE	1.6	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	0.0	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1042	970	1008
SPECIFIC GRAVITY	0.580	0.595	0.558

	INDEX 10912 SAMPLE 5061	INDEX 10913 SAMPLE 5123	INDEX 10914 SAMPLE 3870
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	MCFADDIN	MCFADDIN	MCFADDIN N
WELL NAME	MCFADDIN B-9	MCFADDIN B NO. 10	RYDOLPH NO. 4
LOCATION	J. W. MOORE SUR.	NOT GIVEN	JOHN F. KEMPER A-241 SUR.
OWNER	CHICAGO CORP.	CHICAGO CORP.	UNION PRODUCING CO.
COMPLETED	03/05/51	05/19/51	08/28/43
SAMPLED	06/19/51	11/16/51	09/21/44
FORMATION	MIOC-	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3400	2200	5445
WELLHEAD PRESSURE,PSIG	1510	929	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	68	10750
COMPONENT, MOLE PCT			
METHANE	97.9	98.6	92.9
ETHANE	0.2	0.2	6.1
PROPANE	0.2	TRACE	---
N-BUTANE	0.0	TRACE	---
ISOBUTANE	0.0	TRACE	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	1.2	0.9	0.0
OXYGEN	0.3	TRACE	0.3
ARGON	TRACE	0.1	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	TRACE	0.7
HELIUM	0.01	0.01	0.02
HEATING VALUE*	999	1005	1050
SPECIFIC GRAVITY	0.566	0.559	0.593

	INDEX 10915 SAMPLE 10126	INDEX 10916 SAMPLE 4142	INDEX 10917 SAMPLE 3941
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	MISSION VALLEY	PLACEDO E	PRIDHAM LAKE
WELL NAME	S. F. RUSCHHAUPT NO. 1	VANDENBERGE & HILL NO. 18	M. F. BASS NO. 1-A
LOCATION	EBEN HAVEN SUR.	E. BENAVIDES SUR.	FOUR LEAGUE GRANT
OWNER	LONE STAR PRODUCING CO.	STANOLIND OIL & GAS CO.	LVO CORP.
COMPLETED	02/20/64	06/07/46	--/--/00
SAMPLED	09/16/65	11/08/46	12/27/44
FORMATION	EOCE-WILCOX	OLIG-FRIO	OLIG-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11916	6420	4877
WELLHEAD PRESSURE,PSIG	8570	2250	1500
OPEN FLOW, MCFD	5200	13500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.8	52.7	97.4
ETHANE	7.5	46.3	2.0
PROPANE	3.7	---	---
N-BUTANE	0.8	---	---
ISOBUTANE	0.5	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.6	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	0.7	---	---
NITROGEN	0.1	0.1	0.1
OXYGEN	0.0	0.4	0.4
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	3.6	0.5	0.1
HELIUM	TRACE	0.02	0.03
HEATING VALUE*	1180	1364	1023
SPECIFIC GRAVITY	0.721	0.791	0.568

	INDEX 10918 SAMPLE 4521	INDEX 10919 SAMPLE 13650	INDEX 10920 SAMPLE 13651
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	TELFERNER E	WELDER RANCH	WELDER RANCH
WELL NAME	ROWAN RAGSDALE NO. 6	WELDER-CLIBURN NO. 1	WELDER-CLIBURN NO. 1
LOCATION	VALENTINE GARCIA SUR.	S. A. BELDING SUR. A-144	S. A. BELDING SUR. A-144
OWNER	ROWAN & HOPE	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	--/--/00	07/25/71	07/25/71
SAMPLED	05/15/48	07/18/73	07/18/73
FORMATION	OLIG-FRIO	EOCE-YEGUA	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5100	5559	5670
WELLHEAD PRESSURE,PSIG	2175	3288	3437
OPEN FLOW, MCFD	50000	4050	13000
COMPONENT, MOLE PCT			
METHANE	97.3	92.8	92.5
ETHANE	2.4	3.9	4.3
PROPANE	---	1.5	1.5
N-BUTANE	---	0.3	0.2
ISOBUTANE	---	0.4	0.4
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.2	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.0	0.3	0.4
OXYGEN	0.1	TRACE	0.1
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1029	1090	1087
SPECIFIC GRAVITY	0.569	0.610	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10921 SAMPLE 4294	INDEX 10922 SAMPLE 4335	INDEX 10923 SAMPLE 4736
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	VICTORIA	VICTORIA
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	GEORGE E. SCOTT NO. 1	ELIZABETH MUELLER NO. 1	M. E. COOLEY NO. 1
LOCATION	WM. MINTER SUR. N3. 264	ELI STAPP LEAGUE A-111	BENJ. J. WHITE SUR.
OWNER	TEXAS CO.	AMERADA PETROLEUM CORP.	WESTERN NATURAL GAS CO.
COMPLETED	03/06/47	06/01/47	01/14/49
SAMPLED	04/17/47	07/23/47	04/14/49
FORMATION	TERT-	OLIG-FRIO U	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4110	2872	8895
WELLHEAD PRESSURE,PSIG	1707	1342	3545
OPEN FLOW, MCFD	18000	5600	4500
COMPONENT, MOLE PCT			
METHANE	99.0	97.8	89.0
ETHANE	0.3	0.3	6.3
PROPANE	---	---	2.2
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	0.3	1.4	0.6
OXYGEN	0.3	0.3	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.2
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1008	996	1128
SPECIFIC GRAVITY	0.560	0.565	0.637

	INDEX 10924 SAMPLE 4862	INDEX 10925 SAMPLE 11351	INDEX 10926 SAMPLE 11550
STATE	TEXAS	TEXAS	TEXAS
COUNTY	VICTORIA	WALKER	WALKER
FIELD	WILDCAT	FORT TRINIDAD SW	MOSSY GROVE
WELL NAME	CORA HENSLEY NO. 1	FT. TRINIDAD UNIT 2 NO. 1	MOSSY GROVE UNIT 1
LOCATION	SEC. 5, BLK. A-206, IRR SUR.	NOT GIVEN	NOT GIVEN
OWNER	JERGINS OIL CO. OF TEXAS	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/22/49	08/15/65	--/--/00
SAMPLED	03/21/50	03/01/68	03/01/68
FORMATION	NOT GIVEN	CRET-GLEN ROSE B	CRET-GLEN ROSE B
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6040	10908	11676
WELLHEAD PRESSURE,PSIG	3360	6940	5300
OPEN FLOW, MCFD	NOT GIVEN	21373	71842
COMPONENT, MOLE PCT			
METHANE	87.6	84.9	86.2
ETHANE	5.6	6.4	4.7
PROPANE	2.2	2.7	1.6
N-BUTANE	0.6	0.9	0.5
ISOBUTANE	0.4	0.8	0.6
N-PENTANE	0.3	0.5	1.6
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.7	2.1
NITROGEN	1.0	1.1	TRACE
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.9	1.8	2.0
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1110	1163	1229
SPECIFIC GRAVITY	0.661	0.690	0.720

	INDEX 10927 SAMPLE 12147	INDEX 10928 SAMPLE 3788	INDEX 10929 SAMPLE 12402
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WALLER	WALLER	WALLER
FIELD	BROOKSHIRE	KATY	KATY
WELL NAME	DONIGAN GAS UNIT 1 NO. 1	L. L. SCHARFF	UNIT 1 NO. W-31
LOCATION	WILLIAM COOPER LEAGUE, A-20	SEC. 130	SEC.119, T.S.REESE SUR.A-332
OWNER	TEXACO INC.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	11/02/68	--/--/00	08/02/69
SAMPLED	12/08/69	04/13/44	09/04/70
FORMATION	EOCE-WILCOX	EOCE-YEGUA	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11240	7069	10230
WELLHEAD PRESSURE,PSIG	6495	NOT GIVEN	6275
OPEN FLOW, MCFD	38000	30	16500
COMPONENT, MOLE PCT			
METHANE	85.9	84.0	91.8
ETHANE	7.1	14.2	3.3
PROPANE	2.6	---	1.0
N-BUTANE	0.5	---	0.2
ISOBUTANE	0.2	---	0.2
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.3	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.9	1.0	0.3
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.3	0.6	2.7
HELIUM	TRACE	0.00	TRACE
HEATING VALUE*	1111	1105	1042
SPECIFIC GRAVITY	0.663	0.636	0.620

	INDEX 10930 SAMPLE 16421	INDEX 10931 SAMPLE 12260	INDEX 10932 SAMPLE 13270
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WALLER	WARD	WARD
FIELD	PANS-LLAN	BARSTOW	BARSTOW
WELL NAME	ELIZABETH SORSBY ET AL, NO 1	BARSTOW UNIT NO. 1	JOSEY NO. 1
LOCATION	JUSTO LIENDO SUR., A-41	SEC. 37, BLK. 33, H&TC SUR.	SEC. 183, BLK. 34, H&TC SUR.
OWNER	PLACID OIL CO.	ADOBE OIL & GAS CORP.	SHELL OIL CO.
COMPLETED	05/21/81	02/28/69	10/21/71
SAMPLED	02/02/82	05/18/70	06/19/72
FORMATION	CRET-L	SILU-FUSSELMAN	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	220	430	430
DEPTH, FEET	19132	17550	18243
WELLHEAD PRESSURE,PSIG	15085	6200	5600
OPEN FLOW, MCFD	12649	132000	90000
COMPONENT, MOLE PCT			
METHANE	92.6	95.2	95.0
ETHANE	0.1	0.6	0.5
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	0.5	0.6	0.5
OXYGEN	0.5	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	6.7	3.1	3.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	940	1000	974
SPECIFIC GRAVITY	0.622	0.602	0.598

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10933 SAMPLE 14413	INDEX 10934 SAMPLE 13688	INDEX 10935 SAMPLE 13689
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BARSTOW	BEALL	BEALL
WELL NAME	AMERICAN NAT. INS. CO. NO. 1	MARY W. EVANS NO. 1	MARY EVANS NO. 1
LOCATION	SEC. 44, BLK. 33, H&TC SUR.	SEC. 53, BLK. 34, H&TC SUR.	SEC. 53, BLK. 34, H&TC SUR.
OWNER	NORTHERN NATURAL GAS CO.	EXXON CO., U.S.A.	EXXON CO., U.S.A.
COMPLETED	02/01/74	03/05/72	03/05/72
SAMPLED	07/15/75	08/23/73	08/23/73
FORMATION	PERM-WICHITA-ALBANY	ORDO-ELLENBURGER	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15526	14919	12247
WELLHEAD PRESSURE,PSIG	2005	5315	5300
OPEN FLOW, MCFD	14914	15000	5800
COMPONENT, MOLE PCT			
METHANE	98.1	95.1	92.8
ETHANE	0.4	2.2	2.8
PROPANE	TRACE	0.8	0.9
N-BUTANE	0.0	0.3	0.2
ISOBUTANE	0.0	0.2	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.6	0.6	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.2	2.1
HELIUM	0.01	0.04	0.01
HEATING VALUE*	1001	1058	1036
SPECIFIC GRAVITY	0.566	0.592	0.610

	INDEX 10936 SAMPLE 14433	INDEX 10937 SAMPLE 14418	INDEX 10938 SAMPLE 12590
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BEALL	BIG LION	BLK. 16
WELL NAME	HERD GAS UNIT NO. 1	MIDLAND NATL. BK. NO. 1	WATSON ET AL. NO. 1
LOCATION	SEC. 78, BLK. 34, H&TC SUR.	SEC. 146, BLK. 34, H&TC SUR.	SEC. 76, BLK. 16, H&TC SUR.
OWNER	EXXON CO., U.S.A.	TEXAS AMERICAN OIL CORP.	MOBIL OIL CORP.
COMPLETED	03/01/74	08/26/74	08/14/70
SAMPLED	08/11/75	07/23/75	--/--/00
FORMATION	DEVO-	PENN-MORROW	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12239	15879	15807
WELLHEAD PRESSURE,PSIG	4084	8067	5283
OPEN FLOW, MCFD	79031	2156	41000
COMPONENT, MOLE PCT			
METHANE	93.7	97.1	92.6
ETHANE	2.3	1.1	3.8
PROPANE	0.6	0.2	1.5
N-BUTANE	0.1	0.2	0.5
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.6	0.4	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	1.2	0.2
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1022	1009	1090
SPECIFIC GRAVITY	0.605	0.575	0.614

	INDEX 10939 SAMPLE 12591	INDEX 10940 SAMPLE 15323	INDEX 10941 SAMPLE 12808
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BLK. 16	BLK. 17	BLK. 17 SE
WELL NAME	WATSON ET AL. NO. 1	UNIV. "34" NO. 1	STATE OF TEXAS DC NO. 1
LOCATION	SEC. 76, BLK. 34, H&TC SUR.	SEC. 34, BLK. 17, UNIV. LAND	SEC. 3, BLK. 18, PSL SUR.
OWNER	MOBIL OIL CORP.	HNG OIL CO.	TEXACO INC.
COMPLETED	08/14/70	06/21/77	--/--/00
SAMPLED	12/--/70	08/04/78	04/30/71
FORMATION	DEVO-	PERM-CHERRY CANYON	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12692	6089	4972
WELLHEAD PRESSURE,PSIG	4435	2525	NOT GIVEN
OPEN FLOW, MCFD	22200	5200	67
COMPONENT, MOLE PCT			
METHANE	79.0	86.2	87.6
ETHANE	2.8	5.3	5.8
PROPANE	0.9	2.5	1.9
N-BUTANE	0.2	0.9	0.5
ISOBUTANE	0.2	0.6	0.6
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.1	0.5	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	12.5	3.3	2.8
OXYGEN	2.9	0.0	0.0
ARGON	0.1	0.0	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.0	TRACE
HELIUM	0.31	0.03	0.02
HEATING VALUE*	897	1137	1104
SPECIFIC GRAVITY	0.669	0.667	0.642

	INDEX 10942 SAMPLE 15132	INDEX 10943 SAMPLE 16505	INDEX 10944 SAMPLE 12793
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	BURKHOLDER	BURKHOLDER	CRAWAR
WELL NAME	BURKHOLDER N. UNIT N-1	CHINA LAKE 205 NO. 1	J. B. TUBB A36
LOCATION	SEC.199,BLK.34,H&TC SUR.	H&TC SUR.	SEC. 13, BLK. B-28, PSL SUR.
OWNER	GULF OIL CORP.	UNION TEXAS PETROLEUM CORP.	GULF OIL CO.- U.S.
COMPLETED	02/11/76	04/29/82	01/--/55
SAMPLED	10/31/77	04/29/82	04/28/71
FORMATION	MISS-	SILU-FUSSELMAN	PERM-GLORIETA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16314	15963	4100
WELLHEAD PRESSURE,PSIG	6855	5000	NOT GIVEN
OPEN FLOW, MCFD	5000	15000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	92.6	84.2
ETHANE	0.5	0.3	8.5
PROPANE	0.1	0.1	3.3
N-BUTANE	0.0	0.0	0.8
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.4	1.6	1.6
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.7	5.2	0.4
HELIUM	0.01	0.01	0.03
HEATING VALUE*	977	946	1167
SPECIFIC GRAVITY	0.596	0.615	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10945 SAMPLE 12797	INDEX 10946 SAMPLE 12438	INDEX 10947 SAMPLE 15604
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	CRAWAR	CREWAR	DELAWARE SE
WELL NAME	CRAWAR UNIT NO. 4-F	TUBB NO. 2	STATE XV NO. 2
LOCATION	SEC. 8, BLK. B-20, PSL SUR.	SEC. 18, BLK. B-20, PSL SUR.	SEC. 13, BLK. 18, UL SUR.
OWNER	GULF OIL CO.- U.S.	MCCULLOCH OIL CORP.	GULF OIL CORP.
COMPLETED	01/--/59	09/--/69	05/25/78
SAMPLED	04/28/71	10/10/70	04/21/79
FORMATION	SILU-FUSSELMAN	PERM-TUBB	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6000	4800	6143
WELLHEAD PRESSURE,PSIG	1369	1875	3393
OPEN FLOW, MCFD	NOT GIVEN	12000	2200
COMPONENT, MOLE PCT			
METHANE	95.6	87.0	85.4
ETHANE	1.0	7.3	5.4
PROPANE	0.3	2.6	2.3
N-BUTANE	0.1	0.6	0.8
ISOBUTANE	0.0	0.4	0.7
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.0	0.1	0.6
CYCLOPENTANE	0.0	TRACE	0.4
HEXANES PLUS	0.0	0.1	0.6
NITROGEN	2.1	0.1	1.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.2	0.0
CARBON DIOXIDE	0.1	0.3	0.0
HELIUM	0.01	0.03	0.03
HEATING VALUE*	998	1129	1156
SPECIFIC GRAVITY	0.586	0.646	0.680

	INDEX 10948 SAMPLE 2032	INDEX 10949 SAMPLE 2027	INDEX 10950 SAMPLE 2028
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	GRANDFALLS	GULF-O'BRIEN	GULF-O'BRIEN
WELL NAME	ANDERSON NO. 1	O'BRIEN NO. A	O'BRIEN NO. 6
LOCATION	SEC. 11, BLK. 5, H&TC SUR.	SEC. 19, BLK. F	SEC. 20, BLK. F, GM-M BROS SUR
OWNER	JOHN M. BODGER	GULF PRODUCTION CO.	GULF PRODUCTION CO.
COMPLETED	--/--/00	04/22/29	10/12/29
SAMPLED	06/12/30	06/09/30	06/09/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2115	2575	2610
WELLHEAD PRESSURE,PSIG	NOT GIVEN	36	NOT GIVEN
OPEN FLOW, MCFD	1505	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.7	67.4	82.1
ETHANE	11.7	31.9	15.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.7	0.2	1.3
OXYGEN	0.6	0.2	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.05	0.00	TRACE
HEATING VALUE*	1078	1258	1115
SPECIFIC GRAVITY	0.626	0.717	0.644

	INDEX 10951 SAMPLE 2029	INDEX 10952 SAMPLE 9958	INDEX 10953 SAMPLE 9952
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	GULF-O'BRIEN	H S A	H S A
WELL NAME	HUTCHINGS NO. 2	H. S. A. NO. 596	H. S. A. NO. 617
LOCATION	SEC. 7, BLK. O	SEC. 75, BLK. N, G&MMB&A SUR.	SEC. 62, BLK. N, G&MMB&A SUR.
OWNER	GULF PRODUCTION CO.	GULF OIL CORP.	GULF OIL CORP.
COMPLETED	10/29/29	12/21/63	05/09/64
SAMPLED	06/09/30	07/07/65	07/22/65
FORMATION	NOT GIVEN	PENN-CANYON	PENN-STRAWN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2490	7993	7768
WELLHEAD PRESSURE,PSIG	66	1875	2529
OPEN FLOW, MCFD	NOT GIVEN	498	14900
COMPONENT, MOLE PCT			
METHANE	80.3	59.8	84.1
ETHANE	15.5	14.0	8.8
PROPANE	---	10.5	4.1
N-BUTANE	---	6.8	0.9
ISOBUTANE	---	1.5	0.4
N-PENTANE	---	1.7	0.1
ISOPENTANE	---	2.4	0.2
CYCLOPENTANE	---	0.5	TRACE
HEXANES PLUS	---	1.5	TRACE
NITROGEN	3.3	1.3	1.2
OXYGEN	0.5	TRACE	0.0
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.1
HELIUM	0.07	0.01	0.04
HEATING VALUE*	1091	1670	1173
SPECIFIC GRAVITY	0.653	0.981	0.670

	INDEX 10954 SAMPLE 13489	INDEX 10955 SAMPLE 11430	INDEX 10956 SAMPLE 11942
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	HOWE	LOCKRIDGE	MAGNOLIA-SEALY S
WELL NAME	HOWE G. U. 1 NO. 1	I. P. LOCKRIDGE NO. 1	GEORGE SEALY NO. 5
LOCATION	JOSEPH HOWE SUR. NO. 1	SEC. 89, BLK. 34, H&TC SUR.	SEC.43, BLK. F, G&MMB&A SUR
OWNER	EXXON CO., U.S.A.	SHELL OIL CO.	MOBIL OIL CORP.
COMPLETED	06/30/72	09/07/66	05/08/68
SAMPLED	12/21/72	04/05/68	06/25/69
FORMATION	DEVO-	ORDO-ELLENBURGER	PERM-YATES
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12176	19654	2785
WELLHEAD PRESSURE,PSIG	4433	6600	1018
OPEN FLOW, MCFD	148000	115000	10000
COMPONENT, MOLE PCT			
METHANE	83.5	95.4	87.8
ETHANE	9.7	2.0	3.8
PROPANE	3.1	0.5	2.3
N-BUTANE	0.8	0.3	0.6
ISOBUTANE	0.5	0.1	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	1.2	0.4	2.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.2
CARBON DIOXIDE	0.7	0.9	1.8
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1158	1046	1087
SPECIFIC GRAVITY	0.670	0.594	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10957 SAMPLE 16020	INDEX 10958 SAMPLE 16288	INDEX 10959 SAMPLE 16320
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	MERIDIAN S	MERIDIAN S	MERIDIAN S
WELL NAME	UNIV. 27-19 NO. 1	UNIVERSITY 42-20" NO. 1	UNIVERSITY 42-20 NO. 1
LOCATION	SEC. 27, BLK. 19, ULS SUR.	SEC. 42, BLK. 20, ULS SUR.	SEC. 42, BLK. 20, ULS SUR.
OWNER	GETTY OIL CO.	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	05/15/79	08/27/80	08/27/80
SAMPLED	07/30/80	06/17/81	08/20/81
FORMATION	PERM-WICHITA-ALBANY	ORDO-ELLENBURGER	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	15667	22154	19938
WELLHEAD PRESSURE,PSIG	8650	6815	5865
OPEN FLOW, MCFD	5100	3810	6008
COMPONENT, MOLE PCT			
METHANE	94.7	98.1	95.6
ETHANE	2.9	0.2	0.4
PROPANE	0.6	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.9	0.4	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.2	3.1
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1047	1000	978
SPECIFIC GRAVITY	0.593	0.570	0.592

	INDEX 10960 SAMPLE 12792	INDEX 10961 SAMPLE 7171	INDEX 10962 SAMPLE 7174
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	MILLER BLK. B-29	MONAHANS	MONAHANS
WELL NAME	JANE DEAN MILLER NO. 2	SEALY-SMITH NO. 46	SEALY-SMITH NO. 46
LOCATION	SEC. 14, BLK B-29, PSL SUR.	SEC. 38, BLK. A, GMNBA SUR.	SEC. 38, BLK. A, GMNBA SUR.
OWNER	GULF OIL CO.- U.S.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	01/10/64	08/16/48	01/15/58
SAMPLED	04/28/71	08/11/59	08/11/59
FORMATION	PENN-	PERM-TUBB NO. 2	PERM-TUBB NO. 1
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7952	5532	5470
WELLHEAD PRESSURE,PSIG	500	1442	1935
OPEN FLOW, MCFD	152	6582	2300
COMPONENT, MOLE PCT			
METHANE	81.4	83.1	81.7
ETHANE	10.8	8.4	9.0
PROPANE	4.8	3.6	3.7
N-BUTANE	0.9	1.0	1.1
ISOBUTANE	0.7	0.4	0.3
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	TRACE	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.8	2.4	2.7
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.10	0.10
HEATING VALUE*	1214	1173	1185
SPECIFIC GRAVITY	0.692	0.682	0.693

	INDEX 10963 SAMPLE 14117	INDEX 10964 SAMPLE 1267	INDEX 10965 SAMPLE 16448
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	MONROE, DEEP	NOT GIVEN	NOT GIVEN
WELL NAME	ROMONE UNIT NO. 1	HUTCHINS CATTLE ASSOC.	JANELLE EDWARDS NO. 5
LOCATION	SEC. 31, BLK. 1, WENW SUR.	SEC. 47	SEC. 3, BLK. B-20, PSL SUR.
OWNER	AMARILLO OIL CO.	GULF PRODUCTION CO.	SOUTHLAND ROYALTY CO.
COMPLETED	02/18/73	--/--/00	03/09/82
SAMPLED	07/30/74	05/17/26	03/09/82
FORMATION	PENN-ATOKA	-LIME	PERM-TUBB
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14814	NOT GIVEN	4888
WELLHEAD PRESSURE,PSIG	3000	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	400	1000	2213
COMPONENT, MOLE PCT			
METHANE	97.7	30.7	84.6
ETHANE	0.7	58.3	8.1
PROPANE	0.1	---	3.5
N-BUTANE	0.0	---	1.0
ISOBUTANE	0.0	---	0.4
N-PENTANE	0.0	---	0.3
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.2
NITROGEN	0.4	7.8	1.4
OXYGEN	TRACE	2.7	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.1	0.6	0.1
HELIUM	0.01	TRACE	0.03
HEATING VALUE*	1005	1356	1176
SPECIFIC GRAVITY	0.571	0.896	0.673

	INDEX 10966 SAMPLE 5865	INDEX 10967 SAMPLE 15342	INDEX 10968 SAMPLE 12789
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	PAYTON	PHANTOM	POQUITO
WELL NAME	BRANDENBERG NO. 1-8	LEE "128" NO. 1	P. WALKER ET AL. NO. 2
LOCATION	SEC. 4, BLK. 32, M&TC SUR.	SEC. 128, BLK. 34, M&TC SUR.	SEC. 40, A. J. WILSON SUR.
OWNER	CITIES SERVICE OIL CO.	MNG OIL CO.	GULF OIL CORP.
COMPLETED	03/21/55	05/19/78	07/16/65
SAMPLED	06/21/55	08/04/78	04/14/71
FORMATION	ORDO-ELLENBURGER	PENN-ATOKA	PERM-DELAWARE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10086	14933	5090
WELLHEAD PRESSURE,PSIG	3383	5200	700
OPEN FLOW, MCFD	19	7700	1900
COMPONENT, MOLE PCT			
METHANE	86.1	95.7	89.4
ETHANE	5.8	2.3	5.1
PROPANE	2.8	0.4	1.1
N-BUTANE	1.3	0.1	0.3
ISOBUTANE	0.5	TRACE	0.4
N-PENTANE	0.7	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.7	0.1	0.2
NITROGEN	1.5	0.7	3.0
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.1
HELIUM	0.10	0.01	0.02
HEATING VALUE*	1187	1030	1072
SPECIFIC GRAVITY	0.683	0.580	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10969 SAMPLE 11931	INDEX 10970 SAMPLE 15961	INDEX 10971 SAMPLE 13108
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	PYOTE	QUIBAR	QUITO
WELL NAME	PYOTE G.U. NO. 7-1	GULF NO. 1	QUITO NO. 1
LOCATION	BLK. 16	SEC. 181,BLK. 34, H&TC SUR.	SEC. 210, BLK. 34, H&TC SUR.
OWNER	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.	AMERICAN QUASAR PET. CO.
COMPLETED	06/12/69	06/19/79	06/11/71
SAMPLED	06/13/69	05/15/80	11/30/71
FORMATION	DEVO-	SILU-FUSSELMAN	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	12729	17735	14655
WELLHEAD PRESSURE,PSIG	598	4915	5861
OPEN FLOW, MCFD	3500	23440	16000
COMPONENT, MOLE PCT			
METHANE	92.8	94.3	93.7
ETHANE	3.5	0.5	0.4
PROPANE	1.1	0.1	0.1
N-BUTANE	0.3	TRACE	0.0
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.4	0.4	0.7
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.7	4.5	4.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1060	972	959
SPECIFIC GRAVITY	0.615	0.605	0.608

	INDEX 10972 SAMPLE 13573	INDEX 10973 SAMPLE 15044	INDEX 10974 SAMPLE 14265
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	QUITO	QUITO	QUITO E
WELL NAME	SABINE G.U. NO. 1	PIONEER GP, STATE NO. 1	UNIV. NO. 1
LOCATION	SEC. 196, BLK. 34, H&TC SUR.	SEC. 226, BLK.34, H&TC SUR.	SEC. 31, BLK. 18
OWNER	AMERICAN QUASAR PET. CO.	AMARILLO OIL CO.	GULF OIL CO.- U.S.
COMPLETED	--/--/00	09/25/76	08/30/74
SAMPLED	04/04/73	06/27/77	02/--/75
FORMATION	SILU-FUSSELMAN	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	17207	15378	14300
WELLHEAD PRESSURE,PSIG	5200	10822	10117
OPEN FLOW, MCFD	35000	11600	11500
COMPONENT, MOLE PCT			
METHANE	60.7	97.7	96.7
ETHANE	0.3	0.5	1.9
PROPANE	0.1	0.1	0.3
N-BUTANE	TRACE	TRACE	TRACE
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.5	0.5	0.5
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	37.7	1.0	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	634	1001	1034
SPECIFIC GRAVITY	0.933	0.569	0.578

	INDEX 10975 SAMPLE 14429	INDEX 10976 SAMPLE 14430	INDEX 10977 SAMPLE 11446
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	QUITO E	QUITO E	RHODA WALKER
WELL NAME	P. WALKER NO. 2	P. WALKER NO. 2	CYNTHIA MONROE NO. 1
LOCATION	SEC. 40, A. J. WILSON SUR.	SEC. 40, A. J. WILSON SUR.	SEC. 118, BLK 34, H&TC SUR.
OWNER	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.	RODEN OIL CO.
COMPLETED	08/01/74	08/01/74	08/22/67
SAMPLED	08/07/75	08/07/75	04/08/68
FORMATION	SILU-FUSSELMAN	ORDO-ELLENBURGER	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	17095	19370	20306
WELLHEAD PRESSURE,PSIG	5400	3400	6400
OPEN FLOW, MCFD	43000	11720	105000
COMPONENT, MOLE PCT			
METHANE	94.1	98.0	85.5
ETHANE	0.5	0.2	0.7
PROPANE	0.1	0.1	0.2
N-BUTANE	TRACE	0.0	0.1
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	0.6	0.4	3.0
OXYGEN	0.0	0.0	0.6
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.6	1.2	9.4
HELIUM	0.01	0.02	0.02
HEATING VALUE*	965	999	905
SPECIFIC GRAVITY	0.605	0.569	0.676

	INDEX 10978 SAMPLE 12148	INDEX 10979 SAMPLE 12149	INDEX 10980 SAMPLE 15724
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	ROC	ROC	RODGERS
WELL NAME	CAPRITO NO. 82-1	CAPRITO NO. 82-1	RODGERS NO. 1
LOCATION	SEC. 82, BLK. F, G&MMB&A SUR	SEC. 82, BLK. F, G&MMB&A SUR	SEC. 95, BLK. F, G&MMB&A
OWNER	RODEN OIL CO.	RODEN OIL CO.	MONSANTO CO.
COMPLETED	01/25/69	01/25/69	05/--/78
SAMPLED	12/15/69	12/15/69	08/03/79
FORMATION	ORDO-ELLENBURGER & MONTOYA	DEVO-	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	14105	13265	18290
WELLHEAD PRESSURE,PSIG	4624	4809	6200
OPEN FLOW, MCFD	11750	26000	16311
COMPONENT, MOLE PCT			
METHANE	96.7	93.5	97.1
ETHANE	1.1	2.1	1.2
PROPANE	0.4	0.5	0.3
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.1	TRACE	TRACE
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.4	0.7	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	2.6	0.6
HELIUM	0.03	0.01	0.02
HEATING VALUE*	1030	1015	1033
SPECIFIC GRAVITY	0.581	0.605	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10981 SAMPLE 12794	INDEX 10982 SAMPLE 5559	INDEX 10983 SAMPLE 2030
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	SAND HILLS W	SCOTT	SHIPLEY
WELL NAME	W. A. ESTES NO. 70 D	C. MONROE NO. 1	MAZLETTE NO. 4
LOCATION	SEC. 24, BLK. B-20, PSL SUR.	SEC. 35, BLK. 33, H&TC SUR.	SEC. 17, BLK. S, H&TC SUR.
OWNER	GULF OIL CO.- U.S.	CONTINENTAL OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	01/15/64	02/--/53	12/01/29
SAMPLED	04/28/71	10/22/53	06/10/30
FORMATION	DEVO-	PERM-DELAWARE	PERM-QUEEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	6200	4800	2500
WELLHEAD PRESSURE,PSIG	758	2008	6
OPEN FLOW, MCFD	39000	1800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.9	88.8	46.3
ETHANE	4.8	5.1	46.6
PROPANE	1.9	2.1	---
N-BUTANE	0.6	0.6	---
ISOBUTANE	0.3	0.2	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	1.8	2.5	6.0
OXYGEN	0.0	TRACE	0.4
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.0	0.0	0.7
HELIUM	0.01	0.04	0.00
HEATING VALUE*	1103	1094	1304
SPECIFIC GRAVITY	0.638	0.632	0.819

	INDEX 10984 SAMPLE 15298	INDEX 10985 SAMPLE 15352	INDEX 10986 SAMPLE 13755
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	SODA LAKE	WAR-WINK	WAR-WINK S
WELL NAME	T. B. PRUETT NO. 1	UNIV. 9-18 NO. 2	UNIV. 1-6 NO. 1
LOCATION	SEC. 23, BLK. 1, W&NW RR CO.	SEC. 9,BLK.18,UNIV. LD. SUR.	SEC.6,BLK.18,UNIV.LANDS SUR.
OWNER	GULF OIL EXPL. & PROD. CO.	GETTY OIL CO.	HNG OIL CO.
COMPLETED	02/07/77	08/05/76	07/21/72
SAMPLED	05/02/78	08/25/78	10/12/73
FORMATION	SILU-FUSSELMAN	PENN-ATOKA	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	19100	13839	17686
WELLHEAD PRESSURE,PSIG	6040	2750	5500
OPEN FLOW, MCFD	46800	4000	2250
COMPONENT, MOLE PCT			
METHANE	94.1	94.2	94.8
ETHANE	0.3	3.5	0.5
PROPANE	TRACE	0.8	0.1
N-BUTANE	TRACE	0.2	TRACE
ISOBUTANE	TRACE	0.1	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.4	0.4	0.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.4	0.0	0.5
CARBON DIOXIDE	4.4	0.6	4.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	966	1058	967
SPECIFIC GRAVITY	0.606	0.596	0.603

	INDEX 10987 SAMPLE 13756	INDEX 10988 SAMPLE 14414	INDEX 10989 SAMPLE 2031
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	WAR-WINK S	WAR-WINK S	WARD S
WELL NAME	UNIV. 1-6 NO. 1	UNIV. 10-18 NO. 2	BENNET NO. A-1, OIL WELL
LOCATION	SEC.6,BLK.18,UNIV.LANDS SUR.	SEC. 10, BLK. 18, UL SUR.	SEC. 16, BLK. 34, H&TC SUR.
OWNER	HNG OIL CO.	SKELLY OIL CO.	ATLANTIC RICHFIELD CO.
COMPLETED	07/20/72	03/26/74	12/16/29
SAMPLED	10/12/73	07/15/75	06/09/30
FORMATION	ORDO-ELLENBURGER	PERM-WICHITA-ALBANY	PERM-YATES & SEVEN RIVERS
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	20133	11866	2348
WELLHEAD PRESSURE,PSIG	6000	7713	NOT GIVEN
OPEN FLOW, MCFD	1080	2300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.8	83.1	51.0
ETHANE	1.2	9.4	43.8
PROPANE	0.4	4.0	---
N-BUTANE	0.1	0.9	---
ISOBUTANE	0.2	0.4	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.3	1.8	4.8
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.1	0.2
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1032	1176	1302
SPECIFIC GRAVITY	0.581	0.678	0.794

	INDEX 10990 SAMPLE 12799	INDEX 10991 SAMPLE 12800	INDEX 10992 SAMPLE 15054
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WARD	WARD
FIELD	WARD S	WARD S	WILDCAT
WELL NAME	NORTH CENTRAL GAS UNIT NO. 1	JANE DEAN MILLER NO. 3	ROBERTSON "138" NO. 1
LOCATION	SEC. 19, BLK. B-29, PSL SUR.	SEC. 16, BLK. B-29, PSL SUR.	SEC.138, BLK. 34, H&TC SUR.
OWNER	GULF OIL CO.- U.S.	GULF OIL CO.- U.S.	HNG OIL CO.
COMPLETED	08/31/64	05/22/64	11/27/76
SAMPLED	04/28/71	04/28/71	07/--/77
FORMATION	PENN-LIME U	PENN-DETRITAL U	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	7341	7680	20823
WELLHEAD PRESSURE,PSIG	440	360	4120
OPEN FLOW, MCFD	307	680	24300
COMPONENT, MOLE PCT			
METHANE	84.1	78.5	59.4
ETHANE	8.0	12.3	8.3
PROPANE	4.3	5.9	8.4
N-BUTANE	1.1	1.2	4.2
ISOBUTANE	0.6	0.6	2.9
N-PENTANE	0.4	0.3	0.9
ISOPENTANE	0.1	0.2	2.7
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	1.0	0.7	11.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.5
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1220	1265	1913
SPECIFIC GRAVITY	0.684	0.721	0.954

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 10993 SAMPLE 1727	INDEX 10994 SAMPLE 17720	INDEX 10995 SAMPLE 17723
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WARD	WASHINGTON	WEBB
FIELD	WINK	CHWJ	AGUA AZUL
WELL NAME	SEALY RANCH NO. 1	W. M. HUTCHINGS EST. NO. 1	BONUGLI NO. 3
LOCATION	SEC. 95, BLK. A, GHMB&A SUR.	SUSANNAH CLAMPITT SUR. A-26	J.V. BOREGO GRANT, A-563
OWNER	PRAIRIE OIL & GAS CO.	CLAYTON W. WILLIAMS, JR.	TDC ENGINEERING, INC.
COMPLETED	--/--/28	--/--/00	11/30/85
SAMPLED	03/29/29	06/17/85	06/19/85
FORMATION	NOT GIVEN	CRET-AUSTIN CHALK	EOCE-WILCOX L
GEOLOGIC PROVINCE CODE	430	220	220
DEPTH, FEET	2770	12227	10499
WELLHEAD PRESSURE,PSIG	1100	4500	7475
OPEN FLOW, MCFD	5212	2013	12000
COMPONENT, MOLE PCT			
METHANE	78.3	84.7	93.2
ETHANE	17.0	5.3	2.9
PROPANE	---	1.1	0.5
N-BUTANE	---	0.4	0.1
ISOBUTANE	---	0.4	0.1
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.5	0.2
NITROGEN	3.6	1.4	1.3
OXYGEN	0.2	0.2	0.3
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	5.5	1.1
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1098	1051	1031
SPECIFIC GRAVITY	0.663	0.683	0.600

	INDEX 10996 SAMPLE 15444	INDEX 10997 SAMPLE 17903	INDEX 10998 SAMPLE 17887
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	AVIATORS S	BONEBRAKE	BRISCOE
WELL NAME	BRUNI-LOPEZ UNIT NO. 1	J. M. BONEBRAKE NO. 1	BRISCOE NO. A-1C
LOCATION	J. T. WRIGHT SUR. 309,A-1908	J. M. SAWTER SUR. 1650, A-24	BS&F SUR. 985, A-871
OWNER	KILLAM & HURD, LTD.	FOREST OIL CORP.	GMR ENERGY CORP.
COMPLETED	06/08/77	06/07/85	03/29/85
SAMPLED	10/17/78	11/07/85	10/22/85
FORMATION	EOCE-WILCOX	EOCE-LOBO 6	EOCE-LOBO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10600	9869	8080
WELLHEAD PRESSURE,PSIG	7200	4440	4203
OPEN FLOW, MCFD	5600	7412	3830
COMPONENT, MOLE PCT			
METHANE	84.0	85.0	83.6
ETHANE	7.3	7.6	7.0
PROPANE	2.3	2.6	3.9
N-BUTANE	0.4	0.8	1.3
ISOBUTANE	0.6	0.4	0.6
N-PENTANE	0.2	0.5	0.5
ISOPENTANE	0.2	0.1	0.5
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.3	0.6	0.6
NITROGEN	0.2	0.5	0.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.4	1.7	1.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1112	1165	1219
SPECIFIC GRAVITY	0.689	0.685	0.709

	INDEX 10999 SAMPLE 15840	INDEX 11000 SAMPLE 1908	INDEX 11001 SAMPLE 16487
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	BRUNI NE	BRUNI NW	CALLAGHAN N
WELL NAME	ROSA V. DEBENAVIDES NO. 1	BENAVIDES NO. 1	W.N. MCELROY NO. 1
LOCATION	M. ARISPE GRANT A-850	NOT GIVEN	SEC. 525, A&M SUR., A-1978
OWNER	HUGHES & HUGHES OIL & GAS	MAGNOLIA PETROLEUM CO.	MOBIL PROD., TX & NM, INC.
COMPLETED	01/26/79	--/--/29	01/23/81
SAMPLED	11/20/79	12/12/29	03/31/82
FORMATION	EOCE-	-SAND	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	10354	2800	6492
WELLHEAD PRESSURE,PSIG	6920	750	3161
OPEN FLOW, MCFD	10000	NOT GIVEN	7500
COMPONENT, MOLE PCT			
METHANE	89.8	98.6	92.8
ETHANE	0.4	0.0	5.4
PROPANE	TRACE	---	1.6
N-BUTANE	0.1	---	0.5
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.0	---	0.1
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	TRACE	---	0.1
NITROGEN	0.2	0.9	0.6
OXYGEN	0.0	0.2	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	9.4	0.3	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	920	999	1091
SPECIFIC GRAVITY	0.650	0.562	0.616

	INDEX 11002 SAMPLE 17807	INDEX 11003 SAMPLE 17090	INDEX 11004 SAMPLE 8725
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	CARMON	CASA VERDE	COLE W
WELL NAME	R. V. BENAVIDES NO. 28	KILLAM-HURD-AMOCO-RANGE NO.2	ROSA U. BENAVIDES J NO. 1
LOCATION	SEC. 1906, C. HOWARD SUR.	DMJ SANCHEZ PORCION 22 A-277	NOT GIVEN
OWNER	CONOCO, INC.	AMOCO PRODUCTION CO. (USA)	MORGAN MINERALS CORP.
COMPLETED	03/07/85	12/24/81	07/22/62
SAMPLED	08/14/85	10/17/83	10/19/62
FORMATION	EOCE-LOBO 6	NOT GIVEN	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9034	6412	8390
WELLHEAD PRESSURE,PSIG	4850	3360	3805
OPEN FLOW, MCFD	337	68000	7500
COMPONENT, MOLE PCT			
METHANE	84.3	90.1	92.9
ETHANE	7.8	5.1	2.6
PROPANE	2.9	2.0	0.7
N-BUTANE	0.7	0.5	0.2
ISOBUTANE	0.6	0.4	0.1
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.3	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.3	TRACE
NITROGEN	0.9	0.4	0.1
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.6	3.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1168	1127	1021
SPECIFIC GRAVITY	0.686	0.640	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11005 SAMPLE 17813	INDEX 11006 SAMPLE 17850	INDEX 11007 SAMPLE 13539
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	CRYSTAL LOBO	DESPERADO	DOS HERMANOS
WELL NAME	EDITH CARR NO. 1	LUNDELL "A" NO. 5	D. S. PETTY NO. 1
LOCATION	F. C. JORDAN SUR., 260	CCSD & RGNG SUR. 41-A-1039	SEC.11, I&GN RR CO.SUR.A-168
OWNER	CONOCO, INC.	FOREST OIL CORP.	TESORO PETROLEUM CORP.
COMPLETED	10/10/84	04/22/85	08/27/71
SAMPLED	08/14/85	09/26/85	02/13/73
FORMATION	EOCE-LOBO 6	EOCE-WILCOX & LOBO 6	CRET-OLMOS
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8614	11251	5150
WELLHEAD PRESSURE,PSIG	5650	5300	2000
OPEN FLOW, MCFD	5100	26727	7000
COMPONENT, MOLE PCT			
METHANE	91.5	91.6	83.4
ETHANE	4.0	4.8	9.1
PROPANE	1.3	0.6	3.6
N-BUTANE	0.4	0.2	1.1
ISOBUTANE	0.3	0.0	0.9
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	TRACE	0.0	0.4
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.5	0.2	0.5
NITROGEN	0.5	0.2	0.5
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	2.9	0.1
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	1098	1049	1232
SPECIFIC GRAVITY	0.633	0.625	0.699

	INDEX 11008 SAMPLE 14899	INDEX 11009 SAMPLE 11605	INDEX 11010 SAMPLE 11606
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	LAREDO LOBO	LAS TIENDAS	LAS TIENDAS
WELL NAME	W. HUBBARD NO. 2	BEASLEY-CONNEVEY NO. 3	BEASLEY-CONNEVEY NO. 3
LOCATION	14 MI. SE LAREDO	30 MI. NW LAREDO	30 MI. NW LAREDO
OWNER	CONTINENTAL OIL CO.	HUGHES & HUGHES OIL & GAS	HUGHES & HUGHES OIL & GAS
COMPLETED	07/05/75	02/--/68	02/--/68
SAMPLED	02/08/77	07/23/68	07/24/68
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8427	3000	3500
WELLHEAD PRESSURE,PSIG	1575	1023	1374
OPEN FLOW, MCFD	82000	3900	6500
COMPONENT, MOLE PCT			
METHANE	90.0	99.0	98.2
ETHANE	5.8	0.2	0.2
PROPANE	1.6	TRACE	TRACE
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.1	0.6	1.3
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	0.1
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	1108	1006	998
SPECIFIC GRAVITY	0.634	0.559	0.562

	INDEX 11011 SAMPLE 11607	INDEX 11012 SAMPLE 11609	INDEX 11013 SAMPLE 13608
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	LAS TIENDAS	LAS TIENDAS	LAS TIENDAS
WELL NAME	BEASLEY-CONNEVEY NO. 2	BEASLEY-CONNEVEY NO. 2	BOOTH NO. B-2
LOCATION	30 MI. NW LAREDO	30 MI. NW LAREDO	J. GALAN SUR. NO. 2292
OWNER	HUGHES & HUGHES OIL & GAS	HUGHES & HUGHES OIL & GAS	HUGHES & HUGHES
COMPLETED	10/21/67	10/21/67	08/23/71
SAMPLED	07/24/68	07/24/68	06/04/73
FORMATION	EOCE-WILCOX	~400 FT. SAND	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3250	400	2833
WELLHEAD PRESSURE,PSIG	1385	125	464
OPEN FLOW, MCFD	10500	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	98.9	98.8	97.7
ETHANE	0.3	0.2	0.2
PROPANE	0.0	TRACE	0.1
N-BUTANE	0.2	0.0	0.1
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.4	1.0	1.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1014	1004	1029
SPECIFIC GRAVITY	0.563	0.560	0.578

	INDEX 11014 SAMPLE 13609	INDEX 11015 SAMPLE 16221	INDEX 11016 SAMPLE 7047
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	LAS TIENDAS	LINCOLN	NICHOLSON
WELL NAME	BEASLEY-CONNEVEY NO. 7	LINCOLN ESTATE NO. 1	NICHOLSON NO. 2
LOCATION	G. SCHWARTZ SUR. NO. 97	M. LOPEZ NO. 282 SUR.,A-2111	SUR. 985
OWNER	HUGHES & HUGHES	HUGHES & HUGHES OIL & GAS	W. L. COTTON
COMPLETED	11/29/70	08/07/80	--/--/47
SAMPLED	06/04/73	03/30/81	05/01/59
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2582	7476	5465
WELLHEAD PRESSURE,PSIG	508	3477	2200
OPEN FLOW, MCFD	390	66000	5400
COMPONENT, MOLE PCT			
METHANE	97.9	86.5	90.9
ETHANE	0.4	5.7	5.2
PROPANE	0.3	2.6	1.9
N-BUTANE	TRACE	0.6	0.4
ISOBUTANE	0.2	0.5	0.4
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	1.0	0.4	TRACE
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.0	0.7
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1013	1138	1113
SPECIFIC GRAVITY	0.567	0.654	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11017 SAMPLE 13962	INDEX 11018 SAMPLE 17397	INDEX 11019 SAMPLE 5879
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	OWENS	RAPTURE	RETAMIA
WELL NAME	E. B. JONES NO. 3	P. M. FROST NO. 2	BRUNI NO. 1
LOCATION	E. BENAVIDES SUR. NO. 1142	CCSD & RGNG SUR., A-1041	7 MI. SSE OF PESCADITO
OWNER	TEXAS OIL & GAS CORP.	CONOCO, INC.	PHILLIPS PETROLEUM CO.
COMPLETED	03/11/72	08/24/84	03/16/44
SAMPLED	02/04/74	08/24/84	07/15/44
FORMATION	CRET-OLMOS	CRET-WALKER	EOCE-CARRIZO & WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	7125	9686	4962
WELLHEAD PRESSURE,PSIG	1280	1400	NOT GIVEN
OPEN FLOW, MCFD	10000	1720	5400
COMPONENT, MOLE PCT			
METHANE	96.9	81.9	88.4
ETHANE	0.4	8.5	10.8
PROPANE	0.1	3.7	---
N-BUTANE	0.0	1.0	---
ISOBUTANE	0.1	0.9	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	TRACE	0.7	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	TRACE	0.3	---
NITROGEN	1.9	0.2	0.0
OXYGEN	0.0	TRACE	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	2.4	0.4
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	995	1199	1089
SPECIFIC GRAVITY	0.570	0.713	0.614

	INDEX 11020 SAMPLE 16375	INDEX 11021 SAMPLE 14912	INDEX 11022 SAMPLE 12200
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	ROSA V. BENAVIDES	SANCHEZ HILL	TALVEZ S
WELL NAME	ROSA V. BENAVIDES B NO. 3	KILLAM & HERD NO. 1	W.W. GRIFFIN SUR. 28, A-2263
LOCATION	POITEVENT NO. 111 SUR.A-1616	10 MI. NE LAREDO	W. W. GRIFFIN SUR. 28, A2263
OWNER	CONOCO, INC.	GENERAL CRUDE OIL CO.	SOUTHERN PET. EXPL., INC.
COMPLETED	02/07/81	02/07/75	09/24/68
SAMPLED	11/05/81	02/14/77	02/10/70
FORMATION	CRET-WALKER LOBO	EOCE-WILCOX	EOCE-MIRANDO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	8074	6161	1356
WELLHEAD PRESSURE,PSIG	3200	2324	300
OPEN FLOW, MCFD	2532	6000	2660
COMPONENT, MOLE PCT			
METHANE	85.8	90.6	97.0
ETHANE	6.7	3.9	0.1
PROPANE	2.7	2.0	TRACE
N-BUTANE	0.7	0.6	0.0
ISOBUTANE	0.6	0.3	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.4	0.6	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.3	0.0
NITROGEN	1.2	0.7	2.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.7	TRACE
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1148	1123	985
SPECIFIC GRAVITY	0.672	0.642	0.565

	INDEX 11023 SAMPLE 14278	INDEX 11024 SAMPLE 15288	INDEX 11025 SAMPLE 4331
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WEBB	WEBB
FIELD	THOMPSONVILLE NE	UMBRELLA	WILDCAT
WELL NAME	BRUNI ESTATE D NO. 2X	FEE 1-P-25	AMADO PEREZ NO. 1
LOCATION	BLK. 32 A. DE ARRIBA GR.A199	3 MI. NE LAREDO	SEC. 459
OWNER	ATLANTIC RICHFIELD CO.	KILLAM & HURD, LTD.	HICKOK & REYNOLDS, INC.
COMPLETED	09/17/72	10/13/76	04/20/47
SAMPLED	02/25/75	05/24/78	06/05/47
FORMATION	EOCE-WILCOX	EOCE-WILCOX	EOCE-CLAIBORNE L
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9786	7150	1264
WELLHEAD PRESSURE,PSIG	5300	2900	498
OPEN FLOW, MCFD	9000	2800	25500
COMPONENT, MOLE PCT			
METHANE	87.8	92.0	98.8
ETHANE	4.0	4.5	0.0
PROPANE	1.6	1.4	---
N-BUTANE	0.4	0.4	---
ISOBUTANE	0.4	0.2	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.2	0.3	0.9
OXYGEN	0.0	0.0	0.2
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	5.2	0.8	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1051	1087	1001
SPECIFIC GRAVITY	0.665	0.617	0.560

	INDEX 11026 SAMPLE 11608	INDEX 11027 SAMPLE 5021	INDEX 11028 SAMPLE 11146
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WEBB	WHARTON	WHARTON
FIELD	WILDCAT	BERNARD W	BLUE BASIN
WELL NAME	PALAFOX EXP. CO. NO. 12-1	B. G. WOMACK NO. 1	ANNA SHULT NO. 1
LOCATION	40 MI. NW LAREDO	JOHN F. STEPHENS SUR. A-415	JOS. HYLAND SUR. A-626
OWNER	HUGHES & HUGHES OIL & GAS	TIDEWATER ASSOC. OIL CO.	HAAS BROTHERS
COMPLETED	07/05/68	11/15/51	07/22/66
SAMPLED	07/24/68	03/05/51	10/04/67
FORMATION	EOCE-WILCOX	EOCE-CLODINE	OLIG-5900 FT. SAND
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2800	7086	5901
WELLHEAD PRESSURE,PSIG	1105	3434	2053
OPEN FLOW, MCFD	NOT GIVEN	13900	9600
COMPONENT, MOLE PCT			
METHANE	97.2	90.2	99.0
ETHANE	0.2	5.5	0.2
PROPANE	0.1	2.1	TRACE
N-BUTANE	0.0	0.6	0.0
ISOBUTANE	0.0	0.4	0.0
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	2.2	0.0	0.6
OXYGEN	0.3	0.1	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.5	TRACE
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	991	1130	1008
SPECIFIC GRAVITY	0.571	0.639	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11029 SAMPLE 11147	INDEX 11030 SAMPLE 15389	INDEX 11031 SAMPLE 13390
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	BLUE BASIN	BLUE BASIN	BONUS
WELL NAME	ANNA SHULT NO. 1	G. A. DUFFY "B" NO. 3	C. C. BOETTCHER UNIT NO. 1
LOCATION	JOS. MYLAND SUR. A-626	S OF PIERCE	JOSEPH NEWMAN SUR. A-48
OWNER	MAAS BROTHERS	TEXACO INC.	TEXAS OIL & GAS CORP.
COMPLETED	07/22/66	02/21/76	06/20/71
SAMPLED	10/04/67	09/29/78	09/21/72
FORMATION	OLIG-CH-1	OLIG-FRIO	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5842	4522	7566
WELLHEAD PRESSURE,PSIG	1727	1795	2500
OPEN FLOW, MCFD	17700	109000	8350
COMPONENT, MOLE PCT			
METHANE	99.1	96.4	89.7
ETHANE	0.3	0.2	5.6
PROPANE	TRACE	0.0	2.3
N-BUTANE	0.0	0.1	0.5
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	2.5	0.1
OXYGEN	0.0	0.4	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.8
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1009	989	1124
SPECIFIC GRAVITY	0.559	0.572	0.639

	INDEX 11032 SAMPLE 12562	INDEX 11033 SAMPLE 5150	INDEX 11034 SAMPLE 4549
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	DABOVAL	DUFFY	EGYPT
WELL NAME	GUS LILLIE NO. 1	DUFFY NO. 1	DUNCAN NO. 1
LOCATION	SEC 73, ETRR CO. SUR. A-130	NOT GIVEN	ALEX EDGAR SUR.
OWNER	NAFCO OIL & GAS INC.	F. WILLIAM CARR	CLAUD B. HAMILL
COMPLETED	05/17/69	01/10/51	02/10/48
SAMPLED	12/01/70	11/30/51	06/11/48
FORMATION	OLIG-FRIO	NOT GIVEN	EOCE-YEGUA
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6210	NOT GIVEN	6720
WELLHEAD PRESSURE,PSIG	1800	2295	2400
OPEN FLOW, MCFD	7600	30000	1000
COMPONENT, MOLE PCT			
METHANE	94.7	96.3	69.3
ETHANE	3.0	2.1	21.4
PROPANE	1.0	0.4	---
N-BUTANE	0.2	0.1	---
ISOBUTANE	0.3	TRACE	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	0.3	0.6	8.4
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.3	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1073	1032	1086
SPECIFIC GRAVITY	0.599	0.578	0.703

	INDEX 11035 SAMPLE 13728	INDEX 11036 SAMPLE 4347	INDEX 11037 SAMPLE 9595
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	EGYPT	EL CAMPO	MILLIE
WELL NAME	F.B. DUNCAN NO. 1-C	R. HOLUB B NO. 1	MILLER NO. 1
LOCATION	ALEX EDGAR SUR. A-93	SEC. 48, W.D. IVEY A-516 SUR	SEC. 76, BAGNAL SUR. A-501
OWNER	MCCORMICK OIL & GAS CORP.	SEABOARD OIL CO.	ARMOUR PROPERTIES
COMPLETED	06/09/71	06/30/47	03/13/63
SAMPLED	09/26/73	09/02/47	10/07/64
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2773	6094	6970
WELLHEAD PRESSURE,PSIG	750	2405	2625
OPEN FLOW, MCFD	7676	6500	105000
COMPONENT, MOLE PCT			
METHANE	98.8	90.8	93.1
ETHANE	0.1	7.8	3.9
PROPANE	0.1	---	1.8
N-BUTANE	0.0	---	0.4
ISOBUTANE	0.0	---	0.4
N-PENTANE	0.0	---	0.1
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.0	---	0.1
HEXANES PLUS	0.0	---	0.2
NITROGEN	0.8	0.6	0.1
OXYGEN	0.1	0.6	0.0
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1005	1060	1100
SPECIFIC GRAVITY	0.561	0.601	0.614

	INDEX 11038 SAMPLE 10881	INDEX 11039 SAMPLE 13958	INDEX 11040 SAMPLE 15267
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	HOLUB	HUNGERFORD	HUNGERFORD E
WELL NAME	EDMUND HOLUB NO. 1-U	G. C. DUNCAN NO. 2	CARL HOSMAN NO. 1
LOCATION	SEC. 38, E. C. OGDEN SUR.	HUGH ROGERS SUR. A-325	I&GN RR SUR. A-285
OWNER	PERRY R. BASS, INC.	TEXAS OIL & GAS CORP.	CADDO OIL CO., INC.
COMPLETED	03/30/66	03/28/72	09/18/76
SAMPLED	03/03/67	03/07/74	04/19/78
FORMATION	OLIG-FRIO	MIOC-3000 FT. SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6356	3048	3165
WELLHEAD PRESSURE,PSIG	2279	594	1057
OPEN FLOW, MCFD	20200	8400	7002
COMPONENT, MOLE PCT			
METHANE	94.4	98.2	98.3
ETHANE	3.0	TRACE	0.1
PROPANE	0.6	TRACE	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.1	1.6	1.1
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1045	995	1000
SPECIFIC GRAVITY	0.592	0.563	0.564

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11041 SAMPLE 4719	INDEX 11042 SAMPLE 13381	INDEX 11043 SAMPLE 13820
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	HUTCHINS	HUTCHINS S	JONES CREEK
WELL NAME	ZAPP NO. 1	LACY W. ARMOUR ET AL. NO. 3	ZIMMERMAN-NOWAVITZA NO. 1
LOCATION	SEC. 15, I&GN SUR.	I&GN RR SUR. NO. 22, A 240	I&GN RR SUR.
OWNER	MCDANNALD OIL CO.	PERRY R. BASS, INC.	TERRA RESOURCES, INC.
COMPLETED	--/--/08	02/17/72	04/04/73
SAMPLED	07/08/49	09/15/72	11/20/73
FORMATION	MIOC-	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3110	4978	4650
WELLHEAD PRESSURE,PSIG	1225	1800	1850
OPEN FLOW, MCFD	150000	17700	3400
COMPONENT, MOLE PCT			
METHANE	98.1	98.6	97.8
ETHANE	0.1	0.8	0.5
PROPANE	0.1	0.1	0.2
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.2
HEXANES PLUS	0.1	0.0	0.4
NITROGEN	1.0	0.5	0.2
OXYGEN	0.2	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1010	1016	1044
SPECIFIC GRAVITY	0.566	0.563	0.580

	INDEX 11044 SAMPLE 10630	INDEX 11045 SAMPLE 11192	INDEX 11046 SAMPLE 15136
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE	LOUISE	LOUISE
WELL NAME	WILLIS MCINTYRE NO. 1	ISAAC WEAVER NO. 6	HAWES NO. 1-T
LOCATION	MORRIS & CUMMINGS SUR. A-286	SEC. 22, JMBROWNSON SUR.A797	2 MI. S OF LOUISE
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	PATRICK PETROLEUM CO.
COMPLETED	12/01/65	02/22/66	04/28/75
SAMPLED	06/24/66	10/30/67	11/01/77
FORMATION	OLIG-OWENS	OLIG-EVANS 5600 FT. SAND	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6596	5598	6348
WELLHEAD PRESSURE,PSIG	1949	2142	2100
OPEN FLOW, MCFD	16300	6900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	95.7	94.8
ETHANE	3.7	2.6	2.8
PROPANE	1.4	0.4	1.1
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.5	0.1	0.2
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.3	0.3	0.7
OXYGEN	0.5	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	1.03	0.01	TRACE
HEATING VALUE*	1086	1059	1073
SPECIFIC GRAVITY	0.621	0.588	0.598

	INDEX 11047 SAMPLE 15137	INDEX 11048 SAMPLE 15139	INDEX 11049 SAMPLE 15140
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE	LOUISE	LOUISE
WELL NAME	HAWES NO. 1-C	HENDERSON NO. 2-C	HENDERSON NO. 2-T
LOCATION	2 MI. S OF LOUISE	T.J.J. WINSTON SUR. A-66	T.J.J. WINSTON SUR. A-66
OWNER	PATRICK PETROLEUM CO.	PATRICK PETROLEUM CO.	PATRICK PETROLEUM CO.
COMPLETED	04/28/75	04/11/75	04/11/75
SAMPLED	11/01/77	11/01/77	11/01/77
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5966	5914	5980
WELLHEAD PRESSURE,PSIG	1600	1500	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	95.5	91.6
ETHANE	5.4	2.6	3.5
PROPANE	2.5	0.8	1.8
N-BUTANE	0.8	0.2	0.7
ISOBUTANE	0.9	0.1	0.5
N-PENTANE	0.3	TRACE	0.2
ISOPENTANE	0.4	0.1	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	0.1	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1167	1058	1127
SPECIFIC GRAVITY	0.659	0.589	0.634

	INDEX 11050 SAMPLE 4297	INDEX 11051 SAMPLE 12339	INDEX 11052 SAMPLE 12340
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE N	LOUISE N	LOUISE N
WELL NAME	S. G. SHRADER NO. 1	PEGGY HAWES NO. 1-T	PEGGY HAWES NO. 1-C
LOCATION	SEC. 40, WCRR CO. SUR.	THOS. KEMP SUR. A-265	THOS. KEMP SUR. A-265
OWNER	JOHNSTON & JOHNSTON	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	05/01/46	09/05/69	09/05/69
SAMPLED	05/05/47	07/30/70	07/30/70
FORMATION	OLIG-FRIO	MIOC-BERGSTROM 2750 FT. SAND	MIOC-HAWES 2700 FT.
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4158	2766	2725
WELLHEAD PRESSURE,PSIG	1843	787	1310
OPEN FLOW, MCFD	15000	11500	7800
COMPONENT, MOLE PCT			
METHANE	98.5	99.3	99.3
ETHANE	0.0	0.1	0.1
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.6	0.4	0.5
OXYGEN	0.2	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.1
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	998	1008	1008
SPECIFIC GRAVITY	0.565	0.557	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11053 SAMPLE 12341	INDEX 11054 SAMPLE 12342	INDEX 11055 SAMPLE 4081
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	LOUISE N	LOUISE N	MAGNET WITHERS
WELL NAME	C. C. BERGSTROM NO. 1-A	O. W. BECK NO. 1	COCKBURN B-2
LOCATION	ELLIS BENSON SUR. A-68	A. FRENZEL SUR. NO. 6	NOT GIVEN
OWNER	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.	ATLANTIC REFINING CO.
COMPLETED	09/19/69	08/27/69	12/20/43
SAMPLED	07/30/70	07/30/70	05/24/45
FORMATION	OLIG-4670 FT. SAND	OLIG-3900 FT. SAND	MIOC-
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4720	3919	4212
WELLHEAD PRESSURE,PSIG	1836	1626	1650
OPEN FLOW, MCFD	12800	7100	110000
COMPONENT, MOLE PCT			
METHANE	99.4	99.3	98.6
ETHANE	TRACE	0.1	0.5
PROPANE	TRACE	TRACE	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	0.3	0.3	0.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1007	1008	1008
SPECIFIC GRAVITY	0.556	0.558	0.561

	INDEX 11056 SAMPLE 9576	INDEX 11057 SAMPLE 10147	INDEX 11058 SAMPLE 10148
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	MAGNET WITHERS	MAGNET WITHERS E	MAGNET WITHERS E
WELL NAME	M. C. COCKBURN NO. 60-D	M. C. COCKBURN NO. 70	M. C. COCKBURN NO. 70
LOCATION	BLK 110, S. CASTLEMAN SUR.	S. CASTLEMAN SUR. A-12	S. CASTLEMAN SUR. A-12
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/26/62	04/19/64	04/18/64
SAMPLED	09/30/64	09/22/65	09/22/65
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6592	6886	7082
WELLHEAD PRESSURE,PSIG	2465	2500	2567
OPEN FLOW, MCFD	260000	48000	54000
COMPONENT, MOLE PCT			
METHANE	94.3	93.0	92.8
ETHANE	3.4	4.3	3.8
PROPANE	0.6	1.2	1.3
N-BUTANE	0.2	0.2	0.4
ISOBUTANE	TRACE	0.3	0.3
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.3
NITROGEN	0.2	0.4	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1078	1081	1106
SPECIFIC GRAVITY	0.602	0.605	0.618

	INDEX 11059 SAMPLE 10149	INDEX 11060 SAMPLE 3921	INDEX 11061 SAMPLE 11673
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	MAGNET WITHERS E	MENEFEE	MENEFEE
WELL NAME	M. C. COCKBURN NO. 70	A. G. MENEFEE NO. 2	VITERA NO. 1
LOCATION	S. CASTLEMAN SUR. A-12	6 MI. NW OF LOUISE	JOHN BRIDGES SUR. A-73
OWNER	HUMBLE OIL & REFINING CO.	SALT DOME OIL CORP.	ACCO OIL & GAS CO.
COMPLETED	04/21/64	01/29/44	05/15/67
SAMPLED	09/22/65	08/24/44	10/23/68
FORMATION	OLIG-FRIO	OLIG-FRIO U	OLIG-MENEFEE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6814	4535	4415
WELLHEAD PRESSURE,PSIG	2485	1850	1793
OPEN FLOW, MCFD	50000	50000	23500
COMPONENT, MOLE PCT			
METHANE	93.0	98.2	98.6
ETHANE	3.9	0.0	0.5
PROPANE	1.0	---	0.1
N-BUTANE	0.3	---	0.0
ISOBUTANE	0.3	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.3	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.3	---	0.0
NITROGEN	0.5	0.8	0.3
OXYGEN	0.0	0.3	0.0
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1094	1005	1011
SPECIFIC GRAVITY	0.614	0.561	0.563

	INDEX 11062 SAMPLE 11674	INDEX 11063 SAMPLE 13052	INDEX 11064 SAMPLE 14408
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	MENEFEE	MENEFEE N	MENEFEE N
WELL NAME	VITERA NO. 1	HOUSTON BANK & TRUST NO. 1	T. N. MENEFEE NO. 1
LOCATION	JOHN BRIDGES SUR. A-73	SAMUEL CUMMINGS SUR. A-83	S. P. MIDDLETON LEAGUE A-269
OWNER	ACCO OIL & GAS CO.	MACPET	WINDFOHR OIL CO.
COMPLETED	05/15/67	10/22/70	04/28/73
SAMPLED	10/23/68	09/29/71	07/01/75
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5073	4998	4530
WELLHEAD PRESSURE,PSIG	1811	1568	960
OPEN FLOW, MCFD	4100	34000	2400
COMPONENT, MOLE PCT			
METHANE	96.3	97.6	98.3
ETHANE	2.3	1.6	0.7
PROPANE	0.3	0.1	0.1
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.1	TRACE	TRACE
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.3	0.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1045	1025	1011
SPECIFIC GRAVITY	0.581	0.568	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11065 SAMPLE 15390	INDEX 11066 SAMPLE 15397	INDEX 11067 SAMPLE 11700
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	PIERCE RANCH	PIERCE RANCH	SPANISH CAMP
WELL NAME	PIERCE ESTATE NO. E-9	PIERCE ESTATE NO. E-9	MILL UNIT A NO. 1
LOCATION	IRR SUR. 11 A-447	IRR SUR. 11 A-447	ROBERT KUYKENDALL SUR. A-40
OWNER	TEXACO INC.	TEXACO INC.	GOODALE, BERTMAN & CO., INC.
COMPLETED	12/07/76	07/20/77	10/05/66
SAMPLED	09/29/78	10/04/78	12/06/68
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	6150	4906	4229
WELLHEAD PRESSURE,PSIG	2230	2045	1445
OPEN FLOW, MCFD	24500	2900	35000
COMPONENT, MOLE PCT			
METHANE	79.5	92.8	99.2
ETHANE	4.1	2.1	0.2
PROPANE	0.7	0.5	TRACE
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	10.8	1.8	0.5
OXYGEN	2.5	0.3	0.1
ARGON	0.1	TRACE	0.2
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.8	0.0
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	925	1017	1009
SPECIFIC GRAVITY	0.668	0.608	0.559

	INDEX 11068 SAMPLE 16414	INDEX 11069 SAMPLE 13956	INDEX 11070 SAMPLE 13957
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	SPANISH CAMP	SPANISH CAMP S	SPANISH CAMP S
WELL NAME	IDA K. HOSEA NO. 1	M. SORREL A NO. 1	VIRGINIA BROUSE NO. 1
LOCATION	STEVEN F. AUSTIN SUR., A-3	STEPHEN F. AUSTIN SUR. NO. 3	STEPHEN F. AUSTIN SUR. A-3
OWNER	WAINOCO OIL & GAS CO.	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	--/--/00	04/15/72	06/15/72
SAMPLED	01/28/82	03/07/74	03/07/74
FORMATION	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5388	4556	5206
WELLHEAD PRESSURE,PSIG	2250	390	2005
OPEN FLOW, MCFD	5200	230	14000
COMPONENT, MOLE PCT			
METHANE	97.9	99.0	98.7
ETHANE	1.1	0.1	0.4
PROPANE	0.1	TRACE	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.6	0.8	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1014	1005	1007
SPECIFIC GRAVITY	0.563	0.561	0.563

	INDEX 11071 SAMPLE 14199	INDEX 11072 SAMPLE 4807	INDEX 11073 SAMPLE 15576
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	STIMMEL	WHARTON	WHARTON W
WELL NAME	OUTLAR NO. 1	LOUISE HUTCHINS NO. 1	RUST ESTATE NO. 3-C
LOCATION	WILLIAM MCFARLAND SUR.	J. TUMLINSON SUR.	S. F. AUSTIN LG. A-3
OWNER	TEXAS OIL & GAS CORP.	TEXAS CO.	REALITOS ENERGY CORP.
COMPLETED	10/24/74	08/26/49	05/17/77
SAMPLED	10/30/74	11/21/49	02/25/79
FORMATION	OLIG-FRIO	OLIG-	OLIG-FRIO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	4764	9667	5200
WELLHEAD PRESSURE,PSIG	1845	1863	1785
OPEN FLOW, MCFD	790	78000	6700
COMPONENT, MOLE PCT			
METHANE	93.8	98.7	97.7
ETHANE	2.8	0.5	1.2
PROPANE	0.4	0.1	0.1
N-BUTANE	0.1	0.1	TRACE
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	0.4	0.4	0.4
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.3	0.0	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1017	1021	1019
SPECIFIC GRAVITY	0.599	0.564	0.568

	INDEX 11074 SAMPLE 15577	INDEX 11075 SAMPLE 3986	INDEX 11076 SAMPLE 4759
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	WHARTON W	WILDCAT	WILDCAT
WELL NAME	BROUGHTON-STATE UNIT NO. 1	M. A. MATZKE NO. 1	E. A. WEINHEIMER NO. 1
LOCATION	R. KUYKENDALL LG., A-39	I&GN SUR. NO. 26	NOT GIVEN
OWNER	REALITOS ENERGY CORP.	TEXAS CO.	R. J. CARAWAY
COMPLETED	05/12/78	01/08/45	--/--/00
SAMPLED	02/25/79	03/14/45	10/01/49
FORMATION	OLIG-FRIO	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5700	5775	5203
WELLHEAD PRESSURE,PSIG	1985	2238	NOT GIVEN
OPEN FLOW, MCFD	3600	48000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.9	96.9	95.5
ETHANE	2.0	2.8	3.6
PROPANE	0.1	---	0.2
N-BUTANE	0.1	---	TRACE
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.0
NITROGEN	0.4	0.0	0.2
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.01	0.00	0.01
HEATING VALUE*	1029	1032	1042
SPECIFIC GRAVITY	0.573	0.571	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11077 SAMPLE 4794	INDEX 11078 SAMPLE 5047	INDEX 11079 SAMPLE 5048
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHARTON	WHARTON	WHARTON
FIELD	WILDCAT	WITHERS N	WITHERS N
WELL NAME	F. E. APPLING NO. 1	ARMOUR NO. 2	ARMOUR NO. 3
LOCATION	NOT GIVEN	CHAS. HOWARD SUR.	CHAS. HOWARD SUR.
OWNER	R. J. CARAWAY	COPETCO CORP.	COPETCO CORP.
COMPLETED	06/29/49	12/20/51	02/20/51
SAMPLED	10/01/49	05/28/51	05/28/51
FORMATION	NOT GIVEN	OLIG-NORMAL	OLIG-NORMAL
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5231	5272	5273
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2030	2305
OPEN FLOW, MCFD	NOT GIVEN	22	44
COMPONENT, MOLE PCT			
METHANE	94.8	96.1	96.7
ETHANE	3.8	1.9	1.9
PROPANE	0.3	0.3	0.3
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.2	0.7	0.2
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1051	1024	1032
SPECIFIC GRAVITY	0.588	0.578	0.576

	INDEX 11080 SAMPLE 16879	INDEX 11081 SAMPLE 16166	INDEX 11082 SAMPLE 16167
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	ALLISON BRITT	BILLY-ROSE	BILLY-ROSE
WELL NAME	BRITT NO. 7-2	MEFLEY G.U. NO. 1	MEFLEY G.U. NO. 1
LOCATION	SEC. 7, BLK. 1, B&B SUR.	SEC. 13, BLK. A-8, H&GN SUR.	SEC. 13, BLK. A-8, H&GN SUR.
OWNER	MNG OIL CO.	LEEDE OIL & GAS CO.	LEEDE OIL & GAS, INC.
COMPLETED	03/--/82	06/08/80	07/01/79
SAMPLED	04/18/83	01/13/81	--/--/00
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	12235	5400	5000
WELLHEAD PRESSURE,PSIG	3100	1313	1450
OPEN FLOW, MCFD	850	1000	1800
COMPONENT, MOLE PCT			
METHANE	81.8	63.4	71.7
ETHANE	9.9	10.3	9.6
PROPANE	3.9	9.3	7.1
N-BUTANE	1.0	5.4	3.6
ISOBUTANE	0.5	3.0	1.9
N-PENTANE	0.2	2.0	1.2
ISOPENTANE	0.5	2.5	1.4
CYCLOPENTANE	TRACE	0.5	0.3
HEXANES PLUS	0.1	1.8	0.9
NITROGEN	1.2	1.7	2.1
OXYGEN	0.1	TRACE	TRACE
ARGON	0.3	0.0	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	0.03	0.04	0.05
HEATING VALUE*	1193	1655	1437
SPECIFIC GRAVITY	0.691	0.973	0.842

	INDEX 11083 SAMPLE 17434	INDEX 11084 SAMPLE 15950	INDEX 11085 SAMPLE 14875
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	BRISCOE-MORROW	CANDICE	FARRIS
WELL NAME	FINSTERWALD NO. 1	SMELTON NO. 1	FARRIS-C NO. 1
LOCATION	SEC. 51,BLK.M-1,H&GN SUR.	SEC. 77, BLK. A-5, H&GN SUR.	SEC. 18, BLK. A-4, H&GN SUR.
OWNER	CAMBRIDGE & NAIL	NATURAL GAS ANADARKO, INC.	PHILLIPS PETROLEUM CO.
COMPLETED	10/08/81	08/29/79	10/28/76
SAMPLED	10/01/84	04/21/80	12/28/76
FORMATION	PENN-MORROW PURYEAR	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	14535	12597	16167
WELLHEAD PRESSURE,PSIG	6165	3712	5370
OPEN FLOW, MCFD	8300	2400	18300
COMPONENT, MOLE PCT			
METHANE	95.6	82.3	95.4
ETHANE	1.3	9.8	2.3
PROPANE	0.1	4.3	0.5
N-BUTANE	0.1	1.0	0.2
ISOBUTANE	0.0	0.5	0.1
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.7	0.9	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.5	0.4
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1008	1203	1040
SPECIFIC GRAVITY	0.595	0.692	0.586

	INDEX 11086 SAMPLE 15287	INDEX 11087 SAMPLE 16133	INDEX 11088 SAMPLE 17550
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	FARRIS	FARRIS	FRYE-GRANITE WASH
WELL NAME	BEN TROUT NO. 2	FARRIS "C" NO. 2-18	STANLEY UNIT NO. 1-50
LOCATION	SEC. 17, BLK. A-4, H&GN SUR.	SEC. 18, BLK. A-4, H&GN	SEC. 50, BLOCK A3, H&GN SUR.
OWNER	GETTY OIL CO.	SEARCH DRILLING CO.	MNG OIL CO.
COMPLETED	03/28/78	06/22/80	09/07/83
SAMPLED	09/26/78	11/18/80	12/26/84
FORMATION	DEVO-HUNTON	DEVO-HUNTON	PENN-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16315	16306	12156
WELLHEAD PRESSURE,PSIG	4810	4639	3100
OPEN FLOW, MCFD	7312	57000	800
COMPONENT, MOLE PCT			
METHANE	95.3	95.2	78.1
ETHANE	2.2	2.3	13.2
PROPANE	0.5	0.6	5.2
N-BUTANE	0.3	0.2	1.1
ISOBUTANE	TRACE	0.1	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.8	0.8	1.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.1
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1042	1045	1239
SPECIFIC GRAVITY	0.587	0.589	0.711

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11089 SAMPLE 16522	INDEX 11090 SAMPLE 9272	INDEX 11091 SAMPLE 9752
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	FULLER NW	GAGEBY CREEK	GAGEBY CREEK
WELL NAME	MILLS RANCH NO. 1-98	CARLILE A NO. 1	LEE C NO. 1
LOCATION	SEC. 98, BLK. 13, H&GN SUR.	SEC. 99, BLK. A-5, H&GN SUR.	SEC. 80, BLK. M-1, H&GN SUR.
OWNER	HELMERICH & PAYNE, INC.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	09/06/81	01/03/64	10/16/64
SAMPLED	05/19/82	03/31/64	02/22/65
FORMATION	DEVO-HUNTON	ORDO-SIMPSON	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	20921	15676	15982
WELLHEAD PRESSURE,PSIG	6993	5278	5380
OPEN FLOW, MCFD	64000	33304	21000
COMPONENT, MOLE PCT			
METHANE	93.6	96.9	97.1
ETHANE	2.3	0.7	0.5
PROPANE	1.0	0.5	0.2
N-BUTANE	0.4	TRACE	0.1
ISOBUTANE	0.3	TRACE	TRACE
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	0.6	0.3	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.4	1.1
HELIUM	0.01	0.05	0.05
HEATING VALUE*	1070	1001	1006
SPECIFIC GRAVITY	0.614	0.577	0.575

	INDEX 11092 SAMPLE 9753	INDEX 11093 SAMPLE 10845	INDEX 11094 SAMPLE 10846
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	GAGEBY CREEK	GAGEBY CREEK	GAGEBY CREEK
WELL NAME	LEE C NO. 1	DYSON A NO. 1	DYSON A NO. 1
LOCATION	SEC. 80, BLK. M-1, H&GN SUR.	SEC. 100, BLK.A-5, H&GN SUR.	SEC. 100, BLK.A-5, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	10/17/64	07/27/66	--/--/00
SAMPLED	02/22/65	01/23/67	01/23/67
FORMATION	DEVO-HUNTON	DEVO-HUNTON	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15121	15009	15795
WELLHEAD PRESSURE,PSIG	5010	4990	5126
OPEN FLOW, MCFD	41000	740000	2450
COMPONENT, MOLE PCT			
METHANE	94.9	94.8	96.7
ETHANE	1.2	1.2	0.8
PROPANE	0.3	0.4	0.2
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.2	1.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.0	2.2	1.8
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1002	992	999
SPECIFIC GRAVITY	0.593	0.591	0.580

	INDEX 11095 SAMPLE 17251	INDEX 11096 SAMPLE 16217	INDEX 11097 SAMPLE 17011
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	GAGEBY CREEK	KELTON NW	KEY
WELL NAME	HOLMES NO. 1	MILES GAS UNIT NO. 1	DE WOLF NO. 2
LOCATION	SEC. 60, BLK.A-4, H&GN SUR.	SEC. 2, BLK. A-4, H&GN SUR.	SEC. 1, BLK. 2, B&B SUR.
OWNER	DAVIS OIL CO.	EXXON CO., U.S.A.	PETRO-LEWIS CORP.
COMPLETED	10/25/82	09/18/79	07/19/82
SAMPLED	04/13/84	03/27/81	08/19/83
FORMATION	PENN-MORROW	DEVO-HUNTON	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	13609	16450	16670
WELLHEAD PRESSURE,PSIG	6403	4786	9173
OPEN FLOW, MCFD	2500	18313	3100
COMPONENT, MOLE PCT			
METHANE	96.2	95.7	96.6
ETHANE	1.7	1.6	0.5
PROPANE	0.1	0.4	TRACE
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	1.0	0.2
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	0.8	1.9
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1020	1032	997
SPECIFIC GRAVITY	0.585	0.590	0.578

	INDEX 11098 SAMPLE 17572	INDEX 11099 SAMPLE 17783	INDEX 11100 SAMPLE 14945
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	KEY	KEY	LOTT RANCH
WELL NAME	KEY NO. 2-11	KEY "9" NO. 2	LUTHER WILLIS NO. 1
LOCATION	SEC. 11, BLK.1, B&B SUR.	SEC. 9, BLK. 1, B&B SUR.	SEC. 9, CAMP CO. SCHOOL
OWNER	APACHE CORP.	MNG OIL CO.	GIG EXPLORATION, INC.
COMPLETED	02/14/83	02/11/85	09/02/76
SAMPLED	01/22/85	07/22/85	03/16/77
FORMATION	PENN-MORROW U	PENN-BRITT	PENN-MORROW U
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	16106	12325	15056
WELLHEAD PRESSURE,PSIG	4398	7795	7795
OPEN FLOW, MCFD	31323	13000	12500
COMPONENT, MOLE PCT			
METHANE	97.0	77.3	96.6
ETHANE	0.6	11.9	1.2
PROPANE	0.1	5.5	0.1
N-BUTANE	0.1	1.9	TRACE
ISOBUTANE	TRACE	1.0	TRACE
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.0	0.6	TRACE
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.4	1.2	0.5
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.2	1.5
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1009	1276	1003
SPECIFIC GRAVITY	0.583	0.737	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11101 SAMPLE 15225	INDEX 11102 SAMPLE 15226	INDEX 11103 SAMPLE 13194
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	LOTT RANCH	LOTT RANCH	MILLS RANCH
WELL NAME	LOTT NO. 1-2	LOTT NO. 1	MILDRED DAVIDSON NO. 1
LOCATION	SEC. 2, BLK. E, E.J. CAMPBEL	SEC. 15, CAMP CO. SCHOOL LND	SEC. 36, BLK. A-7, H&GNRR SUR
OWNER	CIG EXPLORATION, INC.	CIG EXPLORATION, INC.	CHEVRON OIL CO.
COMPLETED	11/26/78	11/09/77	06/28/71
SAMPLED	03/13/78	03/13/78	04/15/72
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	15072	14854	16490
WELLHEAD PRESSURE,PSIG	6983	6935	5500
OPEN FLOW, MCFD	8800	2900	4000
COMPONENT, MOLE PCT			
METHANE	96.7	96.1	94.8
ETHANE	0.9	1.0	2.7
PROPANE	0.1	0.1	0.6
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.4	0.8	0.5
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.7	0.7
HELIUM	0.02	0.02	0.02
HEATING VALUE*	998	1003	1044
SPECIFIC GRAVITY	0.578	0.585	0.590

	INDEX 11104 SAMPLE 13794	INDEX 11105 SAMPLE 13840	INDEX 11106 SAMPLE 15799
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	MILLS RANCH	MILLS RANCH	MILLS RANCH SE
WELL NAME	SIDNEY FABIAN NO. 1	J. F. DABERRY NO. 1	BRYANT NO. 1-22
LOCATION	SEC. 45, BLK. A-7, H&GN SUR.	SEC. 1, BB&C SUR.	SEC. 22, BLK. A-7, H&GN RR
OWNER	CHEVRON OIL CO.	CHEVRON OIL CO.	AMERICAN QUASAR PET. CO.
COMPLETED	11/--/72	05/23/73	06/21/79
SAMPLED	11/01/73	12/--/73	10/05/79
FORMATION	DEVO-HUNTON	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	21059	20419	19182
WELLHEAD PRESSURE,PSIG	7400	7445	3745
OPEN FLOW, MCFD	93050	380000	33000
COMPONENT, MOLE PCT			
METHANE	96.9	96.7	96.9
ETHANE	1.0	1.0	0.9
PROPANE	0.2	0.2	0.2
N-BUTANE	0.1	TRACE	0.1
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	0.6	0.7	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.1	1.0
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1016	1006	1016
SPECIFIC GRAVITY	0.580	0.575	0.579

	INDEX 11107 SAMPLE 11563	INDEX 11108 SAMPLE 11635	INDEX 11109 SAMPLE 14913
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	MOBEETIE	MOBEETIE	MOBEETIE
WELL NAME	OPERATING UNIT R/A A NO. 1	SIMS UNIT NO. 3	W. MURRELL NO. 1
LOCATION	SEC. 66, BLK. A-5, H&GN SUR.	SEC. 56, BLK. A-5, H&GN SUR.	SEC. 69, BLK. A-5, H&GN SUR.
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	GETTY OIL CO.
COMPLETED	05/13/63	07/03/68	11/09/76
SAMPLED	07/08/68	08/30/68	02/18/77
FORMATION	PENN-DOUGLAS	PENN-MISSOURI	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	6866	7832	12220
WELLHEAD PRESSURE,PSIG	2055	2300	3742
OPEN FLOW, MCFD	7300	12500	10374
COMPONENT, MOLE PCT			
METHANE	88.0	84.1	90.2
ETHANE	5.2	6.5	4.0
PROPANE	2.1	3.0	1.6
N-BUTANE	0.7	0.8	0.6
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.4
NITROGEN	2.9	4.2	1.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.5
HELIUM	0.87	0.08	0.06
HEATING VALUE*	1127	1127	1107
SPECIFIC GRAVITY	0.642	0.671	0.638

	INDEX 11110 SAMPLE 17565	INDEX 11111 SAMPLE 15262	INDEX 11112 SAMPLE 12420
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	MOBEETIE	MOBEETIE S	MOBEETIE SE
WELL NAME	MOBEETIE O.U. NO. 12	BILL WATERS NO. 1	MOBEETIE 2 SE NO.1
LOCATION	SEC. 55, BLK. A-5, H&GN SUR.	SEC. 34, BLK A-9, H&GN SUR.	SEC. 12, BLK. A-4, H&GN SUR.
OWNER	AMOCO PRODUCTION CO.	COBRA OIL & GAS CORP.	BASIN PETROLEUM CORP.
COMPLETED	08/24/84	11/23/77	07/24/70
SAMPLED	01/15/85	04/25/78	09/23/70
FORMATION	PENN-MISSOURIAN BASAL	DEVO-HUNTON	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	8120	12030	13131
WELLHEAD PRESSURE,PSIG	1800	2500	3700
OPEN FLOW, MCFD	2240	1100	9500
COMPONENT, MOLE PCT			
METHANE	87.3	92.8	93.4
ETHANE	4.4	3.9	3.2
PROPANE	1.8	1.3	1.3
N-BUTANE	0.7	0.4	0.3
ISOBUTANE	0.3	0.1	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.5	0.2	0.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.5	0.1	0.2
NITROGEN	3.9	0.7	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.87	0.03	0.03
HEATING VALUE*	1107	1082	1077
SPECIFIC GRAVITY	0.655	0.607	0.606

* CALCULATED GROSS BTU PER CU FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11113 SAMPLE 14914	INDEX 11114 SAMPLE 9089	INDEX 11115 SAMPLE 16571
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	MOBEETIE W	NOT GIVEN	NOT GIVEN
WELL NAME	V. MURRELL NO. 1	MOBEETIE OPER. UNIT NO. 1	LANCASTER NO. 1-2
LOCATION	SEC. 69, BLK. A-5, H&GN SUR.	SEC. 46, BLK. A-5, H&GN SUR.	SEC.2,BLK.M,W.G.SIMPSON SUR.
OWNER	GETTY OIL CO.	PAN AMERICAN PETROLEUM CORP.	PIONEER PRODUCTION CORP.
COMPLETED	11/09/76	05/15/63	08/28/81
SAMPLED	02/18/77	09/16/63	07/--/82
FORMATION	ORDO-SIMPSON	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	11838	6725	14560
WELLHEAD PRESSURE,PSIG	3490	2085	8555
OPEN FLOW, MCFD	2136	7300	22000
COMPONENT, MOLE PCT			
METHANE	92.2	82.6	96.0
ETHANE	5.3	6.8	1.1
PROPANE	1.7	3.1	0.2
N-BUTANE	0.7	0.9	0.0
ISOBUTANE	0.1	0.4	0.0
N-PENTANE	0.3	0.2	0.0
ISOPENTANE	0.1	0.4	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.9	5.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	2.2
HELIUM	0.04	0.10	0.02
HEATING VALUE*	1090	1119	998
SPECIFIC GRAVITY	0.619	0.677	0.584

	INDEX 11116 SAMPLE 3972	INDEX 11117 SAMPLE 5614	INDEX 11118 SAMPLE 6826
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	PANHANDLE	PANHANDLE E	PANHANDLE E
WELL NAME	HICKS NO. 1	E. A. WILLIAMS NO. B-1	MONTGOMERY NO. 1
LOCATION	SEC. 53, BLK. 17, H&GN SUR.	SEC. 23, BLK. 17, H&GN SUR.	SEC. 60, BLK. 17, H&GN SUR.
OWNER	TEXOMA NATURAL GAS CO.	PANOMA CORP.	EL PASO NATURAL GAS CO.
COMPLETED	07/25/29	03/27/54	07/20/58
SAMPLED	12/21/44	04/30/54	--/--/58
FORMATION	PENN-LIME	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1840	1865	2001
WELLHEAD PRESSURE,PSIG	174	375	336
OPEN FLOW, MCFD	2200	NOT GIVEN	6
COMPONENT, MOLE PCT			
METHANE	86.1	92.7	91.8
ETHANE	9.0	3.1	3.3
PROPANE	---	1.5	1.3
N-BUTANE	---	0.4	0.9
ISOBUTANE	---	0.2	0.4
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.1	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.5	1.6	2.3
OXYGEN	0.0	0.0	0.1
ARGON	---	0.0	TRACE
HYDROGEN	---	0.1	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	3.2	0.0	0.1
HELIUM	0.19	0.08	0.10
HEATING VALUE*	1033	1068	1068
SPECIFIC GRAVITY	0.635	0.606	0.616

	INDEX 11119 SAMPLE 8217	INDEX 11120 SAMPLE 8220	INDEX 11121 SAMPLE 8221
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
WELL NAME	PAVLOVSKY NO. 2	LILLIAN & LUCILLE NO. 1	W. L. PIRTLE NO. 1
LOCATION	SEC. 29, BLK. 17, H&GNRR SUR	SEC. 29, BLK. 17, H&GNRR SUR	SEC. 33, BLK. 17, H&GNRR SUR
OWNER	CRICKET OIL CO.	CRICKET OIL CO.	CRICKET OIL CO.
COMPLETED	06/23/61	06/23/61	09/22/61
SAMPLED	09/23/61	09/23/61	09/24/61
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1885	1832	1848
WELLHEAD PRESSURE,PSIG	162	58	55
OPEN FLOW, MCFD	1000	175	1000
COMPONENT, MOLE PCT			
METHANE	83.8	86.2	87.1
ETHANE	3.7	5.1	4.4
PROPANE	1.7	3.1	2.6
N-BUTANE	0.6	0.3	1.0
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.5	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	8.2	3.5	3.2
OXYGEN	1.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.11	0.12	0.12
HEATING VALUE*	1008	1119	1123
SPECIFIC GRAVITY	0.652	0.658	0.657

	INDEX 11122 SAMPLE 8222	INDEX 11123 SAMPLE 8223	INDEX 11124 SAMPLE 16304
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	PANHANDLE E	PANHANDLE E	SILVER CREEK
WELL NAME	MILLIE ISAACS NO. 1	A. P. BUMPERS NO. 1	A. D. MAY NO. 1
LOCATION	SEC. 28, BLK. 17, H&GNRR SUR	SEC. 39, BLK. 17, H&GNRR SUR	SEC. 16, BLK. A-4, H&GN SUR.
OWNER	CRICKET OIL CO.	CRICKET OIL CO.	GETTY OIL CO.
COMPLETED	06/01/61	06/26/61	11/11/80
SAMPLED	09/23/61	09/23/61	08/11/81
FORMATION	PERM-GRANITE WASH	PERM-GRANITE WASH	MISS-
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	1909	1857	14722
WELLHEAD PRESSURE,PSIG	254	84	2640
OPEN FLOW, MCFD	1750	80	2100
COMPONENT, MOLE PCT			
METHANE	83.9	89.2	87.4
ETHANE	3.8	4.1	5.7
PROPANE	2.0	2.2	2.5
N-BUTANE	0.7	0.8	0.8
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.2	0.2	0.4
NITROGEN	7.9	2.9	2.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.12	0.09	0.02
HEATING VALUE*	1038	1109	1141
SPECIFIC GRAVITY	0.669	0.690	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11125 SAMPLE 16362		INDEX 11126 SAMPLE 16860		INDEX 11127 SAMPLE 16338	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	STILES RANCH		STILES RANCH		THORNDIKE	
WELL NAME	G. C. DAVIS NO. 1		MILLER NO. 2-1		M. B. TAYLOR JR. NO. 2	
LOCATION	SEC. 61, BLK. A-7, H&GN SUR.		SEC. 38, BLK. A3, H&GN SUR.		SEC. 4, BLK. A-2, H&GN SUR.	
OWNER	HUNT ENERGY CORP.		HNG OIL CO.		AMOCO PRODUCTION CO.	
COMPLETED	02/19/81		--/--/82		06/05/81	
SAMPLED	10/20/81		04/06/83		09/18/81	
FORMATION	PENN-MORROW		PENN-ATOKA		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	17722		15239		11298	
WELLHEAD PRESSURE,PSIG	9666		6833		2275	
OPEN FLOW, MCFD	6350		9500		3600	
COMPONENT, MOLE PCT						
METHANE	97.2		94.1		91.7	
ETHANE	0.8		2.7		3.8	
PROPANE	0.1		0.6		1.6	
N-BUTANE	TRACE		0.2		0.4	
ISOBUTANE	TRACE		0.1		0.1	
N-PENTANE	TRACE		0.1		0.1	
ISOPENTANE	0.0		0.2		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.4		0.4		1.0	
OXYGEN	0.0		0.1		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.2		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.4		1.0		0.9	
HELIUM	0.01		0.02		0.03	
HEATING VALUE*	1007		1046		1069	
SPECIFIC GRAVITY	0.577		0.596		0.615	

	INDEX 11128 SAMPLE 14264		INDEX 11129 SAMPLE 15607		INDEX 11130 SAMPLE 15609	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	WHEELER		WHEELER		WHEELER	
WELL NAME	S. K. WILLIAMS NO. 1		BEEF CATTLE CO. NO. 1		MOORE NO. 1-A	
LOCATION	SEC. 2, BLK. E, T&NO SUR.		SEC. 57, BLK. A8, H&GN SUR.		SEC. 58, BLK. 41B, H&GN SUR.	
OWNER	GETTY OIL CO.		NATOMAS NORTH AMERICA, INC.		NATOMAS NORTH AMERICA, INC.	
COMPLETED	09/30/74		--/--/00		--/--/00	
SAMPLED	01/12/75		04/26/79		04/26/79	
FORMATION	DEVO-HUNTON		DEVO-HUNTON		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14480		NOT GIVEN		NOT GIVEN	
WELLHEAD PRESSURE,PSIG	4484		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	34000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	93.5		92.9		88.6	
ETHANE	3.3		3.5		5.2	
PROPANE	1.1		1.1		1.0	
N-BUTANE	0.3		0.4		0.3	
ISOBUTANE	0.2		0.1		0.1	
N-PENTANE	TRACE		0.2		0.1	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	0.6		0.6		4.4	
OXYGEN	0.0		0.0		1.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.8		0.8	
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1061		1077		1008	
SPECIFIC GRAVITY	0.604		0.618		0.622	

	INDEX 11131 SAMPLE 15610		INDEX 11132 SAMPLE 14277		INDEX 11133 SAMPLE 16224	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	WHEELER		WHEELER NE		WHEELER NE	
WELL NAME	IRONS NO. 1		J. R. REED NO. 1-31		YOUNG NO.1-32	
LOCATION	SEC. 8, BLK. A4, H&GN SUR.		SEC. 31, BLK. A-3, H&GN SUR.		SEC. 32, BLK. A3, H&TC SUR.	
OWNER	NATOMAS NORTH AMERICA, INC.		ARKLA EXPLORATION CO.		UNION TEXAS PETROLEUM CORP.	
COMPLETED	--/--/00		12/20/74		07/05/80	
SAMPLED	04/26/79		02/28/75		04/07/81	
FORMATION	DEVO-HUNTON		PENN-MORROW		PENN-MORROW	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14896		16739		15730	
WELLHEAD PRESSURE,PSIG	5790		7384		7665	
OPEN FLOW, MCFD	8106		10131		3800	
COMPONENT, MOLE PCT						
METHANE	89.5		96.9		87.2	
ETHANE	3.6		0.6		1.0	
PROPANE	1.3		0.1		0.1	
N-BUTANE	0.4		TRACE		0.1	
ISOBUTANE	0.1		0.1		0.0	
N-PENTANE	0.1		TRACE		TRACE	
ISOPENTANE	0.1		TRACE		TRACE	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	3.2		0.7		7.8	
OXYGEN	0.7		TRACE		1.9	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		1.5		1.6	
HELIUM	0.02		0.02		0.02	
HEATING VALUE*	1003		1003		912	
SPECIFIC GRAVITY	0.626		0.580		0.623	

	INDEX 11134 SAMPLE 14406		INDEX 11135 SAMPLE 14811		INDEX 11136 SAMPLE 16707	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WHEELER		WHEELER		WHEELER	
FIELD	WHEELER-PAN		WHEELER-PAN		WHEELER-PAN	
WELL NAME	CITY OF SHAMROCK NO. 1		SANDIFER A NO. 1		R.N. BYERS NO. 1	
LOCATION	SEC. 29, POITEVENT SUR.		SEC. 51, BLK. A-8, H&GN SUR.		SEC.23,BLK L,J.&R.LINDSEY SUR	
OWNER	GETTY OIL CO.		PHILLIPS PETROLEUM CO.		SUN EXPLORATION & PRODUCTION	
COMPLETED	04/11/75		08/21/76		12/24/82	
SAMPLED	06/--/75		10/19/76		11/03/82	
FORMATION	DEVO-HUNTON		PENN-GRANITE WASH		DEVO-HUNTON	
GEOLOGIC PROVINCE CODE	360		360		360	
DEPTH, FEET	14842		13932		16065	
WELLHEAD PRESSURE,PSIG	5913		3334		5120	
OPEN FLOW, MCFD	27500		8000		22500	
COMPONENT, MOLE PCT						
METHANE	93.1		91.6		93.9	
ETHANE	3.5		4.1		3.1	
PROPANE	1.2		2.0		0.7	
N-BUTANE	0.3		0.6		0.2	
ISOBUTANE	0.2		0.2		TRACE	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	0.1		0.2		0.1	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	0.7		0.6		1.0	
OXYGEN	0.0		TRACE		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.8		0.4		0.5	
HELIUM	0.02		0.02		0.03	
HEATING VALUE*	1067		1098		1046	
SPECIFIC GRAVITY	0.609		0.621		0.595	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11137 SAMPLE 13520	INDEX 11138 SAMPLE 14793	INDEX 11139 SAMPLE 16076
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	HOLT NO. 1	LANCASTER NO. 1	E. T. DAVIS NO. 1
LOCATION	SEC. 20, BLK. RE, R&E SUR.	SEC. 58, BLK. A-4, H&GN SUR.	SEC. 60, BLK. A7, H&GN SUR.
OWNER	KERR-MCGEE CORP.	AMARILLO OIL CO.	HUNT ENERGY CORP.
COMPLETED	07/11/72	07/27/76	04/08/80
SAMPLED	02/--/73	09/--/76	09/04/80
FORMATION	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	18035	14009	17425
WELLHEAD PRESSURE,PSIG	11286	9073	6559
OPEN FLOW, MCFD	11000	24000	2393
COMPONENT, MOLE PCT			
METHANE	90.5	84.4	97.3
ETHANE	0.4	8.6	0.8
PROPANE	0.1	3.5	0.1
N-BUTANE	0.0	0.9	0.1
ISOBUTANE	0.0	0.7	TRACE
N-PENTANE	0.0	0.2	TRACE
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	4.5	0.7	0.5
OXYGEN	1.0	0.1	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	0.5	1.0
HELIUM	0.02	0.02	0.01
HEATING VALUE*	927	1181	1011
SPECIFIC GRAVITY	0.615	0.677	0.576

	INDEX 11140 SAMPLE 16445	INDEX 11141 SAMPLE 6919	INDEX 11142 SAMPLE 14101
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WILBARGER	WILLACY
FIELD	WILDCAT	MAIN	ARROYO COLORADO
WELL NAME	DIXON NO. 1	MATTYSEK NO. B-1	ARMENDAIZ B NO. 1
LOCATION	SEC. 60, BLK. 13, H&GN SUR.	SEC. 9, BLK. B	JOSE NARCISCO CABAZO GRT.
OWNER	WHEELER OIL CO.	TOM S. MEDDERS	CORPUS CHRISTI MANAGEMENT CO
COMPLETED	02/15/82	10/26/58	04/06/72
SAMPLED	03/01/82	01/06/59	07/14/74
FORMATION	PERM-GRANITE WASH	PENN-CANYON	MIOC-CATAHOULA
GEOLOGIC PROVINCE CODE	360	455	220
DEPTH, FEET	2835	3194	NOT GIVEN
WELLHEAD PRESSURE,PSIG	700	290	NOT GIVEN
OPEN FLOW, MCFD	10	12	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.0	62.9	94.6
ETHANE	1.8	9.5	1.3
PROPANE	0.5	6.3	TRACE
N-BUTANE	0.2	2.4	0.0
ISOBUTANE	0.1	1.3	0.0
N-PENTANE	TRACE	0.6	0.0
ISOPENTANE	0.1	0.7	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	0.1	0.5	0.0
NITROGEN	14.0	14.9	3.7
OXYGEN	0.5	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.38	0.01	0.03
HEATING VALUE*	895	1185	992
SPECIFIC GRAVITY	0.640	0.827	0.575

	INDEX 11143 SAMPLE 14104	INDEX 11144 SAMPLE 11232	INDEX 11145 SAMPLE 11199
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WILLACY	WILLACY	WILLACY
FIELD	ARROYO COLORADO	CHESS	LACAL
WELL NAME	ARMENDAIZ B NO. 2	CHESS TODD NO. 6	BEATTY-YTURRIA L&C CO. NO. 1
LOCATION	NARCISCO CABAZOS GRANT	S. J. DE CARRICITOS GRT.A-8	SAN JUAN DECARRICITOS GR.A-8
OWNER	CORPUS CHRISTI MANAGEMENT CO	SUPERIOR OIL CO.	OCCIDENTAL PETROLEUM CORP.
COMPLETED	04/13/72	10/26/66	01/30/65
SAMPLED	07/14/74	11/1/67	11/01/67
FORMATION	MIOC-CATAHOULA	OLIG-NO. 72 SAND	OLIG-FRIO D-5
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	7210	8136
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2829	3249
OPEN FLOW, MCFD	NOT GIVEN	72000	13200
COMPONENT, MOLE PCT			
METHANE	94.5	91.9	92.5
ETHANE	1.3	3.8	3.9
PROPANE	0.1	1.2	1.0
N-BUTANE	0.0	0.4	0.4
ISOBUTANE	0.0	0.6	0.5
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.6	0.8
NITROGEN	3.8	1.0	1.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	983	1107	1110
SPECIFIC GRAVITY	0.579	0.625	0.627

	INDEX 11146 SAMPLE 13123	INDEX 11147 SAMPLE 12030	INDEX 11148 SAMPLE 4927
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WILLACY	WILLACY	WILSON
FIELD	PASO REAL	WILLAMAR SE	WILDCAT
WELL NAME	ARMENDAIZ B NO. 4	SAUZ RANCH NOPAL NO. 8	T. D. MANFORD NO. 1
LOCATION	SAN JUAN DE CARRICITOS GRANT	SAN JUAN DECARRICITAS GR.A-8	NOT GIVEN
OWNER	TEXAS OIL & GAS CORP.	HUMBLE OIL & REFINING CO.	HEWIT & DOUGHERTY
COMPLETED	08/31/70	09/11/68	04/25/50
SAMPLED	12/22/71	09/04/69	08/26/50
FORMATION	NOT GIVEN	OLIG-FRIO	COFF-WILCOX L
GEOLOGIC PROVINCE CODE	220	220	225
DEPTH, FEET	3700	7834	4279
WELLHEAD PRESSURE,PSIG	1110	2540	1850
OPEN FLOW, MCFD	870	27300	9200
COMPONENT, MOLE PCT			
METHANE	95.4	95.1	89.5
ETHANE	1.5	1.5	0.7
PROPANE	0.1	0.2	0.2
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	2.8	2.7	8.5
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.4
HELIUM	0.02	0.01	0.04
HEATING VALUE*	996	999	941
SPECIFIC GRAVITY	0.575	0.577	0.607

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11149 SAMPLE 13630	INDEX 11150 SAMPLE 11901	INDEX 11151 SAMPLE 7086
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	APOLLO	CRITTENDON	EMPEROR
WELL NAME	UNIV. 21-23 NO. 1	WOLFE UNIT NO. 1	BROWN & ALTMAN GAS UNIT NO.7
LOCATION	SEC. 23, BLK. 21, UNIV. S	SEC. 24, BLK. C-23, PSL SUR.	SEC. 15, BLK. B-5, PSL SUR.
OWNER	MNG OIL CO.	ATLANTIC RICHFIELD CO.	HUMBLE OIL & REFINING CO.
COMPLETED	06/15/73	01/30/68	--/--/00
SAMPLED	06/18/73	05/22/69	06/04/59
FORMATION	SILU-FUSSELMAN	PENN-ATOKA	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	16182	14500	9280
WELLHEAD PRESSURE,PSIG	6200	7834	3225
OPEN FLOW, MCFD	9800	150000	445000
COMPONENT, MOLE PCT			
METHANE	95.5	90.7	92.0
ETHANE	2.0	5.5	3.9
PROPANE	0.3	1.6	1.3
N-BUTANE	TRACE	0.3	0.4
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.3
NITROGEN	0.9	1.1	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.2	0.9
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1014	1086	1085
SPECIFIC GRAVITY	0.581	0.615	0.621

	INDEX 11152 SAMPLE 7169	INDEX 11153 SAMPLE 7170	INDEX 11154 SAMPLE 12809
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	EMPEROR	EMPEROR	EMPEROR
WELL NAME	MCCABE NO. 3	MCCABE NO. 3	S. M. HALLEY NO. 10
LOCATION	SEC. 36, BLK. 5, PSL SUR.	SEC. 36, BLK. B-5, PSL SUR.	SEC. 7, BLK. B-11, PSL SUR.
OWNER	SHELL OIL CO.	SHELL OIL CO.	TEXACO INC.
COMPLETED	11/22/57	11/22/57	--/--/00
SAMPLED	08/11/59	08/11/59	04/30/71
FORMATION	DEVO-	ORDO-ELLENBURGER	ORDO-WADDELL
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9018	11351	11032
WELLHEAD PRESSURE,PSIG	3256	3470	NOT GIVEN
OPEN FLOW, MCFD	72000	24000	230
COMPONENT, MOLE PCT			
METHANE	92.9	92.9	85.5
ETHANE	4.0	4.0	7.4
PROPANE	1.3	1.0	3.1
N-BUTANE	0.4	0.3	1.0
ISOBUTANE	TRACE	0.2	0.7
N-PENTANE	0.2	TRACE	0.6
ISOPENTANE	0.0	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.4
NITROGEN	0.8	1.0	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1083	1069	1186
SPECIFIC GRAVITY	0.608	0.602	0.678

	INDEX 11155 SAMPLE 12891	INDEX 11156 SAMPLE 12892	INDEX 11157 SAMPLE 13687
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	EVETTS	EVETTS	EVETTS
WELL NAME	HALEY UNIT NO. 1-1	HALEY UNIT NO. 1-1	JOHN HALEY JR. B NO. 1
LOCATION	SEC. 7, BLK. 27, PSL SUR.	SEC. 7, BLK. 27, PSL SUR.	SEC. 18, BLK. 27, PSL SUR.
OWNER	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.	EXXON CO., U.S.A.
COMPLETED	05/10/70	05/10/70	05/10/72
SAMPLED	07/31/71	07/01/71	08/23/73
FORMATION	ORDO-ELLENBURGER	SILU-	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	20240	17464	20429
WELLHEAD PRESSURE,PSIG	7015	6197	6715
OPEN FLOW, MCFD	35500	28500	13500
COMPONENT, MOLE PCT			
METHANE	98.3	96.4	97.7
ETHANE	0.2	1.2	0.3
PROPANE	TRACE	0.2	0.1
N-BUTANE	0.0	0.1	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	0.9	0.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	1.0	1.1	1.3
HELIUM	0.03	0.02	0.03
HEATING VALUE*	999	1007	1007
SPECIFIC GRAVITY	0.566	0.578	0.576

	INDEX 11158 SAMPLE 13690	INDEX 11159 SAMPLE 14684	INDEX 11160 SAMPLE 7168
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	EVETTS	FELMONT	HALLEY
WELL NAME	JOHN HALEY JR. B NO. 1	FELMONT OIL CORP. NO. 1	SEALY-SMITH B NO. 1
LOCATION	SEC. 18, BLK. 27, PSL SUR.	SEC. 19, BLK. 26, PSL SUR.	SEC. 91, BLK. A, GHMBA SUR.
OWNER	EXXON CO., U.S.A.	AMOCO PRODUCTION CO.	SHELL OIL CO.
COMPLETED	05/10/72	05/26/76	08/07/57
SAMPLED	08/23/73	05/26/76	08/11/59
FORMATION	SILU-	PENN-ATOKA	DEVO-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	17908	NOT GIVEN	9850
WELLHEAD PRESSURE,PSIG	6225	4200	2460
OPEN FLOW, MCFD	90000	35000	1500
COMPONENT, MOLE PCT			
METHANE	95.9	90.6	84.9
ETHANE	1.3	5.3	7.4
PROPANE	0.2	1.8	4.2
N-BUTANE	TRACE	0.5	1.0
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.2	0.6
NITROGEN	0.7	0.5	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.3	0.0	0.0
CARBON DIOXIDE	1.3	0.2	0.7
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1014	1117	1202
SPECIFIC GRAVITY	0.586	0.629	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11161 SAMPLE 9951	INDEX 11162 SAMPLE 9952	INDEX 11163 SAMPLE 2024
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	HALLEY	HALLEY	HENDRICK
WELL NAME	S. M. HALLEY NO. 167	S. M. HALLEY NO. 167	HUTCHINS NO. 1
LOCATION	SEC. 24, BLK. B-11	SEC. 24, BLK. B-11	SEC. 47, BLK. 26, PSL SUR.
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SOUTHERN CRUDE OIL PUR. CO.
COMPLETED	11/--/64	11/--/64	05/05/28
SAMPLED	07/02/65	07/02/65	06/11/30
FORMATION	DEVO-	ORDO-MONTOYA	PERM-
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	9503	10432	2484
WELLHEAD PRESSURE,PSIG	3000	1893	1100
OPEN FLOW, MCFD	16214	4698	40000
COMPONENT, MOLE PCT			
METHANE	84.4	84.3	85.0
ETHANE	7.3	7.2	12.8
PROPANE	2.7	3.1	---
N-BUTANE	0.9	0.9	---
ISOBUTANE	0.6	0.6	---
N-PENTANE	0.5	0.8	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	1.0	0.5	---
NITROGEN	1.2	2.6	1.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.1	1.3	0.9
HELIUM	TRACE	TRACE	0.00
HEATING VALUE*	1190	1160	1090
SPECIFIC GRAVITY	0.696	0.695	0.632

	INDEX 11164 SAMPLE 2025	INDEX 11165 SAMPLE 9988	INDEX 11166 SAMPLE 6494
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	HENDRICK	HENDRICK	KERMIT
WELL NAME	HENDRICK T86-R1	I. C. ROARK NO. 1	BATTERY 19-14-E BAIRD
LOCATION	SEC. 27, BLK. 26, PSL SUR.	SEC. 32, BLK 26, PSL SUR.	SEC. 19, BLK. B-3, PSL SUR.
OWNER	SOUTHERN CRUDE OIL PUR. CO.	PAN AMERICAN PETROLEUM CORP.	STANDARD OIL CO. OF TEXAS
COMPLETED	10/23/28	09/01/64	01/30/58
SAMPLED	06/11/30	07/21/65	01/29/58
FORMATION	PERM-	PENN-ATOKA	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2490	9576	8660
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3280	2850
OPEN FLOW, MCFD	50000	1710	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.6	91.7	87.0
ETHANE	14.5	4.1	6.8
PROPANE	---	1.4	2.7
N-BUTANE	---	0.5	0.8
ISOBUTANE	---	0.2	0.3
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	TRACE	0.2
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.4	0.2
NITROGEN	0.8	0.5	0.9
OXYGEN	0.3	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.8	0.6	0.9
HELIUM	0.09	0.02	0.04
HEATING VALUE*	1097	1103	1137
SPECIFIC GRAVITY	0.649	0.626	0.657

	INDEX 11167 SAMPLE 6495	INDEX 11168 SAMPLE 6496	INDEX 11169 SAMPLE 7666
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	KERMIT	KERMIT	KERMIT
WELL NAME	STATE WALTON NO. 1	KESSLER NO. 1	STATE WALTON E 30
LOCATION	SEC. 14, BLK. B-3, PSL SUR.	SEC. 14, BLK. B-3, PSL SUR.	SEC. 14, BLK. B-3, PSL SUR.
OWNER	STANDARD OIL CO. OF TEXAS	STANDARD OIL CO. OF TEXAS	SOCONY MOBIL OIL CO., INC.
COMPLETED	10/10/57	06/14/57	08/19/60
SAMPLED	01/30/58	01/30/58	08/30/60
FORMATION	ORDO-ELLENBURGER	DEVO-	SILU-FUSSELMAN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	10621	8100	8616
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2653	2760
OPEN FLOW, MCFD	NOT GIVEN	37000	75000
COMPONENT, MOLE PCT			
METHANE	78.8	85.2	81.3
ETHANE	10.2	6.5	6.8
PROPANE	4.5	2.7	2.5
N-BUTANE	2.0	1.1	0.7
ISOBUTANE	0.8	0.5	0.5
N-PENTANE	0.8	0.5	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.5	0.6	0.1
NITROGEN	1.5	1.5	0.3
OXYGEN	0.1	TRACE	1.1
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.5
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1265	1182	1062
SPECIFIC GRAVITY	0.735	0.687	0.674

	INDEX 11170 SAMPLE 12744	INDEX 11171 SAMPLE 12884	INDEX 11172 SAMPLE 12732
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	KERMIT	KERMIT	KEYSTONE
WELL NAME	J. B. WALTON NO. 209	BAIRD NO. 13-34	J. B. WALTON NO. 58-MC
LOCATION	SEC. 19, BLK. 74, PSL SUR.	SEC. 13, BLK. B-3, PSL SUR.	SEC. 1, BLK. B-3, PSL SUR.
OWNER	MOBIL OIL CORP.	CHEVRON OIL CO.	PERRY R. BASS
COMPLETED	02/14/50	05/--/58	10/16/55
SAMPLED	03/31/71	06/21/71	03/23/71
FORMATION	PERM-YATES	ORDO-JOINS	ORDO-MCKEE
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	2535	10300	8348
WELLHEAD PRESSURE,PSIG	300	800	NOT GIVEN
OPEN FLOW, MCFD	58	40500	874
COMPONENT, MOLE PCT			
METHANE	84.5	72.3	85.3
ETHANE	7.4	9.6	7.3
PROPANE	3.8	4.5	3.0
N-BUTANE	1.0	1.3	0.9
ISOBUTANE	0.6	0.6	0.5
N-PENTANE	0.5	0.5	0.6
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.2	0.5
NITROGEN	1.6	8.7	1.4
OXYGEN	0.0	1.7	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.03	0.00
HEATING VALUE*	1181	1138	1185
SPECIFIC GRAVITY	0.680	0.746	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11173 SAMPLE 12733		INDEX 11174 SAMPLE 2021		INDEX 11175 SAMPLE 15356	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WINKLER	
FIELD	KEYSTONE		LECK		LITTLE JOE	
WELL NAME	J. B. WALTON NO. 63-D		LECK NO. 1-OIL WELL		UNIV. 41-21 NO. 1	
LOCATION	SEC. 5, BLK. B-2, PSL SUR.		SEC. 3, BLK. 74, PSL SUR.		SEC. 41, BLK. 21, UL SUR.	
OWNER	PERRY R. BASS		SHELL OIL CO.		GETTY OIL CO.	
COMPLETED	09/21/55		01/14/29		12/02/77	
SAMPLED	03/23/71		06/11/30		08/31/78	
FORMATION	DEVO-		PERM-YATES		ORDO-ELLENBURGER	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	7529		2905		19758	
WELLHEAD PRESSURE,PSIG	1000		NOT GIVEN		1450	
OPEN FLOW, MCFD	2800		NOT GIVEN		5310	
COMPONENT, MOLE PCT						
METHANE	83.3		82.4		96.8	
ETHANE	7.9		12.7		1.0	
PROPANE	3.5		---		0.2	
N-BUTANE	0.8		---		0.2	
ISOBUTANE	0.3		---		TRACE	
N-PENTANE	0.2		---		0.1	
ISOPENTANE	0.1		---		0.1	
CYCLOPENTANE	0.1		---		TRACE	
HEXANES PLUS	0.2		---		0.1	
NITROGEN	2.9		2.7		0.4	
OXYGEN	0.1		0.4		0.0	
ARGON	0.0		---		TRACE	
HYDROGEN	0.0		---		0.1	
HYDROGEN SULFIDE	0.0		---		0.0	
CARBON DIOXIDE	0.6		1.9		1.0	
HELIUM	0.03		0.06		0.02	
HEATING VALUE*	1140		1066		1024	
SPECIFIC GRAVITY	0.676		0.650		0.582	

	INDEX 11176 SAMPLE 15720		INDEX 11177 SAMPLE 16202		INDEX 11178 SAMPLE 11876	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WINKLER	
FIELD	LITTLE JOE		LITTLE JOE		LITTLE JOE S	
WELL NAME	UNIV. 41-21 NO. 1		UNIVERSITY NO. 32-21		UNIV. 37 NO. 2	
LOCATION	SEC. 41, BLK. 21, UNIV. SUR.		SEC. 32, BLK. 21, U. L. SUR.		SEC. 37, BLK. 20, UNIV. LAND	
OWNER	GETTY OIL CO.		GETTY OIL CO.		UNION OIL CO. OF CALIF.	
COMPLETED	05/18/77		07/25/80		06/08/68	
SAMPLED	08/06/79		03/03/81		05/14/69	
FORMATION	ORDO-ELLENBURGER		SILU-FUSSELMAN		PERM-DELAWARE	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	21000		17560		5002	
WELLHEAD PRESSURE,PSIG	5249		5060		1788	
OPEN FLOW, MCFD	13600		20200		10000	
COMPONENT, MOLE PCT						
METHANE	97.0		95.5		81.4	
ETHANE	1.0		1.6		6.3	
PROPANE	0.2		0.5		3.0	
N-BUTANE	0.1		0.1		0.9	
ISOBUTANE	TRACE		TRACE		0.4	
N-PENTANE	0.1		TRACE		0.4	
ISOPENTANE	TRACE		TRACE		0.2	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		TRACE		0.3	
NITROGEN	0.4		1.1		6.7	
OXYGEN	0.0		0.0		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE	0.0		TRACE		0.0	
CARBON DIOXIDE	1.0		1.3		TRACE	
HELIUM	0.02		0.02		0.08	
HEATING VALUE*	1018		1007		1104	
SPECIFIC GRAVITY	0.578		0.584		0.683	

	INDEX 11179 SAMPLE 9650		INDEX 11180 SAMPLE 9399		INDEX 11181 SAMPLE 3664	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WHEELER	
FIELD	MONAHANS		NOT GIVEN		W. D. BLUE ESTATE NO. 1	
WELL NAME	SEALY-SMITH NO. 1		T. G. HENDRICK NO. 1		SEC. 15, BLK. 46, T1S, T&P	
LOCATION	SEC. 45, BLK. A, GHHB&A SUR.		SEC. 34, BLK. 27, PSL SUR.		STANOLIND OIL & GAS CO.	
OWNER	TENNECO OIL CO.		PAN AMERICAN PETROLEUM CORP.		06/16/43	
COMPLETED	03/28/64		06/08/64		09/16/43	
SAMPLED	11/27/64		06/10/64		NOT GIVEN	
FORMATION	DEVO-		PENN-		NOT GIVEN	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	8252		13350		10493	
WELLHEAD PRESSURE,PSIG	2395		3147		4558	
OPEN FLOW, MCFD	1750		4250		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	48.1		88.0		18.3	
ETHANE	23.7		5.7		73.8	
PROPANE	15.5		1.8		---	
N-BUTANE	5.5		0.5		---	
ISOBUTANE	2.1		0.3		---	
N-PENTANE	1.3		0.1		---	
ISOPENTANE	0.9		0.1		---	
CYCLOPENTANE	0.2		TRACE		---	
HEXANES PLUS	0.7		0.2		---	
NITROGEN	0.8		2.5		6.6	
OXYGEN	0.1		TRACE		0.5	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE	0.0		0.0		---	
CARBON DIOXIDE	1.1		0.7		0.8	
HELIUM	TRACE		0.01		0.04	
HEATING VALUE*	1708		1086		1508	
SPECIFIC GRAVITY	1.020		0.638		0.957	

	INDEX 11182 SAMPLE 10056		INDEX 11183 SAMPLE 11661		INDEX 11184 SAMPLE 15053	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WINKLER	
FIELD	WILDCAT		WILDCAT		WILDCAT	
WELL NAME	S. SMITH FOUNDATION 1 NO. 7A		TUBB ESTATE NO. 1		UNIV. "21-3" NO. 2	
LOCATION	SEC. 10, BLK A, G&MB&A SUR.		SEC. 25, BLK C-23, PSL SUR.		SEC. 3, BLK. 21, U.L. SUR.	
OWNER	STANDARD OIL CO. OF TEXAS		SINCLAIR OIL & GAS CO.		HNG OIL CO.	
COMPLETED	04/13/64		--/--/00		11/05/76	
SAMPLED	08/12/65		10/04/68		07/--/77	
FORMATION	PENN-STRAWN		ORDO-ELLENBURGER		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	8620		21466		12719	
WELLHEAD PRESSURE,PSIG	2800		NOT GIVEN		5751	
OPEN FLOW, MCFD	2850		27000		7850	
COMPONENT, MOLE PCT						
METHANE	82.3		98.2		87.6	
ETHANE	9.1		0.2		5.1	
PROPANE	4.0		TRACE		1.7	
N-BUTANE	1.1		0.0		0.5	
ISOBUTANE	0.6		0.0		0.2	
N-PENTANE	0.4		0.0		0.1	
ISOPENTANE	0.1		0.0		0.3	
CYCLOPENTANE	0.1		0.0		0.1	
HEXANES PLUS	0.2		0.0		0.2	
NITROGEN	1.9		0.3		4.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		1.2		0.2	
HELIUM	0.04		0.03		0.02	
HEATING VALUE*	1193		999		1078	
SPECIFIC GRAVITY	0.692		0.568		0.640	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 11185 SAMPLE 12053		INDEX 11186 SAMPLE 12054		INDEX 11187 SAMPLE 12083	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WINKLER		WINKLER		WINKLER	
FIELD	WINK S		WINK S		WINK S	
WELL NAME	HUTCHINGS-SEALY NO. 1		HUTCHINGS-SEALY NO. 1		UNIV. 21-48 NO. 1	
LOCATION	SEC.90,BLK.F,G&M,MB&A SUR.		SEC.90,BLK.F,G&M,MB&A SUR.		SEC. 48, BLK. 21, UNIV. SUR.	
OWNER	STANDARD OIL CO. OF TEXAS		STANDARD OIL CO. OF TEXAS		STANDARD OIL CO. OF TEXAS	
COMPLETED	09/10/69		09/10/69		12/07/68	
SAMPLED	09/27/69		09/29/69		10/10/69	
FORMATION	ORDO-MONTOYA		ORDO-ELLENBURGER		DEVO-	
GEOLOGIC PROVINCE CODE	430		430		430	
DEPTH, FEET	16352		18239		15752	
WELLHEAD PRESSURE,PSIG	4000		5000		1700	
OPEN FLOW, MCFD	6000		14500		2400	
COMPONENT, MOLE PCT						
METHANE	65.1		76.8		79.1	
ETHANE	13.5		11.1		9.5	
PROPANE	9.5		5.6		4.7	
N-BUTANE	3.8		1.9		2.0	
ISOBUTANE	2.0		1.3		1.5	
N-PENTANE	1.3		0.9		1.5	
ISOPENTANE	0.6		0.5		0.5	
CYCLOPENTANE	0.3		0.1		0.5	
HEXANES PLUS	0.8		0.3		2.3	
NITROGEN	1.8		1.5		7.4	
OXYGEN	0.0		0.1		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.1		TRACE		0.1	
HYDROGEN SULFIDE**	0.6		0.0		0.0	
CARBON DIOXIDE	1.8		0.5		0.1	
HELIUM	TRACE		TRACE		0.01	
HEATING VALUE*	1476		1292		1336	
SPECIFIC GRAVITY	0.889		0.753		0.833	

	INDEX 11188 SAMPLE 12592		INDEX 11189 SAMPLE 12593		INDEX 11190 SAMPLE 16392	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WISE		WISE		WISE	
FIELD	ALVORD		ALVORD		BBC	
WELL NAME	E. M. SMITH NO. 1		ALVORD TOWN SITE NO. 1		C. W. POUNDS NO. 1	
LOCATION	4 MI. SE ALVORD		1/4 MI. W ALVORD		SOUTH ISAACS SURVEY, A-454	
OWNER	GEORGE MITCHELL & ASSOC. INC		GEORGE MITCHELL & ASSOC. INC		NORTH CENTRAL OIL CORP.	
COMPLETED	12/09/57		02/22/62		12/18/57	
SAMPLED	12/17/70		12/17/70		12/10/81	
FORMATION	PENN-ATOKA		PENN-CADDO		DEVO-BBC	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	5745		5660		5757	
WELLHEAD PRESSURE,PSIG	200		100		400	
OPEN FLOW, MCFD	NOT GIVEN		30		103	
COMPONENT, MOLE PCT						
METHANE	83.2		69.8		81.3	
ETHANE	8.0		13.2		8.2	
PROPANE	3.3		8.2		3.9	
N-BUTANE	0.6		2.3		1.1	
ISOBUTANE	0.2		1.1		0.5	
N-PENTANE	0.2		0.8		0.4	
ISOPENTANE	0.2		0.8		0.5	
CYCLOPENTANE	0.1		0.2		0.1	
HEXANES PLUS	0.1		0.6		0.2	
NITROGEN	3.3		2.7		3.1	
OXYGEN	0.5		0.1		0.1	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.3		0.2	
HELIUM	0.08		0.05		0.13	
HEATING VALUE*	1125		1378		1178	
SPECIFIC GRAVITY	0.670		0.818		0.696	

	INDEX 11191 SAMPLE 5272		INDEX 11192 SAMPLE 5237		INDEX 11193 SAMPLE 6710	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WISE		WISE		WISE	
FIELD	BEND		BOONSVILLE		BOONSVILLE	
WELL NAME	C. R. BRIDGES NO. 1		E. L. VAUGHT NO. 1		CRENSHAW NO. 1	
LOCATION	BLK. 99, VAN ZANDT CSL SUR.		BRICE WOODY SUR. NO. A-1-216		J. B. ATROPF SUR. NO. A-13	
OWNER	ACOMA OIL CO.		LONE STAR GAS CO.		KERR-MCGEE OIL INC.. INC.	
COMPLETED	01/26/52		01/29/52		10/31/57	
SAMPLED	10/06/52		04/04/52		07/15/58	
FORMATION	PENN-BEND CONGLOMERATE		PENN-BEND CONGLOMERATE		PENN-BEND CONGLOMERATE	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	5457		5390		5632	
WELLHEAD PRESSURE,PSIG	1250		1750		1275	
OPEN FLOW, MCFD	5700		2500		7400	
COMPONENT, MOLE PCT						
METHANE	84.6		82.2		82.2	
ETHANE	6.5		9.8		8.5	
PROPANE	2.5		3.8		4.1	
N-BUTANE	1.3		0.9		1.0	
ISOBUTANE	0.8		0.4		0.6	
N-PENTANE	0.4		0.1		0.2	
ISOPENTANE	0.7		0.4		0.3	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.4		TRACE		0.2	
NITROGEN	2.4		2.6		2.1	
OXYGEN	TRACE		0.1		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	---		---		0.0	
CARBON DIOXIDE	0.4		0.1		0.5	
HELIUM	0.10		0.09		0.20	
HEATING VALUE*	1177		1158		1181	
SPECIFIC GRAVITY	0.689		0.680		0.691	

	INDEX 11194 SAMPLE 9689		INDEX 11195 SAMPLE 9959		INDEX 11196 SAMPLE 10348	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	WISE		WISE		WISE	
FIELD	BOONSVILLE		BOONSVILLE		BOONSVILLE	
WELL NAME	LEATH-WHORTON NO. 1		HACHTEL GAS UNIT NO. 1		KAKER NO. 1	
LOCATION	CHARLES FRAZIER SUR. A-294		JOHN REID SUR. A-707		SEC. 24, MATAGORDA CSL SUR.	
OWNER	J. G. MAYNARD, ET AL.		LONGHORN PRODUCTION CO.		BURK ROYALTY CO.	
COMPLETED	03/20/63		12/22/63		06/10/64	
SAMPLED	01/06/65		07/07/65		12/21/65	
FORMATION	PENN-ATOKA		PENN-BEND CONGLOMERATE		PENN-ATOKA	
GEOLOGIC PROVINCE CODE	420		420		420	
DEPTH, FEET	6404		5908		6082	
WELLHEAD PRESSURE,PSIG	1050		800		1120	
OPEN FLOW, MCFD	1275		3300		1000	
COMPONENT, MOLE PCT						
METHANE	80.7		79.4		80.8	
ETHANE	9.7		9.9		8.1	
PROPANE	3.9		4.7		4.7	
N-BUTANE	0.9		1.2		1.1	
ISOBUTANE	0.8		0.8		0.7	
N-PENTANE	0.2		0.3		0.3	
ISOPENTANE	0.2		0.3		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.2		0.3		0.1	
NITROGEN	2.6		2.4		3.5	
OXYGEN	0.1		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.6		0.5		0.3	
HELIUM	0.10		0.10		0.15	
HEATING VALUE*	1177		1216		1173	
SPECIFIC GRAVITY	0.697		0.716		0.697	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11197 SAMPLE 12608	INDEX 11198 SAMPLE 17737	INDEX 11199 SAMPLE 16441
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	WISE	WISE
FIELD	BOONSVILLE	BOONSVILLE	BRIDGEPORT
WELL NAME	G. T. LE MAY NO. 2-F	M.F. MARES, JR., NO. 2	HENRY TACKEL NO. 2T
LOCATION	JOHN FREDERICK SUR. A-308	A.G. HARRIS SURV. A-375	MATAGORDA CSL SUR., A-535
OWNER	GEORGE MITCHELL & ASSOC. INC	MITCHELL ENERGY CORP.	MITCHELL ENERGY CORP.
COMPLETED	--/--/00	03/25/85	01/30/81
SAMPLED	12/24/70	07/01/85	03/05/82
FORMATION	PENN-4000 FT. STRAWN	PENN-ATOKA CONGLOMERATE	PENN-ATOKA CONG. 5250 FT.
GEOLOGIC PROVINCE CODE	420	420	260
DEPTH, FEET	3871	6457	5018
WELLHEAD PRESSURE, PSIG	260	620	920
OPEN FLOW, MCFD	50	12250	500
COMPONENT, MOLE PCT			
METHANE	78.6	77.4	79.7
ETHANE	9.2	10.2	8.3
PROPANE	5.0	5.6	6.2
N-BUTANE	1.7	1.5	0.9
ISOBUTANE	0.8	0.8	1.7
N-PENTANE	0.5	0.1	0.6
ISOPENTANE	0.3	0.6	0.0
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	3.2	2.7	1.3
OXYGEN	0.2	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.0
HELIUM	0.16	0.11	0.08
HEATING VALUE*	1166	1230	1213
SPECIFIC GRAVITY	0.728	0.729	0.716

	INDEX 11200 SAMPLE 13653	INDEX 11201 SAMPLE 6053	INDEX 11202 SAMPLE 12271
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	WISE	WISE
FIELD	GREENWOOD	MEANDER W	RHOME
WELL NAME	MAY GRIFFITH NO. 1	T. E. DAVIS NO. 3	MABEL WALKER NO. 1
LOCATION	WILLIAM SHERROD SUR. A-742	ABSTRACT 547, N MACKEY SUR.	BLK. 18, SMITH CSL SUR. A743
OWNER	GEORGE MITCHELL & ASSOC. INC	AMERICAN DRILLING CORP.	GEORGE MITCHELL & ASSOC. INC
COMPLETED	09/30/71	07/--/55	11/12/68
SAMPLED	07/19/73	04/16/56	06/01/70
FORMATION	PENN-ATOKA	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	6606	5590	6220
WELLHEAD PRESSURE, PSIG	1640	1250	2096
OPEN FLOW, MCFD	2532	4545	4900
COMPONENT, MOLE PCT			
METHANE	79.5	80.5	88.8
ETHANE	8.9	8.2	5.9
PROPANE	5.6	4.4	1.9
N-BUTANE	1.2	1.2	0.2
ISOBUTANE	0.9	0.6	0.3
N-PENTANE	0.2	0.4	0.0
ISOPENTANE	0.5	0.1	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.3	0.4	0.1
NITROGEN	2.3	3.8	2.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.3	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.4
HELIUM	0.12	0.18	0.09
HEATING VALUE*	1230	1196	1081
SPECIFIC GRAVITY	0.721	0.705	0.626

	INDEX 11203 SAMPLE 4938	INDEX 11204 SAMPLE 3724	INDEX 11205 SAMPLE 3922
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	WOOD	WOOD
FIELD	WILDCAT	MANZIEL	MANZIEL
WELL NAME	N. L. CONLEY NO. 1	J. C. WHATLEY NO. 1	SHELL-SUN HERRING-SCOGGINS 1
LOCATION	M. SWIFT SUR. NO. 739	JOHN POLK SUR.	SAMUEL BURCH SUR.
OWNER	LONE STAR GAS CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	04/26/50	--/--/00	--/--/00
SAMPLED	08/02/50	02/--/44	08/15/44
FORMATION	PENN-BEND CONGLOMERATE	CRET-GLEN ROSE L	CRET-WENTERS
GEOLOGIC PROVINCE CODE	420	260	260
DEPTH, FEET	5612	8455	8715
WELLHEAD PRESSURE, PSIG	1298	500	3838
OPEN FLOW, MCFD	1200	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	80.1	66.9	71.6
ETHANE	9.2	29.8	21.3
PROPANE	5.3	---	---
N-BUTANE	1.9	---	---
ISOBUTANE	0.6	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	1.9	0.5	5.9
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	2.5	1.2
HELIUM	0.12	0.02	0.02
HEATING VALUE*	1219	1212	1107
SPECIFIC GRAVITY	0.711	0.739	0.696

	INDEX 11206 SAMPLE 12674	INDEX 11207 SAMPLE 9990	INDEX 11208 SAMPLE 9991
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WOOD	WOOD	WOOD
FIELD	MANZIEL	QUITMAN	QUITMAN
WELL NAME	S. R. REYNOLDS NO. 1	DAN GRAHAM 1-L	DAN GRAHAM 1-U
LOCATION	WM. BARNMILL SUR. A-1	DAN ADAMS SUR. A-18	DAN ADAMS SUR. A-18
OWNER	SHELL OIL CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	03/26/61	03/07/64	03/05/64
SAMPLED	02/11/71	07/18/65	07/18/65
FORMATION	CRET-RODESSA	CRET-KIRKLAND, SOUTH	CRET-GLOYD
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	8432	8585	8585
WELLHEAD PRESSURE, PSIG	850	1065	2215
OPEN FLOW, MCFD	1000	525	651
COMPONENT, MOLE PCT			
METHANE	83.5	72.7	71.0
ETHANE	6.1	5.2	6.1
PROPANE	2.5	3.0	3.6
N-BUTANE	0.9	1.6	2.0
ISOBUTANE	0.9	1.2	1.6
N-PENTANE	0.3	0.3	0.8
ISOPENTANE	0.7	0.7	0.6
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.4	0.3	1.1
NITROGEN	3.2	13.6	11.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	1.4
HELIUM	0.03	0.05	0.04
HEATING VALUE*	1139	1064	1167
SPECIFIC GRAVITY	0.692	0.750	0.794

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11209 SAMPLE 12652	INDEX 11210 SAMPLE 12672	INDEX 11211 SAMPLE 12673
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WOOD	WOOD	WOOD
FIELD	QUITMAN	QUITMAN	QUITMAN
WELL NAME	EDITH WAPPE NO. 1	A. MCGEE NO. 1	M. BLALOCK NO. 1
LOCATION	3-1/2 MI. N QUITMAN	JOHN ALLEN SUR. A-20	SANTIAGO CALDERON SUR. A-98
OWNER	AMERADA MESS CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	06/--/66	09/26/61	03/24/58
SAMPLED	02/01/71	02/11/71	02/11/71
FORMATION	CRET-DERR	CRET-CATHEY-GLOYD	CRET-HILL
GEOLOGIC PROVINCE CODE	260	260	260
DEPTH, FEET	4178	8305	8125
WELLHEAD PRESSURE,PSIG	NOT GIVEN	300	400
OPEN FLOW, MCFD	NOT GIVEN	400	1500
COMPONENT, MOLE PCT			
METHANE	87.8	77.6	76.1
ETHANE	1.3	6.8	7.8
PROPANE	1.9	4.2	4.8
N-BUTANE	1.4	2.0	2.1
ISOBUTANE	2.6	1.7	2.1
N-PENTANE	0.4	0.8	0.7
ISOPENTANE	0.9	0.9	0.8
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.7	1.1	1.0
NITROGEN	2.4	3.2	3.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.5	1.4
HELIUM	0.01	0.02	0.03
HEATING VALUE*	1188	1278	1296
SPECIFIC GRAVITY	0.702	0.777	0.786

	INDEX 11212 SAMPLE 4375	INDEX 11213 SAMPLE 12496	INDEX 11214 SAMPLE 4981
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WOOD	WOOD	YOAKUM
FIELD	YANTIS E	YANTIS SW	WASSON
WELL NAME	RIO OIL CORP. NO. 1	M. J. B. MCKEE G. U. NO. 1	WILLARD C NO. 3
LOCATION	JESSIE WALKER SUR.	OSCAR ENGLEDOW SUR.	SEC. 799, BLK. D GIBSON SUR.
OWNER	HUMBLE OIL & REFINING CO.	PAN AMERICAN PETROLEUM CORP.	GENERAL AMERICAN OIL CO.
COMPLETED	08/15/47	06/--/60	01/01/39
SAMPLED	10/30/47	10/25/70	02/07/51
FORMATION	CRET-GLEN ROSE L	JURA-SMACKOVER	PERM-SAN ANDRES
GEOLOGIC PROVINCE CODE	260	260	430
DEPTH, FEET	7930	12765	4796
WELLHEAD PRESSURE,PSIG	3715	3698	NOT GIVEN
OPEN FLOW, MCFD	16000	9100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.2	57.3	78.7
ETHANE	18.9	6.2	8.0
PROPANE	---	4.1	3.1
N-BUTANE	---	1.4	---
ISOBUTANE	---	1.5	---
N-PENTANE	---	0.5	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	1.4
NITROGEN	3.5	16.4	8.0
OXYGEN	0.3	0.0	0.2
ARGON	---	0.0	0.0
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	4.7	---
CARBON DIOXIDE	1.1	7.40	0.6
HELIUM	0.03	0.05	0.03
HEATING VALUE*	1111	979	1087
SPECIFIC GRAVITY	0.675	0.860	0.721

	INDEX 11215 SAMPLE 4982	INDEX 11216 SAMPLE 4983	INDEX 11217 SAMPLE 4537
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOAKUM	YOAKUM	YOUNG
FIELD	WASSON	WASSON	BULAH MARTIN NO. 1
WELL NAME	WILLARD A NO. 1	NELSON NO. 1	BULAH MARTIN NO. 1
LOCATION	SEC. 805, BLK. D GIBSON SUR.	SEC. 805, BLK D GIBSON SUR.	DEWITT SUR. NO. 1412
OWNER	GENERAL AMERICAN OIL CO.	GENERAL AMERICAN OIL CO.	WARREN OIL CORP.
COMPLETED	01/15/40	05/04/40	03/01/47
SAMPLED	02/07/51	02/07/51	08/05/47
FORMATION	PERM-SAN ANDRES	PERM-SAN ANDRES	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE	430	430	425
DEPTH, FEET	4930	4955	4212
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1822
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	12000
COMPONENT, MOLE PCT			
METHANE	8.5	6.9	67.9
ETHANE	0.5	0.5	24.1
PROPANE	0.1	0.2	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	90.6	90.1	7.1
OXYGEN	0.1	0.4	0.3
ARGON	0.0	0.1	---
HYDROGEN	0.0	1.3	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	0.3	0.4
HELIUM	0.04	0.05	0.22
HEATING VALUE*	902	996	1120
SPECIFIC GRAVITY	0.936	0.935	0.708

	INDEX 11218 SAMPLE 12210	INDEX 11219 SAMPLE 4475	INDEX 11220 SAMPLE 4476
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	DENISON S	ELIASVILLE N	ELIASVILLE N
WELL NAME	GRAHAM-HARRISON NO. 4-A	L. F. EVANS NO. 3	L. F. EVANS NO. 2
LOCATION	S. DENISON SUR. A-77	TE&L CO. SUR. A-282	TE&L CO. SUR. A-282
OWNER	FULTZ OIL CO.	STAR OIL CO., INC.	STAR OIL CO., INC.
COMPLETED	06/10/68	12/04/47	10/19/47
SAMPLED	02/21/70	04/24/48	04/24/48
FORMATION	PENN-MARBLE FALLS	PENN-ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	3983	3335	3316
WELLHEAD PRESSURE,PSIG	150	1250	1250
OPEN FLOW, MCFD	10500	458	2530
COMPONENT, MOLE PCT			
METHANE	61.9	66.5	67.3
ETHANE	16.0	23.2	23.5
PROPANE	11.0	---	---
N-BUTANE	3.4	---	---
ISOBUTANE	1.5	---	---
N-PENTANE	1.4	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.4	---	---
NITROGEN	3.4	9.5	8.7
OXYGEN	0.0	0.2	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.0	0.4	0.2
HELIUM	0.04	0.15	0.13
HEATING VALUE*	1467	1069	1103
SPECIFIC GRAVITY	0.877	0.713	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11221 SAMPLE 9627	INDEX 11222 SAMPLE 9961	INDEX 11223 SAMPLE 2301
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	ELIASVILLE N	GAMAGAN	GRAHAM
WELL NAME	ROBERTSON NO. 2	GAMAGAN NO. 3	MARY COX NO. 1
LOCATION	F. L. GREEN SUR. A-105	BLK 2711, TE&L SUR.	ROCK ISLAND SUR.
OWNER	BURK ROYALTY CO.	F. D. MUELLER	PANHANDLE REFINING CO.
COMPLETED	05/14/57	09/16/63	11/30/30
SAMPLED	11/11/64	07/08/65	03/06/31
FORMATION	PENN-ATOKA	PENN-CONGLOMERATE	PENN-CADDO
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4193	4605	2329
WELLHEAD PRESSURE,PSIG	450	1810	900
OPEN FLOW, MCFD	760	9800	2000
COMPONENT, MOLE PCT			
METHANE	79.9	74.9	82.8
ETHANE	7.4	9.9	8.1
PROPANE	3.4	6.9	---
N-BUTANE	0.9	2.3	---
ISOBUTANE	0.3	0.8	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.2	1.0	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.4	---
NITROGEN	6.8	3.0	8.6
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.17	0.08	0.22
HEATING VALUE*	1102	1300	984
SPECIFIC GRAVITY	0.688	0.771	0.632

	INDEX 11224 SAMPLE 13345	INDEX 11225 SAMPLE 2086	INDEX 11226 SAMPLE 5273
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	NEWCASTLE	NOT GIVEN	NOT GIVEN
WELL NAME	T. J. GARDNER NO. 1	W. T. DONNELL NO. 1	SHANAFELT NO. 1
LOCATION	SEC. 425, TE&L SUR. A-632	J. T. MULANAX SUR.	AB&M SUR. NO. A-1369
OWNER	GULF OIL CO.- U.S.	TRANSCONTINENTAL OIL CO.	O. P. LEONARD
COMPLETED	03/23/71	05/29/30	--/--/00
SAMPLED	08/01/71	07/05/30	10/06/52
FORMATION	PENN-CADDO	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	4162	4070	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1560	1365	NOT GIVEN
OPEN FLOW, MCFD	7700	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.9	57.7	64.0
ETHANE	10.5	35.2	1.1
PROPANE	6.9	---	0.0
N-BUTANE	1.7	---	0.0
ISOBUTANE	0.7	---	0.1
N-PENTANE	0.4	---	0.1
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.2	---	TRACE
NITROGEN	6.9	6.4	34.0
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.3	0.5	0.1
HELIUM	0.12	0.15	0.07
HEATING VALUE*	1216	1215	686
SPECIFIC GRAVITY	0.761	0.761	0.709

	INDEX 11227 SAMPLE 4426	INDEX 11228 SAMPLE 9588	INDEX 11229 SAMPLE 4350
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	PADGITT	WHITTENBURG	YOUNG COUNTY REGULAR
WELL NAME	J. W. BULLOCK A	NO. 2	M. K. GRAHAM ESTATE D-2
LOCATION	SEC. 343, TE&L SUR.	J. L. MERCER SUR. A-1873	TE&L CO. SUR. 3410
OWNER	SHELL OIL CO.	HARDING BROS. OIL & GAS CO.	ANZAC OIL CORP., ET AL.
COMPLETED	--/--/00	--/--/00	02/09/47
SAMPLED	01/13/48	10/07/64	09/24/47
FORMATION	PENN-VIRGIL	PENN-CONGLOMERATE	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	549	3960	570
WELLHEAD PRESSURE,PSIG	NOT GIVEN	900	200
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	57.3	76.4	62.5
ETHANE	4.5	9.4	3.3
PROPANE	---	4.8	---
N-BUTANE	---	1.6	---
ISOBUTANE	---	0.7	---
N-PENTANE	---	0.4	---
ISOPENTANE	---	0.5	---
CYCLOPENTANE	---	0.2	---
HEXANES PLUS	---	0.4	---
NITROGEN	36.3	5.1	32.9
OXYGEN	0.1	TRACE	0.5
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.3	0.1
HELIUM	1.39	0.17	0.73
HEATING VALUE*	661	1211	692
SPECIFIC GRAVITY	0.725	0.738	0.707

	INDEX 11230 SAMPLE 8229	INDEX 11231 SAMPLE 8230	INDEX 11232 SAMPLE 8569
STATE	TEXAS	TEXAS	TEXAS
COUNTY	YOUNG	YOUNG	YOUNG
FIELD	YOUNG COUNTY REGULAR	YOUNG COUNTY REGULAR	YOUNG COUNTY REGULAR
WELL NAME	J. P. LOGAN NO. 2	J. P. LOGAN NO. 2	NO. 3
LOCATION	SEC. 165, TEL & CO. SUR.	SEC. 165, TEL & CO. SUR.	SEC. 198, TEL & CO. SUR.
OWNER	C. V. MORGAN	C. V. MORGAN	C. V. MORGAN
COMPLETED	03/27/61	03/27/61	05/25/62
SAMPLED	10/11/61	10/11/61	06/05/62
FORMATION	PENN-GUNSIGHT	PENN-GUNSIGHT	PENN-GUNSIGHT
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	270	270	724
WELLHEAD PRESSURE,PSIG	250	250	350
OPEN FLOW, MCFD	e	5	4280
COMPONENT, MOLE PCT			
METHANE	57.6	58.0	61.4
ETHANE	0.4	0.3	1.2
PROPANE	0.2	0.1	0.1
N-BUTANE	0.2	0.1	TRACE
ISOBUTANE	0.2	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	TRACE	0.0
NITROGEN	40.2	40.5	35.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.65	0.66	1.25
HEATING VALUE*	528	599	646
SPECIFIC GRAVITY	0.738	0.724	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11233 SAMPLE 12643		INDEX 11234 SAMPLE 12644		INDEX 11235 SAMPLE 16843	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	YOUNG		YOUNG		YOUNG	
FIELD	YOUNG COUNTY REGULAR		YOUNG COUNTY REGULAR		YOUNG COUNTY REGULAR	
WELL NAME	MORRISON MARBISON NO. A-2		M. C. HERDY		J. B. DAWS EST.2378 NO. 4-S	
LOCATION	1 MI. E OF GRAHAM		2 MI. E OF GRAHAM		TE&L SUR., A-1095	
OWNER	T. S. BRIDGES OIL OPER. CO.		T. S. BRIDGES OIL OPER. CO.		ASHTOLA EXPLORATION CO., INC	
COMPLETED	01/06/71		01/10/71		12/29/80	
SAMPLED	01/27/71		01/27/71		03/21/83	
FORMATION	NOT GIVEN		NOT GIVEN		PENN-MEGARGEL	
GEOLOGIC PROVINCE CODE	425		425		425	
DEPTH, FEET	1550		2000		550	
WELLHEAD PRESSURE,PSIG	475		600		225	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		3500	
COMPONENT, MOLE PCT						
METHANE	76.1		73.3		69.7	
ETHANE	3.0		3.7		1.3	
PROPANE	2.3		3.0		0.2	
N-BUTANE	0.6		0.8		0.0	
ISOBUTANE	0.4		0.5		0.0	
N-PENTANE	0.2		0.3		0.0	
ISOPENTANE	0.1		TRACE		0.0	
CYCLOPENTANE	TRACE		0.1		0.0	
HEXANES PLUS	0.1		0.2		0.0	
NITROGEN	16.7		17.6		31.1	
OXYGEN	0.0		0.0		1.1	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.1	
HELIUM	0.61		0.49		1.17	
HEATING VALUE*	957		957		685	
SPECIFIC GRAVITY	0.682		0.705		0.693	

	INDEX 11236 SAMPLE 16585		INDEX 11237 SAMPLE 12580		INDEX 11238 SAMPLE 15192	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ZAPATA		ZAPATA		ZAPATA	
FIELD	ALEJANDRENAS		ARROYO GARZA		DYE	
WELL NAME	LOPEZ NO. A-1		GARZA NO. 1		J. D. DYE NO. 1	
LOCATION	1 MI. SANCHEZ PORCION 21,A-81		DE MIRA FLORES GRANT A-27		J. V. BOREGO GRANT A-209	
OWNER	GULF ENERGY PROD. CO.		SUN OIL CO.		GAS PRODUCING ENTERPRISES	
COMPLETED	09/13/81		09/13/69		01/10/76	
SAMPLED	07/22/82		12/15/70		01/06/78	
FORMATION	EOCE-WILCOX U		EOCE-QUEEN CITY		EOCE-WILCOX	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9150		4728		8200	
WELLHEAD PRESSURE,PSIG	4000		1700		3678	
OPEN FLOW, MCFD	3900		6400		18000	
COMPONENT, MOLE PCT						
METHANE	94.7		91.8		90.5	
ETHANE	1.8		3.6		5.2	
PROPANE	0.3		1.7		1.2	
N-BUTANE	0.1		0.3		0.3	
ISOBUTANE	TRACE		0.5		0.3	
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	TRACE		0.2		0.1	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	0.2		1.0		0.5	
OXYGEN	TRACE		0.1		0.1	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.1		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.6		0.6		1.5	
HELIUM	TRACE		0.01		TRACE	
HEATING VALUE*	1008		1088		1084	
SPECIFIC GRAVITY	0.595		0.623		0.630	

	INDEX 11239 SAMPLE 15193		INDEX 11240 SAMPLE 16103		INDEX 11241 SAMPLE 2588	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ZAPATA		ZAPATA		ZAPATA	
FIELD	DYE		EL GRULLO		ESCOBAS	
WELL NAME	J. D. DYE NO. 2		ANTONIO M. VELA NO. C-1		NO. 2	
LOCATION	J. V. BOREGO GRANT A-209		EL GRULLO GRANT A-37		BLK. 2, CARTA BLANCA RANCH	
OWNER	GAS PRODUCING ENTERPRISES		PENNZOIL CO.		WINCH & BILLINGS	
COMPLETED	04/11/76		--/--/00		12/29/32	
SAMPLED	01/06/78		10/1/80		01/16/33	
FORMATION	CRET-NAVARRO		EOCE-WILCOX		EOCE-JACKSON	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9400		6762		1668	
WELLHEAD PRESSURE,PSIG	1704		3700		645	
OPEN FLOW, MCFD	1850		7900		20000	
COMPONENT, MOLE PCT						
METHANE	95.6		92.8		97.5	
ETHANE	2.3		3.4		0.0	
PROPANE	0.3		0.8		---	
N-BUTANE	0.1		0.2		---	
ISOBUTANE	0.1		0.1		---	
N-PENTANE	TRACE		0.1		---	
ISOPENTANE	TRACE		0.1		---	
CYCLOPENTANE	TRACE		0.1		---	
HEXANES PLUS	TRACE		0.1		---	
NITROGEN	0.2		0.3		0.9	
OXYGEN	0.0		0.1		0.9	
ARGON	TRACE		TRACE		---	
HYDROGEN	TRACE		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	1.4		1.9		0.7	
HELIUM	TRACE		0.01		0.00	
HEATING VALUE*	1024		1049		988	
SPECIFIC GRAVITY	0.586		0.612		0.570	

	INDEX 11242 SAMPLE 13565		INDEX 11243 SAMPLE 15202		INDEX 11244 SAMPLE 1950	
STATE	TEXAS		TEXAS		TEXAS	
COUNTY	ZAPATA		ZAPATA		ZAPATA	
FIELD	ESCOBAS		J. C. MARTIN		JENNINGS	
WELL NAME	JOSE M. GUTIERREZ NO. 1		E. T. MARTINEZ NO. 1		F. G. MARTINEZ NO. 1	
LOCATION	PEDRO BUSTAMANTE SUR. A559		J. A. TRAVINO PORC 56, A-97		SEC. 68	
OWNER	PENNZOIL PRODUCING CO.		GULF OIL & MINERALS CO.		MAGNOLIA PETROLEUM CO.	
COMPLETED	11/08/71		07/03/76		08/16/29	
SAMPLED	03/26/73		01/30/78		03/08/30	
FORMATION	EOCE-WILCOX		EOCE-WILCOX		EOCE-YEGUA	
GEOLOGIC PROVINCE CODE	220		220		220	
DEPTH, FEET	9314		7754		1921	
WELLHEAD PRESSURE,PSIG	5050		4780		620	
OPEN FLOW, MCFD	5400		110000		20000	
COMPONENT, MOLE PCT						
METHANE	88.2		94.4		98.0	
ETHANE	5.1		3.2		0.0	
PROPANE	1.6		0.6		---	
N-BUTANE	0.2		0.2		---	
ISOBUTANE	0.4		0.1		---	
N-PENTANE	0.1		0.1		---	
ISOPENTANE	0.1		0.1		---	
CYCLOPENTANE	TRACE		TRACE		---	
HEXANES PLUS	0.1		0.1		---	
NITROGEN	0.7		0.2		1.4	
OXYGEN	0.2		0.0		0.3	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.1		0.0		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	3.2		1.0		0.1	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1060		1053		993	
SPECIFIC GRAVITY	0.646		0.598		0.565	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11245 SAMPLE 15009	INDEX 11246 SAMPLE 13532	INDEX 11247 SAMPLE 15460
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	JENNINGS N	JENNINGS W	LAREDO
WELL NAME	F. CUELLAR EST. NO. B-1	JENNINGS NO. 25	C. L. MCCANN NO. 1
LOCATION	TCRR SUR. 243, A-161	J. M. PEREDO SUR. A-73	J. V. BOREGO GRANT A-209
OWNER	HUGHES & HUGHES OIL & GAS	PENNZOIL PRODUCING CO.	CHEVRON U.S.A., INC.
COMPLETED	06/16/75	10/15/71	04/19/77
SAMPLED	05/--/77	02/14/73	10/26/78
FORMATION	EOCE-WILCOX	EOCE-4850 FT. SAND	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	9498	4871	7898
WELLHEAD PRESSURE,PSIG	4126	1743	9637
OPEN FLOW, MCFD	2650	5100	10500
COMPONENT, MOLE PCT			
METHANE	90.6	89.6	92.8
ETHANE	4.4	5.0	4.2
PROPANE	1.4	2.7	1.1
N-BUTANE	0.4	0.6	0.2
ISOBUTANE	0.2	0.6	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.2	0.1	0.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	0.8	1.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1075	1130	1067
SPECIFIC GRAVITY	0.633	0.642	0.613

	INDEX 11248 SAMPLE 13961	INDEX 11249 SAMPLE 9170	INDEX 11250 SAMPLE 16396
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	LOS MOGOTES	LOS MOGOTES N	MCASKILL LOBO
WELL NAME	HAYNES ESTATE NO. 7	I. B. VERGARA NO. 2	MC ASKILL NO. 4
LOCATION	LOS MOGOTES GRANT A-566	SEC. 628T, T. BERTRANG SUR.	J. V. BOREGO, A-209
OWNER	TEXAS OIL & GAS CORP.	SKELLY OIL CO.	G. M. R. ENERGY CORP.
COMPLETED	03/05/72	01/11/62	09/19/80
SAMPLED	02/04/74	11/13/63	12/16/81
FORMATION	EOCE-QUEEN CITY	EOCE-WILCOX	EOCE-LOBO
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	3594	5533	10166
WELLHEAD PRESSURE,PSIG	1367	2094	NOT GIVEN
OPEN FLOW, MCFD	10000	4000	3800
COMPONENT, MOLE PCT			
METHANE	85.3	93.3	95.7
ETHANE	8.8	3.7	1.1
PROPANE	3.1	1.2	0.1
N-BUTANE	0.7	0.5	0.0
ISOBUTANE	0.6	TRACE	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.3	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.7	TRACE	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	2.8
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1168	1091	992
SPECIFIC GRAVITY	0.663	0.613	0.588

	INDEX 11251 SAMPLE 15235	INDEX 11252 SAMPLE 15189	INDEX 11253 SAMPLE 15439
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	MIRANDO VALLEY N	ROLETA	ROLETA
WELL NAME	HINNANT-FULBRIGHT "J" NO. 1	GUERRA L NO. 1	GUERRA "B" NO. 1
LOCATION	J. M. HINNANT SUR. NO. 613	R. VELA PORCION 26, A-102	5 MI. NW LOPENO
OWNER	HUGHES & HUGHES OIL & GAS	TEXAS OIL & GAS CORP.	TEXAS OIL & GAS CORP.
COMPLETED	05/27/77	06/18/76	02/09/77
SAMPLED	03/20/78	01/--/78	10/18/78
FORMATION	EOCE-CLAIBORNE	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	5551	8146	8172
WELLHEAD PRESSURE,PSIG	2007	4600	1100
OPEN FLOW, MCFD	6200	5000	4000
COMPONENT, MOLE PCT			
METHANE	90.6	92.3	92.1
ETHANE	4.6	4.6	4.3
PROPANE	1.7	1.1	1.2
N-BUTANE	0.4	0.2	0.2
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.9	0.2	0.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	1.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1093	1073	1077
SPECIFIC GRAVITY	0.626	0.612	0.616

	INDEX 11254 SAMPLE 16561	INDEX 11255 SAMPLE 15443	INDEX 11256 SAMPLE 16797
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAPATA	ZAPATA	ZAPATA
FIELD	TAQUACHIE CREEK	UREBENO	WILDCAT
WELL NAME	L. ARMOUR HINNANT NO. 1-252	M. M. ALEXANDER NO. 8-2	ROBERTO VELA NO. 1
LOCATION	R.HINNANT 252 SUR., A-509	M. CUELLAR PORCION 1, A-127	TC RR259, A-186
OWNER	BLOCKER EXPLORATION CO.	GULF OIL EXPL. & PROD. CO.	PENNZOIL EXPL. & PROD. CO.
COMPLETED	12/04/81	06/25/77	--/--/82
SAMPLED	09/--/82	10/17/78	03/--/83
FORMATION	EOCE-WILCOX	EOCE-LOBO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	11162	7853	8920
WELLHEAD PRESSURE,PSIG	7250	3170	NOT GIVEN
OPEN FLOW, MCFD	13500	940	3156
COMPONENT, MOLE PCT			
METHANE	92.0	96.0	82.0
ETHANE	1.7	1.7	0.9
PROPANE	0.2	0.5	0.1
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	0.1	0.2	10.0
OXYGEN	TRACE	TRACE	2.7
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.8	1.5	3.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	968	1019	858
SPECIFIC GRAVITY	0.621	0.585	0.656

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11257 SAMPLE 11193	INDEX 11258 SAMPLE 10911	INDEX 11259 SAMPLE 4007
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAVALA	ZAVALA	ZAVALA
FIELD	BANDERA TANK NW	BUZZARD TANK	LEONA RIVER
WELL NAME	R. W. NORTON NO. 1A	NORTON CHAPPAROSA RANCH NO15	NATIONAL BANK COMMERCE NO. 1
LOCATION	BLK. 12, SEC. 64, I&GNA-454	SEC. 14, SAEMG RR SUR. A593	NOT GIVEN
OWNER	NORTON OIL CO., INC.	NORTON OIL CO., INC.	TEXAS CO.
COMPLETED	06/23/66	07/01/66	02/02/45
SAMPLED	10/29/67	04/05/67	04/22/45
FORMATION	CRET-SAN MIGUEL	CRET-SAN MIGUEL	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	2315	2452	4214
WELLHEAD PRESSURE,PSIG	990	1140	1645
OPEN FLOW, MCFD	25000	4100	9800
COMPONENT, MOLE PCT			
METHANE	96.5	96.6	79.0
ETHANE	0.9	1.0	17.1
PROPANE	0.3	0.0	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.6	2.0	3.6
OXYGEN	0.0	TRACE	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.03	0.03	0.09
HEATING VALUE*	1025	1009	1107
SPECIFIC GRAVITY	0.579	0.574	0.655

	INDEX 11260 SAMPLE 3869	INDEX 11261 SAMPLE 15437	INDEX 11262 SAMPLE 15436
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ZAVALA	ZAVALA	ZAVALA
FIELD	NOT GIVEN	PRYOR RANCH N	PRYOR RANCH S
WELL NAME	W. M. VAN CLEVE NO. 1	IKE T. PRYOR NO. C-1	H & F PROPERTIES NO. B-1
LOCATION	A. VAN CLEVE SUR. NO. 8	ANTONIO AGUIRRE SUR. A-1	SEC. 22, N. AGUIRRE SUR. A-3
OWNER	TEXAS CO.	HUGHES & HUGHES OIL & GAS	HUGHES & HUGHES OIL & GAS
COMPLETED	06/19/44	06/26/77	04/05/77
SAMPLED	09/25/44	10/17/78	10/17/78
FORMATION	NOT GIVEN	CRET-OLMOS	CRET-ELAINE
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	1960	2268	3480
WELLHEAD PRESSURE,PSIG	NOT GIVEN	907	1410
OPEN FLOW, MCFD	300	3200	9800
COMPONENT, MOLE PCT			
METHANE	98.8	97.7	93.6
ETHANE	0.0	0.1	0.8
PROPANE	---	TRACE	0.4
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	0.9	2.0	0.8
OXYGEN	0.0	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1001	991	1018
SPECIFIC GRAVITY	0.561	0.564	0.570

	INDEX 11263 SAMPLE 15172	INDEX 11264 SAMPLE 2218	INDEX 11265 SAMPLE 7821
STATE	TEXAS	UTAH	UTAH
COUNTY	ZAVALA	CARBON	CARBON
FIELD	SPINACH	FARNHAM DOME	FARNHAM DOME
WELL NAME	R. J. KLEINMANN "B" NO. 1	NO. 1	NO. 4
LOCATION	NARCISO AGUIRRE SUR. A-3	SEC. 12, T15S, R11E	SEC. 12, T15S, R11E
OWNER	HUGHES & HUGHES OIL & GAS	CARBON DIOXIDE & CHEMICAL CO	CALIFORNIA OIL CO.
COMPLETED	05/30/77	--/--/00	05/--/46
SAMPLED	12/21/77	10/21/30	01/13/61
FORMATION	CRET-SAN MIGUEL	TRIA-NOT GIVEN	PERM-COCONINO
GEOLOGIC PROVINCE CODE	220	575	575
DEPTH, FEET	3774	3093	3133
WELLHEAD PRESSURE,PSIG	1565	750	NOT GIVEN
OPEN FLOW, MCFD	9000	2780	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.5	0.0	0.4
ETHANE	2.7	0.0	0.1
PROPANE	2.5	---	0.3
N-BUTANE	0.8	---	0.0
ISOBUTANE	0.4	---	0.0
N-PENTANE	0.1	---	0.0
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	1.7	0.9	0.8
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	98.9	98.3
HELIUM	0.02	0.02	0.00
HEATING VALUE*	1099	0	14
SPECIFIC GRAVITY	0.626	1.523	1.519

	INDEX 11266 SAMPLE 6922	INDEX 11267 SAMPLE 6923	INDEX 11268 SAMPLE 16621
STATE	UTAH	UTAH	UTAH
COUNTY	CARBON	CARBON	CARBON
FIELD	GORDON CREEK UNIT	GORDON CREEK UNIT	NINE MILE CANYON
WELL NAME	R. BRYNER NO. 2	R. BRYNER NO. 1	KEEL RANCH NO. 1-16
LOCATION	SEC. 25, T14S, R7E	SEC. 24, T14S, R7E	SEC. 16, T12S, R13E
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	TRIGG DRILLING CO., INC.
COMPLETED	12/05/56	08/13/51	10/23/82
SAMPLED	12/31/58	12/31/58	08/18/82
FORMATION	TRIA-SINBAD	TRIA-SINBAD	CRET-MANCOS
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	10760	10877	8084
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2500
OPEN FLOW, MCFD	6500	5000	440
COMPONENT, MOLE PCT			
METHANE	2.4	0.1	93.0
ETHANE	0.3	0.1	3.7
PROPANE	0.0	0.0	1.3
N-BUTANE	0.1	TRACE	0.4
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	7.3	0.0	0.2
OXYGEN	0.1	0.1	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	89.3	99.5	0.3
HELIUM	0.10	TRACE	TRACE
HEATING VALUE*	56	8	1094
SPECIFIC GRAVITY	1.471	1.527	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11269 SAMPLE 14982	INDEX 11270 SAMPLE 1828	INDEX 11271 SAMPLE 8776
STATE	UTAH	UTAH	UTAH
COUNTY	CARBON	CARBON	CARBON
FIELD	PETERS POINT	SEEP 30MMI. E. OF PRICE	STONE CABIN
WELL NAME	PETERS POINT NO. 1	GAS SEEP	STONE CABIN UNIT NO. 1
LOCATION	SEC. 6, T13S, R17E	SEC.--, T14, R15	SEC. 13, T12S, R14E
OWNER	RESERVE OIL, INC.	G. E. LUNDT	SUN OIL CO.
COMPLETED	08/12/76	--/--/00	09/01/58
SAMPLED	09/17/77	08/04/29	11/17/62
FORMATION	EOCE-WASATCH	NOT GIVEN	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	9622	NOT GIVEN	4953
WELLHEAD PRESSURE, PSIG	500	NOT GIVEN	1180
OPEN FLOW, MCFD	479	NOT GIVEN	4400
COMPONENT, MOLE PCT			
METHANE	89.3	0.0	91.0
ETHANE	6.3	0.0	5.5
PROPANE	2.2	---	1.6
N-BUTANE	0.6	---	0.4
ISOBUTANE	0.3	---	0.3
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.3	---	0.2
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.5	2.8	0.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	97.2	0.2
HELIUM	0.01	0.05	0.01
HEATING VALUE*	1131	0	1104
SPECIFIC GRAVITY	0.636	1.513	0.619

	INDEX 11272 SAMPLE 14134	INDEX 11273 SAMPLE 12620	INDEX 11274 SAMPLE 5560
STATE	UTAH	UTAH	UTAH
COUNTY	CARBON	CARBON	CARBON
FIELD	STONE CABIN	SUNNYSIDE UNIT	WILDCAT
WELL NAME	STONE CABIN II UNIT 2-8-27	SUNNYSIDE UNIT NO. 1	PETERS POINT NO. 2
LOCATION	SEC. 27, T12S, R15E	SEC. 17, T15S, R13E	SEC. 36, T12S, R16E
OWNER	PACIFIC TRANSMISSION SUPPLY	MOUNTAIN FUEL SUPPLY CO.	EL PASO NATURAL GAS CO.
COMPLETED	09/--/72	01/06/71	06/30/53
SAMPLED	08/21/74	11/29/70	10/27/53
FORMATION	NOT GIVEN	TRIA-MOENKOPI	EOCE-WASATCH U
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5004	5092	2856
WELLHEAD PRESSURE, PSIG	1960	1599	680
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2330
COMPONENT, MOLE PCT			
METHANE	80.8	27.6	96.6
ETHANE	5.0	2.1	1.8
PROPANE	1.6	1.2	0.3
N-BUTANE	0.3	0.3	0.1
ISOBUTANE	0.8	0.4	0.0
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.7	0.1	0.0
CYCLOPENTANE	0.4	0.1	TRACE
HEXANES PLUS	1.2	0.2	TRACE
NITROGEN	6.8	60.1	0.5
OXYGEN	1.6	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	6.0	0.5
HELIUM	0.01	1.22	0.01
HEATING VALUE*	1106	394	1026
SPECIFIC GRAVITY	0.709	0.903	0.576

	INDEX 11275 SAMPLE 8662	INDEX 11276 SAMPLE 8696	INDEX 11277 SAMPLE 8743
STATE	UTAH	UTAH	UTAH
COUNTY	CARBON	CARBON	CARBON
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	TEXACO SHARPLES NO. 1	GOVT. PICKRELL NO. 1	GOVT. PICKRELL NO. 1
LOCATION	SEC. 11, T12S, R15E	SEC. 11, T12S, R15E	SEC. 11, T12S, R15E
OWNER	TEXACO INC. & SHARPLES OIL	TEXACO INC. & SHARPLES OIL	TEXACO INC. & SHARPLES OIL
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/06/62	10/02/62	10/30/62
FORMATION	EOCE-WASATCH	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	3790	5530	7173
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	94.0	75.0
ETHANE	5.2	3.6	12.0
PROPANE	1.4	0.6	6.5
N-BUTANE	0.3	0.1	1.9
ISOBUTANE	0.4	0.1	1.6
N-PENTANE	0.1	TRACE	0.5
ISOPENTANE	0.2	0.1	0.8
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	TRACE	0.6
NITROGEN	1.0	1.3	0.6
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	1097	1044	1355
SPECIFIC GRAVITY	0.622	0.589	0.779

	INDEX 11278 SAMPLE 8763	INDEX 11279 SAMPLE 9837	INDEX 11280 SAMPLE 3050
STATE	UTAH	UTAH	UTAH
COUNTY	CARBON	CARBON	DAGGETT
FIELD	WILDCAT	WILDCAT	CLAY BASIN
WELL NAME	GOVT. PICKRELL NO. 1	SPRINGS NO. 1	MURPHY NO. 1
LOCATION	SEC. 11, T12S, R15E	SEC. 27, T15S, R9E	SEC. 22, T3N, R24E
OWNER	TEXACO INC. & SHARPLES OIL	PACIFIC NATURAL GAS EXPL. CO	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	--/--/00	12/12/64	04/--/27
SAMPLED	11/1/62	03/31/65	11/28/41
FORMATION	CRET-MESAVERDE	PENN-MANNING CANYON	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	575	575	570
DEPTH, FEET	7692	10666	5373
WELLHEAD PRESSURE, PSIG	NOT GIVEN	2802	1755
OPEN FLOW, MCFD	NOT GIVEN	3440	3250
COMPONENT, MOLE PCT			
METHANE	83.7	86.6	87.9
ETHANE	9.3	6.4	11.2
PROPANE	3.4	2.0	---
N-BUTANE	0.9	0.6	---
ISOBUTANE	0.8	0.9	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.3	1.1	---
NITROGEN	0.7	1.2	0.3
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.2	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	TRACE	0.07	0.04
HEATING VALUE*	1205	1180	1091
SPECIFIC GRAVITY	0.684	0.677	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11281 SAMPLE 3053	INDEX 11282 SAMPLE 4351	INDEX 11283 SAMPLE 8793
STATE	UTAH	UTAH	UTAH
COUNTY	DAGGETT	DAGGETT	DAGGETT
FIELD	CLAY BASIN	CLAY BASIN	CLAY BASIN
WELL NAME	STATE NO. 1	R. D. MURPHY NO. 6-W	R. D. MURPHY NO. 1
LOCATION	SEC. 16, T3N, R24E	SEC. 22, T3N, R24W	SEC. 22, T3N, R24E
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	11/--/36	07/10/47	04/--/27
SAMPLED	11/28/61	09/24/47	11/28/62
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	570	570	570
DEPTH, FEET	5739	5640	5344
WELLHEAD PRESSURE,PSIG	1710	1665	1722
OPEN FLOW, MCFD	16000	5200	3276
COMPONENT, MOLE PCT			
METHANE	88.8	85.7	92.2
ETHANE	10.1	12.2	4.4
PROPANE	---	---	1.5
N-BUTANE	---	---	0.4
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	0.6	1.3	0.5
OXYGEN	0.2	0.5	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1081	1087	1097
SPECIFIC GRAVITY	0.611	0.626	0.614

	INDEX 11284 SAMPLE 8798	INDEX 11285 SAMPLE 12106	INDEX 11286 SAMPLE 13461
STATE	UTAH	UTAH	UTAH
COUNTY	DAGGETT	DAGGETT	DUCHESNE
FIELD	CLAY BASIN	CLAY BASIN	ALTAMOUNT
WELL NAME	STATELAND NO. 1	UNIT NO. 11	BROTHERSON NO. 1
LOCATION	SEC. 16, T3N, R24E	SEC. 22, T3N, R24E	SEC. 14, T2S, R4W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	SHELL OIL CO.
COMPLETED	11/--/36	--/--/01	07/24/72
SAMPLED	11/28/62	11/06/69	10/24/72
FORMATION	CRET-DAKOTA	PENN-WEBER	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	570	570	575
DEPTH, FEET	5740	9025	10309
WELLHEAD PRESSURE,PSIG	518	3853	4100
OPEN FLOW, MCFD	16375	8500	3500
COMPONENT, MOLE PCT			
METHANE	92.4	3.3	71.4
ETHANE	3.9	0.5	14.3
PROPANE	1.3	0.1	7.8
N-BUTANE	0.4	0.2	2.5
ISOBUTANE	0.2	TRACE	1.3
N-PENTANE	0.1	0.1	1.0
ISOPENTANE	0.1	0.0	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	1.1	80.1	0.3
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	0.3	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	14.7	0.2
HELIUM	0.02	0.48	TRACE
HEATING VALUE*	1074	61	1409
SPECIFIC GRAVITY	0.609	1.039	0.811

	INDEX 11287 SAMPLE 14946	INDEX 11288 SAMPLE 13140	INDEX 11289 SAMPLE 5834
STATE	UTAH	UTAH	UTAH
COUNTY	DUCHESNE	DUCHESNE	DUCHESNE
FIELD	ALTAMOUNT	BLACK CEDAR	BLUEBELL
WELL NAME	FORTUNE UTE NO. 1-11CS	UTE TRIBAL D NO. 1	BLUEBELL UNIT NO. 2
LOCATION	SEC. 11, T3S, R5W	SEC. 14, T3S, R6W	SEC. 3, T1S, R2W
OWNER	GULF ENERGY & MINERALS-U.S.	TEXACO INC.	CARTER OIL CO.
COMPLETED	12/28/76	06/01/71	02/07/55
SAMPLED	03/18/77	01/26/72	04/28/55
FORMATION	EOCE-WASATCH	EOCE-GREEN RIVER	EOCE-GREEN RIVER
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	10278	8786	7895
WELLHEAD PRESSURE,PSIG	3000	NOT GIVEN	2890
OPEN FLOW, MCFD	NOT GIVEN	2587	5000
COMPONENT, MOLE PCT			
METHANE	76.5	68.9	96.0
ETHANE	12.2	13.0	1.1
PROPANE	5.9	8.7	0.9
N-BUTANE	1.9	3.5	0.2
ISOBUTANE	0.5	1.8	0.5
N-PENTANE	0.6	1.3	0.2
ISOPENTANE	0.6	1.1	0.0
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.4	1.0	0.1
NITROGEN	0.5	TRACE	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.1
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1317	1497	1057
SPECIFIC GRAVITY	0.757	0.864	0.590

	INDEX 11290 SAMPLE 13220	INDEX 11291 SAMPLE 13582	INDEX 11292 SAMPLE 8370
STATE	UTAH	UTAH	UTAH
COUNTY	DUCHESNE	DUCHESNE	EMERY
FIELD	BLUEBELL	BLUEBELL	BOW KNOT
WELL NAME	HAMBLIN NO. 1	E. J. ASAY NO. 1	BOW KNOT NO. 145
LOCATION	SEC. 26, T1S, R2W	SEC. 20, T1S, R1W	SEC. 5, T26S, R17E
OWNER	GULF OIL CO.- U.S.	GAS PRODUCING ENTERPRISES	SUPERIOR OIL CO.
COMPLETED	03/26/72	09/08/72	--/--/00
SAMPLED	05/26/72	04/06/73	01/17/62
FORMATION	EOCE-WASATCH	EOCE-GREEN RIVER	MISS---
GEOLOGIC PROVINCE CODE	575	575	585
DEPTH, FEET	13125	11814	6270
WELLHEAD PRESSURE,PSIG	5400	NOT GIVEN	2920
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	300
COMPONENT, MOLE PCT			
METHANE	73.7	73.3	12.6
ETHANE	14.4	12.9	1.5
PROPANE	7.2	4.7	1.0
N-BUTANE	1.9	1.8	0.4
ISOBUTANE	1.0	1.0	0.2
N-PENTANE	0.5	0.6	0.2
ISOPENTANE	0.4	0.8	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	0.1	3.2	79.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.2
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.2
CARBON DIOXIDE	0.4	1.0	2.7
HELIUM	0.01	0.01	1.47
HEATING VALUE*	1347	1279	230
SPECIFIC GRAVITY	0.773	0.771	0.943

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11293 SAMPLE 9717	INDEX 11294 SAMPLE 9721	INDEX 11295 SAMPLE 9722
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	FEDERAL MOUNDS	FEDERAL MOUNDS	FEDERAL MOUNDS
WELL NAME	FED. MOUNDS NO. 1	FED. MOUNDS NO. 1	FED. MOUNDS NO. 1
LOCATION	SEC. 11, T16S, R11E	SEC. 11, T16S, R11E	SEC. 11, T16S, R11E
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/04/65	02/08/65	02/06/65
FORMATION	MISS-DESERET	MISS-DESERET	MISS-DESERET
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8276	8520	8369
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	17000	44	15500
COMPONENT, MOLE PCT			
METHANE	1.5	1.6	1.5
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	70.2	73.0	70.5
OXYGEN	0.1	0.2	0.2
ARGON	0.3	0.4	0.4
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	27.5	24.2	26.8
HELIUM	0.52	0.55	0.54
HEATING VALUE*	17	18	17
SPECIFIC GRAVITY	1.112	1.095	1.110

	INDEX 11296 SAMPLE 7561	INDEX 11297 SAMPLE 9415	INDEX 11298 SAMPLE 17158
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	FERRON	FERRON	FERRON
WELL NAME	STATE NO. 1-22	FERRON UNIT NO. 41-22	MRC FERRON NO. 15
LOCATION	SEC. 22, T20S, R7E	SEC. 22, T20S, R7E	SEC. 34, T20S, R7E
OWNER	ENGLISH OIL CO.	PACIFIC NATURAL GAS EXPL. CO	MOUNTAIN RESOURCES CORP.
COMPLETED	08/22/57	06/05/63	--/--/00
SAMPLED	01/21/60	06/19/64	01/25/84
FORMATION	CRET-FERRON	CRET-FERRON	CRET-FERRON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	628	580	NOT GIVEN
WELLHEAD PRESSURE,PSIG	420	398	NOT GIVEN
OPEN FLOW, MCFD	4700	872	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.8	96.1	93.5
ETHANE	1.3	1.2	1.8
PROPANE	0.7	0.6	0.8
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.1	0.2	0.3
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	1.1	1.1	2.8
OXYGEN	TRACE	0.0	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.04	0.04	0.07
HEATING VALUE*	1027	1038	1014
SPECIFIC GRAVITY	0.579	0.585	0.590

	INDEX 11299 SAMPLE 17159	INDEX 11300 SAMPLE 9631	INDEX 11301 SAMPLE 9846
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	FERRON	FERRON UNIT	FERRON UNIT
WELL NAME	MRC NO. 2	FERRON UNIT NO. 3	FERRON UNIT NO. 3
LOCATION	SEC. 10, T21S, R7E	SEC. 21, T20S, R7E	SEC. 21, T20S, R7E
OWNER	MOUNTAIN RESOURCES CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	--/--/00	09/15/64	09/15/64
SAMPLED	01/25/84	11/04/64	04/14/65
FORMATION	CRET-FERRON	PERM-KAIBAB	PERM-KAIBAB
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	1200	7170	7170
WELLHEAD PRESSURE,PSIG	350	1225	1000
OPEN FLOW, MCFD	600	1107	1107
COMPONENT, MOLE PCT			
METHANE	94.2	29.0	29.9
ETHANE	1.6	4.1	4.0
PROPANE	0.8	3.2	3.4
N-BUTANE	0.2	1.1	1.0
ISOBUTANE	0.2	0.4	0.5
N-PENTANE	0.1	0.7	0.5
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.8	0.6
NITROGEN	2.2	7.5	8.1
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.3	0.2
CARBON DIOXIDE	0.3	52.4	51.4
HELIUM	0.06	0.18	0.19
HEATING VALUE*	1027	581	569
SPECIFIC GRAVITY	0.592	1.209	1.193

	INDEX 11302 SAMPLE 10010	INDEX 11303 SAMPLE 8728	INDEX 11304 SAMPLE 8731
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	FERRON UNIT	FLAT CANYON	FLAT CANYON
WELL NAME	FERRON UNIT NO. 4	MARY D. KEARNS NO. 1	MARY D. KEARNS NO. 2
LOCATION	SEC. 2, T20S, R7E	SEC. 23, T16S, R6E	SEC. 27, T16S, R6E
OWNER	PAN AMERICAN PETROLEUM CORP.	DELMI-TAYLOR OIL CORP.	DELMI-TAYLOR OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/30/65	10/22/62	10/22/62
FORMATION	PERM-KAIBAB	CRET-FERRON	CRET-FERRON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7244	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	10.5	83.9	91.0
ETHANE	1.6	7.6	3.5
PROPANE	1.2	4.3	2.3
N-BUTANE	0.5	1.2	0.6
ISOBUTANE	0.1	0.9	0.6
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	TRACE	0.4	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	6.4	0.9	1.0
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	79.0	0.1	0.3
HELIUM	0.11	0.05	0.02
HEATING VALUE*	219	1213	1107
SPECIFIC GRAVITY	1.392	0.692	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1a - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11305 SAMPLE 17133	INDEX 11306 SAMPLE 17836	INDEX 11307 SAMPLE 2677
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	GRASSY TRAIL	INDIAN CREEK UNIT	LAST CHANCE
WELL NAME	FED. NO. 4-32	INDIAN CREEK NO. 10176-5	NO. 1
LOCATION	SEC. 4, T16S, R12E	SEC. 10, T17S, R6E	SEC. 18, T26S, R7E
OWNER	SKYLINE OIL CO.	WORTH EXPLORATION CO., INC.	RAMSEY PETROLEUM CORP.
COMPLETED	02/17/83	--/--/82	--/--/00
SAMPLED	11/02/83	09/18/85	09/08/34
FORMATION	TRIA-MOENKOPI	CRET-FERRON	PERM-KAIBAB
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4258	5627	2724
WELLHEAD PRESSURE,PSIG	10	1025	410
OPEN FLOW, MCFD	6	3629	21000
COMPONENT, MOLE PCT			
METHANE	28.1	90.4	79.9
ETHANE	2.3	3.6	0.9
PROPANE	1.0	2.4	---
N-BUTANE	0.5	0.7	---
ISOBUTANE	0.3	0.5	---
N-PENTANE	0.2	0.3	---
ISOPENTANE	0.2	0.1	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.5	0.2	---
NITROGEN	60.7	1.2	13.3
OXYGEN	0.0	0.1	0.2
ARGON	0.5	TRACE	---
HYDROGEN	0.5	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	4.6	0.3	5.5
HELIUM	0.71	0.02	0.19
HEATING VALUE*	417	1114	826
SPECIFIC GRAVITY	0.904	0.637	0.668

	INDEX 11308 SAMPLE 17647	INDEX 11309 SAMPLE 7588	INDEX 11310 SAMPLE 5405
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	NOT GIVEN	TEMPLE SPRINGS	WILDCAT
WELL NAME	INDIAN CREEK NO. 021762-3	TEMPLE SPRINGS UNIT NO. 1	PACKSADDLE NO. 1
LOCATION	SEC. 2, T17S, R6E	SEC. 14, T25S, R13E	SEC. 12, T16S, R12E
OWNER	WORTH EXPLORATION CO., INC.	TEXACO INC.	EL PASO NATURAL GAS CO.
COMPLETED	10/19/84	01/28/60	--/--/00
SAMPLED	--/--/00	12/22/59	02/20/53
FORMATION	CRET-FERRON	DEVO-ELBERT	PERM-KAIBAB
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5530	4670	2309
WELLHEAD PRESSURE,PSIG	1050	1770	610
OPEN FLOW, MCFD	3900	2387	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	0.0	0.5
ETHANE	4.4	0.0	0.0
PROPANE	2.8	0.0	0.0
N-BUTANE	0.7	0.0	0.0
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.6	96.6	4.5
OXYGEN	0.2	0.1	0.1
ARGON	TRACE	0.3	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	94.7
HELIUM	0.02	2.80	0.10
HEATING VALUE*	1125	0	5
SPECIFIC GRAVITY	0.648	0.948	1.496

	INDEX 11311 SAMPLE 6222	INDEX 11312 SAMPLE 17400	INDEX 11313 SAMPLE 854
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	WILDCAT	WILDCAT	WOODSIDE
WELL NAME	GOVT-WHEATLET NO. 1	RANGE CREEK - FED. NO. 1	WOODSIDE
LOCATION	SEC. 27, T16S, R12E	SEC. 6, T18S, R16E	NOT GIVEN
OWNER	CARTER OIL CO.	GULF OIL EXPL. & PROD. CO.	UTAH OIL REFINING CO.
COMPLETED	--/--/00	02/--/83	--/--/00
SAMPLED	12/28/56	08/--/84	03/19/24
FORMATION	TRIA-SINBAD	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	3501	6022	NOT GIVEN
WELLHEAD PRESSURE,PSIG	925	1700	NOT GIVEN
OPEN FLOW, MCFD	2	2760	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.4	95.8	0.0
ETHANE	0.1	1.9	0.0
PROPANE	0.0	0.3	---
N-BUTANE	0.0	0.1	---
ISOBUTANE	0.0	0.1	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.0	TRACE	---
CYCLOPENTANE	0.0	TRACE	---
HEXANES PLUS	0.0	0.1	---
NITROGEN	7.0	2.0	68.1
OXYGEN	0.1	TRACE	1.3
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	91.2	0.1	28.4
HELIUM	0.13	0.05	1.33
HEATING VALUE*	16	1019	0
SPECIFIC GRAVITY	1.474	0.581	1.109

	INDEX 11314 SAMPLE 1161	INDEX 11315 SAMPLE 8633	INDEX 11316 SAMPLE 8634
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	EMERY
FIELD	WOODSIDE	WOODSIDE	WOODSIDE
WELL NAME	WOODSIDE NO. 1	UNIT NO. 1	UNIT NO. 1
LOCATION	SEC. 12, T19S, R13E	SEC. 12, T19S, R13E	SEC. 12, T19S, R13E
OWNER	UTAH OIL REFINING CO.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/26/25	07/18/62	07/24/62
FORMATION	PERM-KAIBAB	PERM-ELEPHANT CANYON	PENN-VIRGIL
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	4490	4910
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1530	1620
OPEN FLOW, MCFD	NOT GIVEN	64	6
COMPONENT, MOLE PCT			
METHANE	---	27.0	67.0
ETHANE	5.7	4.0	6.0
PROPANE	---	1.6	2.0
N-BUTANE	---	0.5	0.5
ISOBUTANE	---	0.3	0.3
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	61.0	64.9	23.3
OXYGEN	0.3	TRACE	TRACE
ARGON	---	0.2	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	31.7	0.1	0.2
HELIUM	1.31	1.03	0.30
HEATING VALUE*	102	426	878
SPECIFIC GRAVITY	1.140	0.874	0.720

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11317 SAMPLE 12055	INDEX 11318 SAMPLE 12059	INDEX 11319 SAMPLE 8089
STATE	UTAH	UTAH	UTAH
COUNTY	EMERY	EMERY	GARFIELD
FIELD	WOODSIDE	WOODSIDE	ESCALANTE
WELL NAME	FED. NO. 44-12	FED. 44-12	ESCALANTE NO. 2
LOCATION	SEC. 12, T19S, R13E	SEC. 12, T19S, R13E	SEC. 29, T32S, R3E
OWNER	MOLLY RESOURCES CORP.	MOLLY RESOURCES CORP.	PHILLIPS PETROLEUM CO.
COMPLETED	09/27/69	09/27/69	--/--/00
SAMPLED	09/27/69	10/01/69	07/19/61
FORMATION	PERM-KAIBAB	PERM-KAIBAB	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	3341	3341	1606
WELLHEAD PRESSURE,PSIG	750	750	NOT GIVEN
OPEN FLOW, MCFD	3000	6000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	0.2	0.2	0.7
ETHANE	0.1	0.2	0.2
PROPANE	TRACE	0.1	0.3
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	0.2	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	64.4	64.2	2.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.2	0.2	0.1
HYDROGEN	0.0	0.0	0.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	33.0	33.2	96.1
HELIUM	1.51	1.56	0.10
HEATING VALUE*	24	28	23
SPECIFIC GRAVITY	1.146	1.150	1.503

	INDEX 11320 SAMPLE 8091	INDEX 11321 SAMPLE 17381	INDEX 11322 SAMPLE 17513
STATE	UTAH	UTAH	UTAH
COUNTY	GARFIELD	GARFIELD	GARFIELD
FIELD	ESCALANTE	ESCALANTE ANTICLINE	ESCALANTE ANTICLINE
WELL NAME	ESCALANTE NO. 2	CHARGER NO. 2	CHARGER NO. 4
LOCATION	SEC. 29, T32S, R3E	SEC. 33, T32S, R3E	SEC. 13, T33S, R2E
OWNER	PHILLIPS PETROLEUM CO.	MID-CONTINENT OIL CO.	MID-CONTINENT OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/19/61	08/15/84	10/31/84
FORMATION	NOT GIVEN	TRIA-MOENKOPI & SHINARUMP	TRIA-SHINARUMP & MOENKOPI
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	2260	2140	3005
WELLHEAD PRESSURE,PSIG	NOT GIVEN	34	25
OPEN FLOW, MCFD	NOT GIVEN	994	29504
COMPONENT, MOLE PCT			
METHANE	0.4	0.1	0.2
ETHANE	0.2	0.0	0.0
PROPANE	0.0	0.0	TRACE
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	5.5	0.9	2.0
OXYGEN	0.2	TRACE	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	93.1	98.8	97.6
HELIUM	0.30	0.05	0.04
HEATING VALUE*	16	1	2
SPECIFIC GRAVITY	1.490	1.521	1.514

	INDEX 11323 SAMPLE 9766	INDEX 11324 SAMPLE 6360	INDEX 11325 SAMPLE 6361
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	AGATE	BAR X	BAR X
WELL NAME	FEE NO. 8-1	BAR-X NO. 3	BAR-X NO. 4
LOCATION	SEC. 8, T20S, R24E	SEC. 12, T17S, R25E	SEC. 18, T17S, R26E
OWNER	VILLIAM G. BUSH	AMERICAN METAL CO.	AMERICAN METAL CO.
COMPLETED	11/20/64	12/19/55	01/17/56
SAMPLED	02/22/65	08/14/57	08/14/57
FORMATION	JURA-MORRISON	CRET-DAKOTA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	1670	2919	3503
WELLHEAD PRESSURE,PSIG	680	837	1126
OPEN FLOW, MCFD	2800	1875	7500
COMPONENT, MOLE PCT			
METHANE	88.7	91.6	49.6
ETHANE	1.0	4.1	2.1
PROPANE	0.7	1.2	0.7
N-BUTANE	0.1	0.5	0.1
ISOBUTANE	0.2	0.1	TRACE
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	TRACE	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	8.4	1.8	28.9
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	8.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	9.6
HELIUM	0.50	0.12	0.50
HEATING VALUE*	958	1060	589
SPECIFIC GRAVITY	0.609	0.608	0.744

	INDEX 11326 SAMPLE 6851	INDEX 11327 SAMPLE 6876	INDEX 11328 SAMPLE 7058
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BAR X	BAR X	BAR X
WELL NAME	U.S.A. PETERSON A UNIT NO. 1	BAR-X UNIT NO. 7	BAR X UNIT NO. 4
LOCATION	SEC. 8, T17S, R26E	SEC. 7, T17S, R26E	SEC. 18, T17S, R26E
OWNER	TENNESSEE GAS TRANSMISSION C	AMERICAN CLIMAX PETROLEUM CO	AMERICAN CLIMAX PETROLEUM CO
COMPLETED	10/16/58	10/18/58	--/--/00
SAMPLED	--/--/58	11/14/58	04/29/59
FORMATION	JURA-MORRISON	JURA-MORRISON	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	3611	3345	3550
WELLHEAD PRESSURE,PSIG	730	720	1143
OPEN FLOW, MCFD	5	1	7500
COMPONENT, MOLE PCT			
METHANE	83.5	88.8	45.0
ETHANE	3.6	4.7	0.9
PROPANE	0.9	1.2	1.6
N-BUTANE	0.3	0.3	0.2
ISOBUTANE	0.4	0.3	0.0
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	9.9	3.6	26.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	24.3
HELIUM	0.50	0.30	0.80
HEATING VALUE*	980	1049	530
SPECIFIC GRAVITY	0.645	0.624	0.927

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11329 SAMPLE 17001	INDEX 11330 SAMPLE 17323	INDEX 11331 SAMPLE 8601
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BAR X	BAR X	BARTLETT FLAT
WELL NAME	BAR X NO. 13	NORTH BAR X NO. 1	UNIT NO. 5
LOCATION	SEC. 7, T17S, R26E	SEC. 14, T17S, R25E	SEC. 27, T25S, R19E
OWNER	TERRA RESOURCES, INC.	BEARTOOTH OIL & GAS CO.	PURE OIL CO.
COMPLETED	07/23/82	05/--/84	07/07/62
SAMPLED	07/27/83	06/11/84	07/07/62
FORMATION	JURA-MORRISON	CRET-DAKOTA	MISS---
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	2934	3603	7400
WELLHEAD PRESSURE,PSIG	500	860	NOT GIVEN
OPEN FLOW, MCFD	2500	1148	100
COMPONENT, MOLE PCT			
METHANE	89.8	84.9	12.3
ETHANE	5.3	4.3	2.0
PROPANE	1.4	1.3	1.1
N-BUTANE	0.4	0.3	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.4	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.0	7.7	79.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.3	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	2.3
HELIUM	0.12	0.08	1.39
HEATING VALUE*	1101	1005	247
SPECIFIC GRAVITY	0.650	0.643	0.948

	INDEX 11332 SAMPLE 8602	INDEX 11333 SAMPLE 6421	INDEX 11334 SAMPLE 7049
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BARTLETT FLAT	BIG FLAT	BIG FLAT
WELL NAME	UNIT NO. 5	PURE BIG FLAT UNIT	BIG FLAT UNIT NO. 1
LOCATION	SEC. 27, T25S, R19E	SEC. 14, T26S, R19E	SEC. 14, T26S, R19E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/62	--/--/00	09/15/57
SAMPLED	07/04/62	10/24/57	04/29/59
FORMATION	MISS---	MISS-LEADVILLE	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7441	7694	7954
WELLHEAD PRESSURE,PSIG	NOT GIVEN	420	150
OPEN FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	11.9	7.1	6.3
ETHANE	2.1	1.9	1.1
PROPANE	0.1	3.9	1.8
N-BUTANE	0.7	3.4	1.5
ISOBUTANE	0.6	1.4	0.8
N-PENTANE	0.2	1.9	1.0
ISOPENTANE	0.3	0.8	0.2
CYCLOPENTANE	TRACE	0.3	0.2
HEXANES PLUS	0.2	1.5	1.0
NITROGEN	74.7	72.5	82.1
OXYGEN	TRACE	0.0	TRACE
ARGON	0.2	0.1	0.1
HYDROGEN	0.6	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	1.2	0.0
CARBON DIOXIDE	7.4	2.8	2.0
HELIUM	1.40	1.40	1.70
HEATING VALUE*	236	581	318
SPECIFIC GRAVITY	0.975	1.101	1.015

	INDEX 11335 SAMPLE 7050	INDEX 11336 SAMPLE 8378	INDEX 11337 SAMPLE 8209
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BIG FLAT	BIG FLAT	BOOK CLIFFS
WELL NAME	BIG FLAT UNIT NO. 2	BIG FLAT NO. 5	BOOK CLIFFS NO. 1
LOCATION	SEC. 14, T26S, R19E	SEC. 27, T25S, R19E	SEC. 32, T18S, R22E
OWNER	PURE OIL CO.	PURE OIL CO.	GULF OIL CORP.
COMPLETED	09/04/58	12/04/61	07/05/61
SAMPLED	04/29/59	01/23/62	09/23/61
FORMATION	MISS-LEADVILLE	PENN-PARADOX	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7768	7202	5186
WELLHEAD PRESSURE,PSIG	200	2250	1537
OPEN FLOW, MCFD	NOT GIVEN	90	5300
COMPONENT, MOLE PCT			
METHANE	20.7	60.3	87.7
ETHANE	8.8	16.9	5.5
PROPANE	9.4	11.3	1.3
N-BUTANE	3.7	3.9	0.3
ISOBUTANE	1.9	2.0	0.5
N-PENTANE	1.1	1.0	0.1
ISOPENTANE	0.6	1.1	0.1
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	1.1	0.8	0.2
NITROGEN	44.7	2.2	3.9
OXYGEN	0.1	0.1	0.1
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	1.4	0.0	0.0
CARBON DIOXIDE	5.7	0.1	0.7
HELIUM	0.30	0.05	0.21
HEATING VALUE*	950	1544	1070
SPECIFIC GRAVITY	1.092	0.915	0.639

	INDEX 11338 SAMPLE 8657	INDEX 11339 SAMPLE 8766	INDEX 11340 SAMPLE 9110
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BOOK CLIFFS	BOOK CLIFFS	BOOK CLIFFS
WELL NAME	NO. 3	FED. SEAGULL NO. 1-18	BOOK CLIFFS NO. 3
LOCATION	SEC. 33, T18S, R22E	SEC. 18, T16S, R25E	SEC. 35, T18S, R22E
OWNER	GULF OIL CORP.	RIP C. UNDERWOOD	GULF OIL CORP.
COMPLETED	08/17/62	--/--/00	08/15/62
SAMPLED	08/25/62	11/--/62	10/10/63
FORMATION	CRET-DAKOTA	CRET-CEDAR MOUNTAIN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5330	NOT GIVEN	5418
WELLHEAD PRESSURE,PSIG	1698	900	1918
OPEN FLOW, MCFD	2500	1140	2500
COMPONENT, MOLE PCT			
METHANE	88.9	86.9	89.4
ETHANE	5.7	9.7	5.5
PROPANE	1.4	2.7	1.3
N-BUTANE	0.3	0.6	0.4
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.5	1.0	2.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.0	0.2
HELIUM	0.20	0.11	0.20
HEATING VALUE*	1081	1132	1077
SPECIFIC GRAVITY	0.627	0.556	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11341 SAMPLE 17495	INDEX 11342 SAMPLE 7794	INDEX 11343 SAMPLE 7798
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BRYSON	BRYSON CANYON	BRYSON CANYON
WELL NAME	TOC. TXO POGO USA NO. 15-9	6A	6A
LOCATION	SEC. 15, T17S, R24E	SEC. 9, T17S, R24E	SEC. 9, T17S, R24E
OWNER	TENNECO OIL CO.	TREND OIL CO.	TREND OIL CO.
COMPLETED	09/02/82	11/29/60	11/29/60
SAMPLED	10/15/84	12/01/60	12/01/60
FORMATION	CRET-DAKOTA	CRET-DAKOTA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5333	4606	4731
WELLHEAD PRESSURE,PSIG	460	1076	1276
OPEN FLOW, MCFD	275	1400	9400
COMPONENT, MOLE PCT			
METHANE	93.5	87.1	82.4
ETHANE	3.5	3.7	3.6
PROPANE	0.7	0.6	0.7
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.7	5.7	9.3
OXYGEN	TRACE	1.2	1.7
ARGON	TRACE	0.1	0.1
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.0	0.5
HELIUM	0.06	0.10	0.70
HEATING VALUE*	1049	983	958
SPECIFIC GRAVITY	0.599	0.627	0.648

	INDEX 11344 SAMPLE 15877	INDEX 11345 SAMPLE 17083	INDEX 11346 SAMPLE 8340
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	BRYSON CANYON	BRYSON CANYON UNIT NO. 15	CANYON E
WELL NAME	FED. NO. 3-15	BRYSON CANYON UNIT NO. 15	FED. SEA GULL NO. 1
LOCATION	SEC. 3, T17S, R24E	SEC. 15, T17S, R24E	SEC. 13, T16S, R24E
OWNER	TENNECO OIL CO.	BEARTOOTH OIL & GAS CO.	RIP C. UNDERWOOD
COMPLETED	08/04/79	08/--/83	12/18/61
SAMPLED	01/09/80	10/03/83	12/16/61
FORMATION	CRET-DAKOTA	CRET-DAKOTA & JURA-SALT WASH	CRET-CEDAR MOUNTAIN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4634	5180	5886
WELLHEAD PRESSURE,PSIG	920	840	900
OPEN FLOW, MCFD	2500	1423	20000
COMPONENT, MOLE PCT			
METHANE	78.5	89.2	84.6
ETHANE	5.2	4.1	8.0
PROPANE	2.1	1.1	2.9
N-BUTANE	0.6	0.4	0.6
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	12.1	3.4	1.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.3	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.8	1.0
HELIUM	0.13	0.15	0.14
HEATING VALUE*	1056	1060	1135
SPECIFIC GRAVITY	0.676	0.633	0.666

	INDEX 11347 SAMPLE 9355	INDEX 11348 SAMPLE 944	INDEX 11349 SAMPLE 1176
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	CANYON E	CISCO DOME	CISCO DOME
WELL NAME	E. CANYON UNIT NO. 44-12	NO. 1 CISCO	NO. 1
LOCATION	SEC. 12, T16S, R24E	SEC. 25, T20S, R21E	SEC. 14, T1-S, R21E
OWNER	TIDEWATER OIL CO.	UTAH OIL REFINING CO.	UTAH OIL REFINING CO.
COMPLETED	10/15/63	--/--/00	--/--/00
SAMPLED	05/15/64	11/17/24	10/19/25
FORMATION	CRET-CEDAR MOUNTAIN	JURA-MCELMO	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5717	1960	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1020	1127	NOT GIVEN
OPEN FLOW, MCFD	1300	90000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.0	86.1	83.0
ETHANE	5.9	12.3	13.6
PROPANE	1.9	---	---
N-BUTANE	0.6	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.4	0.9	2.6
OXYGEN	TRACE	0.2	0.5
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.4	0.3	0.3
HELIUM	0.08	0.15	0.14
HEATING VALUE*	1107	1093	1085
SPECIFIC GRAVITY	0.641	0.622	0.638

	INDEX 11350 SAMPLE 1257	INDEX 11351 SAMPLE 6810	INDEX 11352 SAMPLE 6811
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	CISCO DOME	CISCO DOME	CISCO DOME
WELL NAME	CISCO NO. 1	STATE NO. 1	UNION GOVT. II-1
LOCATION	SEC. 25, T20S, R21E	SEC. 36, T20S, R21E	SEC. 24, T20S, R21E
OWNER	UTAH OIL REFINING CO.	CABEEN EXPLORATION CORP.	CABEEN EXPLORATION CORP.
COMPLETED	--/--/00	07/09/55	09/03/57
SAMPLED	12/20/25	09/20/58	09/20/58
FORMATION	NOT GIVEN	CRET-DAKOTA &JURA-MORRISION	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	1940	2108
WELLHEAD PRESSURE,PSIG	NOT GIVEN	460	763
OPEN FLOW, MCFD	NOT GIVEN	1200	5200
COMPONENT, MOLE PCT			
METHANE	86.5	92.4	89.5
ETHANE	11.3	3.6	2.1
PROPANE	---	1.2	0.1
N-BUTANE	---	0.4	0.1
ISOBUTANE	---	0.2	0.1
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.2	0.2
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.5	1.3	4.0
OXYGEN	0.3	0.1	0.6
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.5	0.1	3.0
HELIUM	0.14	0.10	0.10
HEATING VALUE*	1079	1074	967
SPECIFIC GRAVITY	0.624	0.609	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11353 SAMPLE 6812	INDEX 11354 SAMPLE 9322	INDEX 11355 SAMPLE 6554
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	CISCO DOME	CISCO DOME	CISCO SPRINGS
WELL NAME	UNION GOVT. III-1	AREA NO. 30-81	A. W. CULLEN NO. 1
LOCATION	SEC. 10, T20S, R21E	SEC. 30, T20S, R24E	SEC. 15, T20S, R23E
OWNER	CABEEN EXPLORATION CORP.	PUMPELLY-STAVA OPERATOR	THREE STATES NATURAL GAS CO.
COMPLETED	06/05/58	02/12/64	09/08/55
SAMPLED	09/20/58	03/--/64	04/14/58
FORMATION	JURA-MORRISON	CRET-BUCKHORN	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	2621	842	1565
WELLHEAD PRESSURE,PSIG	790	351	690
OPEN FLOW, MCFD	9800	700	2820
COMPONENT, MOLE PCT			
METHANE	89.9	82.1	90.3
ETHANE	4.0	2.5	2.9
PROPANE	1.2	0.8	0.7
N-BUTANE	0.3	0.2	0.2
ISOBUTANE	0.5	TRACE	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	3.3	13.1	4.7
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.20	0.66	0.40
HEATING VALUE*	1063	922	1009
SPECIFIC GRAVITY	0.623	0.637	0.604

	INDEX 11356 SAMPLE 7483	INDEX 11357 SAMPLE 10960	INDEX 11358 SAMPLE 1804
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	DIAMOND RIDGE	GRAVEL PILE	HARLEY DOME
WELL NAME	DIAMOND RIDGE UNIT NO. 2	PUMPELLY-STAVA NO. 30-7S	BASHOR NO. 1
LOCATION	SEC. 23, T17S, R22E	SEC. 30, T20S, R24E	SEC. 4, T19S, R25E
OWNER	SUNRAY MID-CONTINENT OIL CO.	PUMPELLY-STAVA OPERATOR	W. W. BASHOR
COMPLETED	01/28/60	02/08/67	09/12/25
SAMPLED	03/28/60	--/--/00	07/06/29
FORMATION	CRET-CEDAR MOUNTAIN	CRET-CEDAR MOUNTAIN	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7254	648	538
WELLHEAD PRESSURE,PSIG	1675	86	25
OPEN FLOW, MCFD	2100	1330	390
COMPONENT, MOLE PCT			
METHANE	92.2	92.4	50.0
ETHANE	3.6	1.8	3.6
PROPANE	0.7	0.5	----
N-BUTANE	0.1	0.2	----
ISOBUTANE	0.2	0.1	----
N-PENTANE	0.1	0.1	----
ISOPENTANE	0.0	TRACE	----
CYCLOPENTANE	TRACE	TRACE	----
HEXANES PLUS	0.1	0.1	----
NITROGEN	1.8	3.6	43.8
OXYGEN	0.3	TRACE	0.2
ARGON	TRACE	TRACE	----
HYDROGEN	TRACE	TRACE	----
HYDROGEN SULFIDE**	0.0	0.0	----
CARBON DIOXIDE	0.7	0.7	0.3
HELIUM	0.10	0.28	2.25
HEATING VALUE*	1036	1001	571
SPECIFIC GRAVITY	0.603	0.597	0.749

	INDEX 11359 SAMPLE 2331	INDEX 11360 SAMPLE 2333	INDEX 11361 SAMPLE 2396
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	HARLEY DOME	HARLEY DOME	HARLEY DOME
WELL NAME	NO. 2	NO. 2	NO. 2
LOCATION	SEC. 4, T19S, R25E	SEC. 4, T19S, R25E	SEC. 4, T19S, R25E
OWNER	WEIGHTMAN & FOLLGREN	WEIGHTMAN & FOLLGREN	WEIGHTMAN & FOLLGREN
COMPLETED	05/03/26	05/03/31	08/01/31
SAMPLED	05/01/31	05/18/31	08/20/31
FORMATION	JURA-MORRISON	JURA-ENTRADA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	564	860	860
WELLHEAD PRESSURE,PSIG	30	100	157
OPEN FLOW, MCFD	250	3000	1720
COMPONENT, MOLE PCT			
METHANE	46.9	5.5	5.1
ETHANE	2.5	2.0	2.3
PROPANE	----	----	----
N-BUTANE	----	----	----
ISOBUTANE	----	----	----
N-PENTANE	----	----	----
ISOPENTANE	----	----	----
CYCLOPENTANE	----	----	----
HEXANES PLUS	----	----	----
NITROGEN	48.1	84.6	84.5
OXYGEN	0.1	0.1	0.0
ARGON	----	----	----
HYDROGEN	----	----	----
HYDROGEN SULFIDE**	----	----	----
CARBON DIOXIDE	0.2	0.8	1.1
HELIUM	2.45	7.06	7.02
HEATING VALUE*	516	92	93
SPECIFIC GRAVITY	0.757	0.893	0.896

	INDEX 11362 SAMPLE 8603	INDEX 11363 SAMPLE 8651	INDEX 11364 SAMPLE 8652
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	MORSE POINT	LONG CANYON	LONG CANYON
WELL NAME	MORSE POINT 1-X	LONG CANYON UNIT NO. 1	LONG CANYON UNIT NO. 1
LOCATION	SEC. 19, T16S, R23E	SEC. 9, T26S, R20E	SEC. 9, T26S, R20E
OWNER	TIDEWATER OIL CO.	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.
COMPLETED	07/04/62	--/--/00	--/--/00
SAMPLED	07/03/62	08/14/62	08/11/62
FORMATION	CRET-DAKOTA	MISS---	MISS---
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8112	7706	7606
WELLHEAD PRESSURE,PSIG	999	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2169	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	56.1	4.7	4.7
ETHANE	2.3	0.8	0.8
PROPANE	1.2	0.4	0.4
N-BUTANE	0.3	0.3	0.2
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	15.0	91.1	90.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.2	0.2
HYDROGEN	26.3	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.7
HELIUM	0.07	1.48	1.44
HEATING VALUE*	744	95	102
SPECIFIC GRAVITY	0.515	0.950	0.950

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11365 SAMPLE 9047	INDEX 11366 SAMPLE 17064	INDEX 11367 SAMPLE 6304
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	LONG CANYON	MOON RIDGE	NOT GIVEN
WELL NAME	LONG CANYON NO. 2	ICE CANYON NO. 16-9	NO. 1
LOCATION	SEC. 9, T26S, R20E	SEC. 16, T16S, R21E	SEC. 26, T21S, R23E
OWNER	SOUTHERN NATURAL GAS CO.	BEARTOOTH OIL & GAS CO.	CARL LOSEY
COMPLETED	--/--/00	10/--/82	--/--/00
SAMPLED	07/--/63	09/15/83	04/17/57
FORMATION	MISS---	CRET-DAKOTA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7677	9700	595
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1465	220
OPEN FLOW, MCFD	NOT GIVEN	2000	150
COMPONENT, MOLE PCT			
METHANE	2.6	94.9	92.9
ETHANE	0.8	2.0	1.4
PROPANE	0.3	0.2	0.4
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.1	0.0	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	93.9	0.6	3.8
OXYGEN	TRACE	0.1	0.0
ARGON	0.2	TRACE	0.0
HYDROGEN	0.0	0.3	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	1.3	TRACE
HELIUM	1.30	0.03	0.26
HEATING VALUE*	70	1028	1017
SPECIFIC GRAVITY	0.959	0.592	0.598

	INDEX 11368 SAMPLE 6470	INDEX 11369 SAMPLE 9812	INDEX 11370 SAMPLE 9813
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	UTAH FED. NO. 1	U-TEX NO. 4	U-TEX NO. 5
LOCATION	SEC. 8, T17S, R23E	SEC. 16, T20S, R24E	SEC. 10, T20S, R24E
OWNER	SUNRAY MID-CONTINENT OIL CO.	U-TEX OIL CO.	U-TEX OIL CO.
COMPLETED	11/01/57	--/--/00	--/--/00
SAMPLED	01/04/58	03/22/65	03/22/65
FORMATION	CRET-DAKOTA U	JURA-MORRISON	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5862	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1500	775	780
OPEN FLOW, MCFD	150	3000	2900
COMPONENT, MOLE PCT			
METHANE	92.4	76.7	73.4
ETHANE	4.6	2.9	1.1
PROPANE	2.5	1.8	0.4
N-BUTANE	0.3	0.3	0.1
ISOBUTANE	0.0	0.4	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	0.0	16.7	23.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.0
HELIUM	0.04	0.66	1.32
HEATING VALUE*	1094	913	795
SPECIFIC GRAVITY	0.606	0.671	0.665

	INDEX 11371 SAMPLE 7892	INDEX 11372 SAMPLE 7895	INDEX 11373 SAMPLE 8515
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SALT WASH	SALT WASH	SALT WASH
WELL NAME	SALT WASH NO. 1	SALT WASH NO. 1	GOVT. SMOOT NO. 1
LOCATION	SEC. 15, T23S, R17E	SEC. 15, T23S, R17E	SEC. 17, T23S, R17E
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	04/24/62
SAMPLED	03/13/61	03/09/61	04/16/62
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8627	8553	8732
WELLHEAD PRESSURE,PSIG	300	3875	125
OPEN FLOW, MCFD	7000	404	154
COMPONENT, MOLE PCT			
METHANE	11.0	11.8	16.1
ETHANE	3.0	1.9	5.5
PROPANE	4.2	1.7	6.4
N-BUTANE	4.6	1.1	4.1
ISOBUTANE	2.3	0.8	2.4
N-PENTANE	2.2	0.5	1.3
ISOPENTANE	1.7	0.3	1.1
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	1.8	0.5	0.8
NITROGEN	69.2	77.3	55.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.2	0.2	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	2.2	5.3
HELIUM	1.40	1.80	0.78
HEATING VALUE*	773	519	794
SPECIFIC GRAVITY	1.130	0.971	1.093

	INDEX 11374 SAMPLE 8872	INDEX 11375 SAMPLE 8972	INDEX 11376 SAMPLE 8974
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SALT WASH	SALT WASH	SALT WASH
WELL NAME	CF&I NO. 22-16	SALT WASH NO. 1	CF&I NO. 42-16
LOCATION	SEC. 16, T23S, R17E	SEC. 15, T23S, R17E	SEC. 16, T23S, R17E
OWNER	SHELL OIL CO.	PAN AMERICAN PETROLEUM CORP.	SHELL OIL CO.
COMPLETED	03/11/63	04/28/61	04/25/63
SAMPLED	02/22/63	05/27/63	05/27/63
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8793	8422	8814
WELLHEAD PRESSURE,PSIG	2260	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3335	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	11.8	10.3	12.2
ETHANE	1.8	1.7	2.8
PROPANE	1.8	1.7	3.3
N-BUTANE	1.1	1.1	2.6
ISOBUTANE	0.2	0.4	1.1
N-PENTANE	0.5	0.5	0.9
ISOPENTANE	0.2	0.1	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.4	0.6	0.7
NITROGEN	77.8	77.4	70.4
OXYGEN	0.0	2.0	1.0
ARGON	0.2	0.3	0.3
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.3	2.4	2.9
HELIUM	1.80	1.50	1.30
HEATING VALUE*	297	290	484
SPECIFIC GRAVITY	0.964	0.981	1.026

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11377 SAMPLE 8975	INDEX 11378 SAMPLE 15721	INDEX 11379 SAMPLE 7266
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SALT WASH	SALT WASH	SAN ARROYO
WELL NAME	CFEI NO. 22-16	GOVT. SMOOT NO. 3	SAN ARROYO GOVT. NO. 1
LOCATION	SEC. 16, T23S, R17E	SEC. 17, T23S, R17E	SEC. 26, T16S, R25E
OWNER	SHELL OIL CO.	RICHARD P. SMOOT	SINCLAIR OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	10/01/55
SAMPLED	05/27/63	08/--/79	10/29/59
FORMATION	MISS-LEADVILLE	MISS-LEADVILLE	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8900	8643	4851
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1340
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	21000
COMPONENT, MOLE PCT			
METHANE	9.0	12.1	47.9
ETHANE	1.6	2.3	2.2
PROPANE	1.6	2.0	1.5
N-BUTANE	1.1	1.1	0.3
ISOBUTANE	0.3	0.7	0.2
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	76.8	75.6	26.5
OXYGEN	4.8	0.0	0.2
ARGON	0.4	0.2	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.1	3.2	19.6
HELIUM	1.20	1.71	0.90
HEATING VALUE*	258	322	604
SPECIFIC GRAVITY	0.985	0.971	0.897

	INDEX 11380 SAMPLE 7267	INDEX 11381 SAMPLE 7681	INDEX 11382 SAMPLE 7682
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	SAN ARROYO GOVT. NO. 3	SAN ARROYO GOVT. NO. 5	SAN ARROYO GOVT. NO. 4
LOCATION	SEC. 23, T16S, R25E	SEC. 25, T16S, R25E	SEC. 30, T16S, R25E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	01/01/56	09/04/60	08/13/59
SAMPLED	10/29/59	09/12/60	09/13/60
FORMATION	JURA-ENTRADA	JURA-ENTRADA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5414	4814	4235
WELLHEAD PRESSURE,PSIG	1282	1324	941
OPEN FLOW, MCFD	21085	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	46.8	47.2	89.9
ETHANE	2.8	2.3	5.1
PROPANE	1.8	1.4	1.2
N-BUTANE	0.4	0.4	0.3
ISOBUTANE	0.1	0.5	0.3
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.4	0.1
NITROGEN	24.9	27.1	1.8
OXYGEN	0.1	0.1	0.2
ARGON	0.1	0.2	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	22.7	19.7	0.8
HELIUM	0.90	0.50	0.10
HEATING VALUE*	601	619	1059
SPECIFIC GRAVITY	0.923	0.913	0.618

	INDEX 11383 SAMPLE 7683	INDEX 11384 SAMPLE 7753	INDEX 11385 SAMPLE 7754
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	SAN ARROYO GOVT. NO. 5	SAN ARROYO GOVT. NO. 1	SAN ARROYO GOVT. NO. 3
LOCATION	SEC. 25, T16S, R25E	SEC. 26, T16S, R25E	SEC. 23, T16S, R25E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	08/05/60	10/--/55	06/--/56
SAMPLED	09/12/60	11/01/60	11/01/60
FORMATION	CRET-DAKOTA	JURA-ENTRADA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4053	4851	5440
WELLHEAD PRESSURE,PSIG	931	1340	1282
OPEN FLOW, MCFD	NOT GIVEN	21000	21085
COMPONENT, MOLE PCT			
METHANE	90.2	47.5	46.8
ETHANE	5.4	3.5	2.1
PROPANE	1.4	3.2	1.3
N-BUTANE	0.3	0.6	0.4
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.5	0.5
NITROGEN	0.8	17.0	23.7
OXYGEN	0.1	TRACE	TRACE
ARGON	0.0	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.9	26.1	23.4
HELIUM	0.10	0.60	1.00
HEATING VALUE*	1089	703	610
SPECIFIC GRAVITY	0.627	0.961	0.930

	INDEX 11386 SAMPLE 7755	INDEX 11387 SAMPLE 7761	INDEX 11388 SAMPLE 8278
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	SAN ARROYO GOVT. NO. 5	SAN ARROYO GOVT. NO. 2	NO. 6
LOCATION	SEC. 25, T16S, R25E	SEC. 22, T16S, R25E	SEC. 21, T16S, R25E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	09/05/60	04/--/56	10/20/61
SAMPLED	11/01/60	10/31/60	11/08/61
FORMATION	JURA-ENTRADA	JURA-ENTRADA	JURA-ENTRADA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4792	6635	6490
WELLHEAD PRESSURE,PSIG	1324	1235	1249
OPEN FLOW, MCFD	33000	11000	10500
COMPONENT, MOLE PCT			
METHANE	47.2	45.1	51.4
ETHANE	2.8	2.4	2.3
PROPANE	1.5	1.5	1.5
N-BUTANE	0.4	0.3	0.4
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	0.3
HEXANES PLUS	0.4	0.1	1.2
NITROGEN	26.5	24.4	17.1
OXYGEN	0.0	TRACE	0.3
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	19.7	24.5	23.9
HELIUM	1.00	0.90	0.46
HEATING VALUE*	620	572	721
SPECIFIC GRAVITY	0.906	0.932	0.940

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11389 SAMPLE 8279	INDEX 11390 SAMPLE 8704	INDEX 11391 SAMPLE 9821
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SAN ARROYO
WELL NAME	NO. 6	WESTBIT NO. 2	FED. 176, WELL NO. 1
LOCATION	SEC. 21, T16S, R25E	SEC. 9, T16S, R25E	SEC. 29, T16S, R26E
OWNER	SINCLAIR OIL & GAS CO.	BELCO PETROLEUM CORP.	SINCLAIR OIL & GAS CO.
COMPLETED	10/20/61	08/11/62	02/18/65
SAMPLED	11/08/61	10/04/62	03/18/65
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5834	6065	4050
WELLHEAD PRESSURE,PSIG	929	863	800
OPEN FLOW, MCFD	5950	3800	2500
COMPONENT, MOLE PCT			
METHANE	78.6	89.7	91.9
ETHANE	5.1	5.0	4.4
PROPANE	1.2	1.2	1.2
N-BUTANE	0.4	0.4	0.2
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	10.3	1.5	0.8
OXYGEN	2.2	TRACE	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.2	0.9
HELIUM	0.08	0.11	0.10
HEATING VALUE*	969	1076	1064
SPECIFIC GRAVITY	0.682	0.629	0.610

	INDEX 11392 SAMPLE 10349	INDEX 11393 SAMPLE 17174	INDEX 11394 SAMPLE 9390
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	SAN ARROYO	SAN ARROYO	SEGUNDO CANYON
WELL NAME	SAN ARROYO UNIT NO. 30	CREDO FED. NO. 1	SEGUNDO CANYON UNIT NO. 2
LOCATION	SEC. 21, T16S, R25E	SEC. 5, T16S, R26E	SEC. 33, T16S, R21E
OWNER	SINCLAIR OIL & GAS CO.	TXO PRODUCTION CORP.	PACIFIC NATURAL GAS EXPL. CO
COMPLETED	08/04/65	02/--/82	05/27/63
SAMPLED	12/29/65	02/13/84	06/26/64
FORMATION	JURA-MORRISON	CRET-DAKOTA	CRET-CEDAR MOUNTAIN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4192	5600	9832
WELLHEAD PRESSURE,PSIG	530	500	2102
OPEN FLOW, MCFD	935	750	1556
COMPONENT, MOLE PCT			
METHANE	92.7	88.1	96.6
ETHANE	3.6	5.5	1.4
PROPANE	1.0	1.6	0.3
N-BUTANE	0.2	0.4	TRACE
ISOBUTANE	0.1	0.3	TRACE
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	TRACE	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.9	2.0	0.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.2	0.8
HELIUM	0.10	0.19	0.04
HEATING VALUE*	1058	1087	1017
SPECIFIC GRAVITY	0.608	0.642	0.576

	INDEX 11395 SAMPLE 6422	INDEX 11396 SAMPLE 7067	INDEX 11397 SAMPLE 7069
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WESTWATER	WESTWATER	WESTWATER
WELL NAME	FED. NO. 1	FED. NO. E-2	FED. NO. E-2
LOCATION	SEC. 13, T17S, R23E	SEC. 7, T17S, R24E	SEC. 7, T17S, R24E
OWNER	OIL INC.	OIL, INC.	OIL INC.
COMPLETED	06/08/57	12/--/58	--/--/00
SAMPLED	09/01/57	04/22/59	04/22/59
FORMATION	CRET-L	JURA-ENTRADA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4442	5114	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1100	1625	1370
OPEN FLOW, MCFD	2000	17500	10250
COMPONENT, MOLE PCT			
METHANE	90.4	68.2	77.9
ETHANE	5.4	2.8	4.3
PROPANE	1.4	0.6	1.6
N-BUTANE	0.4	0.2	0.9
ISOBUTANE	0.2	0.2	0.9
N-PENTANE	TRACE	TRACE	0.4
ISOPENTANE	0.3	0.1	0.6
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.4
NITROGEN	0.9	24.9	11.6
OXYGEN	TRACE	0.0	0.8
ARGON	0.0	0.2	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	2.0	0.5
HELIUM	0.10	0.60	0.20
HEATING VALUE*	1101	780	1027
SPECIFIC GRAVITY	0.627	0.706	0.704

	INDEX 11398 SAMPLE 7594	INDEX 11399 SAMPLE 7595	INDEX 11400 SAMPLE 8896
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WESTWATER	WESTWATER	WESTWATER
WELL NAME	NO. C-7	NO. E-3	WESTWATER D2
LOCATION	SEC. 7, T17S, R24E	SEC. 17, T17S, R24E	SEC. 18, T17S, R24E
OWNER	OIL INC.	OIL, INC.	OIL INC.
COMPLETED	--/--/00	07/--/59	04/09/61
SAMPLED	07/07/60	07/07/60	03/02/63
FORMATION	CRET-CASTLEGATE	JURA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	1066	5540	4216
WELLHEAD PRESSURE,PSIG	210	1080	1040
OPEN FLOW, MCFD	700	17700	1124
COMPONENT, MOLE PCT			
METHANE	84.9	93.4	91.1
ETHANE	1.6	3.1	5.2
PROPANE	3.8	0.7	1.3
N-BUTANE	1.3	0.3	0.4
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.3	0.1	TRACE
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.1	0.5	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	0.5
HELIUM	0.02	0.10	0.08
HEATING VALUE*	1137	1073	1089
SPECIFIC GRAVITY	0.679	0.610	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11401 SAMPLE 8897	INDEX 11402 SAMPLE 11854	INDEX 11403 SAMPLE 17431
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WESTWATER	WESTWATER	WESTWATER
WELL NAME	WESTWATER E4	HORSEPOINT UNIT NO. M-6	U.S.A. NO. 1-34
LOCATION	SEC. 14, T17S, R23E	SEC. 32, T16S, R24E	SEC. 34, T16S, R24E
OWNER	OIL INC.	OIL INC.	F & M OIL CO.
COMPLETED	05/27/62	01/10/69	09/23/83
SAMPLED	03/21/63	04/24/69	09/25/84
FORMATION	JURA-ENTRADA	CRET-DAKOTA	CRET-DAKOTA & JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6346	6128	5866
WELLHEAD PRESSURE,PSIG	1214	1026	NOT GIVEN
OPEN FLOW, MCFD	4124	8137	1195
COMPONENT, MOLE PCT			
METHANE	75.1	94.0	85.5
ETHANE	1.9	3.1	4.3
PROPANE	0.5	0.5	1.3
N-BUTANE	0.1	0.2	0.5
ISOBUTANE	0.0	TRACE	0.7
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	0.0	TRACE	0.2
HEXANES PLUS	0.0	0.1	0.7
NITROGEN	18.0	0.5	5.6
OXYGEN	0.2	0.0	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	2.4	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.2	0.6
HELIUM	0.62	0.06	0.29
HEATING VALUE*	819	1041	1074
SPECIFIC GRAVITY	0.642	0.597	0.662

	INDEX 11404 SAMPLE 17432	INDEX 11405 SAMPLE 17596	INDEX 11406 SAMPLE 6455
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WESTWATER	WESTWATER	WILDCAT
WELL NAME	U.S.A. NO. 2-34	FED. NO. 1-34	FED. NO. 18-C-2
LOCATION	SEC. 34, T16S, R24E	SEC. 34, T16S, R24E	SEC. 18, T17S, R24E
OWNER	F & M OIL CO.	F & M OIL CO.	OIL INC., ET AL.
COMPLETED	10/14/83	11/01/83	11/06/57
SAMPLED	09/25/84	02/19/85	12/07/57
FORMATION	CRET-DAKOTA & JURA-MORRISON	JURA-NAVAJO & JURA-MORRISON	CRET-CASTLEGATE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5904	5866	764
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	193
OPEN FLOW, MCFD	663	1200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.6	88.1	82.6
ETHANE	8.2	4.3	6.7
PROPANE	3.4	1.1	2.2
N-BUTANE	1.0	0.4	0.5
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	5.3	3.8	5.1
OXYGEN	TRACE	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	1.0	0.8
HELIUM	0.10	0.17	0.02
HEATING VALUE*	1144	1058	1063
SPECIFIC GRAVITY	0.706	0.639	0.667

	INDEX 11407 SAMPLE 7914	INDEX 11408 SAMPLE 8023	INDEX 11409 SAMPLE 8815
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	GRAND	GRAND
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	SALT WASH NO. 1	HARLEY GOVT. NO. 1	A. LANDSDALE NO. 3
LOCATION	SEC. 15, T23S, R17E	SEC. 30, T18S, R25E	SEC. 3, T21S, R23E
OWNER	PAN AMERICAN PETROLEUM CORP.	BELCO PETROLEUM CORP.	A. LANDSDALE CO.
COMPLETED	--/--/00	03/21/60	10/07/62
SAMPLED	03/24/61	06/16/61	12/21/62
FORMATION	MISS-	CRET-DAKOTA	JURA-MORRISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8678	930	1332
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	345
OPEN FLOW, MCFD	NOT GIVEN	891	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	17.2	84.2	91.6
ETHANE	5.5	0.7	1.1
PROPANE	5.4	0.1	0.4
N-BUTANE	3.6	0.1	0.2
ISOBUTANE	1.9	0.1	0.1
N-PENTANE	1.3	0.0	TRACE
ISOPENTANE	1.1	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	1.0	TRACE	TRACE
NITROGEN	60.3	11.4	5.8
OXYGEN	TRACE	2.5	TRACE
ARGON	0.3	0.1	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.5	TRACE
HELIUM	0.90	0.20	0.42
HEATING VALUE*	756	877	972
SPECIFIC GRAVITY	1.055	0.627	0.591

	INDEX 11410 SAMPLE 9916	INDEX 11411 SAMPLE 2090	INDEX 11412 SAMPLE 2358
STATE	UTAH	UTAH	UTAH
COUNTY	GRAND	JUAB	SALT LAKE
FIELD	WILDCAT	NOT GIVEN	SALT LAKE BASIN
WELL NAME	SEGUNDO CANYON NO. 23-4	NOT GIVEN	NO. 1
LOCATION	SEC. 4, T17S, R21E	25 MI. NW OF DELTA	SEC. 21, T1N, R1W
OWNER	PACIFIC NATURAL GAS EXPL. CO	U.S. BUREAU OF MINES	WESTERN PETROLEUM DRLG. CO.
COMPLETED	09/25/63	--/--/00	--/--/00
SAMPLED	06/03/65	07/12/30	06/26/31
FORMATION	CRET-CEDAR MOUNTAIN	-1001 FT.	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	625	630
DEPTH, FEET	9754	NOT GIVEN	746
WELLHEAD PRESSURE,PSIG	1850	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	878	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	89.5	0.0	82.9
ETHANE	6.1	0.0	0.0
PROPANE	1.6	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.6	88.3	16.4
OXYGEN	0.0	3.5	0.6
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.3	8.3	0.0
HELIUM	0.03	0.15	0.08
HEATING VALUE*	1083	0	840
SPECIFIC GRAVITY	0.626	1.020	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11413 SAMPLE 2498	INDEX 11414 SAMPLE 6065	INDEX 11415 SAMPLE 6066
STATE	UTAH	UTAH	UTAH
COUNTY	SALT LAKE	SAN JUAN	SAN JUAN
FIELD	SALT LAKE VALLEY	ANETH	ANETH
WELL NAME	NEBEKER NO. 2	NAVAJO E-1	NAVAJO C-1
LOCATION	SEC. 21, T1N, R1W	SEC. 15, T40S, R24E	SEC. 23, T40S, R24E
OWNER	HENRY NEBEKER	TEXAS CO.	TEXAS CO.
COMPLETED	01/01/21	05/07/56	02/17/56
SAMPLED	05/13/32	05/26/56	05/26/56
FORMATION	NOT GIVEN	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	630	585	585
DEPTH, FEET	535	5630	5828
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.4	59.7	60.6
ETHANE	0.0	20.8	20.1
PROPANE	---	11.8	11.4
N-BUTANE	---	3.6	3.5
ISOBUTANE	---	1.3	1.3
N-PENTANE	---	0.6	0.6
ISOPENTANE	---	0.9	0.9
CYCLOPENTANE	---	0.2	0.1
HEXANES PLUS	---	0.4	0.3
NITROGEN	8.4	0.6	1.0
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	0.1	0.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	916	1541	1512
SPECIFIC GRAVITY	0.600	0.896	0.884

	INDEX 11416 SAMPLE 6067	INDEX 11417 SAMPLE 6217	INDEX 11418 SAMPLE 6246
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANETH	ANETH
WELL NAME	NAVAJO D-1	FED. ARROWHEAD NO. 1	NAVAJO E NO. 3
LOCATION	SEC. 22, T40S, R24E	SEC. 14, T40S, R23E	SEC. 9, T40S, R24E
OWNER	TEXAS CO.	THREE STATES NATURAL GAS CO.	TEXAS CO.
COMPLETED	04/27/56	11/19/56	11/25/56
SAMPLED	05/26/56	12/13/56	02/07/57
FORMATION	PENN-HERMOSA	PENN-PARADOX	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5846	5650	5468
WELLHEAD PRESSURE, PSIG	NOT GIVEN	910	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	515	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.3	55.2	70.6
ETHANE	24.7	24.0	4.2
PROPANE	14.2	9.7	6.6
N-BUTANE	1.2	2.9	1.1
ISOBUTANE	1.2	2.7	0.5
N-PENTANE	0.4	0.5	0.1
ISOPENTANE	0.5	1.4	TRACE
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.5	0.3	0.1
NITROGEN	2.0	3.0	13.7
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	0.7	0.0
HYDROGEN	TRACE	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	2.1	2.6
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1577	1460	1026
SPECIFIC GRAVITY	0.912	0.913	0.752

	INDEX 11419 SAMPLE 6357	INDEX 11420 SAMPLE 6471	INDEX 11421 SAMPLE 8069
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANETH	ANETH
WELL NAME	HICKMAN-FED. NO. 1	SE. N. RICE NO. 2	NORTH DESERT CREEK 43-14
LOCATION	SEC. 3, T40S, R23E	SEC. 23, T40S, R23E	SEC. 14, T41S, R23E
OWNER	CARTER OIL CO.	THREE STATES NATURAL GAS CO.	SHELL OIL CO.
COMPLETED	05/11/57	12/11/57	04/16/61
SAMPLED	08/09/57	01/08/58	07/07/61
FORMATION	PENN-HERMOSA	PENN-PARADOX	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6130	5650	5310
WELLHEAD PRESSURE, PSIG	225	695	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	436	228
COMPONENT, MOLE PCT			
METHANE	63.8	62.9	65.5
ETHANE	16.4	19.4	16.6
PROPANE	9.9	10.6	8.8
N-BUTANE	4.2	3.3	3.0
ISOBUTANE	1.9	1.5	1.6
N-PENTANE	1.1	0.6	0.9
ISOPENTANE	0.7	0.8	0.6
CYCLOPENTANE	0.3	0.1	0.3
HEXANES PLUS	0.7	0.4	0.7
NITROGEN	0.7	0.1	1.6
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.02	0.02	0.10
HEATING VALUE*	1527	1506	1456
SPECIFIC GRAVITY	0.889	0.870	0.853

	INDEX 11422 SAMPLE 17295	INDEX 11423 SAMPLE 1180	INDEX 11424 SAMPLE 8068
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANTICLINE E	BIG INDIAN
WELL NAME	MCELMO CREEK NO. T-18	CANYON NO. 1	BIG INDIAN U.S.A. NO. 1
LOCATION	SEC. 9, T41S, R25E	SEC. 28, T12N, R19S	SEC. 33, T29S, R24E
OWNER	SUPERIOR OIL CO.	UTAH SOUTHERN OIL CO.	PURE OIL CO.
COMPLETED	12/19/83	--/--/00	--/--/00
SAMPLED	05/--/84	11/07/25	07/10/61
FORMATION	PENN-DESERT CREEK	NOT GIVEN	MISS---
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5582	NOT GIVEN	9956
WELLHEAD PRESSURE, PSIG	225	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	505	40000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.4	---	56.7
ETHANE	14.1	---	6.9
PROPANE	5.8	---	2.0
N-BUTANE	1.6	---	0.6
ISOBUTANE	0.8	---	0.6
N-PENTANE	0.4	---	0.3
ISOPENTANE	0.4	---	0.1
CYCLOPENTANE	0.2	---	TRACE
HEXANES PLUS	0.3	---	0.3
NITROGEN	1.8	2.7	15.8
OXYGEN	0.1	---	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	97.3	15.8
HELIUM	0.04	0.07	0.80
HEATING VALUE*	1295	0	823
SPECIFIC GRAVITY	0.753	1.514	0.857

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11425 SAMPLE 8273	INDEX 11426 SAMPLE 8274	INDEX 11427 SAMPLE 8770
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BIG INDIAN	BIG INDIAN	BIG INDIAN
WELL NAME	BIG INDIAN U.S.A. NO. 1	NO. 1	BIG INDIAN NO. 3
LOCATION	SEC. 33, T29S, R24E	SEC. 33, T29S, R24E	SEC. 10, T30S, R25E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	08/--/61	--/--/00
SAMPLED	11/10/61	11/11/61	11/24/62
FORMATION	NOT GIVEN	MISS---	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	9800	9800	4617
WELLHEAD PRESSURE,PSIG	2157	2157	NOT GIVEN
OPEN FLOW, MCFD	44000	44000	266
COMPONENT, MOLE PCT			
METHANE	49.1	56.1	77.2
ETHANE	13.3	6.5	8.9
PROPANE	5.5	1.9	2.8
N-BUTANE	1.2	0.6	0.9
ISOBUTANE	0.8	0.6	0.5
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.4	0.3	0.2
NITROGEN	4.9	16.7	8.6
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.7	0.4	0.0
CARBON DIOXIDE	23.5	15.7	0.1
HELIUM	0.05	0.72	0.07
HEATING VALUE*	986	805	1093
SPECIFIC GRAVITY	0.976	0.859	0.697

	INDEX 11428 SAMPLE 9345	INDEX 11429 SAMPLE 6101	INDEX 11430 SAMPLE 6118
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BIG INDIAN	BLUFF	BLUFF
WELL NAME	BIG INDIAN NO. 4	BLUFF UNIT NO. 3	BLUFF UNIT NO. 3
LOCATION	SEC. 14, T30S, R25E	SEC. 4, T40S, R23E	SEC. 4, T40S, R23E
OWNER	PURE OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	02/05/64	--/--/00	--/--/00
SAMPLED	05/11/64	06/27/56	07/14/56
FORMATION	PENN-HERMOSA	PENN-HERMOSA U	MISS-LEADVILLE
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	3552	5454	6914
WELLHEAD PRESSURE,PSIG	1050	6	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.8	75.1	1.3
ETHANE	8.8	13.9	0.4
PROPANE	3.7	4.7	0.0
N-BUTANE	1.1	1.5	0.1
ISOBUTANE	0.8	0.7	0.1
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.2	0.6	0.0
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	1.3	1.9	11.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	85.7
HELIUM	0.03	0.03	0.42
HEATING VALUE*	1164	1282	45
SPECIFIC GRAVITY	0.697	0.749	1.448

	INDEX 11431 SAMPLE 6120	INDEX 11432 SAMPLE 6515	INDEX 11433 SAMPLE 5077
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLUFF	BLUFF	BLUFF UNIT
WELL NAME	BLUFF UNIT NO. 3	BLUFF BENCH UNIT NO. 4	SHELL BLUFF UNIT NO. 1
LOCATION	SEC. 4, T40S, R23E	SEC. 20, T40S, R22E	NOT GIVEN
OWNER	SHELL OIL CO.	CARTER OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	09/14/57	--/--/00
SAMPLED	07/16/56	03/05/58	09/05/51
FORMATION	MISS-LEADVILLE	PENN-HERMOSA	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6940	5366	7527
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6800
COMPONENT, MOLE PCT			
METHANE	1.2	60.5	0.7
ETHANE	0.4	17.0	0.1
PROPANE	0.0	9.8	0.2
N-BUTANE	0.2	4.5	0.1
ISOBUTANE	0.0	1.8	TRACE
N-PENTANE	0.1	1.7	TRACE
ISOPENTANE	0.1	1.8	0.0
CYCLOPENTANE	TRACE	0.5	0.0
HEXANES PLUS	0.2	1.7	0.1
NITROGEN	10.8	0.1	5.9
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.0	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	86.6	0.4	92.5
HELIUM	0.40	0.02	0.28
HEATING VALUE*	45	1640	21
SPECIFIC GRAVITY	1.456	0.954	1.487

	INDEX 11434 SAMPLE 1841	INDEX 11435 SAMPLE 4390	INDEX 11436 SAMPLE 4446
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE
WELL NAME	BOUNDARY BUTTE WELL	ENGLISH NO. 1	NOT GIVEN
LOCATION	SEC. 22, T43S, R22E	SEC. 22, T43S, R22E	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/14/29	01/21/48	02/25/48
FORMATION	PENN-PARADOX	PENN-PARADOX	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4560	4625	5250
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	15000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.5	64.2	28.4
ETHANE	20.2	15.2	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	29.1	19.5	45.6
OXYGEN	0.5	0.2	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	5.6	0.1	9.4
HELIUM	1.09	0.79	1.41
HEATING VALUE*	803	923	524
SPECIFIC GRAVITY	0.827	0.709	0.889

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11437 SAMPLE 4600	INDEX 11438 SAMPLE 6080	INDEX 11439 SAMPLE 6138
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE
WELL NAME	NAVAJO NO. 1	ENGLISH NO. 7	ENGLISH NO. 7
LOCATION	SEC. 25, T43S, R22E	SEC. 16, T43S, R22E	SEC. 16, T43S, R22E
OWNER	WESTERN NATURAL GAS CO.	WESTERN NATURAL GAS CO.	SAN JACINTO PETROLEUM CORP.
COMPLETED	--/--/00	--/--/00	06/08/56
SAMPLED	10/28/48	05/29/56	08/28/56
FORMATION	PENN-HERMOSA	PENN-HERMOSA	PENN-PARADOX U
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4985	4597	4329
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	30.4	66.1	66.6
ETHANE	14.4	4.6	5.7
PROPANE	---	2.7	2.2
N-BUTANE	---	0.9	1.1
ISOBUTANE	---	0.4	0.4
N-PENTANE	---	0.3	0.5
ISOPENTANE	---	0.3	0.4
CYCLOPENTANE	---	0.2	0.2
HEXANES PLUS	---	0.4	0.4
NITROGEN	43.8	17.4	16.0
OXYGEN	0.3	TRACE	0.1
ARGON	---	0.1	0.1
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	9.7	6.1	6.0
HELIUM	1.42	0.66	0.60
HEATING VALUE*	566	920	942
SPECIFIC GRAVITY	0.897	0.779	0.778

	INDEX 11440 SAMPLE 6364	INDEX 11441 SAMPLE 6562	INDEX 11442 SAMPLE 9655
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE
WELL NAME	NAVAJO TRIBAL NO. 3	ENGLISH NO. 10	ENGLISH NO. 9
LOCATION	SEC. 15, T43S, R22E	SEC. 21, T43S, R22E	SEC. 16, T43S, R22E
OWNER	SINCLAIR OIL & GAS CO.	WESTERN NATURAL GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	04/23/57	03/05/58	11/12/64
SAMPLED	08/18/57	04/25/58	11/12/64
FORMATION	PENN-PARADOX	PENN-PARADOX C	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4338	4648	4142
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1209	1186
OPEN FLOW, MCFD	NOT GIVEN	15000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.4	66.2	70.4
ETHANE	5.4	4.5	5.0
PROPANE	1.0	2.3	2.7
N-BUTANE	0.5	0.7	0.9
ISOBUTANE	0.6	0.3	0.1
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.5	0.2	0.2
NITROGEN	16.0	19.0	17.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	7.1	5.5	2.2
HELIUM	0.58	0.80	0.70
HEATING VALUE*	893	876	938
SPECIFIC GRAVITY	0.764	0.760	0.726

	INDEX 11443 SAMPLE 9656	INDEX 11444 SAMPLE 9657	INDEX 11445 SAMPLE 9659
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE	BOUNDARY BUTTE
WELL NAME	ENGLISH NO. 10	NAVAJO NO. 1	ENGLISH NO. 11
LOCATION	SEC. 21, T43S, R22E	SEC. 25, T43S, R22E	SEC. 26, T43S, R22E
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	11/12/64	--/--/00	--/--/00
SAMPLED	11/12/64	11/12/64	11/12/64
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4684	4370	NOT GIVEN
WELLHEAD PRESSURE,PSIG	807	900	965
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.6	69.9	67.8
ETHANE	4.5	4.2	4.6
PROPANE	2.5	2.6	2.7
N-BUTANE	0.7	0.7	0.9
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	19.3	16.6	19.1
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.9	4.5	3.1
HELIUM	0.80	0.90	0.82
HEATING VALUE*	865	891	904
SPECIFIC GRAVITY	0.746	0.730	0.740

	INDEX 11446 SAMPLE 9660	INDEX 11447 SAMPLE 6052	INDEX 11448 SAMPLE 6057
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE	BOUNDARY BUTTE E, UTAH	BOUNDARY BUTTE E, UTAH
WELL NAME	ENGLISH NO. 1	EAST BOUNDRY BUTTE NO. 3	NO. 3
LOCATION	SEC. 22, T43S, R22E	SEC. 25, T43S, R23E	SEC. 25, T43S, R23E
OWNER	SINCLAIR OIL & GAS CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	11/12/64	--/--/00	--/--/00
SAMPLED	11/12/64	04/15/56	04/22/56
FORMATION	PENN-PARADOX	PENN-HERMOSA	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5041
WELLHEAD PRESSURE,PSIG	300	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.1	77.3	87.4
ETHANE	5.4	4.8	2.4
PROPANE	2.6	2.4	1.4
N-BUTANE	0.9	0.6	0.5
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	19.4	9.3	2.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.3
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	4.0	3.8
HELIUM	0.70	0.43	0.44
HEATING VALUE*	924	992	1023
SPECIFIC GRAVITY	0.735	0.706	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11449 SAMPLE 5780	INDEX 11450 SAMPLE 5782	INDEX 11451 SAMPLE 5788
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE N	BOUNDARY BUTTE N	BOUNDARY BUTTE N
WELL NAME	BOUNDARY BUTTE N NO. 1	NO. 1	BOUNDARY BUTTE N NO. 1
LOCATION	SEC. 33, T42S, R22E	SEC. 33, T42S, R22E	SEC. 33, T42S, R22E
OWNER	SHELL OIL CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/16/55	02/24/55	03/06/55
FORMATION	PENN-HERMOSA	PENN-HERMOSA	DEVO-OURAY
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4662	3770	5807
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1740	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	52.5	64.2	7.5
ETHANE	8.2	8.6	0.4
PROPANE	6.7	5.1	0.5
N-BUTANE	2.3	1.4	0.1
ISOBUTANE	1.0	0.7	0.0
N-PENTANE	0.6	0.2	0.1
ISOPENTANE	0.7	0.4	0.0
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.2
NITROGEN	7.5	17.6	31.9
OXYGEN	0.1	TRACE	0.6
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	19.3	1.16	56.8
HELIUM	0.23	1048	1.58
HEATING VALUE*	1048	0.764	118
SPECIFIC GRAVITY	0.968		1.255

	INDEX 11452 SAMPLE 6063	INDEX 11453 SAMPLE 6064	INDEX 11454 SAMPLE 6403
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BOUNDARY BUTTE N	BOUNDARY BUTTE N	CAMONE MESA
WELL NAME	NO. 43-28	NO. 43-48	NAVAJO NO. 1
LOCATION	SEC. 28, T42S, R22E	SEC. 28, T42S, R22E	SEC. 21, T40S, R25E
OWNER	SHELL OIL CO.	SHELL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	03/31/56	03/31/56	04/24/57
SAMPLED	02/22/56	02/13/56	09/15/57
FORMATION	PENN-HERMOSA	PENN-HERMOSA	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5588	4681	5930
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	650
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	234
COMPONENT, MOLE PCT			
METHANE	71.8	60.9	53.6
ETHANE	13.4	4.5	20.9
PROPANE	6.1	2.4	12.1
N-BUTANE	1.5	0.8	5.6
ISOBUTANE	0.4	0.9	2.2
N-PENTANE	0.2	0.3	1.4
ISOPENTANE	0.3	0.0	1.4
CYCLOPENTANE	0.1	0.1	0.4
HEXANES PLUS	0.2	0.2	1.0
NITROGEN	3.7	14.1	0.6
OXYGEN	0.4	0.1	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	14.9	0.7
HELIUM	0.13	0.58	0.03
HEATING VALUE*	1218	824	1681
SPECIFIC GRAVITY	0.749	0.834	0.993

	INDEX 11455 SAMPLE 6239	INDEX 11456 SAMPLE 6865	INDEX 11457 SAMPLE 6866
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	CHINLE WASH	CHINLE WASH	CHINLE WASH
WELL NAME	OHIO-NAVAJO NO. 1	OHIO-NAVAJO NO. 4	OHIO-NAVAJO NO. 4
LOCATION	SEC. 9, T43S, R21E	SEC. 4, T43S, R21E	SEC. 4, T43S, R21E
OWNER	U.S. SMELTING, REFINING & MI	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	--/--/00	07/22/58	07/22/58
SAMPLED	01/20/57	11/06/58	11/06/58
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4917	4870	4810
WELLHEAD PRESSURE,PSIG	1397	1400	1400
OPEN FLOW, MCFD	85000	8255	10670
COMPONENT, MOLE PCT			
METHANE	69.7	69.7	69.7
ETHANE	5.8	5.6	5.5
PROPANE	2.6	2.4	2.2
N-BUTANE	0.8	0.6	0.6
ISOBUTANE	0.4	0.6	0.5
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.1	0.2	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	18.4	18.3	18.5
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.6	0.1
CARBON DIOXIDE	1.0	1.3	1.3
HELIUM	0.73	0.80	0.80
HEATING VALUE*	945	936	930
SPECIFIC GRAVITY	0.723	0.724	0.722

	INDEX 11458 SAMPLE 5991	INDEX 11459 SAMPLE 5641	INDEX 11460 SAMPLE 5685
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	COALBED CANYON	DESERT CREEK	DESERT CREEK
WELL NAME	COALBED CANYON UNIT NO. 2	DESERT CREEK NO. 1	DESERT CREEK NO. 2
LOCATION	SEC. 20, T35S, R26E	SEC. 2, T42S, R23E	SEC. 35, T41S, R23E
OWNER	GULF OIL CORP.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	12/08/55	06/19/54	09/08/54
FORMATION	MISS-LEADVILLE	DEVO-OURAY	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	5855	5145
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1035	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	7.4	6.3	65.1
ETHANE	0.7	0.4	17.9
PROPANE	0.0	0.8	8.5
N-BUTANE	0.1	0.1	2.3
ISOBUTANE	0.1	0.0	1.2
N-PENTANE	0.1	0.1	0.5
ISOPENTANE	TRACE	0.0	0.7
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	24.2	13.1	2.7
OXYGEN	4.5	TRACE	TRACE
ARGON	0.3	0.1	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	TRACE	0.0	0.0
CARBON DIOXIDE	62.3	77.5	0.1
HELIUM	0.30	1.37	0.06
HEATING VALUE*	104	105	1412
SPECIFIC GRAVITY	1.299	1.374	0.836

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11461 SAMPLE 5798	INDEX 11462 SAMPLE 6279	INDEX 11463 SAMPLE 6187
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	DESERT CREEK	DESERT CREEK NW	GOTHIC AREA
WELL NAME	D. C. 26-36	NAVAJO NO. 2	NAVAJO-GOTHIC NO. 2
LOCATION	SEC. 36, T41S, R23E	SEC. 11, T42S, R22E	SEC. 36, T40S, R21E
OWNER	SHELL OIL CO.	GULF OIL CORP.	CARTER OIL CO.
COMPLETED	04/30/55	01/29/57	11/12/56
SAMPLED	03/23/55	04/06/57	11/06/56
FORMATION	PENN-PARADOX	PENN-PARADOX	MISS-MADISON
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5444	5833	6706
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1000	2
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.1	58.2	1.0
ETHANE	19.4	21.9	0.2
PROPANE	9.0	10.8	0.0
N-BUTANE	2.4	3.1	0.1
ISOBUTANE	1.3	1.6	0.0
N-PENTANE	0.5	0.4	0.6
ISOPENTANE	0.6	0.8	0.0
CYCLOPENTANE	0.6	0.1	0.1
HEXANES PLUS	0.5	0.2	0.1
NITROGEN	2.7	0.6	3.9
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	0.0	0.1
HYDROGEN	TRACE	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.1	93.4
HELIUM	0.03	0.01	0.38
HEATING VALUE*	1425	1487	52
SPECIFIC GRAVITY	0.646	0.694	1.499

	INDEX 11464 SAMPLE 6591	INDEX 11465 SAMPLE 6971	INDEX 11466 SAMPLE 7260
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	GOTHIC MESA	LIME RIDGE	LISBON
WELL NAME	NO. 30-1	U.S. LIME RIDGE NO. 1	NW LISBON U.S.A. NO. 1
LOCATION	SEC. 7, T41S, R21E	SEC. 28, T40S, R20E	SEC. 10, T30S, R24E
OWNER	CARTER OIL CO.	KINGWOOD OIL CO.	PURE OIL CO.
COMPLETED	05/09/58	12/18/58	--/--/00
SAMPLED	05/08/58	02/14/59	10/20/59
FORMATION	MISS---	PENN-HERMOSA U	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6952	1088	7539
WELLHEAD PRESSURE,PSIG	NOT GIVEN	9	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.5	49.1	41.2
ETHANE	0.1	11.9	8.3
PROPANE	TRACE	0.6	1.2
N-BUTANE	0.1	0.1	1.9
ISOBUTANE	0.0	0.0	1.2
N-PENTANE	0.0	0.1	0.4
ISOPENTANE	0.0	0.0	1.4
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	TRACE	TRACE	0.7
NITROGEN	21.3	13.3	17.2
OXYGEN	2.7	TRACE	TRACE
ARGON	0.2	0.2	0.1
HYDROGEN	TRACE	2.2	TRACE
HYDROGEN SULFIDE**	0.0	0.9	0.1
CARBON DIOXIDE	73.2	17.9	25.0
HELIUM	0.90	0.70	1.00
HEATING VALUE*	20	766	875
SPECIFIC GRAVITY	1.371	0.865	1.022

	INDEX 11467 SAMPLE 7262	INDEX 11468 SAMPLE 7265	INDEX 11469 SAMPLE 7275
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON U.S.A. NO. 1	NW LISBON U.S.A. NO. 1	NW LISBON U.S.A. NO. 1
LOCATION	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/26/59	10/30/59	11/07/59
FORMATION	MISS-	MISS-	DEVO-CURAY
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7589	7629	7996
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	10000	300
COMPONENT, MOLE PCT			
METHANE	42.3	42.1	42.4
ETHANE	7.8	7.9	8.3
PROPANE	3.5	6.4	3.6
N-BUTANE	1.5	1.7	1.6
ISOBUTANE	0.9	0.4	1.1
N-PENTANE	0.2	0.3	0.4
ISOPENTANE	1.1	0.7	1.1
CYCLOPENTANE	0.2	0.1	0.3
HEXANES PLUS	0.6	0.4	0.8
NITROGEN	17.7	15.9	17.7
OXYGEN	0.1	0.1	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.1	0.2	0.0
CARBON DIOXIDE	22.9	22.5	21.6
HELIUM	1.10	1.00	1.00
HEATING VALUE*	835	874	880
SPECIFIC GRAVITY	1.002	1.002	1.007

	INDEX 11470 SAMPLE 7280	INDEX 11471 SAMPLE 7286	INDEX 11472 SAMPLE 7461
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON U.S.A. NO. 1	NW LISBON U.S.A. NO. 1	NW LISBON NO. 6-1
LOCATION	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E	SEC. 14, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/12/59	11/19/59	03/27/60
FORMATION	DEVO-ELBERT	DEVO-MCCRACKEN	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8176	8261	8309
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	305
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	4339
COMPONENT, MOLE PCT			
METHANE	54.9	58.5	42.8
ETHANE	11.4	13.3	7.5
PROPANE	2.0	8.0	6.0
N-BUTANE	2.1	2.3	1.4
ISOBUTANE	2.0	1.6	0.3
N-PENTANE	0.1	0.4	0.4
ISOPENTANE	1.9	1.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.6	0.3
NITROGEN	22.0	12.9	16.5
OXYGEN	0.5	TRACE	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.3	0.3	0.1
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	2.0	0.7	23.5
HELIUM	0.40	0.20	1.00
HEATING VALUE*	1047	1269	822
SPECIFIC GRAVITY	0.847	0.863	0.990

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11473 SAMPLE 7462	INDEX 11474 SAMPLE 7485	INDEX 11475 SAMPLE 7487
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON NO. B-1	NW LISBON NO. B-1	NW LISBON NO. 2
LOCATION	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/24/60	03/31/60	04/08/60
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8160	8339	8536
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	S
OPEN FLOW, MCFD	270	5000	897
COMPONENT, MOLE PCT			
METHANE	38.0	43.6	37.7
ETHANE	12.2	7.6	7.2
PROPANE	5.9	5.7	13.2
N-BUTANE	2.9	1.2	1.6
ISOBUTANE	2.0	0.4	0.0
N-PENTANE	0.6	0.4	0.5
ISOPENTANE	1.3	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.6	0.2	0.3
NITROGEN	9.9	17.2	15.9
OXYGEN	0.1	0.1	1.4
ARGON	0.1	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.2	TRACE	0.0
CARBON DIOXIDE	25.5	22.3	21.1
HELIUM	0.30	1.00	0.90
HEATING VALUE*	1039	812	948
SPECIFIC GRAVITY	1.091	0.972	1.040

	INDEX 11476 SAMPLE 7515	INDEX 11477 SAMPLE 7530	INDEX 11478 SAMPLE 7531
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	LISBON VALLEY NO. 1-C	NW LISBON NO. 2	NW LISBON NO. 2
LOCATION	SEC. 9, T30S, R24E	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E
OWNER	ELLIOTT PRODUCTION CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/19/60	04/21/60	04/23/60
FORMATION	MISS-	DEVO-MCCRACKEN	DEVO-MCCRACKEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8808	8885	8947
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5	5
OPEN FLOW, MCFD	NOT GIVEN	66	4
COMPONENT, MOLE PCT			
METHANE	36.1	64.7	60.8
ETHANE	10.7	13.6	16.6
PROPANE	10.2	7.9	9.2
N-BUTANE	2.5	2.2	3.2
ISOBUTANE	0.4	0.5	1.9
N-PENTANE	0.9	0.6	0.9
ISOPENTANE	0.0	0.3	0.7
CYCLOPENTANE	0.2	0.2	0.2
HEXANES PLUS	0.7	0.9	0.7
NITROGEN	4.7	4.8	4.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	31.3	4.2	1.3
HELIUM	0.30	0.10	0.10
HEATING VALUE*	1002	1280	1436
SPECIFIC GRAVITY	1.123	0.842	0.885

	INDEX 11479 SAMPLE 7574	INDEX 11480 SAMPLE 7575	INDEX 11481 SAMPLE 7614
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON B NO. 1	NW LISBON B NO. 1	NW LISBON NO. 3
LOCATION	SEC. 14, T30S, R24E	SEC. 14, T30S, R24E	SEC. 9, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	05/15/60	05/15/60	--/--/00
SAMPLED	06/04/60	06/04/60	05/14/60
FORMATION	MISS---	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8192	8192	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1805	1805	NOT GIVEN
OPEN FLOW, MCFD	33000	33000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	22.6	39.4	40.1
ETHANE	20.3	7.7	8.5
PROPANE	12.4	3.7	5.2
N-BUTANE	4.3	1.0	1.8
ISOBUTANE	2.9	0.6	0.3
N-PENTANE	0.6	0.2	0.4
ISOPENTANE	1.0	0.1	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.5	20.9	18.5
OXYGEN	0.4	1.3	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.6	TRACE	0.0
CARBON DIOXIDE	32.2	24.0	26.7
HELIUM	0.03	0.90	1.00
HEATING VALUE*	1240	705	804
SPECIFIC GRAVITY	1.256	0.987	1.020

	INDEX 11482 SAMPLE 7620	INDEX 11483 SAMPLE 7698	INDEX 11484 SAMPLE 7747
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON C-2	PUBCO LISBON FED. NO. 1-12	LISBON FED. NO. 1-12
LOCATION	SEC. 3, T30S, R24E	SEC. 12, T30S, R24E	SEC. 12, T30S, R24E
OWNER	PURE OIL CO.	PUBCO PETROLEUM CORP.	PUBCO PETROLEUM CORP.
COMPLETED	--/--/00	09/28/60	09/28/60
SAMPLED	07/22/60	09/28/60	10/27/60
FORMATION	-SALT SECTION	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5900	8434	8550
WELLHEAD PRESSURE,PSIG	NOT GIVEN	600	600
OPEN FLOW, MCFD	NOT GIVEN	2600	3394
COMPONENT, MOLE PCT			
METHANE	63.7	34.5	37.8
ETHANE	19.6	11.6	11.4
PROPANE	10.5	9.8	9.3
N-BUTANE	2.8	4.2	2.1
ISOBUTANE	1.2	1.8	0.6
N-PENTANE	0.6	1.6	0.6
ISOPENTANE	0.5	1.1	0.0
CYCLOPENTANE	TRACE	0.3	0.3
HEXANES PLUS	0.3	1.3	0.8
NITROGEN	0.2	6.9	7.6
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	TRACE
CARBON DIOXIDE	0.2	26.6	29.0
HELIUM	TRACE	0.30	0.90
HEATING VALUE*	1466	1207	997
SPECIFIC GRAVITY	0.848	1.177	1.094

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11485 SAMPLE 7783	INDEX 11486 SAMPLE 7784	INDEX 11487 SAMPLE 7847
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	BELCO NO. 2	LISBON FED. NO. 1-12	NO. 1-C
LOCATION	SEC. 16, T30S, R24E	SEC. 12, T30S, R24E	SEC. 9, T30S, R24E
OWNER	BELCO PETROLEUM CORP.	PUBCO PETROLEUM CORP.	ELLIOTT PRODUCTION CO.
COMPLETED	10/11/60	09/28/60	06/14/60
SAMPLED	11/22/60	11/22/60	02/08/61
FORMATION	MISS-	MISS---	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8548	8434	8640
WELLHEAD PRESSURE,PSIG	1072	NOT GIVEN	140
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	37.3	9.1	30.4
ETHANE	11.5	18.9	11.0
PROPANE	8.0	25.5	5.7
N-BUTANE	2.4	13.2	4.9
ISOBUTANE	0.9	6.7	3.1
N-PENTANE	0.5	2.8	2.0
ISOPENTANE	0.2	2.7	1.7
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.2	1.2	1.5
NITROGEN	8.4	0.6	9.1
OXYGEN	TRACE	0.8	0.2
ARGON	TRACE	0.1	0.1
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	1.0	0.2
CARBON DIOXIDE	30.2	17.7	29.6
HELIUM	0.40	TRACE	0.30
HEATING VALUE*	943	2071	1170
SPECIFIC GRAVITY	1.087	1.527	1.230

	INDEX 11488 SAMPLE 7848	INDEX 11489 SAMPLE 7849	INDEX 11490 SAMPLE 7850
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	STATE NO. 2	ARNOLD 21-15	NO. C-1
LOCATION	SEC. 16, T30S, R24E	SEC. 15, T30S, R24E	SEC. 4, T30S, R24E
OWNER	BELCO PETROLEUM CORP.	CALIFORNIA OIL CO.	PURE OIL CO.
COMPLETED	10/11/60	--/--/00	06/07/60
SAMPLED	02/08/61	02/08/61	02/08/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8221	8098	8296
WELLHEAD PRESSURE,PSIG	950	NOT GIVEN	1800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	43.1	33.5	41.6
ETHANE	7.9	11.5	10.4
PROPANE	3.1	6.0	2.4
N-BUTANE	0.7	4.9	0.8
ISOBUTANE	0.4	2.8	0.9
N-PENTANE	0.2	1.7	0.2
ISOPENTANE	TRACE	1.3	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.4	1.1	0.3
NITROGEN	13.7	9.8	13.9
OXYGEN	0.1	0.2	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.3	0.1
CARBON DIOXIDE	29.9	26.3	28.3
HELIUM	0.40	0.40	0.60
HEATING VALUE*	710	1153	768
SPECIFIC GRAVITY	0.995	1.177	1.008

	INDEX 11491 SAMPLE 7851	INDEX 11492 SAMPLE 7852	INDEX 11493 SAMPLE 7854
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	STATE NO. 2	NO. 1-C	NO. 1-12
LOCATION	SEC. 16, T30S, R24E	SEC. 9, T30S, R24E	SEC. 12, T30S, R24E
OWNER	BELCO PETROLEUM CORP.	ELLIOTT PRODUCTION CO.	PUBCO PETROLEUM CORP.
COMPLETED	10/11/60	06/14/60	09/28/60
SAMPLED	02/08/61	02/08/61	02/08/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8221	8640	8434
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1300
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.9	31.1	37.8
ETHANE	11.3	11.6	12.0
PROPANE	4.9	5.3	6.1
N-BUTANE	1.7	3.9	2.7
ISOBUTANE	1.2	2.6	1.9
N-PENTANE	0.4	1.1	0.8
ISOPENTANE	0.3	1.1	0.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.9	0.4
NITROGEN	9.6	9.5	9.5
OXYGEN	0.1	0.2	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.3	0.3
CARBON DIOXIDE	32.9	31.9	27.9
HELIUM	0.40	0.40	0.40
HEATING VALUE*	846	1029	974
SPECIFIC GRAVITY	1.085	1.183	1.089

	INDEX 11494 SAMPLE 7855	INDEX 11495 SAMPLE 7947	INDEX 11496 SAMPLE 7954
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	ARNOLD 21-15	NO. C-3	NO. W. E-1
LOCATION	SEC. 15, T30S, R24E	SEC. 3, T30S, R24E	SEC. 15, T30S, R24E
OWNER	CALIFORNIA OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	03/07/61	04/01/61
SAMPLED	02/08/61	04/27/61	05/06/61
FORMATION	DEVO-DURAY	MISS-	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	8605	8000	8571
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1800	1150
OPEN FLOW, MCFD	NOT GIVEN	33250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	36.4	43.6	43.1
ETHANE	13.1	7.9	9.4
PROPANE	4.3	3.7	3.3
N-BUTANE	3.0	1.2	1.1
ISOBUTANE	2.4	0.6	0.8
N-PENTANE	0.6	0.4	0.3
ISOPENTANE	0.8	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.0	16.7	13.5
OXYGEN	TRACE	0.2	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.3	TRACE
CARBON DIOXIDE	28.7	23.9	27.5
HELIUM	0.30	1.10	0.50
HEATING VALUE*	972	777	786
SPECIFIC GRAVITY	1.099	0.976	1.001

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11497 SAMPLE 7968	INDEX 11498 SAMPLE 7977	INDEX 11499 SAMPLE 7980
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW LISBON NO. B-1	NW LISBON NO. C-1	NW LISBON NO. C-1
LOCATION	SEC. 14, T30S, R24E	SEC. 4, T30S, R24E	SEC. 4, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	05/--/60	06/21/60	06/21/60
SAMPLED	05/08/61	05/17/61	05/17/61
FORMATION	MISS---	MISS---	MISS-
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6198	8738	8738
WELLHEAD PRESSURE,PSIG	1775	1650	1650
OPEN FLOW, MCFD	33000	33000	33000
COMPONENT, MOLE PCT			
METHANE	1.8	5.0	41.3
ETHANE	11.9	26.7	7.9
PROPANE	43.7	23.0	3.4
N-BUTANE	18.9	7.9	0.9
ISOBUTANE	11.1	4.9	0.5
N-PENTANE	3.2	1.7	0.2
ISOPENTANE	2.8	1.6	0.1
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	1.1	1.0	0.1
NITROGEN	0.9	0.0	15.7
OXYGEN	0.9	1.1	0.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE**	1.3	1.7	0.6
CARBON DIOXIDE	2.2	24.9	27.7
HELIUM	0.01	0.01	1.00
HEATING VALUE*	2695	1769	717
SPECIFIC GRAVITY	1.690	1.461	0.994

	INDEX 11500 SAMPLE 7996	INDEX 11501 SAMPLE 8043	INDEX 11502 SAMPLE 8072
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LISBON	LISBON
WELL NAME	NW 8-2	NO. A-1	U.S.A. A-1
LOCATION	SEC. 14, T30S, R24E	SEC. 10, T30S, R24E	SEC. 10, T30S, R24E
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	--/--/60	01/03/60	01/04/60
SAMPLED	05/20/61	06/24/61	07/13/61
FORMATION	MISS-	MISS-	MISS---
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7590
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1750	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	12150	12150
COMPONENT, MOLE PCT			
METHANE	34.0	42.0	33.2
ETHANE	14.0	8.0	14.0
PROPANE	7.5	5.5	9.6
N-BUTANE	2.7	1.2	2.1
ISOBUTANE	1.7	0.3	0.7
N-PENTANE	0.7	0.3	0.5
ISOPENTANE	0.8	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	7.6	15.2	2.9
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.2	1.0
CARBON DIOXIDE	30.6	25.8	35.6
HELIUM	0.20	1.10	0.10
HEATING VALUE*	1001	785	962
SPECIFIC GRAVITY	1.124	0.995	1.141

	INDEX 11503 SAMPLE 8073	INDEX 11504 SAMPLE 8270	INDEX 11505 SAMPLE 8271
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	LISBON	LITTLE VALLEY	LITTLE VALLEY
WELL NAME	U.S.A. A-1	LISBON FED. NO. 2-21-F	LISBON FED. NO. 2-21-F
LOCATION	SEC. 10, T30S, R24E	SEC. 21, T30S, R25E	SEC. 21, T30S, R25E
OWNER	PURE OIL CO.	PUBCO PETROLEUM CORP.	PUBCO PETROLEUM CORP.
COMPLETED	01/04/60	11/15/61	11/15/61
SAMPLED	07/13/61	11/15/61	10/30/61
FORMATION	MISS-	MISS---	MISS---
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7590	9313	9269
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	12150	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	40.6	63.0	65.8
ETHANE	8.0	5.2	5.1
PROPANE	5.1	1.2	1.7
N-BUTANE	1.3	0.5	0.5
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.4	0.1	0.2
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	15.8	10.1	9.6
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.2	1.0	0.2
CARBON DIOXIDE	26.6	17.1	15.5
HELIUM	1.10	0.69	0.68
HEATING VALUE*	781	930	852
SPECIFIC GRAVITY	1.009	0.831	0.808

	INDEX 11506 SAMPLE 6409	INDEX 11507 SAMPLE 6600	INDEX 11508 SAMPLE 9803
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MCELMO	MCELMO CREEK	MCELMO MESA
WELL NAME	NAVAJO TRACT 114-3	NAVAJO NO. C-4	NAVAJO AC NO. 7
LOCATION	SEC. 17, T41S, R25E	SEC. 61, T41S, R25E	SEC. 4, T41S, R26E
OWNER	CARTER OIL CO.	SUPERIOR OIL CO.	TEXACO INC.
COMPLETED	09/07/57	01/01/58	03/01/65
SAMPLED	09/21/57	05/20/58	03/10/65
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-ISMAY
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5295	5470	5569
WELLHEAD PRESSURE,PSIG	700	610	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	175	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.2	62.4	60.4
ETHANE	20.6	19.6	19.2
PROPANE	12.0	10.7	10.6
N-BUTANE	3.8	3.1	3.8
ISOBUTANE	1.8	1.7	1.8
N-PENTANE	0.8	0.5	0.8
ISOPENTANE	0.8	0.9	0.7
CYCLOPENTANE	0.2	0.2	0.3
HEXANES PLUS	0.6	0.5	0.8
NITROGEN	0.0	0.2	1.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1576	1516	1523
SPECIFIC GRAVITY	0.911	0.877	0.897

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11509 SAMPLE 9804	INDEX 11510 SAMPLE 10525	INDEX 11511 SAMPLE 6050
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	MCELMO MESA	MCELMO MESA	NOT GIVEN
WELL NAME	NAVAJO AC NO. 7	AC NO. 8	NAVAJO A-1
LOCATION	SEC. 4, T41S, R26E	SEC. 4, T41S, R26E	SEC. 14, T40S, R24E
OWNER	TEXACO INC.	TEXACO INC.	SUPERIOR OIL CO.
COMPLETED	03/01/65	--/--/00	--/--/00
SAMPLED	03/10/65	04/05/66	04/07/56
FORMATION	PENN-ISMAY	PENN-ISMAY	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5569	5798	5805
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	60.5	68.5	59.5
ETHANE	19.0	17.2	19.6
PROPANE	10.7	8.4	11.6
N-BUTANE	3.5	2.0	3.7
ISOBUTANE	1.7	1.2	1.6
N-PENTANE	0.8	0.3	0.8
ISOPENTANE	0.8	0.3	1.0
CYCLOPENTANE	0.3	TRACE	0.2
HEXANES PLUS	0.8	0.2	0.6
NITROGEN	1.8	1.6	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1527	1364	1599
SPECIFIC GRAVITY	0.899	0.798	0.907

	INDEX 11512 SAMPLE 6877	INDEX 11513 SAMPLE 8531	INDEX 11514 SAMPLE 8789
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	DEADMAN CANYON NO. 1	NAVAJO "D" NO. 30	BIG INDIAN NO. 3
LOCATION	SEC. 20, T37S, R24E	SEC. 20, T40S, R24E	SEC. 10, T30S, R26E
OWNER	PAN AMERICAN PETROLEUM CORP.	TEXACO INC.	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/30/58	04/26/62	11/30/62
FORMATION	MISS-LEADVILLE & MADISON	NOT GIVEN	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	7980	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2000	NOT GIVEN	250
COMPONENT, MOLE PCT			
METHANE	0.4	0.6	81.4
ETHANE	0.2	0.2	7.8
PROPANE	0.0	0.7	3.1
N-BUTANE	0.1	0.1	1.0
ISOBUTANE	0.1	0.0	0.5
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.0	0.5
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	4.8	23.0	5.0
OXYGEN	0.4	4.8	TRACE
ARGON	TRACE	0.2	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	93.6	69.9	0.1
HELIUM	0.20	0.15	0.04
HEATING VALUE*	20	46	1146
SPECIFIC GRAVITY	1.494	1.374	0.688

	INDEX 11515 SAMPLE 6701	INDEX 11516 SAMPLE 7068	INDEX 11517 SAMPLE 8411
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	RATHERFORD	ROLLING MESA	SHAFER CANYON
WELL NAME	NORTH DESERT CREEK NO. 13-13	GOVT. FEHR-LYON NO. 1	U.S.A. NO. 1
LOCATION	SEC. 13, T41S, R23E	SEC. 33, T40S, R21E	SEC. 6, T27S, R20E
OWNER	SHELL OIL CO.	CARTER OIL CO.	SOUTHERN NATURAL GAS CO.
COMPLETED	04/18/58	05/12/59	02/13/62
SAMPLED	06/20/58	05/12/59	02/13/62
FORMATION	PENN-PARADOX	MISS---	PENN---
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5343	6150	5808
WELLHEAD PRESSURE,PSIG	1200	NOT GIVEN	2525
OPEN FLOW, MCFD	900	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.7	4.5	60.7
ETHANE	19.8	0.6	19.5
PROPANE	11.7	4.8	12.0
N-BUTANE	3.4	0.1	3.8
ISOBUTANE	1.7	0.0	1.6
N-PENTANE	0.6	0.3	0.7
ISOPENTANE	0.8	0.0	0.3
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.5	0.3	0.3
NITROGEN	0.2	18.3	1.8
OXYGEN	TRACE	0.8	TRACE
ARGON	0.0	0.1	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	69.2	0.1
HELIUM	0.02	0.90	0.06
HEATING VALUE*	1538	212	1493
SPECIFIC GRAVITY	0.890	1.371	0.879

	INDEX 11518 SAMPLE 6883	INDEX 11519 SAMPLE 5852	INDEX 11520 SAMPLE 6448
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TOHONADLA	WHITE MESA	WHITE MESA
WELL NAME	TOHONADLA LEASE	WHITE MESA NO. 1	NAVAJO NO. F-1
LOCATION	SEC. 35, T41S, R21E	SEC. 6, T43S, R24E	SEC. 23, T41S, R24E
OWNER	SHELL OIL CO.	SHELL OIL CO.	SUPERIOR OIL CO.
COMPLETED	--/--/00	--/--/00	03/--/57
SAMPLED	12/01/58	05/25/55	11/26/57
FORMATION	PENN-HERMOSA U	PENN-HERMOSA	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5200	6065	5445
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	530
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	270
COMPONENT, MOLE PCT			
METHANE	60.3	78.9	55.3
ETHANE	21.8	7.7	24.1
PROPANE	9.1	4.5	13.7
N-BUTANE	2.6	1.5	3.3
ISOBUTANE	1.7	0.6	1.7
N-PENTANE	0.3	0.6	0.6
ISOPENTANE	0.8	0.1	0.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	2.6	4.0	0.0
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.3	0.0
CARBON DIOXIDE	0.2	0.4	0.1
HELIUM	0.10	0.53	0.01
HEATING VALUE*	1449	1173	1591
SPECIFIC GRAVITY	0.861	0.711	0.923

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11521 SAMPLE 5598	INDEX 11522 SAMPLE 5982	INDEX 11523 SAMPLE 6028
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	STATE NO. 1	EGALBED CANYON UNIT NO. 1	NAVAJO C NO. 1
LOCATION	SEC. 32, T29S, R23E	SEC. 15, T35S, R25E	SEC. 23, T40S, R24E
OWNER	THREE STATES NATURAL GAS CO.	GULF OIL CORP.	TEXAS CO.
COMPLETED	--/--/00	08/15/55	02/17/56
SAMPLED	03/01/54	12/05/55	02/18/56
FORMATION	NOT GIVEN	PENN-PARADOX	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6014	5762	5800
WELLHEAD PRESSURE,PSIG	180	1426	325
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.4	76.5	59.8
ETHANE	14.8	11.7	20.0
PROPANE	6.2	4.7	12.0
N-BUTANE	2.1	2.0	3.6
ISOBUTANE	1.0	1.6	1.4
N-PENTANE	0.7	1.0	0.6
ISOPENTANE	0.3	0.5	1.0
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	0.5	1.0	0.4
NITROGEN	0.6	0.6	0.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1340	1347	1541
SPECIFIC GRAVITY	0.781	0.772	0.898

	INDEX 11524 SAMPLE 6051	INDEX 11525 SAMPLE 6147	INDEX 11526 SAMPLE 6248
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NAVAJO 1-A	RECAPTURE CREEK UNIT NO. 1	ANIDO CREEK NO. 1
LOCATION	SEC. 14, T40S, R24E	SEC. 21, T40S, R23E	SEC. 33, T43S, R25E
OWNER	SUPERIOR OIL CO.	SHELL OIL CO.	CARTER OIL CO.
COMPLETED	--/--/00	09/26/56	--/--/00
SAMPLED	04/05/56	09/17/56	02/13/57
FORMATION	PENN-HERMOSA	PENN-HERMOSA	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5694	5333	5956
WELLHEAD PRESSURE,PSIG	2135	680	NOT GIVEN
OPEN FLOW, MCFD	68	300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.6	24.2	88.0
ETHANE	20.2	24.3	3.9
PROPANE	11.2	26.3	2.4
N-BUTANE	3.7	11.7	0.9
ISOBUTANE	1.4	5.0	0.5
N-PENTANE	0.9	3.0	0.3
ISOPENTANE	0.9	2.8	0.2
CYCLOPENTANE	0.3	0.5	0.1
HEXANES PLUS	0.7	1.6	0.3
NITROGEN	1.2	0.5	2.5
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.4	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.6
HELIUM	0.01	0.01	0.32
HEATING VALUE*	1544	2276	1111
SPECIFIC GRAVITY	0.906	1.355	0.653

	INDEX 11527 SAMPLE 6249	INDEX 11528 SAMPLE 6632	INDEX 11529 SAMPLE 7873
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	ANIDO CREEK NO. 1	NAVAJO TRACT 40 NO. 1	LA SAL USA NO. 1
LOCATION	SEC. 33, T43S, R25E	SEC. 9, T41S, R22E	SEC. 17, T29S, R24E
OWNER	CARTER OIL CO.	CARTER OIL CO.	PURE OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/06/57	06/09/58	12/12/60
FORMATION	PENN-PARADOX	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	5500	5620	NOT GIVEN
WELLHEAD PRESSURE,PSIG	5	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	15	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	65.0	59.1	81.7
ETHANE	18.8	19.1	7.0
PROPANE	9.7	10.5	2.6
N-BUTANE	2.7	4.1	0.6
ISOBUTANE	1.3	2.1	0.3
N-PENTANE	0.5	1.5	0.1
ISOPENTANE	0.4	0.8	0.1
CYCLOPENTANE	0.1	0.5	TRACE
HEXANES PLUS	0.2	1.3	0.1
NITROGEN	1.0	0.6	7.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.08	0.02	TRACE
HEATING VALUE*	1434	1619	1065
SPECIFIC GRAVITY	0.834	0.943	0.665

	INDEX 11530 SAMPLE 8346	INDEX 11531 SAMPLE 8413	INDEX 11532 SAMPLE 8775
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	LISBON FED. NO. 2-21-F	SPILLER CANYON NO. 1	BIG INDIAN NO. 3
LOCATION	SEC. 21, T30S, R25E	SEC. 16, T30S, R25E	SEC. 10, T30S, R25E
OWNER	PUBCO PETROLEUM CORP.	PURE OIL CO.	PURE OIL CO.
COMPLETED	11/22/61	--/--/00	--/--/00
SAMPLED	12/09/61	02/20/62	11/20/62
FORMATION	MISS-	PENN-PARADOX	PENN-HERMOSA
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	9270	4830	4222
WELLHEAD PRESSURE,PSIG	2090	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.3	70.8	59.1
ETHANE	5.1	7.5	21.0
PROPANE	2.1	2.6	10.9
N-BUTANE	1.5	1.2	2.9
ISOBUTANE	0.3	0.8	1.7
N-PENTANE	0.2	0.5	0.5
ISOPENTANE	0.1	0.5	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.3	0.5	0.3
NITROGEN	9.9	14.9	2.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	0.2	0.0	0.0
CARBON DIOXIDE	16.5	0.1	0.1
HELIUM	0.31	0.10	0.01
HEATING VALUE*	878	1064	1479
SPECIFIC GRAVITY	0.842	0.746	0.879

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11533 SAMPLE 8817	INDEX 11534 SAMPLE 8538	INDEX 11535 SAMPLE 9088
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	NO. 3	U.S.A. 8 NO. 1	LITTLE VALLEY NO. 2
LOCATION	SEC. 3, T27S, R21E	SEC. 9, T35S, R25E	NOT GIVEN
OWNER	HUMBLE OIL & REFINING CO.	TEXAS PACIFIC COAL & OIL CO.	PACIFIC NATURAL GAS EXPL. CO
COMPLETED	11/15/63	--/--/00	--/--/00
SAMPLED	12/25/62	04/18/63	09/23/63
FORMATION	PENN-PARADOX	MISS---	-CLASTIC BEDS
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	4860	7034	4526
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	300
OPEN FLOW, MCFD	53	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.0	5.2	61.4
ETHANE	12.1	0.4	16.6
PROPANE	4.8	0.3	9.1
N-BUTANE	1.3	TRACE	3.6
ISOBUTANE	0.6	TRACE	1.1
N-PENTANE	0.3	0.0	1.5
ISOPENTANE	0.4	0.0	1.3
CYCLOPENTANE	0.1	TRACE	0.5
HEXANES PLUS	0.2	0.1	2.4
NITROGEN	5.1	4.9	0.4
OXYGEN	0.8	0.1	0.0
ARGON	TRACE	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	88.6	0.1
HELIUM	0.03	0.40	0.02
HEATING VALUE*	1199	73	1643
SPECIFIC GRAVITY	0.740	1.446	0.954

	INDEX 11536 SAMPLE 9199	INDEX 11537 SAMPLE 11612	INDEX 11538 SAMPLE 11613
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	BIG INDIAN NO. 4	NAVAJO MACMULLEN NO. 1	NAVAJO MACMULLEN NO. 1
LOCATION	SEC. 14, T30S, R25E	SEC. 15, T42S, R26E	SEC. 15, T42S, R26E
OWNER	PURE OIL CO.	WESTERN HYDROCARBONS CORP.	WESTERN HYDROCARBONS CORP.
COMPLETED	--/--/00	--/--/01	08/05/68
SAMPLED	12/08/63	08/01/68	08/04/68
FORMATION	PENN-HERMOSA	PENN-	PENN---
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	5890	5886
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.5	62.2	58.5
ETHANE	8.1	18.4	19.0
PROPANE	2.4	10.7	11.2
N-BUTANE	0.9	3.0	4.2
ISOBUTANE	0.1	1.5	1.5
N-PENTANE	0.1	1.0	1.2
ISOPENTANE	0.4	0.4	1.1
CYCLOPENTANE	TRACE	0.4	0.4
HEXANES PLUS	0.1	0.9	1.0
NITROGEN	4.1	1.4	1.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.0	0.1
HELIUM	0.03	0.02	0.09
HEATING VALUE*	1114	1510	1581
SPECIFIC GRAVITY	0.665	0.883	0.931

	INDEX 11539 SAMPLE 12170	INDEX 11540 SAMPLE 12940	INDEX 11541 SAMPLE 12941
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	FED. NO. 1-22	KIMBARK OPERATING CO. NO. 1	KIMBARK OPERATING CO. NO. 1
LOCATION	SEC. 22, T37S, R23E	SEC. 22, T38S, R20E	SEC. 22, T38S, R20E
OWNER	BUTTES GAS & OIL CO.	KIMBARK OPERATING CO.	KIMBARK OPERATING CO.
COMPLETED	--/--/01	--/--/00	--/--/00
SAMPLED	01/06/70	07/26/71	07/26/71
FORMATION	PENN-DESERT CREEK	PENN-PARADOX	PENN-PARADOX
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	6379	2050	2050
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.4	53.8	53.9
ETHANE	15.1	11.1	11.1
PROPANE	9.7	4.1	4.2
N-BUTANE	3.2	0.8	0.7
ISOBUTANE	1.9	0.3	0.4
N-PENTANE	1.3	0.3	0.2
ISOPENTANE	0.7	0.0	0.0
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	1.3	0.2	0.1
NITROGEN	1.9	27.3	27.4
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	0.5
HELIUM	0.01	1.34	1.34
HEATING VALUE*	1519	914	908
SPECIFIC GRAVITY	0.891	0.793	0.790

	INDEX 11542 SAMPLE 16774	INDEX 11543 SAMPLE 6035	INDEX 11544 SAMPLE 8727
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SANPETE	SANPETE
FIELD	WILDCAT	JOES VALLEY	JOES VALLEY
WELL NAME	MUSTANG NO. 1	JOES VALLEY UNIT NO. 1-X	JOES VALLEY UNIT NO. 1-X
LOCATION	SEC. 27, T36S, R23E	SEC. 17, T15S, R6E	SEC. 17, T15S, R6E
OWNER	SKYLINE OIL CO.	THREE STATES NATURAL GAS CO.	DELHI-TAYLOR OIL CORP.
COMPLETED	07/31/82	11/14/55	--/--/00
SAMPLED	02/22/83	02/26/56	10/22/62
FORMATION	PENN-ISMAY	CRET-FERRON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	585	630	630
DEPTH, FEET	6152	7090	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2100	1368	NOT GIVEN
OPEN FLOW, MCFD	8900	7400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.8	97.9	86.0
ETHANE	10.6	0.2	4.6
PROPANE	4.4	0.0	2.9
N-BUTANE	1.2	0.0	0.9
ISOBUTANE	0.5	0.0	1.0
N-PENTANE	0.2	0.0	0.3
ISOPENTANE	0.5	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	7.0	0.9	3.1
OXYGEN	1.1	TRACE	0.5
ARGON	0.1	0.0	0.0
HYDROGEN	0.2	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1154	996	1129
SPECIFIC GRAVITY	0.733	0.563	0.668

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1A - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11545 SAMPLE 8732	INDEX 11546 SAMPLE 8384	INDEX 11547 SAMPLE 8386
STATE	UTAH	UTAH	UTAH
COUNTY	SANPETE	SEVIER	SEVIER
FIELD	JOES VALLEY	EMERY UNIT	EMERY UNIT
WELL NAME	JOES VALLEY UNIT NO. 3	EMERY UNIT NO. 1	EMERY UNIT NO. 1
LOCATION	SEC. 20, T19S, R6E	SEC. 34, T22S, R5E	SEC. 34, T22S, R5E
OWNER	DELHI-TAYLOR OIL CORP.	SKELLY OIL CO.	SKELLY OIL CO.
COMPLETED	00/--/00	02/16/62	02/16/62
SAMPLED	10/22/62	01/29/62	02/--/62
FORMATION	CRET-FERRON	PERM---	PERM-COCONINO
GEOLOGIC PROVINCE CODE	630	630	630
DEPTH, FEET	NOT GIVEN	8985	8730
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	1.4	3.0
ETHANE	4.6	0.2	0.5
PROPANE	3.1	TRACE	0.5
N-BUTANE	0.9	TRACE	0.1
ISOBUTANE	0.9	0.0	0.0
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	1.1	5.4	3.3
OXYGEN	TRACE	0.6	0.1
ARGON	0.0	0.1	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	92.2	91.7
HELIUM	0.02	0.14	0.69
HEATING VALUE*	1159	18	65
SPECIFIC GRAVITY	0.659	1.480	1.473

	INDEX 11548 SAMPLE 8390	INDEX 11549 SAMPLE 15587	INDEX 11550 SAMPLE 16078
STATE	UTAH	UTAH	UTAH
COUNTY	SEVIER	SUMMIT	SUMMIT
FIELD	EMERY UNIT	ANSCHUTZ RANCH E	ANSCHUTZ RANCH E
WELL NAME	EMERY UNIT NO. 1	ANSCHUTZ RANCH NO. 3-1	BOUNTIFUL LIVESTOCK NO. 1
LOCATION	SEC. 34, T22S, R5E	SEC. 3, T3N, R7E	SEC. 16, T4N, R8E
OWNER	SKELLY OIL CO.	ANSCHUTZ CORP.	AMOCO PRODUCTION CO.
COMPLETED	02/16/62	03/15/79	03/27/80
SAMPLED	02/24/62	05/15/79	09/16/80
FORMATION	MISS---	JURA-TWIN CREEK	JURA-NUGGET
GEOLOGIC PROVINCE CODE	630	570	570
DEPTH, FEET	9639	6672	13350
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1300	2950
OPEN FLOW, MCFD	NOT GIVEN	1003	5000
COMPONENT, MOLE PCT			
METHANE	1.6	79.6	77.4
ETHANE	0.1	7.1	13.0
PROPANE	0.1	2.8	5.1
N-BUTANE	TRACE	1.0	1.0
ISOBUTANE	0.0	0.8	0.8
N-PENTANE	0.0	0.4	0.2
ISOPENTANE	0.0	0.5	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.4	0.4
NITROGEN	2.1	7.2	1.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	95.7	0.1	0.4
HELIUM	0.08	0.09	0.02
HEATING VALUE*	21	1130	1232
SPECIFIC GRAVITY	1.496	0.705	0.718

	INDEX 11551 SAMPLE 16506	INDEX 11552 SAMPLE 17373	INDEX 11553 SAMPLE 15089
STATE	UTAH	UTAH	UTAH
COUNTY	SUMMIT	SUMMIT	SUMMIT
FIELD	ANSCHUTZ RANCH E	CAVE CREEK	PINEVIEW
WELL NAME	CHAMPLIN 456 F-2	CAVE CREEK NO. 12-30	UNION PACIFIC RR NO. 3-2
LOCATION	SEC. 21, T4N, R8E	SEC. 30, T5N, R8E	SEC. 3, T2N, R7E
OWNER	AMOCO PRODUCTION CO.	ANSCHUTZ CORP.	AMERICAN QUASAR PET. CO.
COMPLETED	12/--/81	06/04/83	02/11/77
SAMPLED	01/15/82	08/06/84	08/30/77
FORMATION	JURA-NUGGET	JURA-TWIN CREEK	JURA-TWIN CREEK
GEOLOGIC PROVINCE CODE	570	570	570
DEPTH, FEET	15132	6908	9455
WELLHEAD PRESSURE,PSIG	3520	2975	850
OPEN FLOW, MCFD	NOT GIVEN	5643	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	75.5	16.7
ETHANE	11.3	8.3	26.9
PROPANE	4.0	3.8	34.6
N-BUTANE	0.8	1.3	0.0
ISOBUTANE	0.6	1.4	16.2
N-PENTANE	0.2	0.5	0.3
ISOPENTANE	0.2	0.5	0.0
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	TRACE	0.8	0.9
NITROGEN	2.7	7.3	0.3
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.02	0.09	TRACE
HEATING VALUE*	1190	1194	2321
SPECIFIC GRAVITY	0.691	0.745	1.384

	INDEX 11554 SAMPLE 16931	INDEX 11555 SAMPLE 2205	INDEX 11556 SAMPLE 2206
STATE	UTAH	UTAH	UTAH
COUNTY	SUMMIT	UINTAH	UINTAH
FIELD	PINEVIEW N	ASHLEY VALLEY	ASHLEY VALLEY
WELL NAME	LOGAN FED. NO. 1	NO. 1	NO. 3
LOCATION	SEC. 26, T3N, R7E	SEC. 23, T5S, R22E	SEC. 23, T5S, R22E
OWNER	DAVIS OIL CO.	VALLEY FUEL SUPPLY CO.	VALLEY FUEL SUPPLY CO.
COMPLETED	08/01/82	04/13/25	03/23/28
SAMPLED	05/02/83	10/09/30	10/09/30
FORMATION	JURA-NUGGET	JURA-MORRISON	JURA-MORRISON
GEOLOGIC PROVINCE CODE	570	575	575
DEPTH, FEET	12804	1655	1655
WELLHEAD PRESSURE,PSIG	3975	400	400
OPEN FLOW, MCFD	2500	11000	11000
COMPONENT, MOLE PCT			
METHANE	74.0	97.9	99.4
ETHANE	14.5	0.0	0.0
PROPANE	5.2	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.5	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	2.4	0.5	0.3
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.1	1.4	0.2
HELIUM	0.01	0.00	0.01
HEATING VALUE*	1242	992	1007
SPECIFIC GRAVITY	0.743	0.570	0.558

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11557 SAMPLE 9397	INDEX 11558 SAMPLE 9247	INDEX 11559 SAMPLE 17180
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	BEND	BONANZA	BONANZA
WELL NAME	PAN AM STATE NO. 1	NO. 3	FED. NO. 3-15
LOCATION	SEC. 32, T6S, R23E	SEC. 27, T9S, R24E	SEC. 15, T10S, R23E
OWNER	H. P. MCLISH, ET AL.	PACIFIC NATURAL GAS EXPL. CO	LOMAX EXPLORATION CO.
COMPLETED	01/03/64	10/15/63	10/04/83
SAMPLED	06/13/64	02/26/64	01/03/84
FORMATION	EOCE-UINTA	EOCE-WASATCH	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	3170	4917	7188
WELLHEAD PRESSURE,PSIG	1324	1683	2171
OPEN FLOW, MCFD	1710	NOT GIVEN	1124
COMPONENT, MOLE PCT			
METHANE	96.4	90.6	90.6
ETHANE	0.6	4.5	4.4
PROPANE	0.4	1.7	2.0
N-BUTANE	0.0	0.4	0.6
ISOBUTANE	0.0	0.1	0.5
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	2.5	0.2	0.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	2.0	1.2
HELIUM	0.01	0.02	TRACE
HEATING VALUE*	998	1082	1117
SPECIFIC GRAVITY	0.573	0.632	0.641

	INDEX 11560 SAMPLE 16061	INDEX 11561 SAMPLE 15995	INDEX 11562 SAMPLE 5869
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	BOOK CLIFFS	CHAPITA	CHAPITA WELLS
WELL NAME	MAIN CANYON NO. 14-16	CHAPITA UNIT 4525	CHAPITA WELLS UNIT NO. 2
LOCATION	SEC. 16, T15S, R23E	SEC. 25, T 9S, R22E	SEC. 28, T9S, R23E
OWNER	COSEKA RESOURCES (USA), LTD.	BELCO PETROLEUM CORP.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	01/22/80	02/28/55
SAMPLED	08/27/80	06/26/80	06/26/55
FORMATION	CRET-DAKOTA	EOCE-WASATCH	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	8600	5893	5052
WELLHEAD PRESSURE,PSIG	600	NOT GIVEN	1795
OPEN FLOW, MCFD	756	2250	2564
COMPONENT, MOLE PCT			
METHANE	63.8	91.2	92.6
ETHANE	4.8	5.2	3.6
PROPANE	1.2	1.7	1.2
N-BUTANE	0.3	0.4	0.3
ISOBUTANE	0.2	0.3	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	28.5	0.3	0.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.3	0.1
HELIUM	0.03	0.01	0.02
HEATING VALUE*	794	1103	1108
SPECIFIC GRAVITY	0.729	0.619	0.622

	INDEX 11563 SAMPLE 8309	INDEX 11564 SAMPLE 8310	INDEX 11565 SAMPLE 8311
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	FENCE CANYON	FENCE CANYON	FENCE CANYON
WELL NAME	UNIT NO. 2	UNIT NO. 1	UNIT NO. 2
LOCATION	SEC. 26, T15S, R22E	SEC. 36, T15S, R22E	SEC. 26, T15S, R22E
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	04/13/61	04/23/60	09/13/61
SAMPLED	11/11/61	11/11/61	11/11/61
FORMATION	JURA-MORRISON	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	8378	8544	8236
WELLHEAD PRESSURE,PSIG	1168?	4250	1180
OPEN FLOW, MCFD	600		1175
COMPONENT, MOLE PCT			
METHANE	92.8	95.1	92.7
ETHANE	3.9	2.4	4.1
PROPANE	0.6	0.9	0.9
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.9	0.7	0.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.1	1.0	1.1
HELIUM	0.08	0.05	0.05
HEATING VALUE*	1045	1024	1067
SPECIFIC GRAVITY	0.602	0.585	0.619

	INDEX 11566 SAMPLE 7432	INDEX 11567 SAMPLE 9822	INDEX 11568 SAMPLE 12218
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	GUSHER	HORSESHOE BEND	HORSESHOE BEND
WELL NAME	NO. 44X-35	HORSESHOE BEND FED. NO. 3	ROWE FED. NO. 2
LOCATION	SEC. 35, T5S, R19E	SEC. 27, T6S, R21E	SEC. 2, T6S, R21E
OWNER	GUSHER FIELD CO.	CALIFORNIA OIL CO.	KENNETH D. LUFF
COMPLETED	03/30/60	01/29/65	11/--/69
SAMPLED	03/09/60	03/25/65	03/10/70
FORMATION	EOCE-GREEN RIVER U	EOCE-UINTA	EOCE-UINTA
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	6010	3513	3200
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	860
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	500000
COMPONENT, MOLE PCT			
METHANE	74.7	98.1	98.3
ETHANE	0.5	0.6	0.5
PROPANE	0.3	0.2	0.1
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	19.1	0.7	0.8
OXYGEN	4.6	0.0	0.1
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	777	1017	1008
SPECIFIC GRAVITY	0.669	0.566	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11569 SAMPLE 12219	INDEX 11570 SAMPLE 16907	INDEX 11571 SAMPLE 7911
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	HORSESHOE BEND	HORSESHOE BEND	ISLAND
WELL NAME	SHORT FED. NO. 1	HORSESHOE BEND FED. NO. 26-1	UNIT NO. 1
LOCATION	SEC. 4, T7S, R21E	SEC. 26, T6S, R21E	SEC. 7, T10S, R20E
OWNER	KENNETH D. LUFF	TETON ENERGY CO., INC.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	12/--/70	02/24/82	01/05/61
SAMPLED	03/10/70	04/15/83	03/13/61
FORMATION	EOCE-UINTA	EOCE-UINTA	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	3200	3690	5487
WELLHEAD PRESSURE,PSIG	720	1209	2125
OPEN FLOW, MCFD	80000	1969	23000
COMPONENT, MOLE PCT			
METHANE	96.3	98.3	95.4
ETHANE	0.6	0.5	3.5
PROPANE	0.2	0.1	0.6
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	TRACE	0.0	0.2
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	2.1	0.7	0.1
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.3	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1008	1008	1051
SPECIFIC GRAVITY	0.573	0.559	0.582

	INDEX 11572 SAMPLE 8771	INDEX 11573 SAMPLE 8772	INDEX 11574 SAMPLE 15836
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	ISLAND	ISLAND	ISLAND
WELL NAME	UNIT NO. 2	UNIT NO. 5	ISLAND UNIT NO. 9
LOCATION	SEC. 14, T10S, R18E	SEC. 13, T10S, R18E	SEC. 11, T10S, R19E
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	WEXPRO CO.
COMPLETED	05/13/61	12/23/61	08/06/79
SAMPLED	10/19/62	10/19/62	11/15/79
FORMATION	EOCE-WASATCH	EOCE-WASATCH	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	7078	5602	6088
WELLHEAD PRESSURE,PSIG	825	925	2300
OPEN FLOW, MCFD	1600	NOT GIVEN	5247
COMPONENT, MOLE PCT			
METHANE	91.6	89.8	89.0
ETHANE	4.7	5.2	7.1
PROPANE	1.4	1.6	2.0
N-BUTANE	0.4	0.5	0.4
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.7	1.5	0.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.4
HELIUM	0.02	0.04	TRACE
HEATING VALUE*	1098	1102	1134
SPECIFIC GRAVITY	0.618	0.630	0.639

	INDEX 11575 SAMPLE 17283	INDEX 11576 SAMPLE 17122	INDEX 11577 SAMPLE 13405
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	ISLAND	MAIN CANYON	NATURAL BUTTES
WELL NAME	ISLAND UNIT NO. 15	MAIN CANYON NO. 16-4-15-23	NATURAL BUTTE NO. 13
LOCATION	SEC. 7, T10S, R20E	SEC. 3, T15S, R23E	SEC. 30, T9S, R22E
OWNER	WEXPRO CO.	COSEKA RESOURCES (USA), LTD.	GAS PRODUCING ENTERPRISES
COMPLETED	08/23/83	12/27/83	07/27/72
SAMPLED	05/03/84	10/27/83	09/28/72
FORMATION	EOCE-WASATCH	CRET-DAKOTA	CRET-MESAVERDE &EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	6661	8489	5000
WELLHEAD PRESSURE,PSIG	1950	1321	2200
OPEN FLOW, MCFD	3247	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	93.3	86.1	81.8
ETHANE	4.3	6.6	3.3
PROPANE	1.2	1.7	1.0
N-BUTANE	0.3	0.4	0.2
ISOBUTANE	0.2	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.2	2.3	10.3
OXYGEN	TRACE	0.1	2.6
ARGON	TRACE	1.0	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	1.0	0.1
HELIUM	TRACE	0.06	0.01
HEATING VALUE*	1084	1072	940
SPECIFIC GRAVITY	0.603	0.648	0.651

	INDEX 11578 SAMPLE 13406	INDEX 11579 SAMPLE 15315	INDEX 11580 SAMPLE 16069
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	NATURAL BUTTES	NATURAL BUTTES	NATURAL BUTTES
WELL NAME	NATURAL BUTTE NO. 9	FLAT MESA NO. 1	NBU-36Y
LOCATION	SEC. 19, T9S, R22E	SEC. 7, T10S, R23E	SEC. 35, T9S, R21E
OWNER	GAS PRODUCING ENTERPRISES	ENSERCH EXPLORATION, INC.	INTEGRITY OIL & GAS CO.
COMPLETED	05/22/72	05/31/78	03/18/88
SAMPLED	09/28/72	07/12/78	09/18/88
FORMATION	CRET-MESAVERDE &EOCE-WASATCH	CRET-MESAVERDE	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5000	6954	5538
WELLHEAD PRESSURE,PSIG	2000	2150	2300
OPEN FLOW, MCFD	750	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	93.5	92.5
ETHANE	4.5	3.6	4.3
PROPANE	1.9	1.1	1.2
N-BUTANE	0.4	0.3	0.3
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	9.9	0.3	0.4
OXYGEN	2.2	0.0	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	981	1084	1090
SPECIFIC GRAVITY	0.669	0.605	0.608

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11581 SAMPLE 16402	INDEX 11582 SAMPLE 16610	INDEX 11583 SAMPLE 17928
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	NATURAL BUTTES	NATURAL BUTTES	NATURAL BUTTES
WELL NAME	CHAPITA WELLS 47-30	CIGE NO. 940-7-10-21J	RIVER BEND UNIT NO. 9-13E
LOCATION	SEC. 30, T9S, R23E	SEC. 7, T10S, R21E	SEC. 13, T10S, R19E
OWNER	BELCO DEVELOPMENT CORP.	CIG EXPLORATION, INC.	CNG PRODUCING CO.
COMPLETED	12/30/81	08/05/82	09/11/85
SAMPLED	12/30/81	08/05/82	12/11/85
FORMATION	EOCE-WASATCH	EOCE-WASATCH	EOCE-CHAPITA WELLS
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	7442	5034	5432
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2019	1900
OPEN FLOW, MCFD	2400	4500	2391
COMPONENT, MOLE PCT			
METHANE	93.4	94.6	89.9
ETHANE	3.6	3.2	4.0
PROPANE	1.2	0.8	1.2
N-BUTANE	0.3	0.2	0.4
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	0.1	0.1	0.4
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	0.1	0.5
HEXANES PLUS	0.2	0.2	1.1
NITROGEN	0.6	0.2	1.7
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.2	0.3
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1085	1073	1138
SPECIFIC GRAVITY	0.606	0.597	0.655

	INDEX 11584 SAMPLE 7689	INDEX 11585 SAMPLE 8338	INDEX 11586 SAMPLE 15593
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	NOT GIVEN	NOT GIVEN	DURAY
WELL NAME	UINTAH UNIT NO. 2	CHAPITA WELLS UNIT NO. 25	CONOCO MOUNTAIN LION NO. 2
LOCATION	SEC. 35, T10S, R20E	SEC. 1, T9S, R22E	SEC. 34, T8S, R21E
OWNER	DEKALB AGRICULTURAL ASSN.	BELCO PETROLEUM CORP.	CONTINENTAL OIL CO.
COMPLETED	05/17/60	--/--/00	12/29/78
SAMPLED	09/19/60	--/--/00	03/27/79
FORMATION	EOCE-WASATCH	EOCE-GREEN RIVER	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5038	3022	5954
WELLHEAD PRESSURE,PSIG	2110	NOT GIVEN	2100
OPEN FLOW, MCFD	2500	NOT GIVEN	1350
COMPONENT, MOLE PCT			
METHANE	94.8	97.8	92.9
ETHANE	3.2	0.3	4.0
PROPANE	0.7	0.1	1.3
N-BUTANE	0.2	0.1	0.3
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.3
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.1	0.5	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	TRACE	0.05	0.01
HEATING VALUE*	1067	1033	1098
SPECIFIC GRAVITY	0.593	0.577	0.615

	INDEX 11587 SAMPLE 5033	INDEX 11588 SAMPLE 6107	INDEX 11589 SAMPLE 7363
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	RED WASH	RED WASH	RED WASH
WELL NAME	RED WASH UNIT NO. 1	RED WASH NO. 42	NO. 32-21B
LOCATION	SEC. 26, T7S, R23S	SEC. 29, T7S, R24E	SEC. 21, T7S, R23E
OWNER	CALIFORNIA CO.	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.
COMPLETED	02/02/51	01/25/56	09/05/59
SAMPLED	04/03/51	07/16/56	01/22/60
FORMATION	EOCE-GREEN RIVER BASAL	EOCE-GREEN RIVER BASAL	EOCE-GREEN RIVER
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5183	4248	5084
WELLHEAD PRESSURE,PSIG	1912	1482	200
OPEN FLOW, MCFD	435	1500	114
COMPONENT, MOLE PCT			
METHANE	92.0	97.6	94.6
ETHANE	2.1	0.3	0.4
PROPANE	2.1	1.7	0.3
N-BUTANE	0.8	0.1	0.2
ISOBUTANE	0.8	0.0	0.2
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.7	0.0	2.0
OXYGEN	0.1	0.0	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.5	0.0	1.4
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1096	1050	1006
SPECIFIC GRAVITY	0.636	0.578	0.597

	INDEX 11590 SAMPLE 7710	INDEX 11591 SAMPLE 8308	INDEX 11592 SAMPLE 10572
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	RED WASH	RED WASH	RED WASH
WELL NAME	RED WASH UNIT NO. 32-27C	F. S. PRINCE NO. 1	UNIT NO. 20B, 32-22C
LOCATION	SEC. 27, T7S, R24E	SEC. 10, T7S, R24E	SEC. 22, T7S, R24E
OWNER	STANDARD OIL CO. OF CALIF.	TEXACO INC.	CHEVRON OIL CO.
COMPLETED	06/23/60	07/02/60	08/31/65
SAMPLED	10/04/60	11/13/61	05/18/66
FORMATION	EOCE-GREEN RIVER	EOCE-GREEN RIVER	EOCE-GREEN RIVER
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	4887	5322	5010
WELLHEAD PRESSURE,PSIG	1500	1875	1485
OPEN FLOW, MCFD	1686	8490	10500
COMPONENT, MOLE PCT			
METHANE	97.6	99.3	98.1
ETHANE	0.9	0.1	0.8
PROPANE	0.2	0.1	0.0
N-BUTANE	0.1	TRACE	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.6	0.5	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.8
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1026	1010	1008
SPECIFIC GRAVITY	0.571	0.560	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11593 SAMPLE 10878		INDEX 11594 SAMPLE 8680		INDEX 11595 SAMPLE 17046	
STATE	UTAH		UTAH		UTAH	
COUNTY	UINTAH		UINTAH		UINTAH	
FIELD	RED WASH		ROCK HOUSE		ROOSEVELT	
WELL NAME	UNIT NO. 212		RAINBOW UNIT NO. 24		BOW VALLEY-UTE NO. 2-22A1E	
LOCATION	SEC. 8, T8S, R24E		SEC. 18, T11S, R23E		SEC. 22, T1S, R1E	
OWNER	CHEVRON OIL CO.		SHAMROCK OIL & GAS CORP.		BOW VALLEY EXPLORATION INC.	
COMPLETED	06/01/66		--/--/00		01/16/83	
SAMPLED	02/23/67		09/25/62		08/15/83	
FORMATION	CRET-MESAVERDE		EOCE-WASATCH		EOCE-WASATCH	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	9159		2982		11941	
WELLHEAD PRESSURE,PSIG	4320		1428		375	
OPEN FLOW, MCFD	1250		5000		646	
COMPONENT, MOLE PCT						
METHANE	90.5		94.6		73.0	
ETHANE	4.5		3.2		14.1	
PROPANE	2.0		0.5		5.4	
N-BUTANE	0.4		0.1		1.7	
ISOBUTANE	0.4		0.2		0.9	
N-PENTANE	0.2		TRACE		0.4	
ISOPENTANE	0.1		0.2		1.7	
CYCLOPENTANE	0.1		TRACE		0.3	
HEXANES PLUS	0.2		TRACE		0.7	
NITROGEN	0.3		1.0		0.8	
OXYGEN	0.0		TRACE		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.1		0.3	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.2		0.1		0.8	
HELIUM	TRACE		0.03		TRACE	
HEATING VALUE*	1105		1048		1358	
SPECIFIC GRAVITY	0.638		0.588		0.791	

	INDEX 11596 SAMPLE 14272		INDEX 11597 SAMPLE 6808		INDEX 11598 SAMPLE 17789	
STATE	UTAH		UTAH		UTAH	
COUNTY	UINTAH		UINTAH		UINTAH	
FIELD	SEEP RIDGE		SOUTHMAN CANYON		UNDESIGNATED	
WELL NAME	TEXACO-SKYLINE GOVT. AF NO.		SOUTHMAN CANYON UNIT NO. 4		LIZZARD CREEK FED. NO. 1-10	
LOCATION	SEC. 27, T13S, R21E		SEC. 23, T10S, R24E		SEC. 10, T11S, R22E	
OWNER	TEXACO INC.		EL PASO NATURAL GAS CO.		E P OPERATING CO.	
COMPLETED	--/--/00		08/25/58		11/10/84	
SAMPLED	02/15/75		09/10/58		07/30/85	
FORMATION	CRET-DAKOTA		CRET-MESAVERDE		CRET-MESAVERDE	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	9670		5944		7556	
WELLHEAD PRESSURE,PSIG	3000		2850		2300	
OPEN FLOW, MCFD	3000		4		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	95.4		85.6		84.2	
ETHANE	2.3		5.6		6.3	
PROPANE	0.4		4.2		3.9	
N-BUTANE	TRACE		1.3		1.2	
ISOBUTANE	0.1		0.7		0.8	
N-PENTANE	0.1		0.1		0.3	
ISOPENTANE	TRACE		0.4		0.7	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.4	
NITROGEN	0.3		0.0		0.4	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		1.7		1.7	
HELIUM	0.02		0.01		TRACE	
HEATING VALUE*	1043		1179		1201	
SPECIFIC GRAVITY	0.592		0.687		0.709	

	INDEX 11599 SAMPLE 6469		INDEX 11600 SAMPLE 6484		INDEX 11601 SAMPLE 7339	
STATE	UTAH		UTAH		UTAH	
COUNTY	UINTAH		UINTAH		UINTAH	
FIELD	UTE TRAIL		UTE TRAIL		UTE TRAIL	
WELL NAME	11X-21H		88X-2G		UTE TRAIL UNIT NO. 2	
LOCATION	SEC. 21, T10S, R22E		SEC. 2, T10S, R21E		SEC. 20, T9S, R20E	
OWNER	HAVENSTRITE OIL CO.		HAVENSTRITE OIL CO.		DEKALB-SUN	
COMPLETED	10/06/57		11/08/57		10/07/57	
SAMPLED	01/09/58		01/23/58		01/12/60	
FORMATION	EOCE-WASATCH		EOCE-WASATCH		EOCE-WASATCH	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	5052		5366		6075	
WELLHEAD PRESSURE,PSIG	2200		2100		2725	
OPEN FLOW, MCFD	5130		2196		301	
COMPONENT, MOLE PCT						
METHANE	94.4		95.2		89.4	
ETHANE	3.6		3.3		6.5	
PROPANE	1.0		0.6		2.0	
N-BUTANE	0.3		0.2		0.4	
ISOBUTANE	0.2		0.2		0.4	
N-PENTANE	TRACE		TRACE		0.1	
ISOPENTANE	0.1		TRACE		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	0.1		0.2		TRACE	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	TRACE		TRACE		0.2	
HYDROGEN SULFIDE**	0.1		0.0		0.0	
CARBON DIOXIDE	0.0		0.1		0.3	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1073		1058		1133	
SPECIFIC GRAVITY	0.595		0.586		0.635	

	INDEX 11602 SAMPLE 6480		INDEX 11603 SAMPLE 6535		INDEX 11604 SAMPLE 7305	
STATE	UTAH		UTAH		UTAH	
COUNTY	UINTAH		UINTAH		UINTAH	
FIELD	WALKER HOLLOW		WALKER HOLLOW		WALKER HOLLOW	
WELL NAME	WALKER HOLLOW NO. 3		WALKER HOLLOW NO. 6		W. H. UNIT NO. 9	
LOCATION	SEC. 31, T1S, R23E		SEC. 7, T2S, R24E		SEC. 8, T2S, R24E	
OWNER	BRACK DRILLING CO., INC.		CARTER OIL CO.		CARTER OIL CO.	
COMPLETED	12/22/57		03/04/58		09/08/59	
SAMPLED	01/15/58		03/24/58		12/08/59	
FORMATION	EOCE-UINTA		EOCE-GREEN RIVER		EOCE-GREEN RIVER D	
GEOLOGIC PROVINCE CODE	575		575		575	
DEPTH, FEET	2628		5594		5428	
WELLHEAD PRESSURE,PSIG	1000		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	97.9		99.1		88.9	
ETHANE	0.7		0.1		8.1	
PROPANE	0.1		0.1		1.7	
N-BUTANE	0.1		0.1		0.4	
ISOBUTANE	0.1		TRACE		0.2	
N-PENTANE	TRACE		TRACE		TRACE	
ISOPENTANE	TRACE		TRACE		0.2	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	1.0		0.2		TRACE	
OXYGEN	TRACE		0.0		TRACE	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.2	
HELIUM	0.01		0.01		TRACE	
HEATING VALUE*	1019		1022		1127	
SPECIFIC GRAVITY	0.568		0.562		0.630	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11605 SAMPLE 7167	INDEX 11606 SAMPLE 7744	INDEX 11607 SAMPLE 9851
STATE	UTAH	UTAH	UTAH
COUNTY	UINTAH	UINTAH	UINTAH
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	UTE TRAIL UNIT NO. 1	ROCK HOUSE NO. 1	GOVT. 1-1
LOCATION	SEC. 8, T12S, R22E	SEC. 10	SEC. 1, T12S, R21E
OWNER	DEKALB AGRICULTURAL ASSN.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
COMPLETED	09/21/59	10/23/60	07/12/62
SAMPLED	08/12/59	10/23/60	04/20/65
FORMATION	EOCE-WASATCH	CRET-MESAVERDE &EOCE-WASATCH	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	5241	4144	5680
WELLHEAD PRESSURE,PSIG	2125	1990	1950
OPEN FLOW, MCFD	2500	900	1260
COMPONENT, MOLE PCT			
METHANE	93.5	92.2	94.9
ETHANE	3.9	4.5	2.2
PROPANE	1.0	1.6	0.5
N-BUTANE	0.3	0.4	0.2
ISOBUTANE	TRACE	0.5	TRACE
N-PENTANE	0.5	0.1	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.3	0.2	1.3
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.01	TRACE	0.02
HEATING VALUE*	1093	1105	1038
SPECIFIC GRAVITY	0.609	0.616	0.589

	INDEX 11608 SAMPLE 9914	INDEX 11609 SAMPLE 2587	INDEX 11610 SAMPLE 10044
STATE	UTAH	UTAH	VIRGINIA
COUNTY	UINTAH	WASHINGTON	BUCHANAN
FIELD	WILDCAT	VIRGIN	BIG SANDY
WELL NAME	EVACUATION CREEK NO. 23-2-1	NO. 1	8672
LOCATION	SEC. 2, T12S, R25E	SEC. 31, T41S, R11W	CARTER COORDINATE 24-L-89
OWNER	PACIFIC NATURAL GAS EXPL. CO	BARR & CO.	UNITED FUEL GAS CO.
COMPLETED	08/06/64	--/--/00	12/31/64
SAMPLED	05/30/65	01/23/33	08/03/65
FORMATION	CRET-CEDAR MOUNTAIN	NOT GIVEN	MISS-RAVENCLIFF
GEOLOGIC PROVINCE CODE	575	625	160
DEPTH, FEET	8059	452	1611
WELLHEAD PRESSURE,PSIG	2363	NOT GIVEN	360
OPEN FLOW, MCFD	723	NOT GIVEN	328
COMPONENT, MOLE PCT			
METHANE	90.2	0.0	88.8
ETHANE	5.3	0.0	5.8
PROPANE	1.7	---	1.7
N-BUTANE	0.3	---	0.6
ISOBUTANE	0.3	---	0.4
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.2	---	0.2
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.2	---	0.2
NITROGEN	0.6	11.3	3.8
OXYGEN	0.0	1.7	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.0	86.8	TRACE
HELIUM	0.04	0.17	0.37
HEATING VALUE*	1100	0	1069
SPECIFIC GRAVITY	0.632	1.455	0.630

	INDEX 11611 SAMPLE 12552	INDEX 11612 SAMPLE 3699	INDEX 11613 SAMPLE 9995
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	BUCHANAN	BUCHANAN	DICKENSON
FIELD	MAYSI	NOT GIVEN	NORA
WELL NAME	LYNN CAMP COAL CORP. NO.9590	NOT GIVEN	NO. 137
LOCATION	ROCK LICK DIST.	NOT GIVEN	ERVINTON DIST.
OWNER	UNITED FUEL GAS CO.	J. R. WADE	CLINCHFIELD COAL CO.
COMPLETED	07/02/70	08/27/43	08/14/52
SAMPLED	11/21/70	10/28/43	07/09/65
FORMATION	MISS-BEREA	NOT GIVEN	MISS-RAVENCLIFF
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3694	NOT GIVEN	2414
WELLHEAD PRESSURE,PSIG	840	NOT GIVEN	690
OPEN FLOW, MCFD	2144	NOT GIVEN	60
COMPONENT, MOLE PCT			
METHANE	97.5	95.8	92.6
ETHANE	1.7	0.0	3.5
PROPANE	0.2	---	0.5
N-BUTANE	0.0	---	0.5
ISOBUTANE	0.0	---	0.2
N-PENTANE	0.0	---	0.1
ISOPENTANE	0.0	---	TRACE
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.2
NITROGEN	0.4	3.9	2.3
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.2	0.0
HELIUM	0.05	0.00	0.24
HEATING VALUE*	1024	970	1045
SPECIFIC GRAVITY	0.565	0.573	0.599

	INDEX 11614 SAMPLE 9996	INDEX 11615 SAMPLE 10111	INDEX 11616 SAMPLE 10112
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	DICKENSON	DICKENSON	DICKENSON
FIELD	NORA	NORA	NORA
WELL NAME	NO. 141	CLINCHFIELD COAL CO. NO. 101	E. A. SMITH NO. 208
LOCATION	ERVINTON DIST.	NORA	NOT GIVEN
OWNER	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.
COMPLETED	04/30/53	03/28/49	09/04/58
SAMPLED	07/09/65	09/07/65	09/07/65
FORMATION	MISS-MAXTON	MISS-BIG LIME	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3084	3365	3990
WELLHEAD PRESSURE,PSIG	920	NOT GIVEN	820
OPEN FLOW, MCFD	1000	NOT GIVEN	103
COMPONENT, MOLE PCT			
METHANE	93.1	95.9	95.8
ETHANE	4.1	2.6	3.2
PROPANE	0.9	0.5	0.5
N-BUTANE	0.3	0.1	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.0	0.5	0.4
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	TRACE
HELIUM	0.11	0.06	0.04
HEATING VALUE*	1067	1047	1041
SPECIFIC GRAVITY	0.601	0.581	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11617 SAMPLE 9997	INDEX 11618 SAMPLE 9998	INDEX 11619 SAMPLE 10000
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	DICKENSON	DICKENSON	DICKENSON
FIELD	OPEN FORK	OPEN FORK	OPEN FORK
WELL NAME	NO. 142	NO. 151	NO. 164
LOCATION	ERVINTON DIST.	ERVINTON DIST.	ERVINTON DIST.
OWNER	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.
COMPLETED	07/13/53	06/27/56	09/07/54
SAMPLED	07/09/65	07/09/65	09/10/65
FORMATION	MISS-BEREA	PENN-SALT SAND	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4917	1125	3056
WELLHEAD PRESSURE,PSIG	730	420	970
OPEN FLOW, MCFD	1600	200	696
COMPONENT, MOLE PCT			
METHANE	97.1	95.2	93.4
ETHANE	2.0	3.7	4.1
PROPANE	0.4	0.3	0.9
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	0.4	0.7	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.05	0.02	0.20
HEATING VALUE*	1030	1038	1066
SPECIFIC GRAVITY	0.569	0.580	0.597

	INDEX 11620 SAMPLE 10001	INDEX 11621 SAMPLE 933	INDEX 11622 SAMPLE 2890
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	DICKENSON	MATHEWS	ROCKINGHAM
FIELD	OPEN FORK	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 178	PHILLIPS	C. M. SOUDER NO. 1
LOCATION	ERVINTON DIST.	NOT GIVEN	CRAB RUN ANTICLINE
OWNER	CLINCHFIELD COAL CO.	MRS. PHILLIPS	NOT GIVEN
COMPLETED	06/27/56	--/--/00	--/--/00
SAMPLED	07/09/65	--/--/00	07/13/41
FORMATION	MISS-BEREA	NOT GIVEN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	120	160
DEPTH, FEET	5750	90	3000
WELLHEAD PRESSURE,PSIG	740	70	NOT GIVEN
OPEN FLOW, MCFD	603	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	66.9	97.1
ETHANE	1.5	0.4	1.3
PROPANE	0.2	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	1.0	30.9	1.0
OXYGEN	0.0	0.2	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	1.6	0.3
HELIUM	0.06	0.00	0.13
HEATING VALUE*	1017	685	1007
SPECIFIC GRAVITY	0.567	0.698	0.569

	INDEX 11623 SAMPLE 9949	INDEX 11624 SAMPLE 9950	INDEX 11625 SAMPLE 17145
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	ROCKINGHAM	ROCKINGHAM	SCOTT
FIELD	NOT GIVEN	NOT GIVEN	ROARING FORK
WELL NAME	8418	5775	HAGAN EST. NO. 10007
LOCATION	NOT GIVEN	NOT GIVEN	FORT BLACKMORE QUAD.
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	ANR PRODUCTION CO.
COMPLETED	08/18/56	03/31/52	04/05/82
SAMPLED	06/30/65	06/30/65	12/13/83
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2973	3563	4616
WELLHEAD PRESSURE,PSIG	1225	1380	125
OPEN FLOW, MCFD	1078	286	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.5	98.4	72.1
ETHANE	0.3	0.2	4.0
PROPANE	0.0	0.0	0.8
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.1	1.2	22.4
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.10	0.11	0.06
HEATING VALUE*	1003	1000	836
SPECIFIC GRAVITY	0.560	0.561	0.679

	INDEX 11626 SAMPLE 10197	INDEX 11627 SAMPLE 9999	INDEX 11628 SAMPLE 10002
STATE	VIRGINIA	VIRGINIA	VIRGINIA
COUNTY	TAZEWELL	WISE	WISE
FIELD	WAR	STONEGA	STONEGA
WELL NAME	NO. 9342	NO. 160	NO. 185
LOCATION	NOT GIVEN	RICHMOND DIST.	RICHMOND DIST.
OWNER	UNITED FUEL GAS CO.	CLINCHFIELD COAL CO.	CLINCHFIELD COAL CO.
COMPLETED	12/28/64	08/28/54	06/05/56
SAMPLED	10/04/65	07/19/65	07/19/65
FORMATION	MISS-BEREA	DEVO---	MISS-GREENBRIER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5549	4291	3035
WELLHEAD PRESSURE,PSIG	925	700	1000
OPEN FLOW, MCFD	12703	80	980
COMPONENT, MOLE PCT			
METHANE	97.5	85.7	84.1
ETHANE	1.4	8.4	6.5
PROPANE	0.1	2.6	3.5
N-BUTANE	0.0	0.7	0.8
ISOBUTANE	0.0	0.1	0.4
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.8	1.5	1.8
OXYGEN	0.0	TRACE	0.2
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.16	0.10	0.15
HEATING VALUE*	1015	1148	1154
SPECIFIC GRAVITY	0.566	0.655	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11629 SAMPLE 2231	INDEX 11630 SAMPLE 2233	INDEX 11631 SAMPLE 2533
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	BENTON	BENTON	CLALLAM
FIELD	BENTON COUNTY	BENTON COUNTY	NOT GIVEN
WELL NAME	NO. 2	NO. 6	OLYMPIC NO. 1
LOCATION	SEC. 21, T11N, R26E	SEC. 29, T11N, R26E	SEC. 9, T28N, R14W
OWNER	WALLA WALLA OIL, GAS & PL. C	WALLA WALLA OIL, GAS & PL. C	MORDELO L. VINCENT
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/11/30	10/14/30	08/08/32
FORMATION	MIOC-NOT GIVEN	MIOC-NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	605	605	710
DEPTH, FEET	700	700	2980
WELLHEAD PRESSURE,PSIG	2	2	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.0	94.6	94.7
ETHANE	0.0	0.0	3.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.9	4.8	0.1
OXYGEN	0.7	0.3	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	0.00	0.00	0.00
HEATING VALUE*	942	958	1042
SPECIFIC GRAVITY	0.585	0.574	0.581

	INDEX 11632 SAMPLE 2534	INDEX 11633 SAMPLE 2540	INDEX 11634 SAMPLE 7052
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	CLALLAM	GRAYS HARBOR	GRAYS HARBOR
FIELD	NOT GIVEN	NOT GIVEN	OCEAN CITY
WELL NAME	WASHINGTON	WAGONER NO. 1	SAMPSON JOHNS NO. 1
LOCATION	NOT GIVEN	SEC. 5, T15N, R7W	SEC. 15, T18N, R12W
OWNER	MORDELO L. VINCENT	R. E. HENDERSON	SUNSHINE MINING CO.
COMPLETED	--/--/00	07/04/32	01/30/59
SAMPLED	08/08/32	08/25/32	04/28/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	710	710	710
DEPTH, FEET	1935	1505	3600
WELLHEAD PRESSURE,PSIG	NOT GIVEN	150	2600
OPEN FLOW, MCFD	NOT GIVEN	500	1480
COMPONENT, MOLE PCT			
METHANE	78.5	96.6	92.3
ETHANE	11.5	0.6	3.8
PROPANE	---	---	1.1
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.2
HEXANES PLUS	---	---	0.4
NITROGEN	9.0	2.2	0.6
OXYGEN	0.9	0.3	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.00	0.00	TRACE
HEATING VALUE*	1001	989	1108
SPECIFIC GRAVITY	0.654	0.571	0.622

	INDEX 11635 SAMPLE 2617	INDEX 11636 SAMPLE 2352	INDEX 11637 SAMPLE 2679
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	LEWIS	WHATCOM	WHATCOM
FIELD	NOT GIVEN	ANDERSON CREEK	BELLINGHAM
WELL NAME	GAS SEEP	JENSON FARM NO. 1	WHATCOM NO. 1
LOCATION	NEAR MORTON, WASH.	SEC. 19, T38N, R4E	SEC. 27, T39N, R3E
OWNER	NOT GIVEN	P. H. ROTE & C. A. MCDONALD	WHATCOM NATURAL GAS CO.
COMPLETED	--/--/00	--/--/00	04/--/34
SAMPLED	--/--/00	05/24/31	09/12/34
FORMATION	NOT GIVEN	TERT-	NOT GIVEN
GEOLOGIC PROVINCE CODE	710	700	700
DEPTH, FEET	NOT GIVEN	130	172
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	50
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	7180
COMPONENT, MOLE PCT			
METHANE	5.9	0.0	58.2
ETHANE	2.2	0.0	1.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	88.8	99.6	39.6
OXYGEN	2.0	0.1	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	1.1	0.3	0.1
HELIUM	TRACE	0.00	0.06
HEATING VALUE*	99	0	618
SPECIFIC GRAVITY	0.954	0.969	0.729

	INDEX 11638 SAMPLE 2680	INDEX 11639 SAMPLE 1036	INDEX 11640 SAMPLE 6251
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	WHATCOM	WHATCOM	YAKIMA
FIELD	BELLINGHAM	NOT GIVEN	NOT GIVEN
WELL NAME	LINGBLOOM NO. 4	SEEP	SIMCO NO. 1
LOCATION	SEC. 28, T39N, R3E	SEC. 32, T40, R1E	SEC. 24, T11N, R12W
OWNER	WHATCOM NATURAL GAS CO.	R. G. SELINE	ES, J. ELLPHIN, R. J. BOWMAN
COMPLETED	03/--/34	--/--/00	07/--/56
SAMPLED	09/12/34	04/21/25	02/17/57
FORMATION	NOT GIVEN	-GREEN SHALE	NOT GIVEN
GEOLOGIC PROVINCE CODE	700	700	605
DEPTH, FEET	166	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	51.5	57.4	0.6
ETHANE	1.6	0.0	0.1
PROPANE	---	---	0.2
N-BUTANE	---	---	TRACE
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	44.7	41.8	0.0
OXYGEN	1.9	0.3	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.2	0.5	98.8
HELIUM	0.06	0.05	TRACE
HEATING VALUE*	550	581	22
SPECIFIC GRAVITY	0.759	0.754	1.524

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11641 SAMPLE 10421	INDEX 11642 SAMPLE 9175	INDEX 11643 SAMPLE 10903
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BARBOUR	BARBOUR	BARBOUR
FIELD	ARDEN	BERRYBERG	BRIDGEPORT
WELL NAME	C. M. BOWMAR	BERNARD WOLFE NO. 584	BERNICE REEDER NO. 10841.
LOCATION	PHILIPPI DISTRICT	PLEASANTS DIST.	ELK DIST.
OWNER	CONSOLIDATED GAS SUPPLY CORP	CUMBERLAND & ALLEGHENY GAS C	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	11/10/65	11/25/59	07/26/66
SAMPLED	02/24/66	11/20/63	03/14/67
FORMATION	DEVO-GORDON	DEVO-RILEY	DEVO-GANTZ
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2044	4160	1970
WELLHEAD PRESSURE,PSIG	1100	1485	700
OPEN FLOW, MCFD	3536	NOT GIVEN	5497
COMPONENT, MOLE PCT			
METHANE	92.7	90.4	90.4
ETHANE	4.1	5.9	4.5
PROPANE	1.1	1.4	1.4
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	1.1	1.0	2.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.10	0.10	0.22
HEATING VALUE*	1073	1095	1080
SPECIFIC GRAVITY	0.604	0.619	0.619

	INDEX 11644 SAMPLE 9479	INDEX 11645 SAMPLE 9481	INDEX 11646 SAMPLE 9482
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BARBOUR	BARBOUR	BARBOUR
FIELD	ELK CREEK	NOT GIVEN	NOT GIVEN
WELL NAME	N. H. PAUGH NO. 6967	JAMES E. SAYERS NO. 10399	VERA D. NUTTER NO. 10419
LOCATION	ELK DIST.	PLEASANT DIST.	ELK DIST.
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	11/20/26	05/21/62	11/23/62
SAMPLED	07/16/64	07/15/64	07/15/64
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-RILEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4187	4448	4118
WELLHEAD PRESSURE,PSIG	490	1600	1080
OPEN FLOW, MCFD	200	44	348
COMPONENT, MOLE PCT			
METHANE	90.9	90.8	89.4
ETHANE	5.8	5.4	6.4
PROPANE	1.4	1.3	1.8
N-BUTANE	0.3	0.4	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.6	1.2	1.0
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.06	0.08	0.03
HEATING VALUE*	1100	1088	1113
SPECIFIC GRAVITY	0.617	0.618	0.630

	INDEX 11647 SAMPLE 10210	INDEX 11648 SAMPLE 14769	INDEX 11649 SAMPLE 2584
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BARBOUR	BOONE	BOONE
FIELD	UNION DISTRICT	BALD KNOB	COAL RIVER
WELL NAME	NO. 10705	NO. 15920A	FED. NO. 58
LOCATION	CARTER COORDINATE 3-EE-113	POND FORK	NOT GIVEN
OWNER	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP	PURE OIL CO.
COMPLETED	06/02/65	09/25/75	11/05/32
SAMPLED	10/14/65	09/17/76	01/13/33
FORMATION	DEVO-BENSON & RILEY	MISS-WEIR & MAXIMUM	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3886	3344	2133
WELLHEAD PRESSURE,PSIG	1490	615	325
OPEN FLOW, MCFD	7272	5938	3500
COMPONENT, MOLE PCT			
METHANE	93.6	91.6	73.0
ETHANE	4.1	6.1	26.0
PROPANE	0.7	1.2	---
N-BUTANE	0.2	0.2	---
ISOBUTANE	0.1	0.2	---
N-PENTANE	TRACE	0.0	---
ISOPENTANE	0.1	0.1	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.9	0.4	0.3
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.3
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1059	1091	1205
SPECIFIC GRAVITY	0.595	0.608	0.689

	INDEX 11650 SAMPLE 9541	INDEX 11651 SAMPLE 9436	INDEX 11652 SAMPLE 9446
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BOONE	BOONE	BOONE
FIELD	CORREY-JEFFREY	HARNSHAW-BULL CREEK	HARNSHAW-BULL CREEK
WELL NAME	NO. 8865	BULL CREEK NO. 15	BULL CREEK NO. 14
LOCATION	WASHINGTON DIST.	PEYTONA DIST.	PEYTONA DIST.
OWNER	HOPE NATURAL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	12/28/44	05/02/62	07/31/63
SAMPLED	08/12/64	07/02/64	07/02/64
FORMATION	MISS-BEREA	SILU-NEWBURG	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2150	5201	1558
WELLHEAD PRESSURE,PSIG	99	2000	302
OPEN FLOW, MCFD	NOT GIVEN	400	973
COMPONENT, MOLE PCT			
METHANE	74.9	89.0	81.1
ETHANE	11.6	2.9	11.2
PROPANE	6.5	0.8	4.0
N-BUTANE	2.1	0.4	1.0
ISOBUTANE	0.7	0.2	0.6
N-PENTANE	0.7	0.1	0.3
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	2.6	5.6	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.10	0.10	0.06
HEATING VALUE*	1292	1013	1212
SPECIFIC GRAVITY	0.759	0.623	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11653 SAMPLE 9549	INDEX 11654 SAMPLE 9547	INDEX 11655 SAMPLE 9438
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BOONE	BOONE	BOONE
FIELD	HOPKINS FORK-JARROLDS VALLEY	HOPKINS FORK-JARROLDS VALLEY	JULIAN-MADISON
WELL NAME	NO. 1 (213	NO. 10239	LITTLE COAL LAND NO. 2
LOCATION	SHERMAN DIST.	SHERMAN DIST.	WASHINGTON DIST.
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	11/05/59	02/03/60	12/09/26
SAMPLED	08/12/64	08/12/64	07/01/64
FORMATION	MISS-WEIR	MISS-MAXTON	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2660	1889	2095
WELLHEAD PRESSURE,PSIG	258	296	275
OPEN FLOW, MCFD	NOT GIVEN	1212	32
COMPONENT, MOLE PCT			
METHANE	94.0	96.7	81.0
ETHANE	3.6	2.0	10.2
PROPANE	0.7	0.3	3.9
N-BUTANE	0.3	0.0	0.8
ISOBUTANE	0.2	0.0	0.7
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	TRACE	0.0	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	0.7	0.9	2.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.09	0.12	0.10
HEATING VALUE*	1061	1023	1178
SPECIFIC GRAVITY	0.594	0.571	0.689

	INDEX 11656 SAMPLE 9447	INDEX 11657 SAMPLE 4463	INDEX 11658 SAMPLE 10103
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BOONE	BOONE	BOONE
FIELD	JULIAN-MADISON	KANAWHA	NOT GIVEN
WELL NAME	LITTLE COAL LAND CO. NO. 27	NO. 5812	T & O NO. 10-136
LOCATION	SCOTT DIST.	NOT GIVEN	NOT GIVEN
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	UNITED FUEL GAS CO.	PEAKE PETROLEUM CO.
COMPLETED	04/05/44	08/09/47	11/11/65
SAMPLED	07/01/64	03/29/48	08/30/65
FORMATION	DEVO-SHALE	NOT GIVEN	MISS-MAXTON, BIG LIME & WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3857	3395	2248
WELLHEAD PRESSURE,PSIG	485	776	626
OPEN FLOW, MCFD	255	811	700
COMPONENT, MOLE PCT			
METHANE	78.0	89.8	95.7
ETHANE	14.2	9.6	2.3
PROPANE	4.6	---	0.5
N-BUTANE	1.0	---	0.1
ISOBUTANE	0.5	---	0.1
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.3	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	1.1	0.1	0.9
OXYGEN	TRACE	0.2	0.0
ARGON	0.0	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.3	TRACE
HELIUM	0.03	0.04	0.11
HEATING VALUE*	1234	1082	1040
SPECIFIC GRAVITY	0.708	0.606	0.581

	INDEX 11659 SAMPLE 9437	INDEX 11660 SAMPLE 9441	INDEX 11661 SAMPLE 9457
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BOONE	BOONE	BOONE
FIELD	PEYTONA-EMMONS	PEYTONA-EMMONS	PEYTONA-EMMONS
WELL NAME	LENNIG NO. 1	LENNIG NO. 6	LENNIG NO. 6
LOCATION	PEYTONA DIST.	PEYTONA DIST.	PEYTONA DIST.
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	08/17/25	01/12/61	01/12/61
SAMPLED	07/02/64	07/02/64	07/02/64
FORMATION	MISS-BEREA	MISS-BIG LIME	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1900	1433	3275
WELLHEAD PRESSURE,PSIG	215	79	110
OPEN FLOW, MCFD	149	74	10
COMPONENT, MOLE PCT			
METHANE	75.3	75.5	81.7
ETHANE	11.9	12.6	11.4
PROPANE	5.4	5.8	3.8
N-BUTANE	1.8	1.8	0.8
ISOBUTANE	1.1	1.0	0.4
N-PENTANE	0.6	0.6	0.1
ISOPENTANE	0.9	0.4	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.7	0.5	0.1
NITROGEN	1.9	1.5	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.07	0.06	0.05
HEATING VALUE*	1318	1308	1189
SPECIFIC GRAVITY	0.767	0.757	0.680

	INDEX 11662 SAMPLE 9488	INDEX 11663 SAMPLE 10743	INDEX 11664 SAMPLE 9230
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BOONE	BOONE	BRAXTON
FIELD	SHONK LAND CO.	SHONK LAND CO.	COPEN
WELL NAME	NO. 10 SERIAL NO. 1290	SHONK LAND NO. 23 S NO. 1577	MCLAUGHLIN
LOCATION	SHERMAN DIST.	CARTER COORDINATE 10-S-96	SALT LICK DIST.
OWNER	CABOT CORP.	CABOT CORP.	WAVERLY OIL WORKS CO.
COMPLETED	12/29/48	05/07/66	02/20/61
SAMPLED	07/20/64	10/04/66	01/24/64
FORMATION	MISS-WEIR	MISS-MAXTON & WEIR	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2535	2030	1965
WELLHEAD PRESSURE,PSIG	335	690	390
OPEN FLOW, MCFD	127	10370	300
COMPONENT, MOLE PCT			
METHANE	91.8	95.2	86.0
ETHANE	5.6	1.7	8.9
PROPANE	1.1	0.5	2.3
N-BUTANE	0.3	0.0	0.7
ISOBUTANE	0.2	0.0	0.3
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	0.4	2.2	1.2
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.1	0.0	0.10
HELIUM	0.04	0.19	1142
HEATING VALUE*	1094	1008	0.650
SPECIFIC GRAVITY	0.612	0.576	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11665 SAMPLE 9231		INDEX 11666 SAMPLE 10008		INDEX 11667 SAMPLE 9348	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	BRAXTON		BRAXTON		BRAXTON	
FIELD	COPEN		COPEN		ELMIRA-SERVIA	
WELL NAME	MCCONKEY		BROSSIUS NO. 1		FOX NO. 1	
LOCATION	SALT LICK DIST.		SALT LICK DIST.		BIRCH DIST.	
OWNER	WAVERLY OIL WORKS CO.		MACDONALD SPIDEL		DEVONIAN GAS & OIL CO.	
COMPLETED	11/25/60		10/11/63		01/16/63	
SAMPLED	01/24/64		07/22/65		05/07/64	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2044		1771		1978	
WELLHEAD PRESSURE,PSIG	560		650		490	
OPEN FLOW, MCFD	200		8000		200	
COMPONENT, MOLE PCT						
METHANE	86.4		85.1		78.0	
ETHANE	8.9		8.5		13.4	
PROPANE	2.4		2.3		5.1	
N-BUTANE	0.5		0.7		1.7	
ISOBUTANE	0.3		0.5		0.5	
N-PENTANE	0.1		0.1		0.5	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.2		0.3	
NITROGEN	0.9		2.1		0.0	
OXYGEN	0.0		0.1		TRACE	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		TRACE	
HELIUM	0.10		0.11		0.09	
HEATING VALUE*	1142		1138		1290	
SPECIFIC GRAVITY	0.647		0.658		0.729	

	INDEX 11668 SAMPLE 9450		INDEX 11669 SAMPLE 14697		INDEX 11670 SAMPLE 11967	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	BRAXTON		BRAXTON		BRAXTON	
FIELD	HEATERS		LITTLE BIRCH		NOT GIVEN	
WELL NAME	R. D. DENNISON NO. 4175		JACKSON NO. 1		ELLYSON LEASE NO. 1	
LOCATION	SALT LICK DIST.		NOT GIVEN		OTTER DIST.	
OWNER	HOPE NATURAL GAS CO.		TEXAS INTERNATL. PET. CORP.		WHITE SHIELD OIL & GAS CORP.	
COMPLETED	10/03/47		12/10/75		12/26/68	
SAMPLED	07/16/64		06/04/76		--/--/00	
FORMATION	DEVO-GORDON		MISS-SQUAW		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2277		1893		2050	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		580		375	
OPEN FLOW, MCFD	39000		NOT GIVEN		2650	
COMPONENT, MOLE PCT						
METHANE	82.4		91.9		84.1	
ETHANE	10.3		5.4		9.0	
PROPANE	3.3		1.2		3.1	
N-BUTANE	1.0		0.2		0.6	
ISOBUTANE	0.7		0.2		0.5	
N-PENTANE	0.4		0.0		0.1	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.4		TRACE		0.2	
NITROGEN	1.1		0.6		1.8	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.07		0.06		0.09	
HEATING VALUE*	1208		1077		1150	
SPECIFIC GRAVITY	0.591		0.603		0.660	

	INDEX 11671 SAMPLE 9209		INDEX 11672 SAMPLE 17581		INDEX 11673 SAMPLE 9325	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	BRAXTON		CABELL		CABELL	
FIELD	ROSEDALE		BARBOURSVILLE DISTRICT		COMMERCIAL	
WELL NAME	NO. 8135		E. M. JOHNSON NO. 1		R. SCHAUB NO. C22	
LOCATION	NOT GIVEN		WINSLOW QUAD., HUGHES BRANCH		MCCOMAS DIST.	
OWNER	PHILADELPHIA OIL CO.		ALLEGHENY & WESTERN ENERGY C		COMMONWEALTH GAS CORP.	
COMPLETED	12/01/60		10/11/83		07/10/29	
SAMPLED	12/20/63		01/30/85		04/23/64	
FORMATION	MISS---		DEVO-SHALE		DEVO-BROWN SHALE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2186		3335		2770	
WELLHEAD PRESSURE,PSIG	150		NOT GIVEN		450	
OPEN FLOW, MCFD	125		130		1070	
COMPONENT, MOLE PCT						
METHANE	77.5		77.0		74.7	
ETHANE	12.1		12.1		14.3	
PROPANE	5.3		5.6		7.5	
N-BUTANE	1.3		1.3		1.8	
ISOBUTANE	0.9		0.3		0.3	
N-PENTANE	0.3		0.2		0.1	
ISOPENTANE	0.1		0.2		0.4	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.3		0.1		0.1	
NITROGEN	1.1		2.7		0.5	
OXYGEN	0.0		TRACE		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		TRACE		TRACE	
HELIUM	0.10		0.08		0.05	
HEATING VALUE*	1260		1223		1309	
SPECIFIC GRAVITY	0.724		0.716		0.747	

	INDEX 11674 SAMPLE 9317		INDEX 11675 SAMPLE 9498		INDEX 11676 SAMPLE 9347	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CABELL		CALHOUN		CALHOUN	
FIELD	TWO MILE DIVISION		ANNAMORIAH		BEE CREEK	
WELL NAME	NO. M 32		NO. 10491		HARDMAN NO. 3	
LOCATION	GRANT DIST.		SHERIDAN DIST.		CENTER DIST.	
OWNER	COMMONWEALTH GAS CORP.		HOPE NATURAL GAS CO.		CABOT CORP.	
COMPLETED	12/11/38		11/14/63		--/--/00	
SAMPLED	04/22/64		07/15/64		05/08/64	
FORMATION	MISS-BEREA		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2069		1900		1700	
WELLHEAD PRESSURE,PSIG	123		270		175	
OPEN FLOW, MCFD	240		70		63	
COMPONENT, MOLE PCT						
METHANE	80.8		80.3		78.9	
ETHANE	10.7		11.8		11.6	
PROPANE	5.0		4.2		5.0	
N-BUTANE	1.2		0.9		1.7	
ISOBUTANE	0.1		0.5		0.4	
N-PENTANE	0.1		0.2		0.5	
ISOPENTANE	0.3		0.2		0.5	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	TRACE		0.2		0.3	
NITROGEN	1.5		1.6		1.1	
OXYGEN	TRACE		0.0		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		TRACE	
HELIUM	0.07		0.08		0.09	
HEATING VALUE*	1201		1208		1261	
SPECIFIC GRAVITY	0.690		0.695		0.723	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11677 SAMPLE 12048		INDEX 11678 SAMPLE 8097		INDEX 11679 SAMPLE 8096	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CALHOUN		CALHOUN		CALHOUN	
FIELD	CALHOUN DIST.		MILO		MINNORA	
WELL NAME	HUNTER M. BENNETT NO. 11149		W. W. BAILEY		AGNES MAYES	
LOCATION	SHERMAN DIST.		NOT GIVEN		WASHINGTON TERR.	
OWNER	CONSOLIDATED GAS SUPPLY CORP		JAMES DRILLING CO.		JAMES DRILLING CO.	
COMPLETED	05/25/69		07/19/61		03/09/61	
SAMPLED	09/23/69		07/27/61		07/27/61	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		DEVO-U	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2261		2124		2125	
WELLHEAD PRESSURE,PSIG	514		508		450	
OPEN FLOW, MCFD	3663		1039		3500	
COMPONENT, MOLE PCT						
METHANE	75.7		81.8		74.8	
ETHANE	12.8		10.8		13.4	
PROPANE	6.4		3.9		6.0	
N-BUTANE	1.4		0.9		1.8	
ISOBUTANE	0.8		0.6		1.1	
N-PENTANE	0.4		0.2		0.4	
ISOPENTANE	0.3		0.2		0.3	
CYCLOPENTANE	0.1		TRACE		TRACE	
HEXANES PLUS	0.3		0.1		0.2	
NITROGEN	1.6		1.4		1.7	
OXYGEN	0.0		0.0		0.3	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.2		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		TRACE		TRACE	
HELIUM	0.07		0.10		0.10	
HEATING VALUE*	1286		1196		1291	
SPECIFIC GRAVITY	0.744		0.685		0.752	

	INDEX 11680 SAMPLE 9504		INDEX 11681 SAMPLE 14796		INDEX 11682 SAMPLE 9505	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CALHOUN		CALHOUN		CALHOUN	
FIELD	MINNORA		MINNORA		ORMA	
WELL NAME	PRICE JARVIS NO. 3303		DENVER BRANNON NO. 11989		PRUDENCE JARVIS NO. 10380	
LOCATION	WASHINGTON DIST.		OTTER QUAD.		WASHINGTON DIST.	
OWNER	HOPE NATURAL GAS CO.		CONSOLIDATED GAS SUPPLY CORP		HOPE NATURAL GAS CO.	
COMPLETED	03/--/14		08/08/75		04/28/62	
SAMPLED	07/14/64		09/--/76		07/14/64	
FORMATION	PENN-SALT SAND 2ND		DEVO-NOT GIVEN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1272		2924		2040	
WELLHEAD PRESSURE,PSIG	77		630		140	
OPEN FLOW, MCFD	12		2207		73	
COMPONENT, MOLE PCT						
METHANE	83.1		65.4		79.0	
ETHANE	7.1		17.0		11.4	
PROPANE	3.1		9.6		4.9	
N-BUTANE	1.0		3.5		1.3	
ISOBUTANE	0.9		1.4		0.7	
N-PENTANE	0.4		0.8		0.4	
ISOPENTANE	0.2		0.6		0.1	
CYCLOPENTANE	0.1		0.1		0.1	
HEXANES PLUS	0.5		0.4		0.4	
NITROGEN	3.3		1.2		1.6	
OXYGEN	0.0		0.1		TRACE	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		TRACE		0.0	
HELIUM	0.12		0.04		0.08	
HEATING VALUE*	1168		1467		1215	
SPECIFIC GRAVITY	0.690		0.855		0.718	

	INDEX 11683 SAMPLE 8495		INDEX 11684 SAMPLE 9229		INDEX 11685 SAMPLE 9661	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CLAY		CLAY		CLAY	
FIELD	ELK RIVER		NORTHERN DIVISION		NOT GIVEN	
WELL NAME	NELSON NO. 1		NO. 1007		NO. 7851	
LOCATION	NOT GIVEN		UNION DIST.		BUFFALO DIST.	
OWNER	MERCHANTS PETROLEUM CO.		UNITED FUEL GAS CO.		EQUITABLE GAS CO.	
COMPLETED	11/20/61		--/--/17		08/11/42	
SAMPLED	04/03/62		01/21/69		12/09/69	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2098		1413		2126	
WELLHEAD PRESSURE,PSIG	490		510		131	
OPEN FLOW, MCFD	250		4500		39	
COMPONENT, MOLE PCT						
METHANE	88.0		59.0		87.8	
ETHANE	7.7		20.8		8.1	
PROPANE	2.1		11.6		2.2	
N-BUTANE	0.5		4.0		0.6	
ISOBUTANE	0.9		1.5		0.3	
N-PENTANE	0.1		1.1		0.1	
ISOPENTANE	0.1		0.7		0.1	
CYCLOPENTANE	TRACE		0.5		TRACE	
HEXANES PLUS	0.1		0.5		0.2	
NITROGEN	0.8		0.0		0.4	
OXYGEN	TRACE		0.0		TRACE	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.2		0.1	
HELIUM	0.04		0.03		0.04	
HEATING VALUE*	1128		1587		1141	
SPECIFIC GRAVITY	0.637		0.920		0.641	

	INDEX 11686 SAMPLE 11766		INDEX 11687 SAMPLE 10069		INDEX 11688 SAMPLE 9330	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	CLAY		DODDRIDGE		DODDRIDGE	
FIELD	NOT GIVEN		BIG FLINT		BRUSHY FORK	
WELL NAME	NETTIE STARCHER NO. 1		CLINTON DOAK NO. 3		FRANK M. WINTER NO. 1	
LOCATION	OTTER DIST.		GRANT DIST.		NEW MILTON DIST.	
OWNER	RAY BROTHERS DRILLING CO.		PRIOR OIL CO.		DEVONIAN GAS & OIL CO.	
COMPLETED	12/02/67		02/13/65		02/13/64	
SAMPLED	01/21/69		07/11/65		05/02/64	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1714		1960		2267	
WELLHEAD PRESSURE,PSIG	600		525		1025	
OPEN FLOW, MCFD	730		100		150	
COMPONENT, MOLE PCT						
METHANE	82.8		77.7		81.5	
ETHANE	10.5		6.7		8.3	
PROPANE	3.9		4.9		4.1	
N-BUTANE	0.7		1.9		1.6	
ISOBUTANE	0.3		1.0		0.4	
N-PENTANE	0.2		0.6		0.6	
ISOPENTANE	0.2		0.9		0.4	
CYCLOPENTANE	TRACE		0.2		0.1	
HEXANES PLUS	0.1		0.8		0.4	
NITROGEN	1.4		5.6		2.4	
OXYGEN	0.1		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.1		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		TRACE	
HELIUM	0.08		0.12		0.17	
HEATING VALUE*	1171		1232		1215	
SPECIFIC GRAVITY	0.674		0.752		0.707	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11701 SAMPLE 9358	INDEX 11702 SAMPLE 9376	INDEX 11703 SAMPLE 9548
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	LOUP CREEK	LOUP CREEK	MAGNOLIA
WELL NAME	LOUP CREEK CO. NO. 12	LOUP CREEK CO. NO. 1	NO. 9780
LOCATION	NOT GIVEN	NOT GIVEN	FALLS DIST.
OWNER	UNION CARBIDE CORP.	UNION CARBIDE CORP.	HOPE NATURAL GAS CO.
COMPLETED	01/02/64	01/20/61	05/11/53
SAMPLED	05/15/64	05/15/64	08/18/64
FORMATION	MISS-BIG INJUN	MISS-WEIR	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2552	2018	1535
WELLHEAD PRESSURE,PSIG	622	590	126
OPEN FLOW, MCFD	750	330	5348
COMPONENT, MOLE PCT			
METHANE	95.2	94.3	94.4
ETHANE	3.5	3.7	3.8
PROPANE	0.5	0.6	0.6
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	TRACE	0.2	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.4	0.7	0.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.04	0.05	0.05
HEATING VALUE*	1055	1056	1068
SPECIFIC GRAVITY	0.584	0.589	0.594

	INDEX 11704 SAMPLE 4185	INDEX 11705 SAMPLE 4588	INDEX 11706 SAMPLE 9686
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	NOT GIVEN	NOT GIVEN	PAINT CREEK
WELL NAME	RAYMOND KIOUS NO. 1	OAK MILL INV. CO. NO. 1276	EASTERN GAS & FUEL NO. 38
LOCATION	3 MI. S OF ANSTED	NOT GIVEN	ARMSTRONG CREEK
OWNER	GODFREY L. CABOT, INC.	GODFREY L. CABOT, INC.	ASHLAND OIL & REFINING CO.
COMPLETED	08/26/46	06/11/48	11/10/64
SAMPLED	11/25/46	10/12/48	12/30/64
FORMATION	PENN-	MISS-BIG INJUN	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1193	2716	2732
WELLHEAD PRESSURE,PSIG	165	720	450
OPEN FLOW, MCFD	300	56	3816
COMPONENT, MOLE PCT			
METHANE	89.9	98.4	96.2
ETHANE	9.5	1.2	1.4
PROPANE	---	---	0.2
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.0	0.0	1.9
OXYGEN	0.1	0.2	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.5	0.2	0.0
HELIUM	0.04	0.06	0.18
HEATING VALUE*	1081	1018	1005
SPECIFIC GRAVITY	0.607	0.563	0.571

	INDEX 11707 SAMPLE 9687	INDEX 11708 SAMPLE 16737	INDEX 11709 SAMPLE 9886
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	PAINT CREEK	PAINT CREEK	PAINT CREEK E
WELL NAME	EASTERN GAS & FUEL NO. 38	EASTERN GAS FUEL NO. 76	LOUP CREEK CO. NO. 16
LOCATION	ARMSTRONG CREEK	VALLEY DIST. POWELLTON QUAD.	KANAWHA DIST.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND EXPLORATION CO.	UNION CARBIDE CORP.
COMPLETED	11/06/64	04/12/82	01/24/65
SAMPLED	12/30/64	12/17/82	05/05/65
FORMATION	MISS-WEIR	MISS-WEIR U	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3314	3236	2380
WELLHEAD PRESSURE,PSIG	735	380	700
OPEN FLOW, MCFD	5537	8887	1800
COMPONENT, MOLE PCT			
METHANE	94.8	94.1	96.1
ETHANE	3.9	3.9	2.9
PROPANE	0.4	0.6	0.4
N-BUTANE	0.1	0.2	0.0
ISOBUTANE	0.1	0.2	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.7	0.4	0.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.3	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.04	0.04	0.07
HEATING VALUE*	1045	1055	1036
SPECIFIC GRAVITY	0.587	0.588	0.574

	INDEX 11710 SAMPLE 16887	INDEX 11711 SAMPLE 9889	INDEX 11712 SAMPLE 9891
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	GILMER	GILMER
FIELD	WILDCAT	ALICE	CEDARVILLE
WELL NAME	NORTH HILLS GROUP NO. 1	M. S. COLE NO. 1	FRAME NO. 1
LOCATION	FAYETTEVILLE DIST.	TROY DIST.	NOT GIVEN
OWNER	AMOCO PRODUCTION CO. (USA)	ROYAL OIL & GAS CORP.	ROYAL OIL & GAS CORP.
COMPLETED	10/23/81	12/20/64	10/28/64
SAMPLED	04/20/83	05/08/65	05/08/65
FORMATION	MISS-WEIR	MISS-BIG INJUN	MISS-SQUAW & BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2636	1700	2180
WELLHEAD PRESSURE,PSIG	280	720	700
OPEN FLOW, MCFD	100	1122	3391
COMPONENT, MOLE PCT			
METHANE	87.1	83.3	84.5
ETHANE	2.8	8.3	8.6
PROPANE	0.2	3.1	2.9
N-BUTANE	0.1	0.9	0.8
ISOBUTANE	0.0	0.5	0.5
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	7.7	2.8	1.8
OXYGEN	1.8	0.0	0.0
ARGON	0.1	0.1	0.0
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.06	0.19	0.11
HEATING VALUE*	937	1157	1157
SPECIFIC GRAVITY	0.613	0.675	0.664

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11689 SAMPLE 8099	INDEX 11690 SAMPLE 9516	INDEX 11691 SAMPLE 9328
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	DODDRIDGE	DODDRIDGE	DODDRIDGE
FIELD	CENTRAL STATION	CENTRAL STATION	NEW MILTON
WELL NAME	HUDSON NO. 2	NO. 3611	HURST HOME FARM NO. 1
LOCATION	NOT GIVEN	WEST UNION DIST.	NEW MILTON DIST.
OWNER	WORLD WIDE PETROLEUM CORP.	CONSOLIDATED GAS SUPPLY CORP	DEVONIAN GAS & OIL CO.
COMPLETED	06/22/61	10/12/14	02/12/64
SAMPLED	07/27/61	07/23/64	05/04/64
FORMATION	NOT GIVEN	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1832	1883	1956
WELLHEAD PRESSURE,PSIG	880	29	650
OPEN FLOW, MCFD	139	92	50
COMPONENT, MOLE PCT			
METHANE	75.3	70.6	77.1
ETHANE	14.2	14.5	13.3
PROPANE	5.7	7.7	5.2
N-BUTANE	1.4	2.8	1.6
ISOBUTANE	1.2	1.4	0.5
N-PENTANE	0.3	0.8	0.2
ISOPENTANE	0.3	0.7	0.6
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.3	0.8	0.2
NITROGEN	0.8	0.3	1.2
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.10	0.06	0.09
HEATING VALUE*	1294	1429	1270
SPECIFIC GRAVITY	0.742	0.821	0.729

	INDEX 11692 SAMPLE 9692	INDEX 11693 SAMPLE 9693	INDEX 11694 SAMPLE 9706
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	DODDRIDGE	DODDRIDGE	DODDRIDGE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	O. W. 28826	NO. 4709	O. W. 26337
LOCATION	CENTER DIST.	COVE DIST.	GRANT DIST.
OWNER	FOLEY OIL AND GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	06/30/62	02/27/19	03/31/61
SAMPLED	01/08/65	01/08/65	01/08/65
FORMATION	MISS-BIG INJUN	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1965	1900	2034
WELLHEAD PRESSURE,PSIG	800	20	335
OPEN FLOW, MCFD	700	9	300
COMPONENT, MOLE PCT			
METHANE	79.2	79.2	81.1
ETHANE	12.6	9.8	10.6
PROPANE	4.5	4.2	4.0
N-BUTANE	1.0	1.2	1.0
ISOBUTANE	0.7	0.9	0.8
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	1.1	3.0	1.4
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.07	0.19	0.09
HEATING VALUE*	1233	1217	1216
SPECIFIC GRAVITY	0.707	0.718	0.699

	INDEX 11695 SAMPLE 9331	INDEX 11696 SAMPLE 9515	INDEX 11697 SAMPLE 9288
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	DODDRIDGE	DODDRIDGE	FAYETTE
FIELD	PORTO RICO	STRAIGHT FORK-BLUESTONE CK.	ALLOY
WELL NAME	S. A. HURST, JR. NO. 1	NO. 5452	SEMET SOLVAY NO. 1
LOCATION	NEW MILTON DIST.	SW DIST.	FAYETTEVILLE 3 SW
OWNER	DEVONIAN GAS & OIL CO.	HOPE NATURAL GAS CO.	CITIES SERVICE OIL CO.
COMPLETED	03/02/62	10/08/63	11/09/57
SAMPLED	05/04/64	07/27/64	04/07/64
FORMATION	MISS-BIG INJUN	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2003	1945	1904
WELLHEAD PRESSURE,PSIG	530	670	505
OPEN FLOW, MCFD	500	696	434
COMPONENT, MOLE PCT			
METHANE	65.5	82.0	93.9
ETHANE	19.1	8.9	4.3
PROPANE	9.4	3.6	0.7
N-BUTANE	2.7	1.0	0.2
ISOBUTANE	1.1	0.7	0.1
N-PENTANE	0.6	0.4	TRACE
ISOPENTANE	0.6	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.5	0.3	0.2
NITROGEN	0.3	2.7	0.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.02	0.12	0.04
HEATING VALUE*	1458	1178	1075
SPECIFIC GRAVITY	0.839	0.687	0.597

	INDEX 11698 SAMPLE 4367	INDEX 11699 SAMPLE 16096	INDEX 11700 SAMPLE 9357
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	FAYETTE	FAYETTE	FAYETTE
FIELD	GAULEY DISTRICT NO. 23	HAWK'S NEST	LOUP CREEK
WELL NAME	GAULEY MT. COAL CO. NO. 14	M. D. STEELE NO. 1	LOUP CREEK CO. NO. 14
LOCATION	FAYETTE QUAD.	LAUREL CREEK	NOT GIVEN
OWNER	COLUMBIAN CARBON CO.	CABOT CORP.	UNION CARBIDE CORP.
COMPLETED	07/05/47	10/20/78	05/--/64
SAMPLED	09/25/47	10/09/80	05/15/64
FORMATION	MISS---	MISS-RAVENCLIFF	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1639	1260	2077
WELLHEAD PRESSURE,PSIG	500	130	387
OPEN FLOW, MCFD	890	210	200
COMPONENT, MOLE PCT			
METHANE	95.4	90.5	94.0
ETHANE	2.5	5.8	1.5
PROPANE	---	1.1	0.3
N-BUTANE	---	0.2	0.1
ISOBUTANE	---	0.2	0.0
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.1	0.0
NITROGEN	0.7	1.3	3.5
OXYGEN	0.3	0.2	0.2
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.1
HELIUM	0.18	0.04	0.20
HEATING VALUE*	1011	1076	991
SPECIFIC GRAVITY	0.579	0.614	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11713 SAMPLE 9480	INDEX 11714 SAMPLE 14021	INDEX 11715 SAMPLE 14022
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	GLENVILLE	GLENVILLE S	GLENVILLE S
WELL NAME	MINERVA STUMP NO. 6350	LOUISA MOYERS NO. 2	D. C. HAYES NO. 2
LOCATION	GLENVILLE DIST.	CENTER DIST.	TROY DIST.
OWNER	MOPE NATURAL GAS CO.	BASIN PETROLEUM CORP.	BASIN PETROLEUM CORP.
COMPLETED	08/06/23	02/05/73	01/05/73
SAMPLED	07/17/64	06/05/74	06/05/74
FORMATION	MISS-BIG INJUN	MISS-MAXTON	MISS-GREENBRIER
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1848	1960	1894
WELLHEAD PRESSURE,PSIG	200	550	520
OPEN FLOW, MCFD	144	750	1000
COMPONENT, MOLE PCT			
METHANE	83.1	86.1	85.5
ETHANE	9.9	8.2	7.9
PROPANE	3.3	2.8	2.7
N-BUTANE	0.8	0.5	0.6
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.5	1.4	2.1
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.08	0.12	0.12
HEATING VALUE*	1179	1139	1133
SPECIFIC GRAVITY	0.677	0.651	0.656

	INDEX 11716 SAMPLE 14023	INDEX 11717 SAMPLE 14024	INDEX 11718 SAMPLE 9364
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	GLENVILLE S	GLENVILLE S	NORMANTOWN
WELL NAME	ARBUCKLE-GARRETT NO. 1	EFFIE MARKS NO. 1	L. J. MCKINNEY NO. 4
LOCATION	GLENVILLE DIST.	GLENVILLE DIST.	CENTER DIST.
OWNER	BASIN PETROLEUM CORP.	BASIN PETROLEUM CORP.	SMITH & BARKER OIL & GAS CO.
COMPLETED	03/22/73	01/18/73	--/--/47
SAMPLED	06/05/74	06/05/74	05/08/64
FORMATION	MISS-GREENBRIER	MISS-GREENBRIER	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1822	1744	2065
WELLHEAD PRESSURE,PSIG	685	700	NOT GIVEN
OPEN FLOW, MCFD	1200	1000	5
COMPONENT, MOLE PCT			
METHANE	85.6	87.1	82.1
ETHANE	8.6	6.9	10.2
PROPANE	2.7	2.4	4.2
N-BUTANE	0.5	0.5	1.2
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	1.4	2.0	0.9
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.10	0.13	0.09
HEATING VALUE*	1104	1113	1219
SPECIFIC GRAVITY	0.653	0.639	0.694

	INDEX 11719 SAMPLE 9662	INDEX 11720 SAMPLE 12201	INDEX 11721 SAMPLE 12202
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	NOT GIVEN	REVEL	REVEL
WELL NAME	NO. 5306	JONES B NO. 1	KANAWHA UNION BANK A NO. 1
LOCATION	GLENVILLE DIST.	DEKALB DIST.	TROY DIST.
OWNER	EQUITABLE GAS CO.	KEWANEE OIL CO.	KEWANEE OIL CO.
COMPLETED	10/16/20	10/07/69	09/11/69
SAMPLED	12/09/64	02/06/70	02/04/70
FORMATION	MISS-BIG INJUN	PENN-SALT SAND	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1480	1406	1926
WELLHEAD PRESSURE,PSIG	180	165	720
OPEN FLOW, MCFD	17	327	3500
COMPONENT, MOLE PCT			
METHANE	84.0	83.7	81.3
ETHANE	9.1	7.9	9.1
PROPANE	3.1	3.2	3.8
N-BUTANE	0.8	0.7	0.9
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.7	2.8	3.3
OXYGEN	0.1	TRACE	0.2
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.4	0.2
HYDROGEN SULFIDE*	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.0
HELIUM	0.15	0.20	0.17
HEATING VALUE*	1160	1137	1156
SPECIFIC GRAVITY	0.667	0.663	0.682

	INDEX 11722 SAMPLE 10014	INDEX 11723 SAMPLE 9890	INDEX 11724 SAMPLE 9494
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GILMER
FIELD	SAND FORK	STOUTS MILLS	STUMPTOWN-NORMANTOWN-SHOCK
WELL NAME	M. E. COLLINS NO. 7	BAILEY MOYER NO. 1	BENNETT NO. 5067
LOCATION	GLENNVILLE DIST.	NOT GIVEN	CENTER DIST.
OWNER	PENNZOIL CO.	TROJAN COAL & PETROLEUM CO.	MOPE NATURAL GAS CO.
COMPLETED	04/15/65	12/20/64	10/05/18
SAMPLED	07/27/65	05/08/65	07/16/64
FORMATION	MISS-MAXTON	MISS-SQUAW & BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1960	2180	1990
WELLHEAD PRESSURE,PSIG	250	700	80
OPEN FLOW, MCFD	1250	1500	11
COMPONENT, MOLE PCT			
METHANE	87.3	83.8	71.5
ETHANE	7.5	9.3	16.5
PROPANE	2.4	3.1	7.2
N-BUTANE	0.5	0.7	1.8
ISOBUTANE	0.5	0.5	0.9
N-PENTANE	0.1	0.2	0.4
ISOPENTANE	0.1	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	1.1	1.6	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.13	0.04
HEATING VALUE*	1134	1173	1351
SPECIFIC GRAVITY	0.644	0.672	0.777

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11725 SAMPLE 9502	INDEX 11726 SAMPLE 9172	INDEX 11727 SAMPLE 5215
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	GILMER	GILMER	GREENBRIER
FIELD	STUMPTOWN-NORMANTOWN-SMOCK	TANNER	NOT GIVEN
WELL NAME	MARTHA TURNER NO. 8563	F. A. WEAVER NO. 2	THORNBURY NO. 1
LOCATION	CENTER DIST.	S-30, W-20	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	PENNZOIL CO.	DEEP ROCK OIL CO.
COMPLETED	09/--/61	08/11/60	--/--/00
SAMPLED	07/16/64	11/19/63	05/29/52
FORMATION	MISS-BIG INJUN	MISS-BIG INJUN	DEVO-CHERT & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2070	2022	6375
WELLHEAD PRESSURE,PSIG	110	590	2400
OPEN FLOW, MCFD	14	100	500
COMPONENT, MOLE PCT			
METHANE	81.2	77.9	92.9
ETHANE	10.8	12.7	0.9
PROPANE	4.5	5.9	0.1
N-BUTANE	1.0	1.4	0.1
ISOBUTANE	0.6	0.6	0.0
N-PENTANE	0.3	0.5	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.0
NITROGEN	1.3	1.2	5.2
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	0.5
HELIUM	0.02	0.10	0.17
HEATING VALUE*	1214	1259	963
SPECIFIC GRAVITY	0.695	0.724	0.587

	INDEX 11728 SAMPLE 10812	INDEX 11729 SAMPLE 10742	INDEX 11730 SAMPLE 10715
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HAMPSHIRE	HARDY	HARDY
FIELD	NOT GIVEN	HARDY COUNTY	LOST RIVER
WELL NAME	M. B. BILLER, ET AL.	SAMUEL M. FUNK NO. 9368	CLEVELAND EVANS, ET AL. 9386
LOCATION	SHERMAN DIST.	MOOREFIELD DIST.	MOOREFIELD DIST.
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	07/13/66	08/16/66	06/04/66
SAMPLED	12/06/66	10/06/66	09/02/66
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6506	6926	6408
WELLHEAD PRESSURE,PSIG	2200	2245	2149
OPEN FLOW, MCFD	8690	32000	90000
COMPONENT, MOLE PCT			
METHANE	97.3	96.4	97.6
ETHANE	1.1	1.1	1.1
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.4	2.3	1.1
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.08	0.12	0.13
HEATING VALUE*	1008	996	1009
SPECIFIC GRAVITY	0.567	0.573	0.560

	INDEX 11731 SAMPLE 9221	INDEX 11732 SAMPLE 9485	INDEX 11733 SAMPLE 9520
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HARDY	HARRISON	HARRISON
FIELD	LOST RIVER-ELKINS	BROWN-LUMBERPORT	BROWN-LUMBERPORT
WELL NAME	C. P. WILKENS NO. 9301	S. KELLY NO. 1961	NO. 7441
LOCATION	NOT GIVEN	SARDIS DIST.	TENMILE DIST.
OWNER	UNITED FUEL GAS CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	12/03/63	11/12/10	01/30/25
SAMPLED	01/16/64	07/16/64	07/24/64
FORMATION	DEVO-ORISKANY	DEVO-FIFTY FOOT SAND	DEVO-FIFTY FOOT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6756	2943	2397
WELLHEAD PRESSURE,PSIG	2250	38	170
OPEN FLOW, MCFD	1500	2844	53
COMPONENT, MOLE PCT			
METHANE	97.5	84.2	84.8
ETHANE	1.0	8.1	8.3
PROPANE	0.1	3.1	2.9
N-BUTANE	0.0	0.9	0.8
ISOBUTANE	0.0	0.7	0.5
N-PENTANE	0.0	0.5	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.6	0.4
NITROGEN	1.1	1.5	1.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.10	0.11	0.12
HEATING VALUE*	1008	1193	1172
SPECIFIC GRAVITY	0.565	0.685	0.672

	INDEX 11734 SAMPLE 11668	INDEX 11735 SAMPLE 12613	INDEX 11736 SAMPLE 9518
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	BRUSHY FORK	KENNEDY DISTRICT	MEATHOUSE FORK-BRISTOL
WELL NAME	C. S. TRIMBLE NO. 3	NO. 112996, RANDOLPH	NO. 7473
LOCATION	SIMPSON DIST.	GRANT DIST.	TENMILE DIST.
OWNER	TWM PETROLEUM INC.	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.
COMPLETED	02/07/68	08/27/70	11/19/13
SAMPLED	10/09/68	--/--/00	07/24/64
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-GORDON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4156	4156	2755
WELLHEAD PRESSURE,PSIG	2080	1535	31
OPEN FLOW, MCFD	4464	3217	46
COMPONENT, MOLE PCT			
METHANE	93.0	86.2	69.3
ETHANE	4.7	9.0	14.6
PROPANE	0.9	2.4	8.5
N-BUTANE	0.2	0.6	2.8
ISOBUTANE	0.1	0.3	1.4
N-PENTANE	0.2	0.3	0.6
ISOPENTANE	0.1	0.1	1.0
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.1	0.6
NITROGEN	0.5	0.8	0.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.06	0.06	0.04
HEATING VALUE*	1074	1149	1429
SPECIFIC GRAVITY	0.598	0.651	0.827

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11737 SAMPLE 9703	INDEX 11738 SAMPLE 9484	INDEX 11739 SAMPLE 11734
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	HARRISON	HARRISON	HARRISON
FIELD	NOT GIVEN	WESTON-JANE LEW	WESTON-JANE LEW
WELL NAME	NO. 2459	ROSA V. DAWSON NO. 6927	T. M. SMITH NO. 10860
LOCATION	SARDIS DIST.	GRANT DIST.	UNION DIST.
OWNER	EQUITABLE GAS CO.	HOPE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	11/02/11	01/03/18	--/--/00
SAMPLED	01/07/65	07/16/64	01/09/69
FORMATION	MISS-BIG INJUN	DEVO-FIFTH	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1940	2073	NOT GIVEN
WELLHEAD PRESSURE,PSIG	7	424	1080
OPEN FLOW, MCFD	3	950	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.0	85.8	84.5
ETHANE	7.7	7.6	9.7
PROPANE	3.7	2.5	2.8
N-BUTANE	1.6	0.8	0.6
ISOBUTANE	0.9	0.4	0.4
N-PENTANE	0.6	0.3	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.4	0.2
NITROGEN	1.8	1.6	1.1
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.13	0.07	0.06
HEATING VALUE*	1241	1196	1168
SPECIFIC GRAVITY	0.720	0.664	0.665

	INDEX 11740 SAMPLE 4436	INDEX 11741 SAMPLE 12784	INDEX 11742 SAMPLE 4585
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	ELK POCA ORISKANY	GROUND HOG CREEK	JACKSON COUNTY
WELL NAME	LUCY BOSWELL NO. 1, SER.1235	H. F. YOUNG NO. 1	N. WATERBURY NO. 1
LOCATION	KENNA QUAD.	RAVENSWOOD DIST.	NOT GIVEN
OWNER	GODFREY L. CABOT, INC.	MANAGEMENT CONTROL CORP.	UNITED CARBON CO.
COMPLETED	08/08/47	--/--/00	03/04/48
SAMPLED	12/24/47	04/20/71	10/08/48
FORMATION	DEVO-ORISKANY	SILU-NEWBURG	DEVO-BASAL
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4921	NOT GIVEN	4984
WELLHEAD PRESSURE,PSIG	1600	NOT GIVEN	175
OPEN FLOW, MCFD	569	NOT GIVEN	100
COMPONENT, MOLE PCT			
METHANE	80.8	89.1	59.4
ETHANE	17.9	5.2	34.6
PROPANE	---	2.4	---
N-BUTANE	---	0.7	---
ISOBUTANE	---	0.6	---
N-PENTANE	---	0.2	---
ISOPENTANE	---	0.2	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.3	---
NITROGEN	0.7	1.0	5.8
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.05	0.08	0.05
HEATING VALUE*	1139	1129	1222
SPECIFIC GRAVITY	0.649	0.641	0.750

	INDEX 11743 SAMPLE 9499	INDEX 11744 SAMPLE 10920	INDEX 11745 SAMPLE 9503
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	MOUNT ALTO	NEWBURG	NOT GIVEN
WELL NAME	C. W. BAIER NO. 9332	D. K. SMITH, NO. A-1	OTIS SMINN NO. 10519
LOCATION	UNION DIST.	RIPLEY DIST.	RIPLEY DIST.
OWNER	HOPE NATURAL GAS CO.	CITIES SERVICE OIL CO.	HOPE NATURAL GAS CO.
COMPLETED	01/--/50	02/24/67	03/--/64
SAMPLED	07/21/64	04/11/67	07/21/64
FORMATION	DEVO-BROWN SHALE	SILU-NEWBURG	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3760	5612	5071
WELLHEAD PRESSURE,PSIG	790	1845	950
OPEN FLOW, MCFD	10	21645	636
COMPONENT, MOLE PCT			
METHANE	76.8	92.9	86.1
ETHANE	13.6	3.5	8.0
PROPANE	5.8	1.2	2.7
N-BUTANE	1.2	0.4	0.9
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.3	0.1	0.3
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.3
NITROGEN	1.5	1.1	2.0
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.04	0.10	0.05
HEATING VALUE*	1248	1077	1152
SPECIFIC GRAVITY	0.721	0.607	0.665

	INDEX 11746 SAMPLE 11140	INDEX 11747 SAMPLE 11141	INDEX 11748 SAMPLE 9147
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	PARCHMENT	PARCHMENT	PN DISTRICT
WELL NAME	J. B. CARNEY NO. 1-758	STEWART SAYRE NO. 1-748	G. W. VANCE NO. 1
LOCATION	RIPLEY DIST.	RIPLEY DIST.	RIPLEY DIST.
OWNER	COMMONWEALTH GAS CORP.	COMMONWEALTH GAS CORP.	CABOT CORP.
COMPLETED	05/04/67	08/05/66	05/18/60
SAMPLED	08/01/67	08/05/67	11/01/63
FORMATION	DEVO-ORISKANY	SILU-NEWBURG	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4697	5500	4993
WELLHEAD PRESSURE,PSIG	1830	2180	1680
OPEN FLOW, MCFD	11800	6782	1314
COMPONENT, MOLE PCT			
METHANE	88.0	89.3	86.7
ETHANE	6.0	3.5	7.3
PROPANE	2.0	1.4	2.1
N-BUTANE	0.7	0.4	0.9
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	2.0	4.6	1.8
OXYGEN	TRACE	0.7	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.08	0.09	0.10
HEATING VALUE*	1120	1043	1138
SPECIFIC GRAVITY	0.643	0.623	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11749 SAMPLE 9157	INDEX 11750 SAMPLE 4553	INDEX 11751 SAMPLE 11857
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	PN DISTRICT	RAVENWOOD	RAVENWOOD
WELL NAME	FREDA JOHNSON NO. 1	BLANCHE ASHCRAFT NO. 2	S. P. MILLER NO. 1
LOCATION	RIPLEY	SANDY CREEK	RAVENWOOD DIST.
OWNER	CABOT CORP.	COLUMBIAN CARBON CO.	COMMONWEALTH GAS CORP.
COMPLETED	07/02/62	01/20/48	04/08/69
SAMPLED	11/01/63	06/11/48	05/07/69
FORMATION	MISS-BEREA	DEVO-ORISKANY	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2606	4470	4896
WELLHEAD PRESSURE,PSIG	580	1300	1880
OPEN FLOW, MCFD	50	759	27000
COMPONENT, MOLE PCT			
METHANE	84.5	82.9	88.0
ETHANE	3.8	15.7	5.7
PROPANE	2.3	---	2.5
N-BUTANE	1.1	---	0.9
ISOBUTANE	TRACE	---	0.4
N-PENTANE	0.2	---	0.6
ISOPENTANE	0.4	---	0.0
CYCLOPENTANE	TRACE	---	0.2
HEXANES PLUS	0.2	---	0.5
NITROGEN	6.9	0.9	0.8
OXYGEN	0.1	0.2	0.0
ARGON	0.0	---	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.2	0.1
HELIUM	0.50	0.08	0.08
HEATING VALUE*	1057	1121	1166
SPECIFIC GRAVITY	0.656	0.638	0.661

	INDEX 11752 SAMPLE 12270	INDEX 11753 SAMPLE 12225	INDEX 11754 SAMPLE 4456
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	RIPLEY	RIPLEY N	SISSONVILLE
WELL NAME	EDNA SHOCKLEY ET AL. 9540	JOHN MCCOY NO. 1-789	NO. 6218
LOCATION	RAVENWOOD DIST.	RIPLEY DIST.	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	COMMONWEALTH GAS CORP.	UNITED FUEL GAS CO.
COMPLETED	02/24/70	12/12/70	10/16/47
SAMPLED	05/13/70	03/13/70	02/23/48
FORMATION	SILU-NEWBURG	SILU-NEWBURG	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5646	5673	4743
WELLHEAD PRESSURE,PSIG	2182	2175	775
OPEN FLOW, MCFD	29500	70000	2023
COMPONENT, MOLE PCT			
METHANE	89.4	88.3	79.2
ETHANE	4.9	4.9	19.6
PROPANE	2.5	2.4	---
N-BUTANE	0.6	0.7	---
ISOBUTANE	0.4	0.6	---
N-PENTANE	0.3	0.4	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	0.1	0.2	---
HEXANES PLUS	0.3	0.6	---
NITROGEN	1.6	1.8	0.1
OXYGEN	0.0	TRACE	0.8
ARGON	TRACE	0.0	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.0	0.2
HELIUM	0.09	0.09	0.06
HEATING VALUE*	1123	1144	1154
SPECIFIC GRAVITY	0.640	0.656	0.658

	INDEX 11755 SAMPLE 4457	INDEX 11756 SAMPLE 4469	INDEX 11757 SAMPLE 4473
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	JACKSON
FIELD	SISSONVILLE	SISSONVILLE	SISSONVILLE
WELL NAME	NO. 6189	NO. 6199	NO. 6214
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	09/08/47	08/25/47	10/03/47
SAMPLED	02/23/48	02/23/48	02/23/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4925	4851	4780
WELLHEAD PRESSURE,PSIG	430	725	836
OPEN FLOW, MCFD	189	1726	1057
COMPONENT, MOLE PCT			
METHANE	78.4	79.3	79.5
ETHANE	19.9	19.4	19.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.4	0.5	0.7
OXYGEN	0.9	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.05	0.05	0.05
HEATING VALUE*	1151	1151	1149
SPECIFIC GRAVITY	0.662	0.657	0.656

	INDEX 11758 SAMPLE 9402	INDEX 11759 SAMPLE 9497	INDEX 11760 SAMPLE 4366
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	JACKSON	JACKSON	KANAWHA
FIELD	SISSONVILLE	UTICA	BLUE CREEK
WELL NAME	R. D. HUTCHISON NO. 1	LIZZIE MOLLERON NO. 10159	LUCINDA CARTE NO. 6151
LOCATION	NOT GIVEN	GRANT DIST.	LAT. 38-26, LONG. 81-27
OWNER	ASHLAND OIL & REFINING CO.	HOPE NATURAL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	11/10/44	08/--/58	07/28/47
SAMPLED	06/--/64	07/21/64	09/17/47
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4942	4945	5312
WELLHEAD PRESSURE,PSIG	1680	445	1670
OPEN FLOW, MCFD	2113	25	18151
COMPONENT, MOLE PCT			
METHANE	85.1	81.1	77.8
ETHANE	7.8	10.5	20.1
PROPANE	2.4	4.3	---
N-BUTANE	0.8	1.1	---
ISOBUTANE	0.5	0.2	---
N-PENTANE	0.3	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.2	---
NITROGEN	2.3	2.0	0.0
OXYGEN	0.2	TRACE	0.4
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	1.7
HELIUM	0.06	0.12	0.03
HEATING VALUE*	1142	1196	1148
SPECIFIC GRAVITY	0.664	0.692	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11761 SAMPLE 9076	INDEX 11762 SAMPLE 9354	INDEX 11763 SAMPLE 10071
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	BLUE CREEK	BLUE CREEK	CENTRAL DIVISION
WELL NAME	CHARLOTTE CORK NO. 1	CONNER NO. 1	BLACK BAND COAL NO. 5252
LOCATION	NOT GIVEN	NOT GIVEN	LOUDON DIST.
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	UNITED FUEL GAS CO.
COMPLETED	01/23/63	10/10/61	07/02/65
SAMPLED	09/05/63	05/07/64	08/17/65
FORMATION	PENN-SALT SAND	MISS-BIG LIME	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1293	2059	5212
WELLHEAD PRESSURE,PSIG	380	490	2075
OPEN FLOW, MCFD	11300	607	52350
COMPONENT, MOLE PCT			
METHANE	93.7	80.7	93.3
ETHANE	2.4	12.2	3.1
PROPANE	0.7	4.4	0.8
N-BUTANE	0.2	1.3	0.5
ISOBUTANE	0.2	0.4	0.2
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	2.1	TRACE	1.5
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.1	0.1	0.11
HELIUM	0.19	0.05	
HEATING VALUE*	1032	1239	1066
SPECIFIC GRAVITY	0.591	0.700	0.605

	INDEX 11764 SAMPLE 10428	INDEX 11765 SAMPLE 510	INDEX 11766 SAMPLE 4365
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	CENTRAL DIVISION	CLENDENIN	CLENDENIN
WELL NAME	BLACK BAND COAL&COKE CO-3969	JAMES JARRETT NO. 1	NUMA BLK. COAL CO. NO. 5828
LOCATION	KANAWHA STATE FOREST	TOWNSITE	LAT. 38-23, LONG. 81-28
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	10/27/65	--/--/11	07/03/47
SAMPLED	05/02/66	10/15/20	09/15/47
FORMATION	SILU-NEWBURG	MISS-SQUAW	DEVO-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5572	1904	5177
WELLHEAD PRESSURE,PSIG	2015	450	825
OPEN FLOW, MCFD	2477	1500	4075
COMPONENT, MOLE PCT			
METHANE	93.4	93.2	75.4
ETHANE	2.9	4.3	20.7
PROPANE	0.6	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	1.6	1.8	1.4
OXYGEN	0.0	0.3	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.3	2.1
HELIUM	0.11	0.10	0.04
HEATING VALUE*	1062	1021	1135
SPECIFIC GRAVITY	0.605	0.587	0.685

	INDEX 11767 SAMPLE 9360	INDEX 11768 SAMPLE 9287	INDEX 11769 SAMPLE 12471
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	CLENDENIN	COLBON	COOPERS CREEK
WELL NAME	OSBORNE NO. 7	W. H. VICKERS NO. 1-B	PUSHKIN NO. B-1
LOCATION	NOT GIVEN	ELK DIST.	POCA DIST.
OWNER	ASHLAND OIL & REFINING CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	08/--/22	08/26/46	06/20/70
SAMPLED	05/08/64	04/09/64	10/20/70
FORMATION	MISS-WEIR	DEVO-ORISKANY	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2108	4964	5807
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1450	1978
OPEN FLOW, MCFD	NOT GIVEN	2214	12000
COMPONENT, MOLE PCT			
METHANE	71.6	83.8	95.3
ETHANE	15.0	7.4	1.9
PROPANE	7.4	2.8	0.4
N-BUTANE	2.3	0.8	0.2
ISOBUTANE	0.8	0.3	0.1
N-PENTANE	0.4	0.3	TRACE
ISOPENTANE	0.6	0.1	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.1	3.7	1.7
OXYGEN	0.3	0.2	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.5	TRACE
HELIUM	0.05	0.34	0.10
HEATING VALUE*	1353	1123	1030
SPECIFIC GRAVITY	0.784	0.670	0.583

	INDEX 11770 SAMPLE 9375	INDEX 11771 SAMPLE 9877	INDEX 11772 SAMPLE 10738
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	DAVIS CREEK	DAVIS CREEK	DAVIS CREEK
WELL NAME	COURTLAND CO. NO. 5	W. C. HARDY ET AL. NO. 15	COURTLAND CO., ET AL. NO. 3
LOCATION	CHARLESTON QUAD.	DAVIS CREEK	WASHINGTON DIST.
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	COMMONWEALTH GAS CORP.
COMPLETED	05/31/63	03/05/65	07/14/66
SAMPLED	05/18/64	04/27/65	09/30/66
FORMATION	MISS-BIG INJUN	SILU-NEWBURG	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1590	5272	5402
WELLHEAD PRESSURE,PSIG	430	2060	1950
OPEN FLOW, MCFD	808	2190	20135
COMPONENT, MOLE PCT			
METHANE	83.3	93.6	91.2
ETHANE	9.5	3.0	3.7
PROPANE	3.7	0.8	1.2
N-BUTANE	1.3	0.2	0.4
ISOBUTANE	0.2	0.2	0.3
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.6	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	1.2	1.7	2.2
OXYGEN	0.0	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.09	0.12	0.16
HEATING VALUE*	1195	1050	1077
SPECIFIC GRAVITY	0.682	0.597	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE I. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11773 SAMPLE 4313	INDEX 11774 SAMPLE 4458	INDEX 11775 SAMPLE 4459
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KANAWHA CITY	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN
WELL NAME	CAMPBELLS CREEK CO. NO. 4	NO. 6239	NO. 6242
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	COLUMBIAN CARBON CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	08/05/40	12/17/47	12/24/47
SAMPLED	05/21/47	04/01/48	04/01/48
FORMATION	SILU-CLINTON	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6204	5450	5098
WELLHEAD PRESSURE,PSIG	1800	1550	1300
OPEN FLOW, MCFD	1000	2282	7117
COMPONENT, MOLE PCT			
METHANE	40.1	77.9	77.4
ETHANE	1.7	21.6	19.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.6	0.0	1.7
OXYGEN	0.3	0.3	1.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	52.1	0.2	0.3
HELIUM	0.19	0.03	0.04
HEATING VALUE*	437	1176	1128
SPECIFIC GRAVITY	1.094	0.665	0.667

	INDEX 11776 SAMPLE 4519	INDEX 11777 SAMPLE 4520	INDEX 11778 SAMPLE 4629
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN
WELL NAME	NO. 5848	NO. 6263	NO. 6296
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	01/06/48	03/23/48	06/03/48
SAMPLED	05/06/48	05/06/48	11/17/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5163	5137	5244
WELLHEAD PRESSURE,PSIG	975	1165	1125
OPEN FLOW, MCFD	1037	582	6367
COMPONENT, MOLE PCT			
METHANE	78.5	80.2	71.1
ETHANE	20.0	19.2	26.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.0	0.1	2.1
OXYGEN	0.2	0.2	0.3
ARGON	---	---	0.0
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.03	0.03	0.04
HEATING VALUE*	1154	1156	1191
SPECIFIC GRAVITY	0.662	0.654	0.697

	INDEX 11779	INDEX 11780	INDEX 11781
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KANAWHA-CLENDENIN	KANAWHA-CLENDENIN	KELLYS CREEK-MAMMOTH
WELL NAME	NO. 1227	MATTIE G. RAND NO. 6939	LEWIS HOLDING NO. 1
LOCATION	NOT GIVEN	BIG SANDY DIST.	CABIN CREEK DIST.
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	06/03/48	09/03/52	06/01/60
SAMPLED	11/17/48	03/23/53	06/23/64
FORMATION	NOT GIVEN	DEVO-ORISKANY	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5326	5354	985
WELLHEAD PRESSURE,PSIG	1150	1085	205
OPEN FLOW, MCFD	4093	13319	266
COMPONENT, MOLE PCT			
METHANE	70.9	85.4	95.8
ETHANE	27.6	8.8	1.0
PROPANE	---	2.8	0.3
N-BUTANE	---	0.8	TRACE
ISOBUTANE	---	0.4	TRACE
N-PENTANE	---	0.2	TRACE
ISOPENTANE	---	0.2	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	TRACE
NITROGEN	0.7	0.9	2.3
OXYGEN	0.6	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.04	0.04	0.16
HEATING VALUE*	1213	1164	996
SPECIFIC GRAVITY	0.699	0.661	0.572

	INDEX 11782 SAMPLE 9425	INDEX 11783 SAMPLE 9645	INDEX 11784 SAMPLE 9421
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	KELLYS CREEK-MAMMOTH	KELLYS CREEK-MAMMOTH	MALDEN-CAMPBELL CREEK
WELL NAME	MARMET NO. 14	LEWIS HOLDING NO. 5	HANCOCK NO. 7
LOCATION	CABIN CREEK DIST.	CABIN CREEK DIST.	CABIN CREEK DIST.
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	01/06/21	10/27/61	11/06/20
SAMPLED	06/23/64	10/06/64	06/23/64
FORMATION	MISS-BIG LIME	-GREY INJUN	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2080	2298	1800
WELLHEAD PRESSURE,PSIG	290	500	420
OPEN FLOW, MCFD	850	203	525
COMPONENT, MOLE PCT			
METHANE	78.3	82.1	82.1
ETHANE	11.3	11.7	9.7
PROPANE	4.7	3.5	3.8
N-BUTANE	1.7	1.0	1.2
ISOBUTANE	1.0	0.5	1.0
N-PENTANE	0.7	0.2	0.4
ISOPENTANE	0.4	0.3	0.3
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.6	0.2	0.4
NITROGEN	0.5	0.3	0.8
OXYGEN	0.6	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.03	0.04	0.03
HEATING VALUE*	1309	1214	1232
SPECIFIC GRAVITY	0.749	0.686	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11785 SAMPLE 9489	INDEX 11786 SAMPLE 9490	INDEX 11787 SAMPLE 9507
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	N. B. TOMPKINS	N. B. TOMPKINS	N. B. TOMPKINS
WELL NAME	NO. 4 SERIAL NO. 871	TOMPKINS NO. 8	NO. 6
LOCATION	MALDEN DIST.	MALDEN DIST.	MALDEN DIST.
OWNER	CABOT CORP.	CABOT CORP.	CABOT CORP.
COMPLETED	11/27/36	09/30/64	08/23/37
SAMPLED	07/14/64	07/14/64	08/10/64
FORMATION	DEVO-ORISKANY	MISS-BIG INJUN	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4520	1475	4436
WELLHEAD PRESSURE,PSIG	1010	402	NOT GIVEN
OPEN FLOW, MCFD	853	949	492
COMPONENT, MOLE PCT			
METHANE	84.1	80.8	84.2
ETHANE	7.4	9.7	8.1
PROPANE	3.6	4.2	3.2
N-BUTANE	0.9	1.6	0.9
ISOBUTANE	0.1	0.8	0.2
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	TRACE	0.7	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	0.1	0.4	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.0	TRACE	2.2
HELIUM	0.07	0.04	0.05
HEATING VALUE*	1144	1245	1150
SPECIFIC GRAVITY	0.686	0.706	0.681

	INDEX 11788 SAMPLE 9225	INDEX 11789 SAMPLE 9226	INDEX 11790 SAMPLE 9227
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	NORTHERN DIVISION	NORTHERN DIVISION	NORTHERN DIVISION
WELL NAME	NO. 9306	NO. 8977	NO. 8960
LOCATION	ELK DIST.	MALDEN DIST.	BIG SANDY DIST.
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	09/17/63	11/06/60	08/10/60
SAMPLED	01/21/64	01/21/64	01/21/64
FORMATION	PENN-SALT SAND	MISS-BIG INJUN	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1025	1646	2255
WELLHEAD PRESSURE,PSIG	325	455	250
OPEN FLOW, MCFD	1453	1784	327
COMPONENT, MOLE PCT			
METHANE	90.9	81.9	71.0
ETHANE	3.3	11.0	16.5
PROPANE	0.8	3.8	6.6
N-BUTANE	0.3	1.2	1.5
ISOBUTANE	0.1	0.6	1.0
N-PENTANE	TRACE	0.2	0.4
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.3	0.3
NITROGEN	3.6	0.4	1.9
OXYGEN	0.4	0.1	0.2
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.20	0.05	0.55
HEATING VALUE*	1023	1227	1316
SPECIFIC GRAVITY	0.605	0.696	0.771

	INDEX 11791 SAMPLE 2857	INDEX 11792 SAMPLE 4766	INDEX 11793 SAMPLE 9166
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	NOT GIVEN	NOT GIVEN	PAINT CREEK
WELL NAME	COPENHAVER HEIRS NO. 1	NO. 20-769	EASTERN GAS & FUEL NO. 11
LOCATION	LICK BR.	NOT GIVEN	NOT GIVEN
OWNER	COLUMBIAN CARBON CO.	OWENS, LIBBEY-OWENS GAS DEPT	ASHLAND OIL & REFINING CO.
COMPLETED	--/--/00	05/19/49	07/18/60
SAMPLED	05/--/41	10/21/49	11/11/63
FORMATION	SILU-	SILU-MEDINA, WHITE	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	6038	2068
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1900	660
OPEN FLOW, MCFD	NOT GIVEN	560	158
COMPONENT, MOLE PCT			
METHANE	49.2	42.8	94.7
ETHANE	2.8	0.6	3.2
PROPANE	---	0.3	0.5
N-BUTANE	---	0.1	0.1
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	TRACE	0.1
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	7.9	5.8	1.2
OXYGEN	0.2	0.1	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	39.9	50.0	0.1
HELIUM	0.21	0.20	0.04
HEATING VALUE*	549	457	1042
SPECIFIC GRAVITY	0.991	1.075	0.586

	INDEX 11794 SAMPLE 10950	INDEX 11795 SAMPLE 11133	INDEX 11796 SAMPLE 11731
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	KANAWHA
FIELD	ROCKY FORK	ROCKY FORK	ROCKY FORK
WELL NAME	U.F.G. NO. 9449	SMITH BAILEY NO. 1	H. G. MILAM NO. 2
LOCATION	UNION DIST.	UNION DIST.	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	JAMAC PROPERTIES, INC.	APPALACHIAN EXP. & DEV. INC.
COMPLETED	02/24/67	09/21/67	01/11/69
SAMPLED	05/04/67	09/20/67	01/11/69
FORMATION	SILU-NEWBURG	SILU-NEWBURG	SILU-NEWBURG
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5617	5572	5488
WELLHEAD PRESSURE,PSIG	2220	2100	1875
OPEN FLOW, MCFD	31515	23000	3500
COMPONENT, MOLE PCT			
METHANE	92.0	92.2	91.4
ETHANE	3.4	3.4	3.3
PROPANE	1.1	1.1	1.0
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	1.7	1.9	2.5
OXYGEN	TRACE	0.1	0.4
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.09	0.10	0.09
HEATING VALUE*	1082	1066	1067
SPECIFIC GRAVITY	0.617	0.611	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11797 SAMPLE 9906	INDEX 11798 SAMPLE 11764	INDEX 11799 SAMPLE 14381
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	LEWIS
FIELD	SISSONVILLE	SISSONVILLE	FINSTER
WELL NAME	RAYMOND CTY COAL NO. 1556	CAVENDER CT AL. B-1	MARTHA POSEY NO. 11842
LOCATION	UNION TAX DIST.	ELK DIST.	COLLINS SETTLEMENT DIST.
OWNER	CABOT CORP.	CITIES SERVICE OIL CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	01/19/65	12/29/68	10/09/74
SAMPLED	05/26/65	02/14/69	06/11/75
FORMATION	DEVO-ORISKANY	SILU-NEWBURG	DEVO-FIFTY FOOT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5096	5793	2293
WELLHEAD PRESSURE,PSIG	1500	2271	960
OPEN FLOW, MCFD	343	52000	3916
COMPONENT, MOLE PCT			
METHANE	88.1	95.0	88.9
ETHANE	6.1	1.1	4.9
PROPANE	1.9	0.3	2.1
N-BUTANE	0.7	0.0	0.5
ISOBUTANE	0.3	0.0	0.5
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.4	0.0	0.1
NITROGEN	1.9	3.3	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.05	0.11	0.14
HEATING VALUE*	1126	990	1095
SPECIFIC GRAVITY	0.647	0.577	0.632

	INDEX 11800 SAMPLE 9439	INDEX 11801 SAMPLE 9454	INDEX 11802 SAMPLE 13707
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	LORENTZ	MURPHY CREEK	MURPHY CREEK
WELL NAME	LEWIS CO. FARM NO. 10324	PORTER ARNOLD FARM NO. 1872	WOOFTER A-455
LOCATION	MACKEES CREEK DIST.	COURT HOUSE DIST.	FREEMAN CREEK DIST.
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	ALLEGHENY LAND & MINERAL CO.
COMPLETED	08/08/61	07/06/10	09/14/72
SAMPLED	07/14/64	07/15/64	08/24/73
FORMATION	DEVO-BENSON	DEVO-GORDON	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4422	2604	6682
WELLHEAD PRESSURE,PSIG	1600	975	2650
OPEN FLOW, MCFD	4378	2400	2768
COMPONENT, MOLE PCT			
METHANE	87.1	89.1	95.6
ETHANE	7.6	5.9	2.9
PROPANE	2.0	1.6	0.4
N-BUTANE	0.6	0.3	0.1
ISOBUTANE	0.4	0.3	0.2
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.5	2.2	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.09	0.14	0.03
HEATING VALUE*	1132	1089	1050
SPECIFIC GRAVITY	0.647	0.626	0.585

	INDEX 11803 SAMPLE 13708	INDEX 11804 SAMPLE 9448	INDEX 11805 SAMPLE 9451
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	MURPHY CREEK	NOT GIVEN	NOT GIVEN
WELL NAME	BUTCHER A-454	W. R. GIMMEL FARM NO. 10441	JAMES R. MCCLAIN NO. 10317
LOCATION	FREEMAN CREEK DIST.	SKIN CREEK DIST.	COLLINS SETTLEMENT DIST.
OWNER	ALLEGHENY LAND & MINERAL CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	10/20/72	05/06/63	06/24/61
SAMPLED	08/24/73	07/14/64	07/15/64
FORMATION	DEVO-HUNTERSVILLE & ORISKANY	MISS-BIG INJUN	DEVO-FOURTH SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	6735	1487	1927
WELLHEAD PRESSURE,PSIG	2681	730	675
OPEN FLOW, MCFD	4300	1353	1905
COMPONENT, MOLE PCT			
METHANE	94.1	89.0	91.4
ETHANE	3.6	5.9	5.5
PROPANE	0.8	1.6	1.2
N-BUTANE	0.2	0.5	0.3
ISOBUTANE	0.2	0.3	0.2
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	0.5	1.9	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.03	0.10	0.09
HEATING VALUE*	1075	1095	1082
SPECIFIC GRAVITY	0.600	0.630	0.609

	INDEX 11806 SAMPLE 9663	INDEX 11807 SAMPLE 9665	INDEX 11808 SAMPLE 9666
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 7002	NO. 7024	35203-NO. 1
LOCATION	COURT HOUSE DIST.	FREEMAN CREEK DIST.	COLLINS SETTLEMENT DIST.
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	JAMES S. RAY
COMPLETED	11/15/14	07/21/15	05/17/60
SAMPLED	12/08/64	12/08/64	12/08/64
FORMATION	DEVO-GORDON	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2565	1440	1756
WELLHEAD PRESSURE,PSIG	32	1100	600
OPEN FLOW, MCFD	27	337	360
COMPONENT, MOLE PCT			
METHANE	78.7	82.7	89.9
ETHANE	12.5	9.2	4.2
PROPANE	4.6	5.3	1.6
N-BUTANE	1.3	1.0	0.7
ISOBUTANE	0.9	0.7	0.2
N-PENTANE	0.4	0.4	0.2
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.4	0.2
NITROGEN	1.3	1.7	2.5
OXYGEN	0.1	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.07	0.09	0.17
HEATING VALUE*	1260	1195	1081
SPECIFIC GRAVITY	0.727	0.690	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11809 SAMPLE 9667	INDEX 11810 SAMPLE 11687	INDEX 11811 SAMPLE 12050
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	NOT GIVEN	NOT GIVEN	PETERSON
WELL NAME	NO. 1969	MARY HULL NO. 1	HARRY MYERS NO. 1
LOCATION	COURT HOUSE DIST.	COLLINS SETTLEMENT DIST.	COLLINS SETTLEMENT DIST.
OWNER	EQUITABLE GAS CO.	ST. CLAIR OIL CO.	LITTLE SWISS OIL & GAS CO.
COMPLETED	09/24/07	03/06/68	09/01/68
SAMPLED	12/08/64	11/20/68	09/14/69
FORMATION	MISS-BIG INJUN	DEVO-GORDON	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1719	2111	2140
WELLHEAD PRESSURE,PSIG	320	750	780
OPEN FLOW, MCFD	155	400000	2500
COMPONENT, MOLE PCT			
METHANE	85.9	86.3	86.6
ETHANE	8.5	7.7	6.9
PROPANE	2.6	2.4	2.5
N-BUTANE	0.8	0.7	0.5
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.9	1.8	2.2
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.08	0.11	0.15
HEATING VALUE*	1131	1131	1117
SPECIFIC GRAVITY	0.657	0.651	0.643

	INDEX 11812 SAMPLE 9783	INDEX 11813 SAMPLE 9808	INDEX 11814 SAMPLE 12638
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	SKIN CREEK	SKIN CREEK	WANDALIA
WELL NAME	ALDIS CLARK NO. 10644	E. L. SMITH NO. 10645	RUSSELL & DENISON NO. 1
LOCATION	SKIN CREEK DIST.	SKIN CREEK DIST.	COLLINS SETTLEMENT DIST.
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	ST. CLAIR OIL CO.
COMPLETED	09/29/64	12/09/64	09/28/70
SAMPLED	03/03/65	03/17/65	01/22/71
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4596	4617	4128
WELLHEAD PRESSURE,PSIG	1895	1680	1575
OPEN FLOW, MCFD	2316	8691	2223
COMPONENT, MOLE PCT			
METHANE	90.0	89.8	89.2
ETHANE	6.5	6.8	6.9
PROPANE	1.3	1.5	1.9
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.9	0.7	1.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.06	0.05	0.07
HEATING VALUE*	1104	1109	1107
SPECIFIC GRAVITY	0.623	0.624	0.626

	INDEX 11815 SAMPLE 4428	INDEX 11816 SAMPLE 11060	INDEX 11817 SAMPLE 17592
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	VATIS	WESTON	WESTON JANE-LEW
WELL NAME	T. L. MONEYPENNY NO. E-1638	F. WHITE NO. 10888	VILLERS DONNOLLY NO. 12
LOCATION	FREEMAN CREEK DIST.	FREEMAN CREEK DIST.	WESTON QUAD.
OWNER	CARNEGIE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP	D. G. HANEY, INC.
COMPLETED	11/27/47	07/05/67	11/25/80
SAMPLED	02/03/48	08/09/67	02/12/85
FORMATION	DEVO-GORDON	DEVO-BENSON	DEVO-ELK
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2291	4613	5982
WELLHEAD PRESSURE,PSIG	505	1880	1460
OPEN FLOW, MCFD	989	9500	2953
COMPONENT, MOLE PCT			
METHANE	95.1	79.8	84.6
ETHANE	2.8	10.8	9.9
PROPANE	---	3.4	2.9
N-BUTANE	---	0.8	0.7
ISOBUTANE	---	0.5	0.4
N-PENTANE	---	0.0	0.2
ISOPENTANE	---	1.4	0.1
CYCLOPENTANE	---	0.7	0.1
HEXANES PLUS	---	0.6	0.3
NITROGEN	1.3	1.6	0.6
OXYGEN	0.2	TRACE	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.2	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.31	0.07	0.05
HEATING VALUE*	1014	1251	1179
SPECIFIC GRAVITY	0.576	0.724	0.667

	INDEX 11818 SAMPLE 9444	INDEX 11819 SAMPLE 11713	INDEX 11820 SAMPLE 9414
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LINCOLN
FIELD	WESTON-JANE LEW	WILDCAT	ALUM CREEK
WELL NAME	T. L. HUDKINS FARM NO. 10357	J. W. NORRIS NO. 10994	LINCOLN MINERAL NO. 8
LOCATION	FREEMAN CREEK DIST.	FREEMAN CREEK DIST.	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP	ASHLAND OIL & REFINING CO.
COMPLETED	03/02/62	12/06/68	09/17/43
SAMPLED	07/15/64	08/05/69	06/--/64
FORMATION	MISS-BIG INJUN	DEVO-BENSON	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1370	4165	3400
WELLHEAD PRESSURE,PSIG	590	1820	350
OPEN FLOW, MCFD	1592	825	848
COMPONENT, MOLE PCT			
METHANE	84.4	84.1	79.1
ETHANE	8.6	10.1	12.4
PROPANE	2.5	3.4	4.4
N-BUTANE	0.8	0.7	1.0
ISOBUTANE	0.6	0.4	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.1	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	1.7	0.5	1.8
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.08	0.06	0.07
HEATING VALUE*	1168	1178	1207
SPECIFIC GRAVITY	0.672	0.664	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11821 SAMPLE 9219	INDEX 11822 SAMPLE 9419	INDEX 11823 SAMPLE 9545
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LINCOLN	LINCOLN	LOGAN
FIELD	CENTRAL DIVISION	JULIAN-MADISON	BLAIR
WELL NAME	NO. 6945	LITTLE COAL LAND CO. NO. 15	NO. 9771
LOCATION	NOT GIVEN	JEFFERSON DIST.	LOGAN DIST.
OWNER	UNITED FUEL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT	HOPE NATURAL GAS CO.
COMPLETED	06/12/52	06/25/36	10/04/55
SAMPLED	01/20/64	06/29/64	08/12/64
FORMATION	DEVO-BROWN SHALE	MISS-BIG LIME	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3023	1590	2036
WELLHEAD PRESSURE,PSIG	375	346	47
OPEN FLOW, MCFD	348	907	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.1	78.0	91.1
ETHANE	14.0	11.8	3.7
PROPANE	4.8	5.1	1.4
N-BUTANE	1.2	1.6	0.8
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.2	0.5	0.5
ISOPENTANE	0.2	0.5	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.4	0.7
NITROGEN	2.3	1.2	1.0
OXYGEN	0.3	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.10	0.04	0.09
HEATING VALUE*	1226	1278	1131
SPECIFIC GRAVITY	0.720	0.736	0.640

	INDEX 11824 SAMPLE 9424	INDEX 11825 SAMPLE 9363	INDEX 11826 SAMPLE 9495
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	CHAPMANSVILLE-LOGAN	GILBERT	MAGNOLIA
WELL NAME	PATTERSON NO. 5	ALBERT COLE NO. 7	NO. 9758
LOCATION	CHAPMANSVILLE DIST.	MATEWAN QUAD.	TRIADELPHIA DIST.
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	CITIES SERVICE OIL CO.	HOPE NATURAL GAS CO.
COMPLETED	08/31/60	06/06/63	03/06/53
SAMPLED	06/26/64	09/08/64	07/06/64
FORMATION	MISS-BIG LIME	MISS-BIG LIME	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1183	2502	2854
WELLHEAD PRESSURE,PSIG	405	735	785
OPEN FLOW, MCFD	277	4875	2630
COMPONENT, MOLE PCT			
METHANE	74.4	88.7	90.4
ETHANE	15.1	6.5	6.3
PROPANE	6.3	1.3	1.5
N-BUTANE	1.6	0.3	0.4
ISOBUTANE	0.9	0.3	0.3
N-PENTANE	0.5	TRACE	TRACE
ISOPENTANE	0.5	TRACE	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.1	0.2
NITROGEN	0.4	2.3	0.6
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.1
HELIUM	0.04	0.03	0.01
HEATING VALUE*	1325	1074	1106
SPECIFIC GRAVITY	0.757	0.622	0.621

	INDEX 11827 SAMPLE 9404	INDEX 11828 SAMPLE 9582	INDEX 11829 SAMPLE 14768
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	MANN-OCEANA	MANN-OCEANA	MANN-OCEANA
WELL NAME	PARDEE LAND CO. NO. 1	ELK CREEK COAL LD. NO. 15	NO. 11870
LOCATION	TRIADELPHIA DIST.	TRIADELPHIA DIST.	BUFFALO CREEK
OWNER	ASHLAND OIL & REFINING CO.	ASHLAND OIL & REFINING CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	09/15/63	04/18/59	12/30/74
SAMPLED	06/--/64	08/11/64	09/17/76
FORMATION	MISS-WEIR	MISS-BIG LIME	MISS-BIG LIME & BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3145	2148	4193
WELLHEAD PRESSURE,PSIG	500	810	852
OPEN FLOW, MCFD	412	2524	5938
COMPONENT, MOLE PCT			
METHANE	91.8	89.8	90.1
ETHANE	5.8	6.6	6.0
PROPANE	1.2	1.8	1.8
N-BUTANE	0.2	0.4	0.6
ISOBUTANE	0.2	0.2	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.03	TRACE	0.10
HEATING VALUE*	1088	1122	1132
SPECIFIC GRAVITY	0.607	0.630	0.635

	INDEX 11830 SAMPLE 9546	INDEX 11831 SAMPLE 9420	INDEX 11832 SAMPLE 9326
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	NOT GIVEN	RANGER-ALLEN-FERRELLSBURG	MACOTOCK
WELL NAME	NO. 10451	ISLAND CREEK NO. 16	NO. W-22
LOCATION	LOGAN DIST.	CHAPMANSVILLE DIST.	LOGAN DIST.
OWNER	HOPE NATURAL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT	COMMONWEALTH GAS CORP.
COMPLETED	05/08/63	12/29/55	01/04/26
SAMPLED	08/11/64	06/24/64	04/23/64
FORMATION	MISS-MAXTON	DEVO-SHALE	MISS-GREENBRIER & BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1990	3169	2350
WELLHEAD PRESSURE,PSIG	632	460	555
OPEN FLOW, MCFD	7234	112	1813
COMPONENT, MOLE PCT			
METHANE	93.0	78.3	72.5
ETHANE	0.7	13.5	15.3
PROPANE	0.2	5.0	6.4
N-BUTANE	TRACE	1.1	2.3
ISOBUTANE	TRACE	0.3	0.8
N-PENTANE	0.1	0.2	0.5
ISOPENTANE	TRACE	0.2	0.8
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	5.4	1.0	0.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.4
HELIUM	0.39	0.05	0.02
HEATING VALUE*	969	1235	1375
SPECIFIC GRAVITY	0.584	0.707	0.788

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11833 SAMPLE 9327	INDEX 11834 SAMPLE 5373	INDEX 11835 SAMPLE 9435
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LOGAN	LOGAN	MARION
FIELD	WACOTOCK	WYOMING	BROWN-LUMBERPORT
WELL NAME	GUYAN MERCANTILE W-3	PARDEE LAND NO. 33	J. T. CRISS NO. 485
LOCATION	LOGAN DIST.	TRIDELPHIA DIST.	MANNINGTON DIST.
OWNER	COMMONWEALTH GAS CORP.	UNITED PRODUCING CO., INC.	HOPE NATURAL GAS CO.
COMPLETED	06/26/26	10/03/52	09/--/03
SAMPLED	06/23/64	01/02/53	07/16/64
FORMATION	MISS-GREENBRIER	MISS-BEREA	DEVO-GORDON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2240	4445	2880
WELLHEAD PRESSURE,PSIG	290	658	15
OPEN FLOW, MCFD	1309	959	27
COMPONENT, MOLE PCT			
METHANE	85.7	93.8	71.9
ETHANE	8.3	4.2	12.2
PROPANE	2.9	0.7	6.8
N-BUTANE	1.1	0.1	2.7
ISOBUTANE	0.2	0.1	1.5
N-PENTANE	0.3	0.1	0.6
ISOPENTANE	0.3	0.0	1.2
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.5	0.1	0.8
NITROGEN	0.4	0.1	1.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.05	0.04	0.08
HEATING VALUE*	1191	1060	1390
SPECIFIC GRAVITY	0.671	0.593	0.814

	INDEX 11836 SAMPLE 4602	INDEX 11837 SAMPLE 9442	INDEX 11838 SAMPLE 9478
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MARION	MARION	MARION
FIELD	FAIRMONT	FARMINGTON	FARMINGTON
WELL NAME	JOHN G. VINCENT ET AL. NO. 1	C. W. TALKINGTON NO. 9523	J. N. KUHN NO. 1658
LOCATION	SEC. 1, UNION DIST.	LINCOLN DIST.	GRANT DIST.
OWNER	OWENS-ILLINOIS GLASS CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	07/12/48	01/24/18	07/31/10
SAMPLED	10/26/48	07/15/64	07/15/64
FORMATION	MISS-KEENER	MISS-BIG INJUN	DEVO-FIFTH
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1090	NOT GIVEN	2680
WELLHEAD PRESSURE,PSIG	220	28	93
OPEN FLOW, MCFD	411	14	26
COMPONENT, MOLE PCT			
METHANE	88.9	68.8	79.8
ETHANE	9.5	15.9	11.1
PROPANE	---	8.1	4.6
N-BUTANE	---	2.8	1.5
ISOBUTANE	---	1.5	0.8
N-PENTANE	---	0.6	0.4
ISOPENTANE	---	1.1	0.3
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.7	0.5
NITROGEN	1.0	0.1	0.8
OXYGEN	0.3	TRACE	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.12	0.05	0.09
HEATING VALUE*	1017	1445	1257
SPECIFIC GRAVITY	0.609	0.833	0.718

	INDEX 11839 SAMPLE 9701	INDEX 11840 SAMPLE 9702	INDEX 11841 SAMPLE 9452
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MARION	MARION	MARION
FIELD	NOT GIVEN	NOT GIVEN	PLUM RUN
WELL NAME	NO. 5169	NO. 5201	JOSEPH CAMPBELL NO. 114
LOCATION	FAIRMONT DIST.	FAIRMONT DIST.	MANNINGTON DIST.
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	06/21/16	11/14/16	04/--/99
SAMPLED	01/07/65	01/07/65	07/15/64
FORMATION	MISS-BIG INJUN	DEVO-FIFTH	DEVO-FIFTH
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1875	2892	5337
WELLHEAD PRESSURE,PSIG	26	162	27
OPEN FLOW, MCFD	40	16	32
COMPONENT, MOLE PCT			
METHANE	90.3	83.1	83.0
ETHANE	4.6	9.8	10.0
PROPANE	1.2	3.5	3.1
N-BUTANE	0.4	0.9	0.5
ISOBUTANE	0.3	0.7	0.6
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.3	0.2
NITROGEN	2.5	1.1	1.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.08	0.11
HEATING VALUE*	1072	1195	1197
SPECIFIC GRAVITY	0.619	0.682	0.685

	INDEX 11842 SAMPLE 14524	INDEX 11843 SAMPLE 9542	INDEX 11844 SAMPLE 4595
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MASON	MASON	MASON
FIELD	MANNA DISTRICT	J. F. WHEATON	MASON
WELL NAME	DALE NIBERT #1-1738	NO. 129	LEO OTIS HUSSELL NO. 1
LOCATION	FLATFOOT CREEK	MANNAH DIST.	NOT GIVEN
OWNER	UNION DRILLING, INC.	PEAKE PETROLEUM CO.	COLUMBIAN CARBON CO.
COMPLETED	--/--/00	12/07/62	06/10/48
SAMPLED	11/14/84	04/30/64	10/08/48
FORMATION	DEVO-HURON	DEVO-ORISKANY	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3000	4130	3483
WELLHEAD PRESSURE,PSIG	600	950	700
OPEN FLOW, MCFD	158	59	445
COMPONENT, MOLE PCT			
METHANE	82.8	88.0	70.4
ETHANE	7.5	6.4	25.5
PROPANE	3.6	2.0	---
N-BUTANE	0.9	0.6	---
ISOBUTANE	0.2	0.1	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	3.8	2.2	3.4
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.16	0.10	0.10
HEATING VALUE*	1131	1099	1170
SPECIFIC GRAVITY	0.671	0.636	0.699

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11845 SAMPLE 4596	INDEX 11846 SAMPLE 4551	INDEX 11847 SAMPLE 4552
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MASON	MASON	MASON
FIELD	MASON	MASON DISTRICT	MASON DISTRICT
WELL NAME	H. A. GERLACH NO. 1	C. F. DURST NO. 1	GOLDIE ANKRUM NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	RIGHT FORK-COLOGNE DIST.
OWNER	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	05/18/48	03/06/48	04/28/48
SAMPLED	10/08/48	07/30/48	06/11/48
FORMATION	DEVO-SHALE	DEVO-SHALE	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3200	3485	2735
WELLHEAD PRESSURE,PSIG	860	860	800
OPEN FLOW, MCFD	39	84	103
COMPONENT, MOLE PCT			
METHANE	54.8	74.5	75.0
ETHANE	37.3	21.7	22.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.4	3.3	1.7
OXYGEN	0.2	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.10	0.12	0.12
HEATING VALUE*	1224	1144	1170
SPECIFIC GRAVITY	0.772	0.678	0.677

	INDEX 11848 SAMPLE 10542	INDEX 11849 SAMPLE 17678	INDEX 11850 SAMPLE 9512
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MASON	MCDOWELL	MCDOWELL
FIELD	NOT GIVEN	ASHLAND	BIG CREEK
WELL NAME	VALLEY TONEY NO. 1	C. SMITH NO. 4	NO. 10220
LOCATION	LEWIS DIST., 12-CC-89	ADKIN DISTRICT	BIG CREEK DIST.
OWNER	POWVA OIL CO.	BEREA OIL & GAS CORP.	HOPE NATURAL GAS CO.
COMPLETED	08/26/65	11/16/84	04/16/63
SAMPLED	03/22/66	05/22/85	07/27/64
FORMATION	DEVO-ORISKANY	MISS-WEIR	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3446	3760	4423
WELLHEAD PRESSURE,PSIG	1145	860	410
OPEN FLOW, MCFD	250	3800	641
COMPONENT, MOLE PCT			
METHANE	84.7	96.4	97.9
ETHANE	8.5	1.4	1.3
PROPANE	3.5	0.1	0.1
N-BUTANE	0.9	0.0	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.7	1.7	0.5
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.11	0.08	0.07
HEATING VALUE*	1156	1005	1018
SPECIFIC GRAVITY	0.663	0.571	0.564

	INDEX 11851 SAMPLE 9807	INDEX 11852 SAMPLE 9797	INDEX 11853 SAMPLE 12348
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MCDOWELL	MCDOWELL	MCDOWELL
FIELD	BROWNS CREEK	GILBERT	GILBERT
WELL NAME	PEOPLES 1ST NATL. BANK 10659	SIBLEY COAL & COKE NO. 2	EDWARDS NO. A-1
LOCATION	BROWNS CREEK DIST.	SANDY RIVER DIST.	TAGER QUAD.
OWNER	HOPE NATURAL GAS CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	09/29/64	10/28/64	--/--/00
SAMPLED	03/17/65	03/02/65	08/11/70
FORMATION	MISS-BEREA	MISS-BIG LIME	MISS-BIG LIME & BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3593	2960	3660
WELLHEAD PRESSURE,PSIG	950	915	920
OPEN FLOW, MCFD	2014	11137	3156
COMPONENT, MOLE PCT			
METHANE	98.0	95.6	97.3
ETHANE	1.3	2.7	1.5
PROPANE	0.1	0.4	0.1
N-BUTANE	0.0	0.2	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.4	0.7	0.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.06	0.09	0.11
HEATING VALUE*	1019	1043	1015
SPECIFIC GRAVITY	0.562	0.581	0.565

	INDEX 11854 SAMPLE 17181	INDEX 11855 SAMPLE 4573	INDEX 11856 SAMPLE 9511
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MCDOWELL	MCDOWELL	MCDOWELL
FIELD	MCDOWELL	NOT GIVEN	NOT GIVEN
WELL NAME	ROGERS NO. 25	FORD MOTOR CO. NO. 1261	NO. 10366
LOCATION	SANDY RIVER DIST.	NOT GIVEN	SANDY RIVER DIST.
OWNER	ASHLAND EXPLORATION, INC.	GODFREY L. CABOT, INC.	HOPE NATURAL GAS CO.
COMPLETED	09/10/82	04/20/48	11/26/62
SAMPLED	02/13/84	10/08/48	07/27/64
FORMATION	MISS-BEREA&BIGLIME&DEVOSHALE	MISS-MARTON & BIG LIME	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3965	1975	3582
WELLHEAD PRESSURE,PSIG	775	NOT GIVEN	805
OPEN FLOW, MCFD	5180	189	3610
COMPONENT, MOLE PCT			
METHANE	97.4	95.5	97.7
ETHANE	1.6	4.0	1.5
PROPANE	0.1	---	0.1
N-BUTANE	TRACE	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	TRACE	---	0.0
NITROGEN	0.6	0.0	0.5
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.09	0.17	0.06
HEATING VALUE*	1018	1039	1019
SPECIFIC GRAVITY	0.566	0.578	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11857 SAMPLE 12057	INDEX 11858 SAMPLE 9562	INDEX 11859 SAMPLE 9750
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MCDOWELL	MCDOWELL	MCDOWELL
FIELD	NOT GIVEN	PINEVILLE	POCAHONTAS LAND CORP.
WELL NAME	MCDOWELL NO. 11148	NO. 9679	NO. 44, SER NO. 1337
LOCATION	BIG CREEK DIST.	NOT GIVEN	NOT GIVEN
OWNER	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP	CABOT CORP.
COMPLETED	04/21/69	06/27/52	08/16/51
SAMPLED	09/26/69	08/26/64	--/--/--
FORMATION	MISS-BEREA	MISS-BIG LIME & WEIR	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4807	3649	4178
WELLHEAD PRESSURE,PSIG	950	852	485
OPEN FLOW, MCFD	2157	1300	555
COMPONENT, MOLE PCT			
METHANE	96.8	97.7	97.2
ETHANE	1.6	1.2	1.9
PROPANE	0.1	0.1	0.2
N-BUTANE	0.1	0.0	0.6
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.7	0.8	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.12	0.10	0.09
HEATING VALUE*	1029	1014	1024
SPECIFIC GRAVITY	0.579	0.565	0.568

	INDEX 11860 SAMPLE 9724	INDEX 11861 SAMPLE 16380	INDEX 11862 SAMPLE 15917
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MCDOWELL	MERCER	MINERAL
FIELD	RODDERFIELD POOL	NOT GIVEN	NOT GIVEN
WELL NAME	PEOPLES 1ST NATL. BANK 10659	NO. 20062	MASTELLAR COAL CO, 20364-T
LOCATION	BROWNS CREEK DIST.	JUMPING BRANCH DISTRICT	NEW CREEK DIST.
OWNER	HOPE NATURAL GAS CO.	COLUMBIA GAS TRANS. CORP.	COLUMBIA GAS TRANS. CORP.
COMPLETED	09/29/64	12/17/79	12/20/78
SAMPLED	02/05/65	11/10/81	03/03/80
FORMATION	MISS-BEREA	MISS-MAXTON	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3593	2753	8494
WELLHEAD PRESSURE,PSIG	950	455	3600
OPEN FLOW, MCFD	2014	4721	9728
COMPONENT, MOLE PCT			
METHANE	97.9	97.7	97.6
ETHANE	1.3	0.1	1.6
PROPANE	0.0	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.6	0.5	0.4
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.06	0.09	0.04
HEATING VALUE*	1015	1016	1029
SPECIFIC GRAVITY	0.564	0.563	0.565

	INDEX 11863 SAMPLE 9181	INDEX 11864 SAMPLE 9198	INDEX 11865 SAMPLE 11249
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	CENTRAL	CENTRAL	CENTRAL DIVISION
WELL NAME	NO. 9070	NO. 8839	WYOMING COAL&LAND CO. NO. 11
LOCATION	NOT GIVEN	STAFFORD DIST.	STAFFORD DIST.
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	11/16/61	04/18/60	11/01/67
SAMPLED	11/01/63	02/11/64	12/26/67
FORMATION	MISS-BIG LIME	MISS-BEREA	MISS-BIG LIME & BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2485	5417	2775
WELLHEAD PRESSURE,PSIG	725	740	730
OPEN FLOW, MCFD	1162	700	2316
COMPONENT, MOLE PCT			
METHANE	95.9	93.7	92.4
ETHANE	2.6	4.8	5.4
PROPANE	0.4	0.6	0.9
N-BUTANE	0.2	0.0	0.2
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	0.7	0.7	0.6
OXYGEN	TRACE	0.1	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.10	0.09	0.05
HEATING VALUE*	1035	1051	1080
SPECIFIC GRAVITY	0.576	0.587	0.603

	INDEX 11866 SAMPLE 10590	INDEX 11867 SAMPLE 5160	INDEX 11868 SAMPLE 9382
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	GILBERT	GILBERT DISTRICT NO. 27	KERMIT
WELL NAME	U.F.G. NO. 9333	THACKER LAND CO. NO. 1	NO. 8219
LOCATION	CARTER COORDINATE 4-N-92	MATEWAN QUAD. MAGNOLIA DIST.	HARDY DIST.
OWNER	UNITED FUEL GAS CO.	COLUMBIAN CARBON CO.	UNITED FUEL GAS CO.
COMPLETED	10/29/64	10/30/51	05/02/54
SAMPLED	06/06/66	01/29/51	06/05/64
FORMATION	MISS-BEREA	MISS-LIME	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3267	2255	2334
WELLHEAD PRESSURE,PSIG	750	800	440
OPEN FLOW, MCFD	762	16817	193
COMPONENT, MOLE PCT			
METHANE	93.6	90.0	80.0
ETHANE	4.5	5.5	12.2
PROPANE	1.0	1.9	4.8
N-BUTANE	0.4	0.3	1.1
ISOBUTANE	0.0	0.1	0.4
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.4	1.0	1.0
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.0	0.2	0.0
HELIUM	0.06	0.05	0.04
HEATING VALUE*	1068	1087	1227
SPECIFIC GRAVITY	0.594	0.617	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11869 SAMPLE 9383	INDEX 11870 SAMPLE 9385	INDEX 11871 SAMPLE 9386
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	KERMIT	KERMIT	KERMIT
WELL NAME	NO. 6075	NO. 8993	NO. 8875
LOCATION	HARVEY DIST.	LEE DIST.	MAGNOLIA DIST.
OWNER	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	02/06/53	11/28/60	12/08/57
SAMPLED	06/08/64	06/05/64	06/05/64
FORMATION	DEVO-BROWN SHALE	MISS-BIG LIME	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2965	2415	3945
WELLHEAD PRESSURE,PSIG	545	660	450
OPEN FLOW, MCFD	751	6083	58
COMPONENT, MOLE PCT			
METHANE	78.2	91.4	82.5
ETHANE	13.3	6.1	10.5
PROPANE	5.3	1.3	3.3
N-BUTANE	1.1	0.3	0.7
ISOBUTANE	0.2	0.1	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.2	0.4	2.0
OXYGEN	0.0	0.0	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.06	0.05	0.04
HEATING VALUE*	1234	1096	1157
SPECIFIC GRAVITY	0.707	0.611	0.670

	INDEX 11872 SAMPLE 9560	INDEX 11873 SAMPLE 9993	INDEX 11874 SAMPLE 9152
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	LOGAN-HOLDEN-DINGESS	LOGAN-MINGO	NOT GIVEN
WELL NAME	COTIGA NO. 1	U.S. STEEL CORP. NO. 7-1692	NO. 8469
LOCATION	PIGEON CREEK, LENORE	MAGNOLIA DIST.	NOT GIVEN
OWNER	ASHLAND OIL & REFINING CO.	CARNEGIE NATURAL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	04/05/43	08/10/56	09/19/57
SAMPLED	08/11/64	07/16/65	11/01/63
FORMATION	DEVO-SHALE	MISS-GREENBRIER	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3690	2550	4100
WELLHEAD PRESSURE,PSIG	515	685	510
OPEN FLOW, MCFD	403	20000	112000
COMPONENT, MOLE PCT			
METHANE	78.5	90.7	92.3
ETHANE	11.1	7.1	5.9
PROPANE	4.6	1.0	0.7
N-BUTANE	1.1	0.3	0.1
ISOBUTANE	0.3	0.2	TRACE
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.4	0.1	1.0
OXYGEN	0.2	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.03	TRACE	0.05
HEATING VALUE*	1219	1103	1063
SPECIFIC GRAVITY	0.704	0.614	0.599

	INDEX 11875 SAMPLE 17808	INDEX 11876 SAMPLE 287	INDEX 11877 SAMPLE 290
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MINGO	MINGO	MINGO
FIELD	NOT GIVEN	TRIPLE STATE	TRIPLE STATE
WELL NAME	C-431 COTIGA DEVEL. NO. 1	NO. 88	NO. 551
LOCATION	MYRTLE QUAD.	1/2 MI. KERMIT	5 MI. W KERMIT, W. VA.
OWNER	SENECA-UPSHUR PETROLEUM CO.	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	05/12/83	--/--/95	--/--/16
SAMPLED	08/14/85	05/25/20	05/25/20
FORMATION	DEVO-BROWN SHALE	MISS-BIG LIME	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3674	1840	2303
WELLHEAD PRESSURE,PSIG	670	110	90
OPEN FLOW, MCFD	1200	1000	1000
COMPONENT, MOLE PCT			
METHANE	66.2	73.0	75.3
ETHANE	12.3	24.7	23.0
PROPANE	4.4	---	---
N-BUTANE	1.1	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.3	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	11.7	1.6	1.0
OXYGEN	2.7	0.5	0.3
ARGON	0.1	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.03	TRACE	0.12
HEATING VALUE*	1094	1182	1175
SPECIFIC GRAVITY	0.763	0.688	0.675

	INDEX 11878 SAMPLE 9748	INDEX 11879 SAMPLE 15827	INDEX 11880 SAMPLE 9443
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MONONGALIA	MONONGALIA	MONONGALIA
FIELD	BURNS CHAPEL S	GREER	MAPLE-WADESTOWN
WELL NAME	BERN NO. 1	M. MILLER 12478	L. C. SHRIVER NO. 994
LOCATION	CLINTON DIST.	CLINTON DIST.	BATTELLE DIST.
OWNER	PHILLIPS PETROLEUM CO.	CONSOLIDATED GAS SUPPLY CORP	HOPE NATURAL GAS CO.
COMPLETED	10/22/64	--/--/00	11/--/08
SAMPLED	02/18/65	10/30/79	07/15/64
FORMATION	DEVO-ORISKANY	DEVO-ONONDAGA	DEVO-FIFTY FOOT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7559	7496	2714
WELLHEAD PRESSURE,PSIG	2900	NOT GIVEN	200
OPEN FLOW, MCFD	4390	2316	14
COMPONENT, MOLE PCT			
METHANE	97.2	97.2	88.1
ETHANE	1.7	1.7	6.1
PROPANE	0.1	0.1	1.8
N-BUTANE	0.0	0.1	0.7
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.2
NITROGEN	0.8	0.5	2.0
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.02	0.02	0.14
HEATING VALUE*	1018	1025	1117
SPECIFIC GRAVITY	0.569	0.571	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11881 SAMPLE 9704	INDEX 11882 SAMPLE 9705	INDEX 11883 SAMPLE 14690
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	MONONGALIA	MONONGALIA	NICHOLAS
FIELD	NOT GIVEN	NOT GIVEN	20 MILE CREEK
WELL NAME	NO. 5321	NO. 5153	FED. COAL NO. 4
LOCATION	CLAY DIST.	CLAY DIST.	NOT GIVEN
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	TEXAS INTERNATL. PET. CORP.
COMPLETED	11/01/21	07/01/08	--/--/00
SAMPLED	01/12/65	01/12/65	06/04/76
FORMATION	MISS-BIG INJUN	DEVO-FIFTH	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2330	3060	2471
WELLHEAD PRESSURE,PSIG	NOT GIVEN	136	525
OPEN FLOW, MCFD	NOT GIVEN	24	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.0	88.5	91.1
ETHANE	8.8	6.8	5.9
PROPANE	9.1	1.9	1.5
N-BUTANE	2.5	0.6	0.3
ISOBUTANE	1.5	0.3	0.2
N-PENTANE	0.4	0.1	TRACE
ISOPENTANE	0.5	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	1.4	1.2	0.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.10	0.09	0.03
HEATING VALUE*	1309	1117	1098
SPECIFIC GRAVITY	0.756	0.634	0.613

	INDEX 11884 SAMPLE 14691	INDEX 11885 SAMPLE 14693	INDEX 11886 SAMPLE 14695
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	20 MILE CREEK
WELL NAME	BETHLEHEM NO. B-1	FED. COAL NO. 13	FED. COAL NO. 16
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATL. PET. CORP.	TEXAS INTERNATL. PET. CORP.	TEXAS INTERNATL. PET. CORP.
COMPLETED	08/14/75	12/09/75	05/15/75
SAMPLED	06/04/76	06/04/76	06/04/76
FORMATION	MISS-INJUN	MISS-BIG INJUN	DEVO-BLUE MONDAY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1840	2612	2063
WELLHEAD PRESSURE,PSIG	540	520	675
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.0	91.3	92.9
ETHANE	5.8	5.8	4.2
PROPANE	1.7	1.5	1.1
N-BUTANE	0.3	0.3	0.2
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.5	0.5	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.04	0.04	0.09
HEATING VALUE*	1104	1089	1075
SPECIFIC GRAVITY	0.619	0.608	0.605

	INDEX 11887 SAMPLE 14696	INDEX 11888 SAMPLE 14698	INDEX 11889 SAMPLE 14699
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	20 MILE CREEK
WELL NAME	BETHLEHEM NO. B-14	BETHLEHEM NO. B-17	FED. COAL NO. 6
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATL. PET. CORP.	TEXAS INTERNATL. PET. CORP.	TEXAS INTERNATL. PET. CORP.
COMPLETED	09/17/75	--/--/00	01/04/75
SAMPLED	06/04/76	06/04/76	06/04/76
FORMATION	MISS-MAXTON	NOT GIVEN	MISS-INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2267	NOT GIVEN	2454
WELLHEAD PRESSURE,PSIG	920	560	540
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	79.3	90.3
ETHANE	5.7	3.3	6.0
PROPANE	1.5	0.6	1.7
N-BUTANE	0.3	0.2	0.4
ISOBUTANE	0.2	0.1	0.3
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.8	1.3	0.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.08	0.15	0.03
HEATING VALUE*	1089	1044	1104
SPECIFIC GRAVITY	0.611	0.588	0.621

	INDEX 11890 SAMPLE 14700	INDEX 11891 SAMPLE 14701	INDEX 11892 SAMPLE 4312
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	20 MILE CREEK	20 MILE CREEK	GAULEY
WELL NAME	BLANTON NO. 1	BETHLEHEM NO. B-25	ROWENA GROSE NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TEXAS INTERNATL. PET. CORP.	TEXAS INTERNATL. PET. CORP.	COLUMBIAN CARBON CO.
COMPLETED	05/10/75	08/28/75	04/08/47
SAMPLED	06/04/76	06/04/76	05/21/47
FORMATION	MISS-INJUN	MISS-BIG LIME	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1898	2212	1745
WELLHEAD PRESSURE,PSIG	545	625	565
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1784
COMPONENT, MOLE PCT			
METHANE	90.9	90.1	87.8
ETHANE	6.1	8.5	11.7
PROPANE	1.5	1.7	---
N-BUTANE	0.3	0.4	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.5	0.5	0.1
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.34	0.04	0.05
HEATING VALUE*	1096	1107	1099
SPECIFIC GRAVITY	0.612	0.624	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11893 SAMPLE 4597	INDEX 11894 SAMPLE 4449	INDEX 11895 SAMPLE 4450
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	GAULEY	GAULEY DISTRICT	GAULEY DISTRICT
WELL NAME	C. M. RADER NO. 1	ABNEY PAYNE NO. 1, GW-953	W. R. GROSE NO. 1, GW-960
LOCATION	NOT GIVEN	NEAR SWISS	NEAR SWISS
OWNER	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	06/16/48	08/01/47	06/20/47
SAMPLED	10/12/48	03/08/48	03/08/48
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1742	1596	1629
WELLHEAD PRESSURE,PSIG	560	385	565
OPEN FLOW, MCFD	636	4787	640
COMPONENT, MOLE PCT			
METHANE	85.6	88.6	88.4
ETHANE	12.9	10.6	10.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.1	0.1	0.0
OXYGEN	0.2	0.4	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1098	1087	1082
SPECIFIC GRAVITY	0.626	0.612	0.612

	INDEX 11896 SAMPLE 4452	INDEX 11897 SAMPLE 4464	INDEX 11898 SAMPLE 4477
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	GAULEY DISTRICT	GAULEY DISTRICT NO. 22	GAULEY DISTRICT NO. 22
WELL NAME	ROWENA GROSE NO. 1, GW-918	LEAH FRANK NO. 2, GW-989	LEAH FRANK NO. 1, GW-980
LOCATION	NEAR SWISS	NEAR SWISS	NEAR SWISS
OWNER	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	04/08/47	02/16/48	01/22/48
SAMPLED	03/08/48	04/15/48	04/15/48
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1745	2093	2018
WELLHEAD PRESSURE,PSIG	565	465	445
OPEN FLOW, MCFD	1784	248	964
COMPONENT, MOLE PCT			
METHANE	90.9	88.8	88.6
ETHANE	8.8	9.8	10.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.9	0.0
OXYGEN	0.2	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE*	---	---	---
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1079	1075	1093
SPECIFIC GRAVITY	0.600	0.610	0.612

	INDEX 11899 SAMPLE 4362	INDEX 11900 SAMPLE 9782	INDEX 11901 SAMPLE 11244
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	GAULEY DISTRICT NO. 23	HAMILTON	HAMILTON
WELL NAME	Mrs. J. SUMMERS NO. 1GW-947	C. L. TOMLINSON 10565	C. F. TOMLINSON NO. 10902
LOCATION	NOT GIVEN	HAMILTON DIST.	HAMILTON DIST.
OWNER	COLUMBIAN CARBON CO.	HOPE NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP
COMPLETED	07/12/47	12/11/64	--/--/00
SAMPLED	09/25/47	03/03/65	12/14/67
FORMATION	MISS-	DEVO-BLUE MONDAY	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1575	1664	1850
WELLHEAD PRESSURE,PSIG	535	490	395
OPEN FLOW, MCFD	3468	823	1958
COMPONENT, MOLE PCT			
METHANE	89.3	95.6	94.9
ETHANE	9.0	2.8	1.9
PROPANE	---	0.5	0.3
N-BUTANE	---	0.1	0.2
ISOBUTANE	---	0.1	0.0
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	TRACE	0.0
CYCLOPENTANE	---	TRACE	0.0
HEXANES PLUS	---	0.1	0.0
NITROGEN	0.9	0.6	2.2
OXYGEN	0.2	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	TRACE	TRACE
HELIUM	0.04	0.06	0.17
HEATING VALUE*	1066	1043	1010
SPECIFIC GRAVITY	0.610	0.580	0.577

	INDEX 11902 SAMPLE 7197	INDEX 11903 SAMPLE 9493	INDEX 11904 SAMPLE 14592
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	NICHOLAS COUNTY	NOT GIVEN	PETERS CREEK
WELL NAME	NO. 10212	NO. 10226	WALKER NO. 1
LOCATION	NOT GIVEN	HAMILTON DIST.	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	TEXAS INTERNATL. PET. CORP.
COMPLETED	01/22/59	04/14/59	10/18/75
SAMPLED	09/02/59	07/23/64	06/04/76
FORMATION	DEVO-BLUE MONDAY	DEVO-BLUE MONDAY	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1793	1815	1865
WELLHEAD PRESSURE,PSIG	495	495	190
OPEN FLOW, MCFD	2214	283	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.9	96.3	92.3
ETHANE	1.7	2.3	5.2
PROPANE	0.3	0.4	1.1
N-BUTANE	0.1	TRACE	0.2
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.6	0.7	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.07	0.08	0.04
HEATING VALUE*	1041	1030	1080
SPECIFIC GRAVITY	0.578	0.573	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11905 SAMPLE 14694	INDEX 11906 SAMPLE 9335	INDEX 11907 SAMPLE 9343
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	NICHOLAS	NICHOLAS	NICHOLAS
FIELD	PETERS CREEK	SHARP MCMILLEN	SHARP MCMILLEN
WELL NAME	KEENAN NO. 1	NO. 57	NO. 34
LOCATION	NOT GIVEN	GRANT DIST.	GRANT DIST.
OWNER	TEXAS INTERNATL. PET. CORP.	PEAKE PETROLEUM CO.	PEAKE PETROLEUM CO.
COMPLETED	11/06/75	04/19/57	02/17/56
SAMPLED	06/04/76	04/24/64	04/24/64
FORMATION	MISS-MAXTON	MISS-BIG LIME	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1216	1606	1845
WELLHEAD PRESSURE,PSIG	190	425	980
OPEN FLOW, MCFD	NOT GIVEN	164	2011
COMPONENT, MOLE PCT			
METHANE	90.5	91.9	90.9
ETHANE	6.5	5.5	5.9
PROPANE	1.5	1.3	1.6
N-BUTANE	0.3	0.3	0.6
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	0.6	0.3	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1103	1097	1120
SPECIFIC GRAVITY	0.620	0.611	0.624

	INDEX 11908 SAMPLE 9431	INDEX 11909 SAMPLE 9486	INDEX 11910 SAMPLE 9161
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	POCAHONTAS	PRESTON	PRESTON
FIELD	DURBIN	ETAM	GLADESVILLE
WELL NAME	U.S.A.-R-1	DESSIE F. DAVIS NO. 10281	HOLMES-B NO. 1
LOCATION	NOT GIVEN	RENO DIST.	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	HOPE NATURAL GAS CO.	PHILLIPS PETROLEUM CO.
COMPLETED	05/08/64	10/12/60	11/02/62
SAMPLED	07/01/64	07/15/64	11/01/63
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4949	5098	7688
WELLHEAD PRESSURE,PSIG	1685	1194	2128
OPEN FLOW, MCFD	1347	470	2600
COMPONENT, MOLE PCT			
METHANE	97.5	97.9	83.5
ETHANE	0.9	1.2	1.3
PROPANE	0.0	0.1	0.2
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	0.8	11.9
OXYGEN	0.0	0.0	2.8
ARGON	0.0	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	TRACE	0.1
HELIUM	0.06	0.04	0.02
HEATING VALUE*	1004	1016	874
SPECIFIC GRAVITY	0.567	0.565	0.629

	INDEX 11911 SAMPLE 9677	INDEX 11912 SAMPLE 14845	INDEX 11913 SAMPLE 14846
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	MORTON	MORGANTOWN QUADRANGLE	MORGANTOWN QUADRANGLE
WELL NAME	U.S.A.-N-1	M. J. RENE	PRESTON CO. COAL NO. 484
LOCATION	NOT GIVEN	VALLEY DIST.	VALLEY DIST.
OWNER	CITIES SERVICE OIL CO.	RAY RESOURCES CORP.	RAY RESOURCES CORP.
COMPLETED	02/07/63	--/--/00	12/04/74
SAMPLED	12/16/64	11/01/76	11/01/76
FORMATION	SILU-TUSCARORA	NOT GIVEN	DEVO-HUNTERSVILLE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7180	NOT GIVEN	7792
WELLHEAD PRESSURE,PSIG	1800	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	696	NOT GIVEN	3037
COMPONENT, MOLE PCT			
METHANE	76.8	97.4	97.6
ETHANE	1.8	1.7	1.6
PROPANE	0.3	TRACE	0.1
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	20.3	0.5	0.6
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.46	0.02	0.02
HEATING VALUE*	818	1021	1020
SPECIFIC GRAVITY	0.649	0.568	0.567

	INDEX 11914 SAMPLE 14851	INDEX 11915 SAMPLE 14852	INDEX 11916 SAMPLE 5879
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	MORGANTOWN QUADRANGLE	MORGANTOWN QUADRANGLE	NOT GIVEN
WELL NAME	PRESTON CO. COAL NO. 478	PRESTON CO. COAL NO. 474	LAWRENCE BURGER NO. 1
LOCATION	VALLEY DIST.	VALLEY DIST.	UNION DIST.
OWNER	RAY RESOURCES CORP.	RAY RESOURCES CORP.	COLUMBIAN CARBON CO.
COMPLETED	11/18/74	12/04/74	05/03/55
SAMPLED	--/--/00	--/--/00	07/13/55
FORMATION	DEVO-HUNTERSVILLE	DEVO-HUNTERSVILLE	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7602	7792	4981
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1150
OPEN FLOW, MCFD	5165	3037	1555
COMPONENT, MOLE PCT			
METHANE	97.5	97.5	98.2
ETHANE	1.7	1.7	1.0
PROPANE	0.1	0.1	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.02	0.02	0.10
HEATING VALUE*	1021	1021	1015
SPECIFIC GRAVITY	0.568	0.568	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11917 SAMPLE 14820	INDEX 11918 SAMPLE 9432	INDEX 11919 SAMPLE 5139
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	NOT GIVEN	PARSONS	PRESTON COUNTY
WELL NAME	B. M. MORGAN NO. 481	U.S.A.-G-1	NO. 9636
LOCATION	MORGANTOWN QUAD.	NOT GIVEN	PORTLAND DIST.
OWNER	RAY RESOURCES CORP.	CITIES SERVICE OIL CO.	HOPE NATURAL GAS CO.
COMPLETED	11/18/75	03/17/64	06/19/51
SAMPLED	10/25/76	07/01/64	10/16/51
FORMATION	DEVO-HUNTERSVILLE	SILU-TUSCARORA	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7861	7058	5248
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2620	2250
OPEN FLOW, MCFD	2919	16300	1981
COMPONENT, MOLE PCT			
METHANE	97.3	78.7	96.9
ETHANE	1.7	1.8	1.1
PROPANE	0.1	0.2	0.1
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.5	18.6	1.4
OXYGEN	0.0	0.5	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.02	0.42	0.05
HEATING VALUE*	1019	835	1007
SPECIFIC GRAVITY	0.565	0.643	0.571

	INDEX 11920 SAMPLE 4762	INDEX 11921 SAMPLE 4845	INDEX 11922 SAMPLE 4892
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PRESTON
FIELD	TERRA ALTA	TERRA ALTA	TERRA ALTA
WELL NAME	J. PAUL MARTIN NO. 2	FITZPATRIC NO. 1	NO. 9351
LOCATION	NOT GIVEN	PORTLAND DIST.	PORTLAND DIST.
OWNER	HOPE NATURAL GAS CO.	NOLLEM OIL & GAS CORP.	HOPE NATURAL GAS CO.
COMPLETED	06/21/49	--/--/00	03/07/50
SAMPLED	10/18/49	05/15/50	05/10/50
FORMATION	DEVO-ORISKANY	NOT GIVEN	DEVO-CHERT & ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5172	5505	5511
WELLHEAD PRESSURE,PSIG	2140	NOT GIVEN	1875
OPEN FLOW, MCFD	2071	NOT GIVEN	3048
COMPONENT, MOLE PCT			
METHANE	97.3	96.8	97.0
ETHANE	1.2	1.3	1.2
PROPANE	0.1	0.2	0.1
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.0	1.0	1.2
OXYGEN	0.1	0.1	0.1
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.2	0.2
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1016	1020	1012
SPECIFIC GRAVITY	0.571	0.572	0.572

	INDEX 11923 SAMPLE 5011	INDEX 11924 SAMPLE 5170	INDEX 11925 SAMPLE 9338
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PRESTON	PRESTON	PUTNAM
FIELD	TERRA ALTA	TERRA ALTA	MCCULLOCH
WELL NAME	MARGARET C. KRAUS 9462	JONES NO. 464-C	NO. 45
LOCATION	NOT GIVEN	NOT GIVEN	SCOTT DIST.
OWNER	HOPE NATURAL GAS CO.	CUMBERLAND & ALLEGHENY GAS C	PEAKE PETROLEUM CO.
COMPLETED	01/16/51	12/13/51	03/03/55
SAMPLED	02/20/51	01/20/52	04/30/64
FORMATION	DEVO-ORISKANY	DEVO-CHERT	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5101	4651	3487
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2175	700
OPEN FLOW, MCFD	12500	5000	381
COMPONENT, MOLE PCT			
METHANE	96.8	96.6	83.2
ETHANE	1.2	1.2	9.4
PROPANE	0.1	0.1	3.9
N-BUTANE	0.1	0.1	1.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	1.4	1.6	1.5
OXYGEN	0.1	0.2	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.05	0.05	0.14
HEATING VALUE*	1008	1007	1176
SPECIFIC GRAVITY	0.571	0.574	0.675

	INDEX 11926 SAMPLE 9314	INDEX 11927 SAMPLE 9316	INDEX 11928 SAMPLE 9329
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PUTNAM	PUTNAM	PUTNAM
FIELD	MIDWAY LEASE	MIDWAY LEASE	OAKLAND
WELL NAME	NO. 560	NO. 564	NO. 718
LOCATION	UNION DIST.	UNION DIST.	L. W. BOWLING FARM
OWNER	COMMONWEALTH GAS CORP.	COMMONWEALTH GAS CORP.	COMMONWEALTH GAS CORP.
COMPLETED	01/29/51	01/15/52	12/11/63
SAMPLED	04/22/64	04/22/64	05/01/64
FORMATION	DEVO-BROWN SHALE	DEVO-BROWN SHALE	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3707	3285	5101
WELLHEAD PRESSURE,PSIG	410	410	450
OPEN FLOW, MCFD	140	315	504
COMPONENT, MOLE PCT			
METHANE	83.4	82.7	85.1
ETHANE	10.4	10.2	7.9
PROPANE	3.9	4.6	2.8
N-BUTANE	0.9	1.0	1.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	0.6	1.3	1.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.12	0.12	0.06
HEATING VALUE*	1184	1179	1157
SPECIFIC GRAVITY	0.671	0.674	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES.

	INDEX 11928 SAMPLE 11048	INDEX 11930 SAMPLE 9362	INDEX 11931 SAMPLE 9315
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PUTNAM	PUTNAM	PUTNAM
FIELD	ROCKY FORK	SISSONVILLE	TWO MILE DIVISION
WELL NAME	U.F.G. NO. 9454	R. T. TROUT NO. 1436	SARAH BRINDLE ET AL. NO. 1
LOCATION	POCATALICO DIST.	POCATALICO DIST.	SCOTT DIST.
OWNER	UNITED FUEL GAS CO.	CABOT CORP.	COMMONWEALTH GAS CORP.
COMPLETED	06/01/67	09/20/55	02/27/58
SAMPLED	08/01/67	05/13/64	04/22/64
FORMATION	SILU-NEWBURG	DEVO-ORISKANY	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5377	4581	3333
WELLHEAD PRESSURE,PSIG	2240	NOT GIVEN	450
OPEN FLOW, MCFD	59000	200	189
COMPONENT, MOLE PCT			
METHANE	92.7	88.4	82.6
ETHANE	3.2	5.6	9.9
PROPANE	1.0	1.7	3.9
N-BUTANE	0.4	0.7	0.9
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.3	0.1
NITROGEN	1.7	2.3	1.8
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.09	0.05	0.19
HEATING VALUE*	1079	1107	1170
SPECIFIC GRAVITY	0.613	0.641	0.673

	INDEX 11932 SAMPLE 9319	INDEX 11933 SAMPLE 9367	INDEX 11934 SAMPLE 9883
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	PUTNAM	RALEIGH	RALEIGH
FIELD	TWO MILE DIVISION	BEAVER	CENTRAL DIVISION
WELL NAME	NO. M54	NO. 25	A. B. ANDERSON ET AL.-NO-9358
LOCATION	CURRY DIST.	NOT GIVEN	SLAB FORK DIST.
OWNER	COMMONWEALTH GAS CORP.	CABOT CORP.	UNITED FUEL GAS CO.
COMPLETED	07/21/41	09/28/56	03/04/63
SAMPLED	04/22/64	05/08/64	04/30/65
FORMATION	MISS-BEREA&DEVO-BROWN SHALE	MISS-MAXTON	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2129	1675	4500
WELLHEAD PRESSURE,PSIG	360	92	505
OPEN FLOW, MCFD	219	11	1540
COMPONENT, MOLE PCT			
METHANE	82.3	96.8	98.1
ETHANE	9.9	2.9	1.2
PROPANE	3.8	0.1	0.0
N-BUTANE	0.9	TRACE	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	1.8	0.3	0.6
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.13	0.05	0.08
HEATING VALUE*	1187	1031	1015
SPECIFIC GRAVITY	0.683	0.569	0.562

	INDEX 11935 SAMPLE 4453	INDEX 11936 SAMPLE 4454	INDEX 11937 SAMPLE 9333
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RALEIGH	RALEIGH
FIELD	CLEAR FORK DISTRICT NO. 24	CLEAR FORK DISTRICT NO. 24	CRAB ORCHARD
WELL NAME	C.C. DICKINSON NO.1-B GW-965	PRICE DAVIS NO. 1 GW-955	NO. 1220
LOCATION	NEAR DAMERON	NEAR DAMERON	SLAB FORK DIST.
OWNER	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.	PEAKE PETROLEUM CO.
COMPLETED	03/10/48	12/13/47	09/17/62
SAMPLED	04/15/48	04/15/48	04/23/64
FORMATION	MISS-	MISS-	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2601	2498	2361
WELLHEAD PRESSURE,PSIG	585	580	640
OPEN FLOW, MCFD	1220	328	2780
COMPONENT, MOLE PCT			
METHANE	96.7	95.4	97.9
ETHANE	1.7	2.0	1.3
PROPANE	---	---	0.1
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	1.2	1.9	0.5
OXYGEN	0.1	0.4	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.2	TRACE
HELIUM	0.06	0.06	0.07
HEATING VALUE*	1010	1002	1018
SPECIFIC GRAVITY	0.570	0.576	0.563

	INDEX 11938 SAMPLE 9337	INDEX 11939 SAMPLE 9339	INDEX 11940 SAMPLE 9875
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RALEIGH	RALEIGH
FIELD	DOROTHY SARITA	DOROTHY SARITA	HOPKINS FORK-JARROLDS VALLEY
WELL NAME	NO. 119	NO. 112	DOR. SAR. NO. 107
LOCATION	CLEAR FORK DIST.	CLEAR FORK DIST.	MARSH FORK DIST.
OWNER	PEAKE PETROLEUM CO.	PEAKE PETROLEUM CO.	PEAKE PETROLEUM CO.
COMPLETED	04/17/62	05/05/49	06/22/61
SAMPLED	04/30/64	04/30/64	04/22/65
FORMATION	MISS-WEIR & BIG LIME	MISS-BIG LIME&PENN-SALT SAND	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2375	2227	1420
WELLHEAD PRESSURE,PSIG	510	700	113
OPEN FLOW, MCFD	200	188	280
COMPONENT, MOLE PCT			
METHANE	95.1	95.7	90.3
ETHANE	3.6	3.3	4.2
PROPANE	0.6	0.4	1.1
N-BUTANE	0.2	0.1	0.3
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	0.5	0.3	2.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.7
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.04	0.04	0.23
HEATING VALUE*	1054	1047	1044
SPECIFIC GRAVITY	0.584	0.579	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11941 SAMPLE 9514	INDEX 11942 SAMPLE 4526	INDEX 11943 SAMPLE 4634
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RALEIGH	RALEIGH
FIELD	MCGRAW	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 9164	NO. 9175	O. C. DANIEL NO. 9212
LOCATION	TRAP HILL DIST.	NOT GIVEN	3 MI. N BOLT
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	09/27/47	12/15/47	07/12/48
SAMPLED	07/27/64	05/24/48	11/15/48
FORMATION	MISS-MAXTON	MISS-M	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2022	2026	2148
WELLHEAD PRESSURE,PSIG	285	520	600
OPEN FLOW, MCFD	251	2192	600
COMPONENT, MOLE PCT			
METHANE	96.9	55.0	95.4
ETHANE	2.2	2.5	3.4
PROPANE	0.2	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	0.4	2.0	0.6
OXYGEN	TRACE	0.2	0.2
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.3
HELIUM	0.06	0.06	0.06
HEATING VALUE*	1026	1027	1027
SPECIFIC GRAVITY	0.567	0.578	0.577

	INDEX 11944 SAMPLE 9876	INDEX 11945 SAMPLE 9740	INDEX 11946 SAMPLE 15922
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RALEIGH	RALEIGH
FIELD	NOT GIVEN	PINEY	SHADY SPRING DIST.
WELL NAME	EUNICE NO. 12	NO. 1 SERIAL NO. 1106	NO. 20622-T
LOCATION	MARSH CREEK DIST.	NOT GIVEN	CRAB ORCHARD QUAD.
OWNER	PEAKE PETROLEUM CO.	CABOT CORP.	COLUMBIA GAS TRANS. CORP.
COMPLETED	03/13/53	12/09/44	09/24/79
SAMPLED	04/22/65	02/11/65	03/11/80
FORMATION	MISS-WEIR	MISS-MAXTON & WEIR	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2337	3367	3298
WELLHEAD PRESSURE,PSIG	160	825	928
OPEN FLOW, MCFD	520	268	3998
COMPONENT, MOLE PCT			
METHANE	94.0	98.0	93.8
ETHANE	3.6	1.3	1.3
PROPANE	0.7	0.1	0.4
N-BUTANE	0.3	0.0	0.0
ISOBUTANE	0.1	0.0	0.4
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.1	0.0	0.3
CYCLOPENTANE	TRACE	0.0	0.7
HEXANES PLUS	0.1	0.0	1.3
NITROGEN	0.8	0.5	1.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.05	0.07	0.08
HEATING VALUE*	1058	1019	1108
SPECIFIC GRAVITY	0.593	0.563	0.627

	INDEX 11947 SAMPLE 9370	INDEX 11948 SAMPLE 9376	INDEX 11949 SAMPLE 9334
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RALEIGH	RALEIGH
FIELD	SNUFFER	TRAP HILL DIST.	WELCHLANDS
WELL NAME	NO. 1	WELL NO. 9126	NO. 66
LOCATION	NOT GIVEN	NOT GIVEN	SLAB FORK DIST.
OWNER	CABOT CORP.	HOPE NATURAL GAS CO.	PEAKE PETROLEUM CO.
COMPLETED	05/22/44	07/--/47	08/29/58
SAMPLED	05/08/64	09/26/47	04/27/64
FORMATION	MISS-BIG LIME	MISS-	MISS-BIG LIME
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2680	2076	2377
WELLHEAD PRESSURE,PSIG	330	530	NOT GIVEN
OPEN FLOW, MCFD	8	926	650
COMPONENT, MOLE PCT			
METHANE	97.9	96.1	97.9
ETHANE	1.3	2.8	1.2
PROPANE	0.1	---	0.1
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.5	0.5	0.6
OXYGEN	TRACE	0.3	TRACE
ARGON	TRACE	---	0.0
HYDROGEN	TRACE	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.2	0.0
HELIUM	0.08	0.06	0.07
HEATING VALUE*	1018	1034	1016
SPECIFIC GRAVITY	0.563	0.573	0.563

	INDEX 11950 SAMPLE 9336	INDEX 11951 SAMPLE 9346	INDEX 11952 SAMPLE 12311
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RALEIGH	RANDOLPH	RANDOLPH
FIELD	WELCHLANDS	ALPENA	BROOK RUN
WELL NAME	NO. 72	MADDIX NO. 1	L. L. MOSS NO. 1
LOCATION	SLAB FORK DIST.	MORTON QUAD.	ROARING CREEK DIST.
OWNER	PEAKE PETROLEUM CO.	CITIES SERVICE OIL CO.	WHITE SHIELD OIL & GAS CORP.
COMPLETED	11/18/58	01/19/50	07/26/69
SAMPLED	04/27/64	09/30/64	06/18/70
FORMATION	MISS-MAXTON	DEVO-CHERT & ORISKANY	DEVO-RILEY & BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1875	NOT GIVEN	3351
WELLHEAD PRESSURE,PSIG	349	1510	1100
OPEN FLOW, MCFD	5800	569	200
COMPONENT, MOLE PCT			
METHANE	96.7	98.0	87.7
ETHANE	2.1	1.1	7.5
PROPANE	0.2	TRACE	2.2
N-BUTANE	0.0	0.0	0.5
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.6	0.6	0.3
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	TRACE	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.08	0.05	0.05
HEATING VALUE*	1023	1012	1131
SPECIFIC GRAVITY	0.569	0.564	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11953 SAMPLE 12312	INDEX 11954 SAMPLE 17704	INDEX 11955 SAMPLE 16278
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RANDOLPH	RANDOLPH	RANDOLPH
FIELD	BROOK RUN	CASSITY	MIDDLE FORK
WELL NAME	L. L. MOSS NO. 1	M. G. WARD NO. 4	MCMULLAN NO. A-925
LOCATION	ROARING CREEK DIST.	ADOLPH QUAD.	CASSITY QUAD.
OWNER	WHITE SHIELD OIL & GAS CORP.	SENECA-UPSHUR PETROLEUM CO.	ALLEGHENY LAND & MINERAL CO.
COMPLETED	07/28/69	04/16/82	12/12/80
SAMPLED	06/18/70	06/10/85	06/09/81
FORMATION	MISS-SQUAW	DEVO-BENSON	DEVO-CHERT
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1264	3655	7747
WELLHEAD PRESSURE,PSIG	440	550	2600
OPEN FLOW, MCFD	5410	160	9100
COMPONENT, MOLE PCT			
METHANE	93.9	91.0	96.8
ETHANE	3.0	5.4	1.8
PROPANE	0.6	1.3	0.1
N-BUTANE	0.1	0.5	TRACE
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	1.5	0.8	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.5	0.0
HYDROGEN	0.7	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.4
HELIUM	0.12	0.07	0.03
HEATING VALUE*	1039	1076	1015
SPECIFIC GRAVITY	0.584	0.611	0.570

	INDEX 11956 SAMPLE 6030	INDEX 11957 SAMPLE 12179	INDEX 11958 SAMPLE 9519
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RANDOLPH	RANDOLPH	RITCHIE
FIELD	NOT GIVEN	ROARING CREEK	BEACON RUN
WELL NAME	D. HILL ARNOLD NO. 1 GW1208	MOSS NO. 1	NO. 10082
LOCATION	NOT GIVEN	NOT GIVEN	UNION DIST.
OWNER	COLUMBIAN CARBON CO.	WHITE SHIELD OIL & GAS CORP.	HOPE NATURAL GAS CO.
COMPLETED	11/10/55	07/06/69	05/24/57
SAMPLED	03/05/56	01/23/70	07/23/64
FORMATION	DEVO-ORISKANY	DEVO-BENSON	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	9838	3500	1880
WELLHEAD PRESSURE,PSIG	2045	1050	243
OPEN FLOW, MCFD	9832	200	12
COMPONENT, MOLE PCT			
METHANE	98.5	93.5	75.2
ETHANE	1.0	3.1	15.2
PROPANE	0.0	0.7	6.0
N-BUTANE	0.0	0.1	1.4
ISOBUTANE	0.0	TRACE	0.8
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.0	TRACE	0.4
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.4
NITROGEN	0.5	1.4	0.2
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.8	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.05	0.12	0.04
HEATING VALUE*	1016	1036	1318
SPECIFIC GRAVITY	0.562	0.584	0.749

	INDEX 11959 SAMPLE 9501	INDEX 11960 SAMPLE 9492	INDEX 11961 SAMPLE 9173
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RITCHIE	RITCHIE	RITCHIE
FIELD	HAZEL GREENE-LAWFORD	MAHONE	MELLEN
WELL NAME	HARTMAN NO. 3070	WESTFALL NO. 10029	RITCHIE MINES NO. 72
LOCATION	MURPHY DIST.	MURPHY DIST.	S23, W31
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	PENNZOIL CO.
COMPLETED	09/--/13	02/--/57	11/29/60
SAMPLED	07/16/64	07/16/64	11/19/63
FORMATION	MISS-BEREA	MISS-BIG INJUN	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2139	1871	2138
WELLHEAD PRESSURE,PSIG	60	201	30
OPEN FLOW, MCFD	17	47	34
COMPONENT, MOLE PCT			
METHANE	64.9	82.5	71.1
ETHANE	14.8	13.6	15.5
PROPANE	9.7	3.5	7.3
N-BUTANE	4.4	0.8	2.5
ISOBUTANE	1.7	0.4	0.9
N-PENTANE	1.3	0.2	0.6
ISOPENTANE	1.1	0.2	0.7
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	1.1	0.2	0.6
NITROGEN	0.7	1.3	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.06	0.05	0.10
HEATING VALUE*	1547	1187	1392
SPECIFIC GRAVITY	0.897	0.680	0.800

	INDEX 11962 SAMPLE 9500	INDEX 11963 SAMPLE 6985	INDEX 11964 SAMPLE 9819
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RITCHIE	RITCHIE	ROANE
FIELD	RACY	SAND HILL	GEARY DISTRICT
WELL NAME	NO. 4439	NO. 10160	DENVER MORRIS NO. 1
LOCATION	GRANT DIST.	NOT GIVEN	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	CRESLENN OIL CO.
COMPLETED	11/--/16	12/13/58	10/29/64
SAMPLED	07/16/64	02/25/59	03/15/65
FORMATION	MISS-BEREA	-WISSIS CREEK	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2269	6960	1114
WELLHEAD PRESSURE,PSIG	300	400	400
OPEN FLOW, MCFD	13	5396	731
COMPONENT, MOLE PCT			
METHANE	73.9	92.7	82.8
ETHANE	15.8	2.8	8.8
PROPANE	6.5	0.7	3.1
N-PUTANE	1.4	0.3	0.9
ISOBUTANE	0.7	0.4	0.7
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.4	0.0	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.5	0.4
NITROGEN	0.6	1.9	2.5
OXYGEN	TRACE	0.2	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.05	TRACE	0.09
HEATING VALUE*	1320	1069	1176
SPECIFIC GRAVITY	0.755	0.615	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11965 SAMPLE 9506	INDEX 11966 SAMPLE 9699	INDEX 11967 SAMPLE 9700
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	ROANE	TAYLOR	TAYLOR
FIELD	RICHARDSON	NOT GIVEN	NOT GIVEN
WELL NAME	RADAKER NO. 7122	NO. 6043	NO. 6137
LOCATION	SPENCER QUAD.	BOOTHS CREEK DIST.	BOOTHS CREEK DIST.
OWNER	HOPE NATURAL GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	02/23/14	04/28/18	09/27/43
SAMPLED	08/--/64	01/07/65	01/07/65
FORMATION	MISS-BEREA	DEVO-FIFTH	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2544	2412	977
WELLHEAD PRESSURE,PSIG	940	84	35
OPEN FLOW, MCFD	NOT GIVEN	5	33
COMPONENT, MOLE PCT			
METHANE	74.9	92.1	82.9
ETHANE	12.6	4.5	8.9
PROPANE	6.8	1.0	3.4
N-BUTANE	2.1	0.3	1.1
ISOBUTANE	0.8	0.3	0.8
N-PENTANE	0.5	0.1	0.4
ISOPENTANE	0.3	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.3	0.6
NITROGEN	1.3	1.1	1.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.09	0.01	0.10
HEATING VALUE*	1317	1079	1216
SPECIFIC GRAVITY	0.760	0.609	0.697

	INDEX 11968 SAMPLE 9378	INDEX 11969 SAMPLE 17677	INDEX 11970 SAMPLE 9483
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	TUCKER	TUCKER	TUCKER
FIELD	CANAAN VALLEY	CANAAN VALLEY	ETAM
WELL NAME	J. G. KUYKENDALL NO. 454	ALLMAN & TETER NO. 1	INA E. NESTOR NO. 9924
LOCATION	DRY FORK DIST.	BLACKWATER FALLS QUAD	LICKING DIST.
OWNER	CUMBERLAND & ALLEGHENY GAS C	BEREA OIL & GAS CORP.	HOPE NATURAL GAS CO.
COMPLETED	05/25/46	04/18/82	04/28/55
SAMPLED	05/27/64	05/17/85	07/15/64
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-ONONDAGA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8250	8450	4473
WELLHEAD PRESSURE,PSIG	3175	2650	1631
OPEN FLOW, MCFD	4150	5000	138
COMPONENT, MOLE PCT			
METHANE	97.8	98.1	97.8
ETHANE	1.1	1.0	1.3
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.7	0.5	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.05	0.04	0.04
HEATING VALUE*	1013	1012	1014
SPECIFIC GRAVITY	0.565	0.564	0.564

	INDEX 11971 SAMPLE 4092	INDEX 11972 SAMPLE 4093	INDEX 11973 SAMPLE 9676
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	TUCKER	TUCKER	TUCKER
FIELD	NOT GIVEN	NOT GIVEN	PARSONS
WELL NAME	KUYKENDALL NO. 1	KUYKENDALL NO. 1	U.S.A.-T-1
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	OHIO OIL CO.	OHIO OIL CO.	CITIES SERVICE OIL CO.
COMPLETED	08/15/45	08/15/45	08/21/64
SAMPLED	08/20/45	08/20/45	12/16/64
FORMATION	DEVO-ORISKANY	PENN-	SILU-TUSCARORA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	8000	8000	6822
WELLHEAD PRESSURE,PSIG	3200	3200	2630
OPEN FLOW, MCFD	1500	1500	22000
COMPONENT, MOLE PCT			
METHANE	97.6	98.3	79.4
ETHANE	1.8	1.4	1.8
PROPANE	---	---	0.2
N-BUTANE	---	---	0.0
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.0
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	0.2	0.0	17.9
OXYGEN	0.1	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.06	0.05	0.42
HEATING VALUE*	1021	1021	842
SPECIFIC GRAVITY	0.568	0.564	0.640

	INDEX 11974 SAMPLE 13158	INDEX 11975 SAMPLE 4659	INDEX 11976 SAMPLE 16742
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	TUCKER	TUCKER	TYLER
FIELD	PARSONS	TUCKER	BEARSVILLE
WELL NAME	MULLINAX NO. A-1	NO. 418	W. P. MEREDITH NO. 1
LOCATION	PARSONS QUAD.	NOT GIVEN	CENTERVILLE DIST.
OWNER	CITIES SERVICE OIL CO.	CUMBERLAND & ALLEGHENY GAS C	HAUGHT, INC.
COMPLETED	12/11/71	12/23/48	09/15/81
SAMPLED	02/29/72	03/23/49	12/20/82
FORMATION	SILU-TUSCARORA	DEVO-ORISKANY	DEVO-SHALE
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5455	5056	2700
WELLHEAD PRESSURE,PSIG	2645	2500	320
OPEN FLOW, MCFD	28000	468	220
COMPONENT, MOLE PCT			
METHANE	79.0	96.6	82.4
ETHANE	1.8	1.2	4.7
PROPANE	0.2	0.1	2.3
N-BUTANE	0.1	0.1	1.1
ISOBUTANE	0.0	0.0	0.7
N-PENTANE	0.1	0.0	0.4
ISOPENTANE	0.0	0.0	0.6
CYCLOPENTANE	0.2	0.0	0.1
HEXANES PLUS	0.3	0.0	0.4
NITROGEN	17.1	1.5	5.9
OXYGEN	0.4	0.2	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	---	0.5
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.41	0.05	0.46
HEATING VALUE*	869	1007	1108
SPECIFIC GRAVITY	0.653	0.572	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11977 SAMPLE 9174	INDEX 11978 SAMPLE 9553	INDEX 11979 SAMPLE 9458
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	TYLER	TYLER	UPSHUR
FIELD	BRADEN STATION	SCHUTTE	ABBOTT-FRENCH CREEK
WELL NAME	NELSON FORRESTER	MCCOY NO. 6173	DELIA M. GOLDEN NO. 10188
LOCATION	MCELROY DIST.	NOT GIVEN	BANK DIST.
OWNER	QUAKER STATE OIL REF. CORP.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	01/20/60	05/15/22	08/19/59
SAMPLED	11/21/63	08/17/64	07/15/64
FORMATION	DEVO-GORDON	DEVO-GORDON	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2726	2842	4050
WELLHEAD PRESSURE,PSIG	62	53	790
OPEN FLOW, MCFD	7	17	1699
COMPONENT, MOLE PCT			
METHANE	58.5	64.3	89.5
ETHANE	16.8	19.7	6.7
PROPANE	12.4	9.7	1.5
N-BUTANE	4.6	2.3	0.3
ISOBUTANE	2.0	1.2	0.3
N-PENTANE	0.9	0.5	0.1
ISOPENTANE	1.1	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.8	0.4	0.2
NITROGEN	2.5	1.3	1.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.1
HELIUM	0.10	0.06	0.07
HEATING VALUE*	1568	1437	1105
SPECIFIC GRAVITY	0.934	0.836	0.624

	INDEX 11980 SAMPLE 9449	INDEX 11981 SAMPLE 9177	INDEX 11982 SAMPLE 10369
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	BUCKHANNON CENTURY	BUCKHANNON	BUCKHANNON
WELL NAME	J.W.MCDERMOTT FARM NO. 10509	W. S. GOULD NO. 593	ALVIN TEAL QUEEN
LOCATION	UNION DIST.	MEADE DIST.	WARREN DIST.
OWNER	HOPE NATURAL GAS CO.	CUMBERLAND & ALLEGHENY GAS C	ALLERTON MILLER.
COMPLETED	10/04/63	12/19/60	09/22/65
SAMPLED	07/15/64	11/21/63	01/06/66
FORMATION	DEVO-BENSON	DEVO-BENSON & RILEY	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3964	4048	4608
WELLHEAD PRESSURE,PSIG	1280	1330	1720
OPEN FLOW, MCFD	4387	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	90.3	90.5	88.3
ETHANE	6.4	6.0	7.1
PROPANE	1.4	1.6	2.1
N-BUTANE	0.3	0.5	0.5
ISOBUTANE	0.3	0.1	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.8	0.8	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.06	0.10	0.06
HEATING VALUE*	1100	1100	1135
SPECIFIC GRAVITY	0.619	0.619	0.641

	INDEX 11983 SAMPLE 9379	INDEX 11984 SAMPLE 9664	INDEX 11985 SAMPLE 17523
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	FRENCH CREEK	MEADE DISTRICT	NOT GIVEN
WELL NAME	O. NEELY NO. 583	2941-NO. 1	BOONE
LOCATION	MEADE DIST.	MEADE DIST.	CARTER
OWNER	CUMBERLAND & ALLEGHENY GAS C	ALLERTON MILLER	UNION DRILLING, INC.
COMPLETED	07/21/59	03/26/63	--/--/00
SAMPLED	05/26/64	12/10/64	11/09/84
FORMATION	DEVO-BENSON	DEVO-GORDON	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3898	2230	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1200	510	1700
OPEN FLOW, MCFD	222	2100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.7	88.9	96.5
ETHANE	5.4	7.0	2.2
PROPANE	1.3	1.6	0.1
N-BUTANE	0.4	0.6	0.1
ISOBUTANE	0.1	0.4	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	0.6	0.7	0.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.08	0.07	0.03
HEATING VALUE*	1090	1125	1023
SPECIFIC GRAVITY	0.610	0.634	0.573

	INDEX 11986 SAMPLE 8617	INDEX 11987 SAMPLE 9380	INDEX 11988 SAMPLE 12208
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	PECKS RUN	ROCK CAVE	TALLMANSVILLE
WELL NAME	LUCILLE POST 10353	G. E. MEARNS NO. 538	GEORGE A. TENNEY A-393
LOCATION	NOT GIVEN	BANKS DIST.	WASHINGTON DIST.
OWNER	HOPE NATURAL GAS CO.	CUMBERLAND & ALLEGHENY GAS C	ALLEGHENY LAND & MINERAL CO.
COMPLETED	04/09/62	12/20/55	11/12/69
SAMPLED	07/23/62	05/26/64	02/16/70
FORMATION	DEVO-BENSON	DEVO-BENSON	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	4530	4076	3922
WELLHEAD PRESSURE,PSIG	1540	1100	1500
OPEN FLOW, MCFD	25283	1202	4153
COMPONENT, MOLE PCT			
METHANE	89.9	85.3	90.1
ETHANE	6.9	7.0	5.6
PROPANE	1.7	2.0	1.7
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.6	0.3	1.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.07	0.07	0.05
HEATING VALUE*	1107	1129	1092
SPECIFIC GRAVITY	0.622	0.632	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 11989 SAMPLE 12215	INDEX 11990 SAMPLE 12396	INDEX 11991 SAMPLE 12397
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	UPSHUR	UPSHUR
FIELD	TALLMANSVILLE	TALLMANSVILLE	TALLMANSVILLE
WELL NAME	GEORGE ROESSING NO. 2	GOODWIN NO. A-401	GOODWIN NO. A-401
LOCATION	WASHINGTON DIST.	WASHINGTON DIST.	WASHINGTON DIST.
OWNER	WESTRANS PETROLEUM, INC.	ALLEGHENY LAND & MINERAL CO.	ALLEGHENY LAND & MINERAL CO.
COMPLETED	10/22/69	06/03/70	06/03/70
SAMPLED	03/--/70	08/25/70	08/25/70
FORMATION	DEVO-BENSON	DEVO-FIFTH	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3948	2181	3892
WELLHEAD PRESSURE,PSIG	1600	650	1340
OPEN FLOW, MCFD	2705	998	1400
COMPONENT, MOLE PCT			
METHANE	88.9	91.6	90.2
ETHANE	6.4	4.9	5.8
PROPANE	2.0	1.3	1.8
N-BUTANE	0.4	0.2	0.3
ISOBUTANE	0.3	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.5	1.2	1.1
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.07	0.09	0.08
HEATING VALUE*	1105	1073	1091
SPECIFIC GRAVITY	0.629	0.605	0.616

	INDEX 11992 SAMPLE 9381	INDEX 11993 SAMPLE 4554	INDEX 11994 SAMPLE 4592
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	UPSHUR	WAYNE	WAYNE
FIELD	TURKEY RUN	BRANCHLAND	BRANCHLAND
WELL NAME	F. A. ALLMAN NO. 521	NO. 6181	U-6181
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CUMBERLAND & ALLEGHENY GAS C	UNITED FUEL GAS CO.	UNITED FUEL GAS CO.
COMPLETED	05/23/55	--/--/00	--/--/00
SAMPLED	05/26/64	06/03/48	11/02/48
FORMATION	DEVO-FIFTH	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2655	7085	7164
WELLHEAD PRESSURE,PSIG	620	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	1818	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.6	78.1	74.5
ETHANE	9.9	4.9	9.4
PROPANE	3.0	---	---
N-BUTANE	0.9	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	0.5	1.6	2.4
OXYGEN	TRACE	0.5	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	14.8	13.3
HELIUM	0.05	0.08	0.07
HEATING VALUE*	1183	879	925
SPECIFIC GRAVITY	0.667	0.732	0.742

	INDEX 11995 SAMPLE 4699	INDEX 11996 SAMPLE 9469	INDEX 11997 SAMPLE 9460
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	BRANCHLAND	CRUM-KERMIT	CRUM-KERMIT
WELL NAME	NO. 6181	WILSON COAL LAND CO. NO. 9	WILSON COAL LAND CO. NO. 8
LOCATION	NOT GIVEN	LINCOLN DIST.	LINCOLN DIST.
OWNER	UNITED FUEL GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	--/--/00	12/28/49	12/08/54
SAMPLED	04/14/49	07/08/64	07/10/64
FORMATION	NOT GIVEN	MISS-BIG LIME	MISS-MAXTON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	7760	1219	1337
WELLHEAD PRESSURE,PSIG	NOT GIVEN	402	360
OPEN FLOW, MCFD	NOT GIVEN	81	191
COMPONENT, MOLE PCT			
METHANE	85.1	80.9	81.6
ETHANE	2.1	10.3	10.4
PROPANE	0.6	4.7	4.2
N-BUTANE	0.2	1.1	1.0
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	5.5	2.9	1.8
OXYGEN	0.5	TRACE	0.1
ARGON	0.1	0.0	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	5.5	0.0	0.1
HELIUM	0.11	0.10	0.09
HEATING VALUE*	930	1201	1184
SPECIFIC GRAVITY	0.659	0.694	0.684

	INDEX 11998 SAMPLE 9468	INDEX 11999 SAMPLE 9471	INDEX 12000 SAMPLE 9473
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	CRUM-KERMIT	CRUM-KERMIT	CRUM-KERMIT
WELL NAME	WILSON COAL LAND CO. NO. 54	WILSON COAL LAND CO. NO. 54	WILSON COAL LAND CO. NO. 17
LOCATION	LINCOLN DIST.	LINCOLN DIST.	LINCOLN DIST.
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	05/11/51	05/11/51	04/17/30
SAMPLED	07/09/64	07/08/64	07/08/64
FORMATION	MISS-BEREA	DEVO-SHALE	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2326	2442	585
WELLHEAD PRESSURE,PSIG	405	540	335
OPEN FLOW, MCFD	11	154	2000
COMPONENT, MOLE PCT			
METHANE	81.3	78.2	81.8
ETHANE	8.9	11.7	9.9
PROPANE	3.8	5.3	4.1
N-BUTANE	0.9	1.1	1.0
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.9	2.6	2.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.17	0.08	0.11
HEATING VALUE*	1145	1205	1174
SPECIFIC GRAVITY	0.679	0.705	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12001 SAMPLE 9579		INDEX 12002 SAMPLE 9647		INDEX 12003 SAMPLE 9455	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	CRUM-KERMIT		FORT GAY-HUBBARDS TOWN		MANY-COVE CREEK	
WELL NAME	E. G. COLEMAN NO. 1		BARNEY ASBURY B-1		HOARD BALDWIN NO. 30	
LOCATION	LINCOLN DIST.		BUTLER DIST.		STONEWALL DIST.	
OWNER	ASHLAND OIL & REFINING CO.		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	09/26/43		06/17/58		05/15/43	
SAMPLED	08/12/64		09/29/64		07/03/64	
FORMATION	DEVO-SHALE		MISS-BEREA		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	2186		2057		1220	
WELLHEAD PRESSURE,PSIG	300		583		325	
OPEN FLOW, MCFD	1107		208		166	
COMPONENT, MOLE PCT						
METHANE	77.4		73.7		80.9	
ETHANE	13.1		12.0		9.6	
PROPANE	5.7		7.4		4.3	
N-BUTANE	1.2		2.0		0.9	
ISOBUTANE	0.2		0.7		0.3	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.2		0.4		TRACE	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.1		0.2		0.1	
NITROGEN	1.8		3.0		3.3	
OXYGEN	0.0		TRACE		TRACE	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.1		0.1		0.1	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.0		0.1		0.1	
HELIUM	0.07		0.16		0.12	
HEATING VALUE*	1232		1281		1158	
SPECIFIC GRAVITY	0.712		0.757		0.683	

	INDEX 12004 SAMPLE 9462		INDEX 12005 SAMPLE 9464		INDEX 12006 SAMPLE 9475	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	MANY-COVE CREEK		MANY-COVE CREEK		MANY-COVE CREEK	
WELL NAME	C. E. COUNTS NO. 1		C. E. COUNTS NO. 1		HOARD BALDWIN NO. 2	
LOCATION	GRANT DIST.		GRANT DIST.		GRANT DIST.	
OWNER	OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	06/21/48		06/21/48		02/01/62	
SAMPLED	07/10/64		07/10/64		07/10/64	
FORMATION	MISS-BIG LIME		DEVO-SHALE		MISS-BIG INJUN	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1516		2586		1215	
WELLHEAD PRESSURE,PSIG	255		435		138	
OPEN FLOW, MCFD	63		183		208	
COMPONENT, MOLE PCT						
METHANE	83.9		79.4		83.9	
ETHANE	8.5		10.9		10.1	
PROPANE	3.1		4.6		3.1	
N-BUTANE	0.8		1.0		0.8	
ISOBUTANE	0.5		0.9		0.3	
N-PENTANE	0.2		0.1		0.2	
ISOPENTANE	0.2		0.2		0.2	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	2.4		1.0		1.0	
OXYGEN	TRACE		0.0		0.0	
ARGON	0.0		0.0		TRACE	
HYDROGEN	0.0		0.1		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.09		0.12		0.07	
HEATING VALUE*	1154		1184		1176	
SPECIFIC GRAVITY	0.670		0.696		0.669	

	INDEX 12007 SAMPLE 9467		INDEX 12008 SAMPLE 9474		INDEX 12009 SAMPLE 9546	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	MERBERT		MERBERT		MERBERT	
WELL NAME	LUCRETIA KNIGHT NO. 1		O. J. SPURLOCK NO. 2		OTHEL WRIGHT NO. 1	
LOCATION	UNION DIST.		UNION DIST.		STONEWALL DIST.	
OWNER	OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	06/09/61		09/04/58		12/16/59	
SAMPLED	07/08/64		07/09/64		09/29/64	
FORMATION	DEVO-CORNIFEROUS		SILU-BIG SIX		SILU-BIG SIX	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	3160		3809		3879	
WELLHEAD PRESSURE,PSIG	780		860		1200	
OPEN FLOW, MCFD	3585		219		243	
COMPONENT, MOLE PCT						
METHANE	87.1		86.5		78.6	
ETHANE	4.3		4.6		2.6	
PROPANE	1.6		1.8		0.6	
N-BUTANE	0.6		0.7		0.3	
ISOBUTANE	0.3		0.2		0.2	
N-PENTANE	0.1		0.2		0.1	
ISOPENTANE	0.1		0.1		0.1	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	0.2		0.2		0.2	
NITROGEN	5.2		5.1		18.9	
OXYGEN	TRACE		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.2		TRACE	
HELIUM	0.16		0.20		0.35	
HEATING VALUE*	1050		1055		878	
SPECIFIC GRAVITY	0.636		0.643		0.668	

	INDEX 12010 SAMPLE 15690		INDEX 12011 SAMPLE 9470		INDEX 12012 SAMPLE 9465	
STATE	WEST VIRGINIA		WEST VIRGINIA		WEST VIRGINIA	
COUNTY	WAYNE		WAYNE		WAYNE	
FIELD	LOCKWOOD E		LOST CREEK		LYNN-CRETE E	
WELL NAME	TRACY 1 NO.20530		KOONCE & ZIMMERMAN NO. 2		BUYAN OIL CO. NO. 4	
LOCATION	EAST LYNN DIST.		LINCOLN DIST.		STONEWALL DIST.	
OWNER	COLUMBIA GAS TRANS. CORP.		OWENS, LIBBEY-OWENS GAS DEPT		OWENS, LIBBEY-OWENS GAS DEPT	
COMPLETED	10/17/77		02/19/41		05/20/30	
SAMPLED	07/12/79		07/08/64		07/09/63	
FORMATION	MISS-BIG INJUN		MISS-BIG INJUN		DEVO-SHALE	
GEOLOGIC PROVINCE CODE	160		160		160	
DEPTH, FEET	1390		1171		1884	
WELLHEAD PRESSURE,PSIG	430		380		685	
OPEN FLOW, MCFD	3890		911		302	
COMPONENT, MOLE PCT						
METHANE	84.6		81.1		79.9	
ETHANE	6.2		8.6		12.0	
PROPANE	2.7		3.8		4.8	
N-BUTANE	0.5		0.8		1.0	
ISOBUTANE	0.2		0.3		0.4	
N-PENTANE	0.1		0.1		0.1	
ISOPENTANE	TRACE		0.2		0.2	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.1		0.1	
NITROGEN	3.1		4.6		0.6	
OXYGEN	0.8		TRACE		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1		0.1		0.2	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		0.0	
HELIUM	0.27		0.12		0.14	
HEATING VALUE*	1071		1133		1172	
SPECIFIC GRAVITY	0.646		0.681		0.691	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12013 SAMPLE 9466	INDEX 12014 SAMPLE 4700	INDEX 12015 SAMPLE 9476
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WAYNE	WAYNE	WAYNE
FIELD	LYNN-CRETE E	NOT GIVEN	NOT GIVEN
WELL NAME	CLYDE MILLER NO. 1	ISAAC B. SMITH, HRS. NO. 1	MGARD BALDWIN NO. 36
LOCATION	STONEWALL DIST.	NOT GIVEN	STONEWALL DIST.
OWNER	OWENS, LIBBEY-OWENS GAS DEPT	CHARTIERS OIL & GAS CO.	OWENS, LIBBEY-OWENS GAS DEPT
COMPLETED	04/29/53	02/12/49	--/--/00
SAMPLED	07/09/64	--/--/00	08/11/64
FORMATION	DEVO-BROWN SHALE&CORNIFEROUS	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2096	4180	NOT GIVEN
WELLHEAD PRESSURE,PSIG	401	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	75	984	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.4	67.3	80.7
ETHANE	8.6	1.2	9.8
PROPANE	3.9	0.4	4.4
N-BUTANE	0.8	0.2	1.1
ISOBUTANE	0.2	0.1	0.7
N-PENTANE	0.1	---	0.3
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	4.3	29.5	2.3
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.13	0.90	0.17
HEATING VALUE*	1132	725	1199
SPECIFIC GRAVITY	0.677	0.690	0.697

	INDEX 12016 SAMPLE 9323	INDEX 12017 SAMPLE 4423	INDEX 12018 SAMPLE 17012
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WAYNE	WAYNE	WEBSTER
FIELD	WAYNE DIVISION	WAYNE-LINCOLN	FORK LICK DISTRICT
WELL NAME	RAY STALEY NO. 666	C. E. COUNTS NO. 1	MOWER LUMBER NO. 1768
LOCATION	BUTLER DIST.	GRANT DIST.	SAMP QUAD.
OWNER	COMMONWEALTH GAS CORP.	OWENS, LIBBEY-OWENS GAS DEPT	UNION DRILLING, INC.
COMPLETED	05/06/60	10/29/47	11/15/81
SAMPLED	04/23/64	02/12/48	08/18/83
FORMATION	MISS-BEREA	MISS-LIME	DEVO-BENSON
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1821	1516	2772
WELLHEAD PRESSURE,PSIG	650	425	950
OPEN FLOW, MCFD	189	NOT GIVEN	289
COMPONENT, MOLE PCT			
METHANE	81.8	69.3	91.0
ETHANE	5.8	25.6	1.9
PROPANE	2.9	---	0.2
N-BUTANE	0.8	---	0.0
ISOBUTANE	0.1	---	0.0
N-PENTANE	0.2	---	0.0
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	7.1	4.2	3.5
OXYGEN	0.0	0.5	0.1
ARGON	0.0	---	TRACE
HYDROGEN	0.3	---	0.4
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.3	2.8
HELIUM	0.54	0.13	0.09
HEATING VALUE*	1065	1161	962
SPECIFIC GRAVITY	0.663	0.704	0.606

	INDEX 12019 SAMPLE 9456	INDEX 12020 SAMPLE 9440	INDEX 12021 SAMPLE 9453
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WETZEL	WETZEL	WETZEL
FIELD	BIG RUN-BURCHFIELD	COBURN-EARNSHAW	KNOX FORK
WELL NAME	JACKSON LAMBERT NO. 818	SAMUEL CUMMINGS NO. 761	PETER GLOVER FARM NO. 3
LOCATION	CENTER DIST.	GRANT DIST.	CENTER DIST.
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	--/--/06	08/05/05	05/19/97
SAMPLED	07/15/64	07/16/64	07/15/64
FORMATION	DEVO-GORDON	DEVO-FOURTH SAND	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2924	3085	1998
WELLHEAD PRESSURE,PSIG	33	78	16
OPEN FLOW, MCFD	18	16	26
COMPONENT, MOLE PCT			
METHANE	46.7	79.3	77.6
ETHANE	23.5	11.7	9.8
PROPANE	16.0	4.1	4.7
N-BUTANE	5.1	1.1	2.0
ISOBUTANE	2.9	0.9	1.1
N-PENTANE	0.8	0.3	0.9
ISOPENTANE	1.6	0.3	0.4
CYCLOPENTANE	0.2	TRACE	0.2
HEXANES PLUS	0.9	0.3	1.4
NITROGEN	2.1	1.6	1.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.05	0.07	0.10
HEATING VALUE*	1735	1228	1323
SPECIFIC GRAVITY	1.034	0.710	0.767

	INDEX 12022 SAMPLE 9690	INDEX 12023 SAMPLE 9694	INDEX 12024 SAMPLE 9695
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WETZEL	WETZEL	WETZEL
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 5129	NO. 5193	NO. 5414
LOCATION	CHURCH DIST.	CHURCH DIST.	CHURCH DIST.
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	11/06/15	07/20/16	05/07/26
SAMPLED	01/11/65	01/11/65	01/11/65
FORMATION	DEVO-FOURTH SAND	DEVO-GORDON	DEVO-FIFTH
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2888	3351	3265
WELLHEAD PRESSURE,PSIG	85	51	25
OPEN FLOW, MCFD	13	61	22
COMPONENT, MOLE PCT			
METHANE	78.1	81.2	74.9
ETHANE	12.9	10.3	14.5
PROPANE	4.8	3.9	5.6
N-BUTANE	1.1	1.0	1.6
ISOBUTANE	0.9	0.9	1.1
N-PENTANE	0.3	0.3	0.4
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.5	0.5
NITROGEN	1.2	1.4	0.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.05	0.08	0.05
HEATING VALUE*	1246	1223	1318
SPECIFIC GRAVITY	0.716	0.703	0.757

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12025 SAMPLE 9696	INDEX 12026 SAMPLE 9697	INDEX 12027 SAMPLE 9698
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WETZEL	WETZEL	WETZEL
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 5210	NO. 1643	NO. 1624
LOCATION	CHURCH DIST.	GRANT DIST.	GRANT DIST.
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
COMPLETED	10/01/16	02/14/98	11/21/96
SAMPLED	01/11/65	01/11/65	01/11/65
FORMATION	MISS-BIG INJUN	DEVO-GORDON	MISS-BIG INJUN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2004	2674	1760
WELLHEAD PRESSURE,PSIG	72	49	91
OPEN FLOW, MCFD	11	16	21
COMPONENT, MOLE PCT			
METHANE	84.7	75.2	82.9
ETHANE	7.8	11.4	7.8
PROPANE	2.8	6.0	3.1
N-BUTANE	1.0	2.4	1.2
ISOBUTANE	0.6	1.3	0.8
N-PENTANE	0.3	0.6	0.5
ISOPENTANE	0.1	0.6	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.5	0.7	0.6
NITROGEN	1.9	1.5	2.2
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.11	0.09	0.14
HEATING VALUE*	1173	1337	1197
SPECIFIC GRAVITY	0.676	0.776	0.695

	INDEX 12028 SAMPLE 9477	INDEX 12029 SAMPLE 4941	INDEX 12030 SAMPLE 4871
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WETZEL	WIRT	WIRT
FIELD	READER	KANAWHA-CLENDENIN	NOT GIVEN
WELL NAME	JOSEPHINE BRAST NO. 1055	NO. 6552	T. P. BEARD NO. 1, SER. 1301
LOCATION	GREENE DIST.	NOT GIVEN	STEELE DIST.
OWNER	HOPE NATURAL GAS CO.	UNITED FUEL GAS CO.	GODFREY L. CABOT, INC.
COMPLETED	04/06/09	04/26/50	01/10/50
SAMPLED	07/16/64	07/08/50	05/11/50
FORMATION	MISS-BIG INJUN	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2123	5302	5360
WELLHEAD PRESSURE,PSIG	33	1480	1700
OPEN FLOW, MCFD	9	862	10000
COMPONENT, MOLE PCT			
METHANE	79.9	84.6	85.1
ETHANE	10.0	8.2	8.8
PROPANE	4.2	2.9	2.9
N-BUTANE	1.3	0.7	0.8
ISOBUTANE	0.9	0.3	0.4
N-PENTANE	0.5	0.2	0.3
ISOPENTANE	0.5	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.6	0.2	0.3
NITROGEN	1.6	2.5	1.1
OXYGEN	0.0	0.6	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.11	TRACE	0.05
HEATING VALUE*	1299	1121	1162
SPECIFIC GRAVITY	0.723	0.660	0.665

	INDEX 12031 SAMPLE 15528	INDEX 12032 SAMPLE 4566	INDEX 12033 SAMPLE 4635
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WIRT	WOOD	WOOD
FIELD	PEE WEE	CHARLESTON 7-A	KANAWHA-CLENDENIN
WELL NAME	B. N. WISEMAN NO. 1	THOMPSON NO. 1069	NO. 6335
LOCATION	TUCKER DIST.	STEELE DIST.	16.5 MI. S PARKERSBURG
OWNER	RAY RESOURCES CORP.	COLUMBIAN CARBON CO.	UNITED FUEL GAS CO.
COMPLETED	01/06/77	08/12/48	08/30/48
SAMPLED	11/20/78	09/27/48	10/29/48
FORMATION	MISS-BEREA	DEVO-L	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	1641	4843	5309
WELLHEAD PRESSURE,PSIG	750	1970	1750
OPEN FLOW, MCFD	6500	4000	2588
COMPONENT, MOLE PCT			
METHANE	85.8	73.0	75.9
ETHANE	2.6	25.8	22.4
PROPANE	0.9	---	---
N-BUTANE	0.3	---	---
ISOBUTANE	0.1	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	8.7	0.7	1.0
OXYGEN	0.0	0.3	0.4
ARGON	TRACE	---	---
HYDROGEN	0.3	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.95	0.05	0.07
HEATING VALUE*	967	1252	1170
SPECIFIC GRAVITY	0.615	0.687	0.673

	INDEX 12034 SAMPLE 5086	INDEX 12035 SAMPLE 4656	INDEX 12036 SAMPLE 4732
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WOOD	WOOD	WOOD
FIELD	KANAWHA-CLENDENIN	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 6651	JOHN HAGUE NO. 1, SER. 1281	G. L. CABOT NO. 2
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	UNITED FUEL GAS CO.	GODFREY L. CABOT, INC.	UNITED CARBON CO.
COMPLETED	01/24/51	10/09/48	03/02/49
SAMPLED	08/06/51	01/14/49	05/16/49
FORMATION	-MONOCLINAL SLOPE	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5205	5089	4805
WELLHEAD PRESSURE,PSIG	410	1300	1340
OPEN FLOW, MCFD	2659	103	1000
COMPONENT, MOLE PCT			
METHANE	82.0	85.1	84.1
ETHANE	9.5	8.7	8.8
PROPANE	3.7	2.7	2.9
N-BUTANE	0.9	0.8	0.8
ISOBUTANE	0.5	0.4	0.4
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	0.5	1.4	1.1
OXYGEN	0.2	0.1	0.4
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	0.1	0.1
HELIUM	0.06	0.05	0.05
HEATING VALUE*	1174	1158	1157
SPECIFIC GRAVITY	0.684	0.663	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12037 SAMPLE 9491	INDEX 12038 SAMPLE 9936	INDEX 12039 SAMPLE 4782
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WOOD	WOOD	WOOD
FIELD	NOT GIVEN	STEEL DIST.	STEEL DIST.-POND CREEK
WELL NAME	BIG RUN OIL CO. NO. 8840	J. A. RUBLE NO. 1, GW-1143	C. W. MOORE NO. 1 GW-1124
LOCATION	WILLIAMS DIST.	NOT GIVEN	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	COLUMBIAN CARBON CO.	COLUMBIAN CARBON CO.
COMPLETED	03/--/49	05/22/50	08/01/49
SAMPLED	07/16/64	08/17/50	09/22/49
FORMATION	DEVO-SHALE	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2782	5160	4884
WELLHEAD PRESSURE,PSIG	210	1225	1520
OPEN FLOW, MCFD	37	13000	954
COMPONENT, MOLE PCT			
METHANE	80.3	85.1	84.0
ETHANE	11.4	8.7	8.9
PROPANE	4.3	2.9	3.0
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	1.8	1.0	1.7
OXYGEN	TRACE	0.2	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.09	0.05	0.05
HEATING VALUE*	1208	1165	1171
SPECIFIC GRAVITY	0.697	0.667	0.676

	INDEX 12040 SAMPLE 4758	INDEX 12041 SAMPLE 4780	INDEX 12042 SAMPLE 9407
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WOOD	WOOD	WYOMING
FIELD	WOOD COUNTY	WOOD COUNTY	BAILEYSVILLE
WELL NAME	BENJAMIN QUICK NO. 1	JACOB GATES NO. 1 SER. 1282	W. M. RITTER NO. 184
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	GODFREY L. CABOT, INC.	GODFREY L. CABOT, INC.	ASHLAND OIL & REFINING CO.
COMPLETED	08/10/49	03/03/49	04/06/60
SAMPLED	11/--/49	11/15/49	06/--/60
FORMATION	DEVO-ORISKANY	DEVO-ORISKANY	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	5053	5225	1949
WELLHEAD PRESSURE,PSIG	1780	1600	535
OPEN FLOW, MCFD	174	NOT GIVEN	22800
COMPONENT, MOLE PCT			
METHANE	83.1	84.2	96.9
ETHANE	8.6	8.9	2.1
PROPANE	2.8	2.9	0.3
N-BUTANE	0.9	0.9	0.0
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.2	0.4	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.3	0.0
NITROGEN	2.9	1.8	0.5
OXYGEN	0.3	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.05	0.05	0.06
HEATING VALUE*	1144	1164	1027
SPECIFIC GRAVITY	0.679	0.674	0.570

	INDEX 12043 SAMPLE 9411	INDEX 12044 SAMPLE 9369	INDEX 12045 SAMPLE 9361
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	BAILEYSVILLE	BIG MUFF	GILBERT
WELL NAME	W. M. RITTER NO. 211	NO. 7	SUE BAILEY NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	GILBERT QUAD.
OWNER	ASHLAND OIL & REFINING CO.	CABOT CORP.	CITIES SERVICE OIL CO.
COMPLETED	01/15/64	09/20/55	06/07/63
SAMPLED	06/--/64	05/12/64	05/08/64
FORMATION	MISS-BIG LIME	MISS-BEREA	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3265	3864	3460
WELLHEAD PRESSURE,PSIG	850	430	810
OPEN FLOW, MCFD	1175	100	838
COMPONENT, MOLE PCT			
METHANE	95.8	93.7	93.7
ETHANE	2.9	4.0	4.5
PROPANE	0.3	0.5	0.6
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.7	1.6	0.7
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.06	0.03	0.04
HEATING VALUE*	1030	1037	1053
SPECIFIC GRAVITY	0.576	0.588	0.590

	INDEX 12046 SAMPLE 9372	INDEX 12047 SAMPLE 9739	INDEX 12048 SAMPLE 9523
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	GILBERT	GILBERT & PLUMLEY	MANN-OCEANA
WELL NAME	NO. 20	G&P NO. 28, SER. NO. 1553	NO. 9023
LOCATION	NOT GIVEN	MUFF CREEK DIST.	OCEANA DIST.
OWNER	CABOT CORP.	CABOT CORP.	HOPE NATURAL GAS CO.
COMPLETED	09/22/55	11/06/64	11/01/46
SAMPLED	05/12/64	02/16/65	07/30/64
FORMATION	MISS-MAXTON & BEREA	MISS-BEREA & RAVENCLIFF	MISS-BEREA
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2566	4041	3608
WELLHEAD PRESSURE,PSIG	235	820	810
OPEN FLOW, MCFD	13	10723	539
COMPONENT, MOLE PCT			
METHANE	93.6	96.9	95.5
ETHANE	1.3	2.3	3.5
PROPANE	0.2	0.2	0.3
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	4.7	0.4	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.20	0.05	0.04
HEATING VALUE*	977	1028	1049
SPECIFIC GRAVITY	0.581	0.568	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12049 SAMPLE 4571	INDEX 12050 SAMPLE 4572	INDEX 12051 SAMPLE 4633
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	W. M. WALKER NO. 1263	GOLDA MAYNES NO. 1272	LILLIE BARRETT NO. 9194
LOCATION	NOT GIVEN	NOT GIVEN	OCEANA DIST.
OWNER	GODFREY L. CABOT, INC.	GODFREY L. CABOT, INC.	HOPE NATURAL GAS CO.
COMPLETED	05/21/48	05/27/48	03/26/48
SAMPLED	10/28/48	10/08/48	10/27/48
FORMATION	MISS-BIG LIME	MISS-MAXTON	MISS-RAVENCLIFF
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2524	1940	1548
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	530
OPEN FLOW, MCFD	1594	1679	2214
COMPONENT, MOLE PCT			
METHANE	98.5	97.1	95.2
ETHANE	5.0	2.5	4.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	0.9
OXYGEN	0.3	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.04	0.07	0.05
HEATING VALUE*	1047	1028	1036
SPECIFIC GRAVITY	0.583	0.569	0.579

	INDEX 12052 SAMPLE 9151	INDEX 12053 SAMPLE 9169	INDEX 12054 SAMPLE 9496
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	NO. 9015	W. M. RITTER NO. 181	NO. 10339
LOCATION	NOT GIVEN	NOT GIVEN	OCEANA DIST.
OWNER	UNITED FUEL GAS CO.	ASHLAND OIL & REFINING CO.	HOPE NATURAL GAS CO.
COMPLETED	09/24/63	12/22/59	09/08/61
SAMPLED	11/05/63	11/15/63	07/07/64
FORMATION	MISS-BEREA	MISS-BEREA	MISS-RAVENCLIFF
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3412	3509	1915
WELLHEAD PRESSURE,PSIG	815	600	557
OPEN FLOW, MCFD	2116	750	4282
COMPONENT, MOLE PCT			
METHANE	93.0	97.3	92.3
ETHANE	4.3	1.7	4.5
PROPANE	0.5	0.2	0.9
N-BUTANE	0.2	0.0	0.2
ISOBUTANE	TRACE	0.0	0.2
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	1.5	0.7	1.3
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.10	0.09
HEATING VALUE*	1043	1021	1067
SPECIFIC GRAVITY	0.594	0.567	0.605

	INDEX 12055 SAMPLE 4933	INDEX 12056 SAMPLE 9510	INDEX 12057 SAMPLE 17663
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	OCEANA	PINEVILLE	RHODELL EXTENSION
WELL NAME	C. W. MURPHY NO. 1	NO. 9148	POCOHONTAS LAND NO. 1-42R
LOCATION	PINEVILLE DIST.	BAILEYSVILLE DIST.	RHODELL QUAD
OWNER	GODFREY L. CABOT, INC.	HOPE NATURAL GAS CO.	CABOT CORP.
COMPLETED	09/01/47	09/14/49	04/13/84
SAMPLED	01/08/48	07/27/64	05/07/85
FORMATION	MISS-GREENBRIER	MISS-BEREA	MISS-WEIR
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	2359	3340	4120
WELLHEAD PRESSURE,PSIG	760	305	840
OPEN FLOW, MCFD	1264	848	740
COMPONENT, MOLE PCT			
METHANE	94.7	94.7	97.6
ETHANE	4.2	3.2	1.5
PROPANE	---	0.5	0.1
N-BUTANE	---	0.1	0.0
ISOBUTANE	---	0.1	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	TRACE	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	0.2	1.1	0.5
OXYGEN	0.4	TRACE	TRACE
ARGON	---	0.1	0.0
HYDROGEN	---	0.0	0.2
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	TRACE	0.1
HELIUM	0.05	0.10	0.07
HEATING VALUE*	1035	1036	1019
SPECIFIC GRAVITY	0.582	0.583	0.585

	INDEX 12058 SAMPLE 9340	INDEX 12059 SAMPLE 9341	INDEX 12060 SAMPLE 4792
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	WELCHLANDS	WELCHLANDS	WYOMING
WELL NAME	NO. 36	NO. 61	W. M. RITTER NO. 79
LOCATION	SLAB FORK DIST.	SLAB FORK DIST.	NOT GIVEN
OWNER	PEAKE PETROLEUM CO.	PEAKE PETROLEUM CO.	UNITED PRODUCING CO., INC.
COMPLETED	05/11/56	05/14/58	02/24/49
SAMPLED	04/30/64	04/30/64	08/31/49
FORMATION	MISS-WEIR	MISS-WEIR	PENN-SALT SAND
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3373	3429	1887
WELLHEAD PRESSURE,PSIG	750	NOT GIVEN	775
OPEN FLOW, MCFD	360	300	1641
COMPONENT, MOLE PCT			
METHANE	97.9	97.7	96.9
ETHANE	0.9	1.1	2.1
PROPANE	TRACE	TRACE	0.2
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.8	0.8	0.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.1
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.10	0.09	0.06
HEATING VALUE*	1009	1009	1031
SPECIFIC GRAVITY	0.560	0.561	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12061 SAMPLE 4523	INDEX 12062 SAMPLE 4524	INDEX 12063 SAMPLE 4525
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	WYOMING	WYOMING	WYOMING
FIELD	WYOMING COUNTY	WYOMING COUNTY	WYOMING COUNTY
WELL NAME	NO. 9112	NO. 9156	NO. 9139
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.	HOPE NATURAL GAS CO.
COMPLETED	08/17/47	12/02/47	12/15/47
SAMPLED	05/20/48	05/20/48	05/20/48
FORMATION	MISS---	MISS---	MISS-
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	3530	2556	3617
WELLHEAD PRESSURE,PSIG	795	770	815
OPEN FLOW, MCFD	3723	2055	1107
COMPONENT, MOLE PCT			
METHANE	97.0	90.8	96.3
ETHANE	2.0	7.9	2.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.4	0.6	0.0
OXYGEN	0.2	0.3	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.06	0.10	0.03
HEATING VALUE*	1018	1061	1027
SPECIFIC GRAVITY	0.570	0.600	0.575

	INDEX 12064 SAMPLE 2184	INDEX 12065 SAMPLE 1236	INDEX 12066 SAMPLE 1238
STATE	WYOMING	WYOMING	WYOMING
COUNTY	ALBANY	BIG HORN	BIG HORN
FIELD	REX LAKE	ALKALI DOME	BYRON
WELL NAME	COUGHLIN NO. 3	NO. 1	HAVIG NO. 1
LOCATION	SEC. 26, T16N, R77W	SEC. 10, T55N, R95W	SEC. 33, T56N, R96W
OWNER	OHIO OIL CO.	VICTOR CORNER	CALIFORNIA CO.
COMPLETED	06/01/30	04/04/25	--/--/00
SAMPLED	09/24/30	10/09/25	10/10/25
FORMATION	CRET-SHANNON	CRET-GREYBULL	CRET-TORCHLIGHT
GEOLOGIC PROVINCE CODE	535	520	520
DEPTH, FEET	385	380	2734
WELLHEAD PRESSURE,PSIG	15	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	20	500	1000
COMPONENT, MOLE PCT			
METHANE	85.3	80.0	80.2
ETHANE	0.0	1.5	18.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.6	16.5	0.1
OXYGEN	2.9	0.6	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	1.2	0.6
HELIUM	0.09	0.36	TRACE
HEATING VALUE*	864	837	1148
SPECIFIC GRAVITY	0.620	0.644	0.655

	INDEX 12067 SAMPLE 1239	INDEX 12068 SAMPLE 2140	INDEX 12069 SAMPLE 15791
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	BYRON	BYRON	DOBIE CREEK
WELL NAME	BYRON-UNION NO. 1	COZZENS NO. 1	DOBIE CREEK NO. 11-1
LOCATION	SEC. 22, T56N, R97W	SEC. 23, T56N, R97W	SEC. 11, T49N, R94W
OWNER	BYRON-UNION OIL CO.	OHIO OIL CO.	AMERICAN QUASAR PET. CO.
COMPLETED	--/--/00	--/--/00	12/24/78
SAMPLED	10/10/25	09/12/30	07/25/79
FORMATION	CRET-TORCHLIGHT	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2430	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2290
OPEN FLOW, MCFD	2000	NOT GIVEN	30
COMPONENT, MOLE PCT			
METHANE	84.1	55.6	85.3
ETHANE	15.1	27.0	8.4
PROPANE	---	---	2.1
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.0	14.9	1.2
OXYGEN	0.4	0.1	0.2
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.2	0.1
HELIUM	TRACE	0.26	0.01
HEATING VALUE*	1123	1047	1161
SPECIFIC GRAVITY	0.635	0.760	0.665

	INDEX 12070 SAMPLE 17327	INDEX 12071 SAMPLE 9408	INDEX 12072 SAMPLE 1240
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	DOBIE CREEK	FIVE MILE	GARLAND
WELL NAME	DOBIE CREEK-GETTY 20-6	TORGENSON NO. 1	NO. 3
LOCATION	SEC. 20, T49N, R93W	SEC. 29, T49N, R93W	SEC. 3, T55N, R97W
OWNER	AMERICAN QUASAR PET. CO.	HUSKY OIL CO.	ALLEN OIL CO.
COMPLETED	10/15/82	04/15/61	--/--/00
SAMPLED	06/12/84	06/19/69	10/13/25
FORMATION	CRET-MUDDY	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	9956	9026	1279
WELLHEAD PRESSURE,PSIG	2200	2451	NOT GIVEN
OPEN FLOW, MCFD	460	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.6	84.7	76.9
ETHANE	14.3	8.8	16.4
PROPANE	5.1	3.2	---
N-BUTANE	1.0	0.7	---
ISOBUTANE	0.8	0.7	---
N-PENTANE	0.3	TRACE	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	0.1	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.5	1.2	1.9
OXYGEN	TRACE	0.3	0.8
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	2.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1267	1170	1109
SPECIFIC GRAVITY	0.730	0.657	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12073 SAMPLE 1241	INDEX 12074 SAMPLE 1242	INDEX 12075 SAMPLE 1243
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	CROSS GAS NO. 1	NO. 1 NEVILLE	NO. 2 NEVILLE
LOCATION	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W
OWNER	OHIO OIL CO.	MONTANA-WYOMING OIL CO.	MONTANA-WYOMING OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/13/25	10/13/25	10/13/25
FORMATION	CRET-CLOVERLY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1800	500	1560
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.7	76.1	72.1
ETHANE	17.3	22.3	27.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.8	0.9	0.1
OXYGEN	0.4	0.2	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.6	0.3
HELIUM	0.03	TRACE	TRACE
HEATING VALUE*	1108	1171	1216
SPECIFIC GRAVITY	0.651	0.676	0.694

	INDEX 12076 SAMPLE 1244	INDEX 12077 SAMPLE 1245	INDEX 12078 SAMPLE 1246
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	LOVELL G & E NO. 1	NO. 1 GEO. EASTON	U.S. GOVT.
LOCATION	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W
OWNER	LOVELL GAS & ELECTRIC CO.	UTAH-WYOMING CONSOL. OIL CO.	UTAH-WYOMING CONSOL. OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/13/25	10/13/25	10/14/25
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1780	1640	1300
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.5	73.3	74.1
ETHANE	16.5	25.7	23.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.3	0.1	1.9
OXYGEN	0.4	0.7	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.2	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1121	1203	1163
SPECIFIC GRAVITY	0.648	0.689	0.685

	INDEX 12079 SAMPLE 1247	INDEX 12080 SAMPLE 1250	INDEX 12081 SAMPLE 1251
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	GEORGE EASTON NO. 2	B. A. SESSIONS NO. 1	OLD COLONY
LOCATION	SEC. 33, T56N, R97W	SEC. 34, T56N, R97W	SEC. 33, T56N, R97W
OWNER	OHIO OIL CO.	MOUNTAIN OIL & GAS CO.	OHIO OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/14/25	10/14/25	10/14/25
FORMATION	CRET-CLOVERLY	NOT GIVEN	CRET-CLOVERLY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1535	1830	1782
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.8	74.1	76.3
ETHANE	25.3	24.6	22.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.0	0.3	0.1
OXYGEN	0.5	0.6	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1191	1191	1182
SPECIFIC GRAVITY	0.690	0.685	0.673

	INDEX 12082 SAMPLE 1252	INDEX 12083 SAMPLE 2109	INDEX 12084 SAMPLE 2121
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	GARLAND
WELL NAME	E. THOMAS NO. 1	CROSS GAS CO. NO. 2	CROSS GAS CO. NO. 3
LOCATION	SEC. 3, T55N, R97W	SEC. 33, T56N, R97W	SEC. 33, T56N, R97W
OWNER	CARTER OIL CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/14/25	09/09/30	09/08/30
FORMATION	NOT GIVEN	PENN-TENSLEEP	JURA-MORRISON
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1276	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	40
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.6	90.5	84.2
ETHANE	7.0	6.2	15.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	1.8	TRACE
OXYGEN	0.7	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.6	1.2	0.2
HELIUM	TRACE	0.08	0.06
HEATING VALUE*	1053	1028	1129
SPECIFIC GRAVITY	0.599	0.604	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12085 SAMPLE 2124	INDEX 12086 SAMPLE 2403	INDEX 12087 SAMPLE 9139
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	GARLAND	GARLAND	MANDERSON
WELL NAME	CROSS GAS CO. NO. 4	NO. 1	F32-19-G
LOCATION	SEC. 33, T56N, R97W	SEC. 28, T56N, R97W	SEC. 19, T50N, R92W
OWNER	OHIO OIL CO.	PORTLAND ASSOC., INC.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	09/13/61
SAMPLED	09/11/30	09/19/31	10/30/63
FORMATION	CRET-DAKOTA	MISS-MADISON	CRET-MUDDY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	NOT GIVEN	NOT GIVEN	5719
WELLHEAD PRESSURE,PSIG	75	1550	1200
OPEN FLOW, MCFD	NOT GIVEN	40000	1000
COMPONENT, MOLE PCT			
METHANE	71.3	83.5	80.8
ETHANE	22.5	9.7	12.4
PROPANE	---	---	3.5
N-BUTANE	---	---	0.9
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	5.7	5.5	0.9
OXYGEN	0.3	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE*	---	---	0.0
CARBON DIOXIDE	0.1	1.2	0.2
HELIUM	0.03	0.11	0.03
HEATING VALUE*	1125	1020	1216
SPECIFIC GRAVITY	0.691	0.638	0.695

	INDEX 12088 SAMPLE 13727	INDEX 12089 SAMPLE 1237	INDEX 12090 SAMPLE 5989
STATE	WYOMING	WYOMING	WYOMING
COUNTY	BIG HORN	BIG HORN	BIG HORN
FIELD	NOT GIVEN	SPENCE DOME	TORCHLIGHT W
WELL NAME	GOVT.-TRIGG NO. 16-9	NO. 1	TORCHLIGHT UNIT WELL NO. 2
LOCATION	SEC. 9, T55N, R96W	SEC. 9, T54N, R94W	SEC. 14, T51N, R93W
OWNER	CARDINAL PETROLEUM CO.	MILWAUKEE HIMES DEV. CO.	STANOLIND OIL & GAS CO.
COMPLETED	07/05/73	08/01/25	12/14/55
SAMPLED	--/--/00	10/09/25	12/20/55
FORMATION	CRET-FRONTIER & PEAT	PENN-TENSLEEP	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	3870	260	3140
WELLHEAD PRESSURE,PSIG	1578	NOT GIVEN	110
OPEN FLOW, MCFD	6500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.4	68.4	46.4
ETHANE	4.7	22.1	24.6
PROPANE	0.5	---	8.2
N-BUTANE	0.1	---	4.7
ISOBUTANE	0.4	---	2.2
N-PENTANE	0.0	---	1.3
ISOPENTANE	0.1	---	1.8
CYCLOPENTANE	TRACE	---	0.3
HEXANES PLUS	0.1	---	1.1
NITROGEN	2.2	3.1	0.0
OXYGEN	0.2	0.4	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	9.3
CARBON DIOXIDE	1.4	6.1	0.3
HELIUM	0.04	TRACE	0.01
HEATING VALUE*	1039	1089	1616
SPECIFIC GRAVITY	0.619	0.739	1.019

	INDEX 12091 SAMPLE 17086	INDEX 12092 SAMPLE 17531	INDEX 12093 SAMPLE 17578
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	AMOS DRAW	AMOS DRAW	AMOS DRAW
WELL NAME	FLOYD BROTHERS NO. 1	NORTHWEST THRONE 2-35	NORTHWEST THRONE NO. 2-35
LOCATION	SEC. 28, T51N, R75W	SEC. 35, T51N, R76W	SEC. 35, T51N, R76W
OWNER	DAVIS OIL CO.	DAVIS OIL CO.	DAVIS OIL CO.
COMPLETED	09/25/83	02/09/84	03/08/84
SAMPLED	10/09/83	12/03/84	01/25/85
FORMATION	CRET-MUDDY	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	9996	10393	10393
WELLHEAD PRESSURE,PSIG	3829	1100	1100
OPEN FLOW, MCFD	2537	NOT GIVEN	630
COMPONENT, MOLE PCT			
METHANE	72.9	61.3	78.3
ETHANE	11.6	8.6	12.1
PROPANE	1.9	7.8	4.5
N-BUTANE	5.8	6.2	1.0
ISOBUTANE	0.0	3.1	0.6
N-PENTANE	0.9	2.9	0.2
ISOPENTANE	3.4	3.4	0.3
CYCLOPENTANE	0.2	1.0	0.1
HEXANES PLUS	0.4	2.9	0.2
NITROGEN	0.5	1.6	0.7
OXYGEN	0.0	0.3	TRACE
ARGON	0.1	0.0	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	1.4	2.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1365	1722	1216
SPECIFIC GRAVITY	0.831	1.040	0.722

	INDEX 12094 SAMPLE 17366	INDEX 12095 SAMPLE 8969	INDEX 12096 SAMPLE 9000
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	BUCK DRAW	DEAD HORSE CREEK	DEAD HORSE CREEK
WELL NAME	MEM NO. 33-18	GOVT. NO. 1	GOVT. NISSELIUS NO. 1
LOCATION	SEC. 18, T41N, R73W	SEC. 30, T29N, R75W	SEC. 27, T48N, R75W
OWNER	LOUISIANA LAND & EXPL. CO.	CALIFORNIA OIL CO.	GEORGE G. ANDERMAN
COMPLETED	05/--/83	09/04/57	01/--/62
SAMPLED	08/--/84	05/24/63	06/07/63
FORMATION	CRET-DAKOTA	CRET-PARKMAN	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	12574	6791	6994
WELLHEAD PRESSURE,PSIG	4100	153	NOT GIVEN
OPEN FLOW, MCFD	5500	65	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	70.2	59.8
ETHANE	10.7	12.4	9.7
PROPANE	4.3	8.7	13.9
N-BUTANE	1.2	2.9	6.3
ISOBUTANE	0.7	1.3	2.5
N-PENTANE	0.4	0.5	1.0
ISOPENTANE	0.2	0.6	2.5
CYCLOPENTANE	0.2	0.1	0.4
HEXANES PLUS	0.4	0.4	1.3
NITROGEN	5.8	2.1	2.6
OXYGEN	1.4	TRACE	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	0.7	1.0
HELIUM	0.01	0.01	0.23
HEATING VALUE*	1160	1372	1651
SPECIFIC GRAVITY	0.765	0.815	0.998

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12097 SAMPLE 9035	INDEX 12098 SAMPLE 17873	INDEX 12099 SAMPLE 17239
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	DEAD HORSE CREEK	ECHETA	ELK DRAW
WELL NAME	BARLOW NO. 1	ECHETA NO. 1	SAGE BRUSH FED. 1-11
LOCATION	SEC. 22, T48N, R75W	SEC. 13, T51N, R75W	SEC. 11, T51N, R76W
OWNER	GEORGE G. ANDERMAN	DIAMOND SHAMROCK EXPL. CO.	AMINOIL U.S.A., INC.
COMPLETED	12/--/60	02/06/85	12/19/82
SAMPLED	06/07/63	10/17/85	03/10/84
FORMATION	CRET-MESAVERDE	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	6879	9157	10120
WELLHEAD PRESSURE,PSIG	NOT GIVEN	700	4800
OPEN FLOW, MCFD	NOT GIVEN	1800	1500
COMPONENT, MOLE PCT			
METHANE	56.3	75.7	80.2
ETHANE	16.4	12.3	10.9
PROPANE	15.7	5.0	3.8
N-BUTANE	4.6	1.4	0.8
ISOBUTANE	2.2	0.7	0.6
N-PENTANE	0.8	0.4	0.2
ISOPENTANE	0.7	0.4	0.2
CYCLOPENTANE	0.3	0.2	0.2
HEXANES PLUS	0.8	0.5	0.4
NITROGEN	1.6	0.9	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	2.6	2.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1597	1256	1199
SPECIFIC GRAVITY	0.959	0.758	0.712

	INDEX 12100 SAMPLE 12228	INDEX 12101 SAMPLE 13506	INDEX 12102 SAMPLE 15213
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	HILIGHT	INTERSTATE	KUEHNE SE
WELL NAME	MILLS NO. 10	LOWERY-MC CLURE NO. 1	KUEHNE RANCH UNIT NO. 8
LOCATION	SEC. 10, T44N, R71W	SEC. 31, T50N, R73W	SEC. 20, T54N, R69W
OWNER	INTERNATIONAL NUCLEAR CORP.	ANSCHUTZ CORP.	DAVIS OIL CO.
COMPLETED	01/04/78	09/07/72	--/--/00
SAMPLED	03/20/78	01/16/73	02/--/78
FORMATION	CRET-MUDDY	CRET-MUDDY	PENN-MINNELUSA
GEOLOGIC PROVINCE CODE	515	515	519
DEPTH, FEET	9754	9597	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1600	2799	NOT GIVEN
OPEN FLOW, MCFD	5910	4300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.3	75.3	21.0
ETHANE	15.8	12.1	3.5
PROPANE	9.5	6.1	1.8
N-BUTANE	2.0	1.5	1.0
ISOBUTANE	0.8	0.7	0.7
N-PENTANE	0.2	0.4	0.6
ISOPENTANE	0.4	0.1	0.4
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.3	0.6
NITROGEN	2.5	1.7	56.4
OXYGEN	0.1	TRACE	0.1
ARGON	0.0	0.0	0.3
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.6	12.7
HELIUM	0.61	0.02	0.80
HEATING VALUE*	1136	1253	460
SPECIFIC GRAVITY	0.806	0.750	1.009

	INDEX 12103 SAMPLE 13580	INDEX 12104 SAMPLE 14714	INDEX 12105 SAMPLE 17092
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	NOT GIVEN	PORCUPINE	PORCUPINE
WELL NAME	THUNDER BASIN FED. NO. 1	BIRDSALL NO. 34-10	FED. NO. 29-1
LOCATION	SEC. 7, T42N, R70W	SEC. 10, T42N, R71W	SEC. 29, T42N, R70W
OWNER	YATES DRILLING CO.	L. R. FRENCH, JR.	CZAR RESOURCES, INC.
COMPLETED	--/--/00	05/19/75	07/--/82
SAMPLED	04/--/73	06/27/76	10/07/83
FORMATION	CRET-MUDDY	CRET-TURNER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	10110	9430	10400
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3100	2150
OPEN FLOW, MCFD	6500	1813	467
COMPONENT, MOLE PCT			
METHANE	36.4	71.2	78.6
ETHANE	21.2	12.4	11.3
PROPANE	20.2	7.4	4.2
N-BUTANE	8.0	2.7	0.9
ISOBUTANE	5.3	1.3	0.5
N-PENTANE	1.8	0.8	0.2
ISOPENTANE	3.3	1.4	0.4
CYCLOPENTANE	0.2	0.3	0.2
HEXANES PLUS	1.2	0.9	0.2
NITROGEN	1.4	0.7	1.9
OXYGEN	0.2	0.0	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.9	1.6
HELIUM	TRACE	0.01	0.03
HEATING VALUE*	2008	1421	1198
SPECIFIC GRAVITY	1.209	0.832	0.717

	INDEX 12106 SAMPLE 16438	INDEX 12107 SAMPLE 11304	INDEX 12108 SAMPLE 11426
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	POWELL N	RECLUSE	RECLUSE
WELL NAME	SARA ARMSTRONG-FED. NO. 2	GREENOUGH GOVT. NO. 5	GREENOUGH GOVT.
LOCATION	SEC. 15, T41N, R74W	SEC. 9, T56N, R74W	SEC. 10, T56N, R74W
OWNER	HPC, INC.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	12/--/80	--/--/01	04/07/68
SAMPLED	02/24/82	02/14/68	04/01/68
FORMATION	CRET-FRONTIER	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	11795	7480	7560
WELLHEAD PRESSURE,PSIG	1000	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	128	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.6	55.3	52.6
ETHANE	12.0	19.4	17.9
PROPANE	4.0	15.0	17.1
N-BUTANE	0.7	3.4	5.7
ISOBUTANE	0.3	1.9	2.2
N-PENTANE	0.1	0.6	1.3
ISOPENTANE	0.2	0.5	1.4
CYCLOPENTANE	TRACE	0.2	0.3
HEXANES PLUS	0.1	0.9	0.8
NITROGEN	0.8	2.2	0.2
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	1.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1187	1551	1732
SPECIFIC GRAVITY	0.689	0.937	1.011

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12109 SAMPLE 11436	INDEX 12110 SAMPLE 11467	INDEX 12111 SAMPLE 11626
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	RECLUSE	RECLUSE	RECLUSE
WELL NAME	FED. BOW & ARROW NO. 1	BOW & ARROW NO. 2	U.S. FAGERNESS NO. 2
LOCATION	SEC. 25, T57N, R75W	SEC. 25, T57N, R75W	SEC. 15, T56N, R74W
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	APACHE CORP.
COMPLETED	--/--/00	--/--/00	09/--/67
SAMPLED	04/09/68	04/17/68	08/24/68
FORMATION	CRET-MUDDY	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	7465	7604	7500
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1600
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	19000
COMPONENT, MOLE PCT			
METHANE	20.2	59.3	75.3
ETHANE	11.9	17.5	11.7
PROPANE	26.8	13.9	7.2
N-BUTANE	20.6	3.6	1.6
ISOBUTANE	6.9	1.7	0.6
N-PENTANE	5.3	0.7	0.2
ISOPENTANE	4.7	0.7	0.2
CYCLOPENTANE	0.6	0.2	0.1
HEXANES PLUS	2.5	0.6	0.1
NITROGEN	0.5	1.1	2.3
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	0.5
HELIUM	TRACE	0.01	0.02
HEATING VALUE*	2612	1552	1260
SPECIFIC GRAVITY	1.566	0.915	0.743

	INDEX 12112 SAMPLE 10055	INDEX 12113 SAMPLE 9023	INDEX 12114 SAMPLE 13967
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	ROCKY POINT	ROZET	SPOTTED HORSE
WELL NAME	NO. 2 NW 32	STATE OF WYOMING NO. 1	SKYLINE FED. NO. 16-34
LOCATION	SEC. 34, T57N, R69W	NOT GIVEN	SEC. 34, T55N, R75W
OWNER	MCCULLOCH OIL CORP. OF CALIF	PAN AMERICAN PETROLEUM CORP.	KISSINGER PETROLEUM CORP.
COMPLETED	04/28/63	08/09/60	12/23/72
SAMPLED	--/--/00	06/27/63	03/28/74
FORMATION	CRET-MUDDY	CRET-MUDDY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	3710	NOT GIVEN	8300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1400
OPEN FLOW, MCFD	18000	NOT GIVEN	700
COMPONENT, MOLE PCT			
METHANE	88.8	77.4	77.3
ETHANE	2.0	5.4	11.7
PROPANE	3.1	6.8	5.5
N-BUTANE	1.1	2.6	1.2
ISOBUTANE	0.7	1.0	0.8
N-PENTANE	0.3	0.6	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.2	0.5	0.2
NITROGEN	3.4	4.4	1.4
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	1.1
HELIUM	0.01	0.02	0.03
HEATING VALUE*	1112	1250	1242
SPECIFIC GRAVITY	0.656	0.762	0.732

	INDEX 12115 SAMPLE 14012	INDEX 12116 SAMPLE 12183	INDEX 12117 SAMPLE 12852
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CAMPBELL	CAMPBELL
FIELD	SPOTTED HORSE	WHITE	WILDCAT
WELL NAME	CODNES B NO. 1	ATLANTIC-ANDERSON NO. 1	U.S.A. NO. 1-2
LOCATION	SEC. 27, T55N, R75W	SEC. 28, T55N, R71W	SEC. 2, T57N, R76W
OWNER	PHILLIPS PETROLEUM CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/00	--/--/81	05/28/71
SAMPLED	05/25/74	--/--/00	--/--/00
FORMATION	CRET-MUDDY	CRET-MUDDY	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	8072	6034	7423
WELLHEAD PRESSURE,PSIG	1700	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	500000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.2	59.5	63.3
ETHANE	11.5	9.5	6.8
PROPANE	6.0	16.6	13.1
N-BUTANE	1.6	5.6	6.0
ISOBUTANE	0.9	3.1	2.7
N-PENTANE	0.2	1.3	1.7
ISOPENTANE	1.2	1.2	1.2
CYCLOPENTANE	0.3	0.2	0.5
HEXANES PLUS	0.6	0.6	0.9
NITROGEN	1.3	2.3	2.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.0	0.1
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1305	1642	1628
SPECIFIC GRAVITY	0.771	0.978	0.969

	INDEX 12118 SAMPLE 17535	INDEX 12119 SAMPLE 915	INDEX 12120 SAMPLE 7776
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CAMPBELL	CARBON	CARBON
FIELD	WILDCAT	ALLEN LAKE	BAGGS S
WELL NAME	ELSIE WOLF NO. 1	NO. 1	BAGGS UNIT NO. 8
LOCATION	SEC. 15, T43N, R71W	SEC. A NE1/4-34, T23, R79	SEC. 10, T12N, R92W
OWNER	DAVIS OIL CO.	LARAMIE SYNDICATE	PHILLIPS PETROLEUM CO.
COMPLETED	04/09/84	--/--/00	12/31/59
SAMPLED	12/11/84	06/24/24	11/19/60
FORMATION	CRET-DAKOTA	JURA-STRAY	CRET-LEWIS
GEOLOGIC PROVINCE CODE	515	535	535
DEPTH, FEET	10332	1685	4100
WELLHEAD PRESSURE,PSIG	1700	310	950
OPEN FLOW, MCFD	618	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.4	97.4	90.0
ETHANE	10.5	0.0	4.1
PROPANE	4.0	---	1.1
N-BUTANE	0.9	---	0.2
ISOBUTANE	0.5	---	0.2
N-PENTANE	0.2	---	0.1
ISOPENTANE	0.3	---	0.1
CYCLOPENTANE	0.1	---	0.0
HEXANES PLUS	0.5	---	TRACE
NITROGEN	1.7	2.5	3.1
OXYGEN	0.1	0.0	0.7
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	2.0	0.0	0.2
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1184	987	1036
SPECIFIC GRAVITY	0.714	0.564	0.613

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 12121 SAMPLE 11242	INDEX 12122 SAMPLE 17010	INDEX 12123 SAMPLE 916
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	BARREL SPRINGS	BARREL SPRINGS E	BELL SPRINGS
WELL NAME	BARREL SPRINGS UNIT NO. 1	CIGE FED. NO. 16-7-15-92	NO. 1
LOCATION	SEC. 15, T16N, R93W	SEC. 7, T15N, R92W	SEC. 6, T23N, R88W
OWNER	CLARK OIL & REFINING CO.	SNYDER OIL CO.	KASOMING OIL CO.
COMPLETED	10/13/66	09/28/83	--/--/00
SAMPLED	12/09/67	09/28/83	08/13/24
FORMATION	CRET-ALMOND	CRET-MESAVERDE	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8724	8784	1924
WELLHEAD PRESSURE,PSIG	2500	3000	NOT GIVEN
OPEN FLOW, MCFD	1184	700	10000
COMPONENT, MOLE PCT			
METHANE	83.1	82.9	89.6
ETHANE	7.6	8.1	1.0
PROPANE	2.6	2.5	---
N-BUTANE	0.8	0.5	---
ISOBUTANE	0.7	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.3	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.9	0.6	6.1
OXYGEN	0.1	0.1	0.5
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	0.3	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.3	3.2	2.3
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	1122	1096	928
SPECIFIC GRAVITY	0.685	0.682	0.608

	INDEX 12124 SAMPLE 7434	INDEX 12125 SAMPLE 14237	INDEX 12126 SAMPLE 17722
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	BELL SPRINGS	BLUE GAP	BLUE GAP
WELL NAME	NO. 1	BLUE GAP UNIT II	CIGE FEDERAL NO. 2A-8-15-92
LOCATION	SEC. 19, T23N, R88W	SEC. 7, T14N, R92W	SEC. 8, T15N, R92W
OWNER	SINCLAIR OIL & GAS CO.	CIG EXPLORATION, INC.	SNYDER OIL CO.
COMPLETED	01/--/60	09/13/74	11/21/84
SAMPLED	03/11/60	11/22/74	06/19/85
FORMATION	JURA-SUNDANCE	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2706	9126	8041
WELLHEAD PRESSURE,PSIG	1174	3875	NOT GIVEN
OPEN FLOW, MCFD	8150	3980	2500
COMPONENT, MOLE PCT			
METHANE	97.4	87.1	81.3
ETHANE	0.5	5.6	6.9
PROPANE	TRACE	2.0	2.9
N-BUTANE	0.0	0.5	0.8
ISOBUTANE	0.0	0.6	0.8
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.0	0.3	0.5
CYCLOPENTANE	0.0	0.1	0.2
HEXANES PLUS	0.0	0.3	0.4
NITROGEN	1.3	0.1	2.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	3.3	4.0
HELIUM	0.20	TRACE	TRACE
HEATING VALUE*	996	1108	1130
SPECIFIC GRAVITY	0.566	0.668	0.714

	INDEX 12127 SAMPLE 15313	INDEX 12128 SAMPLE 17870	INDEX 12129 SAMPLE 7482
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	COAL GULCH	COAL GULCH	COW CREEK
WELL NAME	CHAMPLIN 444 AMOCO A NO. 1	COAL GULCH WIUE NO. 1	NO. 1-14
LOCATION	SEC. 17, T17N, R93W	SEC. 34, T18N, R93W	SEC. 14, T15N, R91W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	CONTINENTAL OIL CO.
COMPLETED	03/15/78	08/12/80	12/08/59
SAMPLED	06/27/78	10/15/85	03/31/60
FORMATION	CRET-ALMOND	MISS-MADISON	MIDC-DEEP CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9168	8801	2616
WELLHEAD PRESSURE,PSIG	3950	2500	1207
OPEN FLOW, MCFD	2460	3000	2050
COMPONENT, MOLE PCT			
METHANE	82.4	83.5	90.0
ETHANE	7.9	8.1	3.4
PROPANE	3.3	3.2	1.9
N-BUTANE	0.8	0.8	0.4
ISOBUTANE	0.7	0.5	0.1
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	1.2	0.9	1.7
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.4	2.5	0.7
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	1166	1158	1035
SPECIFIC GRAVITY	0.702	0.691	0.621

	INDEX 12130 SAMPLE 11755	INDEX 12131 SAMPLE 14795	INDEX 12132 SAMPLE 17269
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	COW CREEK	COW CREEK S	CRESTON S
WELL NAME	COW CREEK NO. 2-13	ASHLAND FED. NO. 13-22X	SOCO HUSKYFED.NO.1C-18-17-92
LOCATION	SEC. 13, T16N, R92W	SEC. 22, T16N, R91W	SEC. 18, T17N, R92W
OWNER	U.S. NATURAL RESOURCES, INC.	EXETER EXPLORATION CO.	SOCO-SNYDER OIL CO.
COMPLETED	06/18/67	07/--/76	08/25/82
SAMPLED	02/04/69	09/24/76	04/20/84
FORMATION	PENN-CHEROKEE	CRET-FRONTIER	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3237	7800	8462
WELLHEAD PRESSURE,PSIG	750	4000	3775
OPEN FLOW, MCFD	2000	10000	180
COMPONENT, MOLE PCT			
METHANE	96.8	96.3	87.8
ETHANE	0.2	0.7	5.2
PROPANE	TRACE	0.3	2.0
N-BUTANE	0.0	0.0	0.6
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	1.3	0.2	0.4
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	2.5	2.8
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	984	996	1103
SPECIFIC GRAVITY	0.574	0.586	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12133 SAMPLE 15270	INDEX 12134 SAMPLE 15013	INDEX 12135 SAMPLE 5029
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	CRESTON UNIT	DEEP CREEK	DEEP CREEK UNIT
WELL NAME	CRESTON III NO. 3	BROWN MILL UNIT NO. 8-31	DEEP CREEK UNIT NO. 1
LOCATION	SEC. 5, T18N, R91W	SEC. 31, T16N, R90W	SEC. 30, T16N, R90W
OWNER	AMOCO PRODUCTION CO.	BENSON-MONTIN-GREER DRILLING	AMERADA PETROLEUM CORP.
COMPLETED	11/06/77	--/--/00	10/08/50
SAMPLED	04/07/78	05/26/77	04/01/51
FORMATION	CRET-ERICSON	NOT GIVEN	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8253	NOT GIVEN	2432
WELLHEAD PRESSURE,PSIG	3000	NOT GIVEN	965
OPEN FLOW, MCFD	2979	NOT GIVEN	3728
COMPONENT, MOLE PCT			
METHANE	84.9	98.4	98.2
ETHANE	6.6	0.5	0.5
PROPANE	2.5	0.1	0.1
N-BUTANE	0.7	0.0	0.1
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.3	0.0	0.1
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.5	0.0	0.1
NITROGEN	0.3	0.3	0.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	2.9	0.7	0.3
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1154	1008	1015
SPECIFIC GRAVITY	0.692	0.566	0.570

	INDEX 12136 SAMPLE 9640	INDEX 12137 SAMPLE 2103	INDEX 12138 SAMPLE 16635
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	DIAMOND DOME	DUTTON CREEK	ECHO SPRINGS
WELL NAME	FED. NO. 1	NO. 6-X	ECHO SPRINGS NO.1-28
LOCATION	SEC. 6, T20N, R77W	SEC. 1, T18N, R78W	SEC. 28, T20N, R93W
OWNER	SUNSET INTERNATL. PET. CORP.	MIDWEST REFINING CO.	JERRY CHAMBERS EXPL. CO.
COMPLETED	07/--/53	02/01/27	09/07/82
SAMPLED	11/10/64	09/03/30	09/03/82
FORMATION	CRET-SHANNON	CRET-SHANNON	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	1470	1600	9597
WELLHEAD PRESSURE,PSIG	154	235	4200
OPEN FLOW, MCFD	346	750	400
COMPONENT, MOLE PCT			
METHANE	97.3	64.9	85.3
ETHANE	0.3	0.0	7.9
PROPANE	0.1	---	2.2
N-BUTANE	0.0	---	0.7
ISOBUTANE	0.0	---	0.3
N-PENTANE	0.0	---	0.1
ISOPENTANE	0.0	---	0.2
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.1
NITROGEN	1.9	34.9	0.7
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.1	0.1	2.0
HELIUM	0.07	0.10	TRACE
HEATING VALUE*	996	657	1115
SPECIFIC GRAVITY	0.565	0.699	0.662

	INDEX 12139 SAMPLE 895	INDEX 12140 SAMPLE 224	INDEX 12141 SAMPLE 2142
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	EIGHT MILE LAKE	FERRIS	HATFIELD
WELL NAME	NO. 1	NO. 1	NO. 2
LOCATION	SEC. 2, T19N, R88W	SEC. 26, T26N, R87W	SEC. 35, T20N, R88W
OWNER	HATFIELD OIL CO.	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.
COMPLETED	11/17/23	05/14/20	09/24/24
SAMPLED	06/25/24	04/07/20	09/15/30
FORMATION	CRET-DAKOTA	CRET-CLOVERLY	CRET-MUDDY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3954	17	3749
WELLHEAD PRESSURE,PSIG	1710	1000	1500
OPEN FLOW, MCFD	21000	10000	15000
COMPONENT, MOLE PCT			
METHANE	98.3	97.5	96.7
ETHANE	0.0	2.2	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.1	0.0	2.3
OXYGEN	0.5	0.0	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.0	0.4	0.9
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	996	1027	980
SPECIFIC GRAVITY	0.567	0.570	0.573

	INDEX 12142 SAMPLE 3062	INDEX 12143 SAMPLE 15281	INDEX 12144 SAMPLE 947
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	HORNE VALLEY	HORSESHOE RIDGE	MAHONEY DOME
WELL NAME	MORN BROTHERS NO. 1	HORSESHOE RIDGE UNIT NO. 2	NO. 2
LOCATION	SEC. 22, T22N, R78W	SEC. 16, T24N, R83W	SEC. 33, T26, R88
OWNER	MARIN & GAYLORD	ENERGY RESERVES GROUP, INC.	PRODUCERS & REFINERS CORP.
COMPLETED	12/--/39	03/06/78	11/03/24
SAMPLED	12/27/41	05/10/78	--/--/00
FORMATION	CRET-MUDDY	CRET-HATFIELD	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	750	2932	2902
WELLHEAD PRESSURE,PSIG	325	1081	1200
OPEN FLOW, MCFD	7000	4588	3000
COMPONENT, MOLE PCT			
METHANE	96.8	95.5	93.8
ETHANE	2.0	0.1	0.0
PROPANE	---	0.1	---
N-BUTANE	---	0.0	---
ISOBUTANE	---	0.0	---
N-PENTANE	---	0.0	---
ISOPENTANE	---	0.0	---
CYCLOPENTANE	---	0.0	---
HEXANES PLUS	---	0.0	---
NITROGEN	0.5	0.3	4.7
OXYGEN	0.2	0.0	0.5
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.2	0.1	0.8
HELIUM	TRACE	0.01	0.03
HEATING VALUE*	1022	1012	950
SPECIFIC GRAVITY	0.571	0.559	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 12145 SAMPLE 2141	INDEX 12146 SAMPLE 2144	INDEX 12147 SAMPLE 3063
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	MAHONEY DOME	MAHONEY DOME	MEDICINE BOW
WELL NAME	NO. 2	NO. C-3	CROMBERG NO. 1
LOCATION	SEC. 25, T26N, R88W	SEC. 34, T26N, R88W	SEC. 25, T21N, R79W
OWNER	PRAIRIE OIL & GAS CO.	PRAIRIE OIL & GAS CO.	OHIO OIL CO.
COMPLETED	02/04/24	04/25/27	12/--/36
SAMPLED	09/16/30	09/12/30	12/26/41
FORMATION	CRET-DAKOTA	JURA-SUNDANCE	JURA-SUNDANCE 1ST
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2663	2758	5259
WELLHEAD PRESSURE,PSIG	285	600	765
OPEN FLOW, MCFD	2000	10000	750
COMPONENT, MOLE PCT			
METHANE	90.5	75.3	78.7
ETHANE	5.3	0.0	28.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.1	19.9	0.0
OXYGEN	0.1	2.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.9	2.8	0.2
HELIUM	0.02	0.07	0.00
HEATING VALUE*	1012	763	1234
SPECIFIC GRAVITY	0.608	0.675	0.700

	INDEX 12148 SAMPLE 11227	INDEX 12149 SAMPLE 4284	INDEX 12150 SAMPLE 15099
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	MELTON	NOT GIVEN	NOT GIVEN
WELL NAME	FED.-MELTON NO. 1	BAGGS UNIT NO. 1	CHAMPLIN 242 AMOCO A NO. 1
LOCATION	SEC. 26, T22N, R86W	NOT GIVEN	SEC. 1, T19N, R93W
OWNER	FUNDAMENTAL OIL CORP.	KERR-MCGEE CORP. & PHILLIPS	AMOCO PRODUCTION CO.
COMPLETED	11/01/65	--/--/00	10/02/76
SAMPLED	11/21/67	05/25/47	09/17/77
FORMATION	CRET-DAKOTA	NOT GIVEN	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5124	3770	9760
WELLHEAD PRESSURE,PSIG	1400	NOT GIVEN	3650
OPEN FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.8	93.6	84.9
ETHANE	2.6	0.4	7.9
PROPANE	0.8	---	2.8
N-BUTANE	0.1	---	0.6
ISOBUTANE	0.3	---	0.4
N-PENTANE	0.1	---	0.2
ISOPENTANE	0.2	---	0.1
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.3	---	0.1
NITROGEN	1.3	1.7	0.2
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.2	4.0	2.8
HELIUM	0.05	TRACE	0.01
HEATING VALUE*	1063	955	1130
SPECIFIC GRAVITY	0.604	0.609	0.675

	INDEX 12151 SAMPLE 6916	INDEX 12152 SAMPLE 8113	INDEX 12153 SAMPLE 8453
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	O'BRIEN SPRINGS	O'BRIEN SPRINGS	O'BRIEN SPRINGS
WELL NAME	OBRIEN SPRINGS UNIT NO. 3	OBRIEN SPRINGS UNIT NO. 7	OBRIEN SPRINGS UNIT NO. 1
LOCATION	SEC. 34, T25N, R86W	SEC. 34, T25N, R86W	SEC. 9, T24N, R86W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	10/03/58	06/07/61	09/15/61
SAMPLED	12/16/58	08/07/61	03/12/62
FORMATION	JURA-NUGGET	CRET-CLOVERLY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5418	4994	3075
WELLHEAD PRESSURE,PSIG	1603	1930	NOT GIVEN
OPEN FLOW, MCFD	5300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.5	95.6	97.6
ETHANE	0.9	2.0	1.2
PROPANE	0.2	0.2	0.1
N-BUTANE	0.1	TRACE	0.1
ISOBUTANE	0.5	0.1	0.0
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.0	1.1	0.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.8	0.5
HELIUM	0.10	0.10	0.02
HEATING VALUE*	1018	1013	1029
SPECIFIC GRAVITY	0.590	0.579	0.575

	INDEX 12154 SAMPLE 8595	INDEX 12155 SAMPLE 9359	INDEX 12156 SAMPLE 17532
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	O'BRIEN SPRINGS	O'BRIEN SPRINGS	O'BRIEN SPRINGS
WELL NAME	OBRIEN SPRINGS UNIT NO. 1	OBRIEN SPRINGS UNIT NO. 7	FED. NO. 14-32
LOCATION	SEC. 9, T24N, R86W	SEC. 34, T25N, R86W	SEC. 32, T25N, R86W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	CENEX
COMPLETED	09/28/61	04/27/64	04/21/82
SAMPLED	06/20/62	05/10/64	--/--/00
FORMATION	CRET-FRONTIER	CRET-MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4000	4890	5383
WELLHEAD PRESSURE,PSIG	1400	1525	1275
OPEN FLOW, MCFD	200	820	220000
COMPONENT, MOLE PCT			
METHANE	97.7	94.2	86.1
ETHANE	1.2	3.2	0.8
PROPANE	0.1	0.5	0.1
N-BUTANE	0.0	0.2	TRACE
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.3	0.8	12.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.14	0.18	0.02
HEATING VALUE*	1018	1058	898
SPECIFIC GRAVITY	0.567	0.597	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12157 SAMPLE 2100	INDEX 12158 SAMPLE 17241	INDEX 12159 SAMPLE 10097
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	ROCK CREEK	SAVERY	SEPARATION FLATS
WELL NAME	DIAMOND CATTLE NO. 4	SAVERY UNIT NO. G-15	UPPER BUZZARD RANCH 7-1
LOCATION	SEC. 35, T20N, R78W	SEC. 15, T13N, R89W	SEC. 7, T24N, R87W
OWNER	OHIO OIL CO.	BENSON-MONTIN-GREER DRILLING	AMAX PETROLEUM CORP.
COMPLETED	--/--/00	11/13/83	05/12/64
SAMPLED	09/03/30	04/--/84	08/30/65
FORMATION	CRET-DAKOTA	CRET-MESAVERDE	CRET-MUDDY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2740	801	2848
WELLHEAD PRESSURE,PSIG	5	95	1225
OPEN FLOW, MCFD	NOT GIVEN	2000	6800
COMPONENT, MOLE PCT			
METHANE	2.4	98.0	95.6
ETHANE	93.6	0.4	1.6
PROPANE	---	0.1	0.4
N-BUTANE	---	0.0	TRACE
ISOBUTANE	---	0.0	TRACE
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	TRACE
NITROGEN	3.5	1.2	0.9
OXYGEN	0.1	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	0.1	1.4
HELIUM	0.00	0.03	0.03
HEATING VALUE*	1102	1002	1007
SPECIFIC GRAVITY	1.033	0.562	0.583

	INDEX 12160 SAMPLE 3826	INDEX 12161 SAMPLE 16794	INDEX 12162 SAMPLE 16206
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	SHERARD	SHERARD DOME	STANDARD DRAW
WELL NAME	MARY C. CARTER NO. 1	CENEX NO. 7-14	STANDARD DRAW NO. 4-4
LOCATION	SEC. 31, T25N, R88W	SEC. 14, T25N, R89W	SEC. 4, T18N, R93W
OWNER	SINCLAIR WYOMING OIL CO.	CENEX	COASTAL OIL & GAS CORP.
COMPLETED	10/17/43	06/--/82	11/03/80
SAMPLED	04/29/44	02/10/83	03/04/81
FORMATION	CRET-DAKOTA	CRET-FRONTIER 3RD	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2838	2306	8886
WELLHEAD PRESSURE,PSIG	1140	840	900
OPEN FLOW, MCFD	150	500	4500
COMPONENT, MOLE PCT			
METHANE	95.0	98.2	73.2
ETHANE	3.1	0.2	6.1
PROPANE	---	TRACE	2.1
N-BUTANE	---	0.0	0.3
ISOBUTANE	---	0.0	0.3
N-PENTANE	---	0.0	TRACE
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	0.1
NITROGEN	0.3	0.8	11.8
OXYGEN	0.4	TRACE	2.9
ARGON	---	TRACE	0.1
HYDROGEN	---	0.2	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	1.1	0.4	2.9
HELIUM	0.05	0.03	0.01
HEATING VALUE*	1018	999	935
SPECIFIC GRAVITY	0.583	0.561	0.712

	INDEX 12163 SAMPLE 16248	INDEX 12164 SAMPLE 12349	INDEX 12165 SAMPLE 12350
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	STANDARD DRAW	SUGAR CREEK	SUGAR CREEK
WELL NAME	STANDARD DRAW-NO. 3-16	U.S.A. TROWBRIDGE NO. 1	U.S.A. TROWBRIDGE NO. 1
LOCATION	SEC. 16, T18N, R93W	SEC. 36, T19N, R90W	SEC. 36, T19N, R90W
OWNER	MARATHON OIL CO.	TENNECO OIL CO.	TENNECO OIL CO.
COMPLETED	10/11/80	06/--/68	06/--/68
SAMPLED	04/23/81	08/07/70	08/07/70
FORMATION	CRET-MESAVERDE	CRET-FRONTIER	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5000	9000	12000
WELLHEAD PRESSURE,PSIG	3900	NOT GIVEN	3348
OPEN FLOW, MCFD	6000	1750	2000
COMPONENT, MOLE PCT			
METHANE	83.1	95.7	76.6
ETHANE	8.5	1.4	1.7
PROPANE	3.6	0.3	0.6
N-BUTANE	0.8	0.1	0.3
ISOBUTANE	0.6	0.1	0.2
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.5	1.0	9.6
OXYGEN	0.0	0.2	0.0
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.9
CARBON DIOXIDE	2.2	1.0	9.5
HELIUM	0.01	0.01	0.20
HEATING VALUE*	1161	1014	866
SPECIFIC GRAVITY	0.689	0.584	0.724

	INDEX 12166 SAMPLE 15398	INDEX 12167 SAMPLE 16034	INDEX 12168 SAMPLE 1892
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	WAMSUTTER	WAMSUTTER	WERTZ
WELL NAME	ECHO SPRINGS NO. 1-2	CHAMPLIN 222D NO. 1	NO. 7
LOCATION	SEC. 2, T19N, R93W	SEC. 27, T19N, R93W	SEC. 7, T26N, R89W
OWNER	MARATHON OIL CO.	AMOCO PRODUCTION CO.	PRODUCERS & REFINERS CORP.
COMPLETED	--/--/00	--/--/00	08/17/29
SAMPLED	10/06/78	08/14/80	11/07/29
FORMATION	NOT GIVEN	CRET-ALMOND	CRET-CLOVERLY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	8970	3637
WELLHEAD PRESSURE,PSIG	3900	NOT GIVEN	1100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	22000
COMPONENT, MOLE PCT			
METHANE	80.3	77.3	87.5
ETHANE	7.0	10.6	10.1
PROPANE	3.8	7.1	---
N-BUTANE	1.2	1.0	---
ISOBUTANE	1.1	1.1	---
N-PENTANE	0.5	0.2	---
ISOPENTANE	0.7	0.2	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.6	0.1	---
NITROGEN	0.3	0.2	0.0
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	4.0	2.2	2.2
HELIUM	TRACE	0.01	0.00
HEATING VALUE*	1211	1250	1067
SPECIFIC GRAVITY	0.746	0.742	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12169 SAMPLE 2101	INDEX 12170 SAMPLE 2122	INDEX 12171 SAMPLE 2128
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	WERTZ	WERTZ	WERTZ
WELL NAME	NO. 8	NO. 7	NO. 1
LOCATION	SEC. 7, T26N, R89W	SEC. 7, T26N, R89W	SEC. 7, T26N, R89W
OWNER	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.
COMPLETED	08/06/29	08/17/29	09/23/29
SAMPLED	09/03/30	09/06/30	09/11/30
FORMATION	JURA-SUNDANCE	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4100	3637	3427
WELLHEAD PRESSURE,PSIG	1320	1285	620
OPEN FLOW, MCFD	57000	22000	42000
COMPONENT, MOLE PCT			
METHANE	99.9	90.3	81.8
ETHANE	0.0	8.0	10.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	4.8
OXYGEN	0.1	0.1	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.0	1.5	2.2
HELIUM	0.07	0.03	0.02
HEATING VALUE*	1012	1058	1024
SPECIFIC GRAVITY	0.555	0.609	0.650

	INDEX 12172 SAMPLE 10855	INDEX 12173 SAMPLE 10856	INDEX 12174 SAMPLE 10857
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	WEST SIDE CANAL	WEST SIDE CANAL	WEST SIDE CANAL
WELL NAME	JONS NO. 1	JONS NO. 1	JONS NO. 1
LOCATION	SEC. 7, T12N, R91W	SEC. 7, T12N, R91W	SEC. 7, T12N, R91W
OWNER	SUPERIOR OIL CO.	SUPERIOR OIL CO.	SUPERIOR OIL CO.
COMPLETED	10/03/66	10/03/66	10/03/66
SAMPLED	01/30/67	01/30/67	01/30/67
FORMATION	CRET-LANCE	CRET-FOX HILLS	CRET-LANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3858	3396	2550
WELLHEAD PRESSURE,PSIG	1280	1425	1160
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.9	96.4	96.5
ETHANE	0.6	1.6	1.6
PROPANE	TRACE	0.5	0.4
N-BUTANE	0.1	0.2	0.3
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.5	0.5
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.7	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1006	1025	1027
SPECIFIC GRAVITY	0.570	0.579	0.580

	INDEX 12175 SAMPLE 16656	INDEX 12176 SAMPLE 16657	INDEX 12177 SAMPLE 16204
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	WEST SIDE CANAL	WEST SIDE CANAL	WILD ROSE
WELL NAME	UNIT NO. 14	UNIT NO. 14	U.S.A. NO. 1-32
LOCATION	SEC. 18, T12N, R91W	SEC. 18, T12N, R91W	SEC. 32, T17N, R93W
OWNER	SOUTHLAND ROYALTY CO.	SOUTHLAND ROYALTY CO.	COASTAL OIL & GAS CORP.
COMPLETED	03/01/82	03/01/82	11/24/80
SAMPLED	09/21/82	09/21/82	05/04/81
FORMATION	CRET-LEWIS	CRET-LANCE	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4346	3010	9250
WELLHEAD PRESSURE,PSIG	730	710	2100
OPEN FLOW, MCFD	1000	4850	3925
COMPONENT, MOLE PCT			
METHANE	89.9	96.4	82.6
ETHANE	5.2	0.8	6.6
PROPANE	1.9	0.2	2.9
N-BUTANE	0.5	0.1	0.6
ISOBUTANE	0.3	0.0	0.8
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	TRACE	0.6
NITROGEN	0.8	1.5	2.0
OXYGEN	0.2	0.2	0.4
ARGON	0.1	TRACE	0.0
HYDROGEN	0.4	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.4	2.4
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1104	1008	1149
SPECIFIC GRAVITY	0.628	0.577	0.704

	INDEX 12178 SAMPLE 16866	INDEX 12179 SAMPLE 16799	INDEX 12180 SAMPLE 16805
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CONVERSE	CONVERSE
FIELD	WILD ROSE	BIG MUDDY	BIG MUDDY
WELL NAME	CIGE FED. NO. 1C-30-17-93	R. B. WHITESIDE NO. 100	R. B. WHITESIDE NO. 96
LOCATION	SEC. 30, T17N, R93W	NOT GIVEN	NOT GIVEN
OWNER	SNYDER OIL CO.	CONOCO, INC.	CONOCO, INC.
COMPLETED	04/04/83	09/11/78	07/--/78
SAMPLED	04/04/83	03/09/83	03/15/83
FORMATION	CRET-MESAVERDE & ALMOND U	CRET-WALL CREEK 2ND	CRET-WALL CREEK
GEOLOGIC PROVINCE CODE	535	515	515
DEPTH, FEET	9447	3114	3201
WELLHEAD PRESSURE,PSIG	3450	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.2	82.7	78.3
ETHANE	8.2	2.5	3.4
PROPANE	3.2	4.8	6.0
N-BUTANE	1.8	2.3	2.3
ISOBUTANE	0.6	1.7	1.7
N-PENTANE	0.1	0.9	0.3
ISOPENTANE	0.9	1.7	1.5
CYCLOPENTANE	0.1	0.4	0.3
HEXANES PLUS	0.1	0.6	0.5
NITROGEN	0.3	0.3	4.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.9	2.3	0.9
HELIUM	TRACE	TRACE	0.07
HEATING VALUE*	1147	1278	1259
SPECIFIC GRAVITY	0.689	0.760	0.771

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12181 SAMPLE 16962	INDEX 12182 SAMPLE 16963	INDEX 12183 SAMPLE 16964
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CONVERSE	CONVERSE	CONVERSE
FIELD	BIG MUDDY	BIG MUDDY	BIG MUDDY
WELL NAME	R. B. WHITESIDE NO. 82	R. B. WHITESIDE NO. 57	R. B. WHITESIDE
LOCATION	T33N, R76W	T33N, R76W	T33N, R76W
OWNER	CONOCO, INC.	CONOCO, INC.	CONOCO, INC.
COMPLETED	01/09/79	--/--/29	10/--/78
SAMPLED	06/03/83	06/02/83	06/03/83
FORMATION	CRET-WALL CREEK 2ND	CRET-WALL CREEK 2ND	CRET-WALL CREEK 2ND
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	3060	3075	3092
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.8	59.1	55.8
ETHANE	7.5	4.8	6.5
PROPANE	7.7	9.8	13.2
N-BUTANE	2.6	5.9	7.2
ISOBUTANE	1.9	3.5	4.3
N-PENTANE	1.3	1.4	1.3
ISOPENTANE	2.6	4.7	5.3
CYCLOPENTANE	1.0	1.1	0.8
HEXANES PLUS	1.2	1.8	1.4
NITROGEN	1.0	6.8	2.1
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.9	1.8
HELIUM	0.01	0.12	0.01
HEATING VALUE*	1447	1651	1796
SPECIFIC GRAVITY	0.853	1.038	1.096

	INDEX 12184 SAMPLE 16965	INDEX 12185 SAMPLE 2668	INDEX 12186 SAMPLE 8933
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CONVERSE	CONVERSE	CONVERSE
FIELD	BIG MUDDY	DOUGLAS S	FLAT TOP
WELL NAME	R. B. WHITESIDE NO. 89	SILVER FARM NO. 1	REESE A-2
LOCATION	T33N, R76W	SEC. 33, T32N, R71W	SEC. 24, T33N, R69W
OWNER	CONOCO, INC.	WHITE ROCK OIL CO.	TOWER OIL & GAS CO. OF TEXAS
COMPLETED	08/--/78	--/--/00	--/--/00
SAMPLED	06/03/83	03/25/34	04/04/62
FORMATION	CRET-WALL CREEK 2ND	NOT GIVEN	CRET-LANCE CREEK
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	3073	128	4497
WELLHEAD PRESSURE,PSIG	NOT GIVEN	21	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	600	848
COMPONENT, MOLE PCT			
METHANE	34.3	87.6	80.3
ETHANE	15.9	3.2	9.3
PROPANE	25.5	---	5.3
N-BUTANE	9.2	---	1.7
ISOBUTANE	6.2	---	0.7
N-PENTANE	0.9	---	0.6
ISOPENTANE	6.0	---	0.5
CYCLOPENTANE	0.8	---	0.1
HEXANES PLUS	1.2	---	0.3
NITROGEN	0.8	8.6	1.4
OXYGEN	TRACE	0.4	0.0
ARGON	TRACE	---	0.0
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	1.1	0.1	TRACE
HELIUM	TRACE	0.07	0.01
HEATING VALUE*	2164	945	1256
SPECIFIC GRAVITY	1.304	0.608	0.722

	INDEX 12187 SAMPLE 11657	INDEX 12188 SAMPLE 9107	INDEX 12189 SAMPLE 9108
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CONVERSE	CONVERSE	CONVERSE
FIELD	FLAT TOP	GLENROCK S	GLENROCK S
WELL NAME	GOVT. NO. 1	NO. 89	NO. 130
LOCATION	SEC. 33, T33N, R68W	SEC. 17, T33N, R75W	SEC. 19, T33N, R75W
OWNER	KANSAS-NEBRASKA NATURAL GAS	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	02/09/52	12/26/52
SAMPLED	10/02/68	10/08/63	10/09/63
FORMATION	CRET-TEAPOT	CRET-MUDDY U	CRET-MUDDY L
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	7050	6210	6459
WELLHEAD PRESSURE,PSIG	1950	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2188	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.9	2.8	9.0
ETHANE	9.2	17.7	33.7
PROPANE	6.7	38.8	35.1
N-BUTANE	1.7	20.5	10.3
ISOBUTANE	0.9	5.1	4.0
N-PENTANE	0.3	3.5	2.2
ISOPENTANE	0.3	7.5	2.1
CYCLOPENTANE	TRACE	0.6	0.8
HEXANES PLUS	0.4	1.3	2.3
NITROGEN	1.6	0.0	0.0
OXYGEN	0.0	0.1	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.00	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.06	TRACE	TRACE
HEATING VALUE*	1256	2879	2420
SPECIFIC GRAVITY	0.727	1.726	1.449

	INDEX 12190 SAMPLE 9109	INDEX 12191 SAMPLE 9366	INDEX 12192 SAMPLE 3046
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CONVERSE	CONVERSE	CONVERSE
FIELD	GLENROCK S	LAPRELLE	SHANNE CREEK
WELL NAME	NO. 57	JEFF HAWKS A -GOVT. NO. 1	SALISBURY NO. 2
LOCATION	SEC. 16, T33N, R75W	SEC. 23, T33N, R71W	SEC. 27, T32N, R69W
OWNER	CONTINENTAL OIL CO.	TEXACO INC.	WYOMING SOUTHERN OIL CO.
COMPLETED	06/17/52	05/17/64	05/--/37
SAMPLED	10/08/63	05/15/64	12/13/41
FORMATION	CRET-DAKOTA	CRET-FRONTIER	OLIG-WHITE RIVER
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	6445	11577	453
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3895	162
OPEN FLOW, MCFD	NOT GIVEN	500	2250
COMPONENT, MOLE PCT			
METHANE	43.0	81.9	95.6
ETHANE	15.8	10.5	2.0
PROPANE	21.5	3.6	---
N-BUTANE	8.8	0.9	---
ISOBUTANE	TRACE	0.5	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	7.8	0.1	---
CYCLOPENTANE	0.7	0.2	---
HEXANES PLUS	1.6	0.4	---
NITROGEN	0.9	0.4	0.4
OXYGEN	0.1	TRACE	0.2
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.1	1.3	1.8
HELIUM	0.01	0.02	0.01
HEATING VALUE*	2005	1199	1014
SPECIFIC GRAVITY	1.186	0.697	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 12193 SAMPLE 9521	INDEX 12194 SAMPLE 13456	INDEX 12195 SAMPLE 1994
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CROOK	CROOK	FREMONT
FIELD	DONKEY CREEK	MILLER CREEK N	ALKALI BUTTE
WELL NAME	E. C. STEVENSON NO. 10	RAUDSEP NO. 6-16	GOVT. NO. 1
LOCATION	SEC. 29, T50N, R68W	SEC. 6, T51N, R68W	SEC. 1, T34N, R95W
OWNER	TEXACO INC.	EXETER DRILLING & EXPL. CO.	TEXAS PRODUCTION CO.
COMPLETED	10/-/61	12/27/71	11/13/28
SAMPLED	08/03/64	10/20/72	04/10/30
FORMATION	CRET-MUDDY	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	515	530
DEPTH, FEET	5863	6024	4151
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1030	600
OPEN FLOW, MCFD	NOT GIVEN	10050	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	53.3	98.1	94.6
ETHANE	17.1	0.1	4.5
PROPANE	18.2	0.1	---
N-BUTANE	5.0	TRACE	---
ISOBUTANE	1.6	0.4	---
N-PENTANE	0.9	0.0	---
ISOPENTANE	0.9	0.2	---
CYCLOPENTANE	0.3	0.1	---
HEXANES PLUS	0.6	TRACE	---
NITROGEN	1.6	0.3	0.2
OXYGEN	TRACE	0.0	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	0.7	0.3
HELIUM	TRACE	TRACE	0.02
HEATING VALUE*	1660	1024	1039
SPECIFIC GRAVITY	0.988	0.576	0.582

	INDEX 12196 SAMPLE 2120	INDEX 12197 SAMPLE 13589	INDEX 12198 SAMPLE 4178
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	ALKALI BUTTE	ALKALI BUTTE	BEAVER CREEK
WELL NAME	STATE NO. 1	ALKALI BUTTE UNIT NO. 8	UNIT NO. 3
LOCATION	SEC. 36, T34N, R95W	SEC. 26, T34N, R95W	SEC. 14, T33N, R96W
OWNER	TEXAS PRODUCTION CO.	TEXACO INC.	STANOLIND OIL & GAS CO.
COMPLETED	--/--/00	12/28/71	08/24/46
SAMPLED	09/08/30	04/27/73	12/01/46
FORMATION	CRET-DAKOTA	CRET-MUDDY	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4381	4572	9108
WELLHEAD PRESSURE,PSIG	1905	2050	NOT GIVEN
OPEN FLOW, MCFD	15000	11600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.2	95.4	95.5
ETHANE	4.3	2.5	3.7
PROPANE	---	0.8	---
N-BUTANE	---	0.2	---
ISOBUTANE	---	0.2	---
N-PENTANE	---	TRACE	---
ISOPENTANE	---	0.1	---
CYCLOPENTANE	---	TRACE	---
HEXANES PLUS	---	0.1	---
NITROGEN	0.0	0.4	0.0
OXYGEN	0.1	0.0	0.2
ARGON	---	0.0	---
HYDROGEN	---	0.0	---
HYDROGEN SULFIDE**	---	0.0	---
CARBON DIOXIDE	0.4	0.2	0.6
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1041	1055	1034
SPECIFIC GRAVITY	0.580	0.588	0.580

	INDEX 12199 SAMPLE 8477	INDEX 12200 SAMPLE 8965	INDEX 12201 SAMPLE 8966
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	BEAVER CREEK	BEAVER CREEK	BEAVER CREEK
WELL NAME	BEAVER CREEK NO. 10	MADISON NO. 38	TENSLEEP NO. 22
LOCATION	SEC. 16, T33N, R96W	SEC. 13, T33N, R96W	SEC. 14, T33N, R96W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	03/22/62	07/21/55	12/04/54
SAMPLED	05/23/62	05/23/63	05/23/63
FORMATION	PERM-PHOSPHORIA	MISS-	PENN-
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	11209	10935	10817
WELLHEAD PRESSURE,PSIG	3200	NOT GIVEN	100
OPEN FLOW, MCFD	7219	NOT GIVEN	20
COMPONENT, MOLE PCT			
METHANE	81.8	45.4	69.3
ETHANE	5.7	25.7	16.3
PROPANE	1.8	12.5	5.6
N-BUTANE	0.8	6.2	2.4
ISOBUTANE	0.4	2.4	1.4
N-PENTANE	0.2	1.2	0.6
ISOPENTANE	0.2	2.1	0.6
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	1.7	0.4
NITROGEN	2.5	1.4	1.2
OXYGEN	0.2	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	5.1	0.0	1.7
CARBON DIOXIDE	1.0	1.1	0.5
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1082	1771	1354
SPECIFIC GRAVITY	0.687	1.062	0.805

	INDEX 12202 SAMPLE 8967	INDEX 12203 SAMPLE 8968	INDEX 12204 SAMPLE 912
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	BEAVER CREEK	BEAVER CREEK	BUFFALO ANTICLINE
WELL NAME	FRONTIER NO. 6	NO. 18	NO. 1
LOCATION	SEC. 15, T33N, R96W	SEC. 10, T33N, R96W	SEC. 17, T27N, R95W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	KASOMING OIL CO.
COMPLETED	01/19/47	--/--/52	06/05/24
SAMPLED	05/23/63	05/23/63	08/13/24
FORMATION	CRET-	CRET-	NOT GIVEN
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	6770	3706	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	8000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.1	82.4	87.9
ETHANE	4.6	5.1	6.9
PROPANE	1.5	8.1	---
N-BUTANE	0.4	1.4	---
ISOBUTANE	0.3	0.7	---
N-PENTANE	TRACE	0.2	---
ISOPENTANE	0.2	0.8	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.5	0.7	2.1
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.1	2.7
HELIUM	0.01	0.01	0.00
HEATING VALUE*	1092	1267	1014
SPECIFIC GRAVITY	0.613	0.724	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12205 SAMPLE 12400	INDEX 12206 SAMPLE 8695	INDEX 12207 SAMPLE 8414
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	CASTLE GARDEN	CONANT CREEK	DINTY MOORE RESERVOIR
WELL NAME	BRUNEL FED. NO. 1	UNIT NO. 33-16	UNIT NO. 23-3
LOCATION	SEC. 13, T34N, R91W	SEC. 16, T35N, R90W	SEC. 3, T37N, R92W
OWNER	EL PASO OIL & GAS CO.	SHELL OIL CO.	SHELL OIL CO.
COMPLETED	06/10/70	08/02/62	05/12/61
SAMPLED	08/30/70	10/04/62	02/17/62
FORMATION	CRET-SHANNON	CRET-LANCE	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	3000	5600	7877
WELLHEAD PRESSURE,PSIG	1105	1300	1400
OPEN FLOW, MCFD	3306	625000	2591
COMPONENT, MOLE PCT			
METHANE	96.4	98.6	78.7
ETHANE	1.9	0.1	9.9
PROPANE	0.5	0.1	5.3
N-BUTANE	0.2	0.1	1.6
ISOBUTANE	0.0	TRACE	1.5
N-PENTANE	0.0	TRACE	0.4
ISOPENTANE	0.0	0.0	0.6
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	0.5	0.9	0.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	1.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1031	1007	1270
SPECIFIC GRAVITY	0.578	0.562	0.742

	INDEX 12208 SAMPLE 7603	INDEX 12209 SAMPLE 8251	INDEX 12210 SAMPLE 8835
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	DOLIS HILLS	FRENCHIE DRAW	FRENCHIE DRAW
WELL NAME	DOLIS HILL FED. UNIT NO. 1	FRENCHIE DRAW NO. 1	UNIT NO. 2-8
LOCATION	SEC. 21, T30N, R91W	SEC. 21, T37N, R89W	SEC. 21, T37N, R90W
OWNER	GULF OIL CORP.	HUMBLE OIL & REFINING CO.	HUMBLE OIL & REFINING CO.
COMPLETED	10/31/59	08/16/61	06/25/62
SAMPLED	07/13/60	10/19/61	01/08/63
FORMATION	CRET-LANCE	EOCE-FORT UNION L	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	6780	9885	10115
WELLHEAD PRESSURE,PSIG	2800	3490	3838
OPEN FLOW, MCFD	21000	5074	2900
COMPONENT, MOLE PCT			
METHANE	50.3	85.7	94.4
ETHANE	7.6	7.1	2.8
PROPANE	14.2	2.3	0.7
N-BUTANE	11.6	0.4	0.3
ISOBUTANE	3.7	0.7	TRACE
N-PENTANE	4.1	0.1	0.1
ISOPENTANE	4.4	0.2	0.3
CYCLOPENTANE	0.8	0.3	0.1
HEXANES PLUS	2.9	0.6	0.4
NITROGEN	0.0	0.2	0.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.6	0.0	0.8
CARBON DIOXIDE	0.3	2.3	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	2073	1144	1076
SPECIFIC GRAVITY	1.221	0.678	0.607

	INDEX 12211 SAMPLE 15626	INDEX 12212 SAMPLE 13409	INDEX 12213 SAMPLE 8415
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	FULLER RESERVOIR	GIRARD	HOWARD RANCH
WELL NAME	DAVISON RANCH-FED. NO. 2-12	FED. NO. 1-8	UNIT NO. 23-15
LOCATION	SEC. 12, T36N, R94W	SEC. 8, T27N, R95W	SEC. 15, T39N, R93W
OWNER	ANR PRODUCTION CO.	MOUNTAIN PETROLEUM, LTD.	SHELL OIL CO.
COMPLETED	02/17/82	10/02/72	01/04/61
SAMPLED	08/27/82	10/02/72	02/17/62
FORMATION	EOCE-FORT UNION	CRET-MUDDY	CRET-LANCE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	3970	895	7610
WELLHEAD PRESSURE,PSIG	1750	305	3800
OPEN FLOW, MCFD	853	1200	2163
COMPONENT, MOLE PCT			
METHANE	86.6	96.6	84.7
ETHANE	3.7	0.1	8.9
PROPANE	4.0	0.1	3.3
N-BUTANE	1.5	TRACE	0.6
ISOBUTANE	0.7	0.0	0.8
N-PENTANE	0.4	0.0	0.1
ISOPENTANE	0.6	0.0	0.4
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.3	0.0	0.4
NITROGEN	1.8	2.0	0.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.02	0.08	0.01
HEATING VALUE*	1184	983	1196
SPECIFIC GRAVITY	0.682	0.569	0.679

	INDEX 12214 SAMPLE 5645	INDEX 12215 SAMPLE 10379	INDEX 12216 SAMPLE 6850
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	KIRBY DRAW	KIRK	LITTLE DOME
WELL NAME	UNIT NO. 1	GOVT.-PADON NO. 1	TRIBAL NO. 1
LOCATION	SEC. 27, T33N, R95W	SEC. 6, T28N, R92W	SEC. 15, T5N, R1W
OWNER	SINCLAIR OIL & GAS CO.	BOBBY M. BURNS, ET AL.	PETROLEUM, INC.
COMPLETED	06/10/54	05/31/65	07/09/58
SAMPLED	06/22/54	02/02/66	10/30/58
FORMATION	CRET-LAKOTA	CRET-CLOVERLY	TRIA-CROW MOUNTAIN
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	5500	2568	1300
WELLHEAD PRESSURE,PSIG	2140	914	1100
OPEN FLOW, MCFD	10000	13500	5
COMPONENT, MOLE PCT			
METHANE	94.5	96.8	83.9
ETHANE	2.3	0.6	6.2
PROPANE	0.6	0.9	1.3
N-BUTANE	0.2	0.0	0.4
ISOBUTANE	TRACE	0.0	0.4
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.3
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	1.7	1.5	7.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.04	TRACE	0.20
HEATING VALUE*	1039	1015	1040
SPECIFIC GRAVITY	0.592	0.573	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12217 SAMPLE 5057	INDEX 12218 SAMPLE 16074	INDEX 12219 SAMPLE 16269
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	LONG CREEK	LYSITE	LYSITE
WELL NAME	GOVT. HEANEY NO. 1	LONG BUTTE NO. 1	LONG BUTTE UNIT 30-1X
LOCATION	SEC. 5, T31N, R94W	SEC. 32, T39N, R91W	SEC. 30, T39N, R91W
OWNER	BRITISH AMERICAN OIL CO. LTD	MONSANTO CO.	MONCRIEF OIL CO.
COMPLETED	10/16/50	--/--/00	09/01/79
SAMPLED	06/26/51	09/16/80	05/04/81
FORMATION	PERM-PHOSPHORIA	CRET-MESAVERDE	CRET-SHANNON 1ST & 2ND
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	5186	NOT GIVEN	18152
WELLHEAD PRESSURE,PSIG	2259	7250	10000
OPEN FLOW, MCFD	10250	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	81.3	95.7	96.9
ETHANE	9.5	0.2	0.1
PROPANE	3.0	TRACE	TRACE
N-BUTANE	0.8	0.0	TRACE
ISOBUTANE	0.7	0.0	0.0
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.5	0.0	0.1
NITROGEN	3.0	0.1	0.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	3.9	2.4
HELIUM	0.03	TRACE	TRACE
HEATING VALUE*	1161	973	989
SPECIFIC GRAVITY	0.694	0.593	0.581

	INDEX 12220 SAMPLE 17074	INDEX 12221 SAMPLE 12343	INDEX 12222 SAMPLE 15284
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	LYSITE	MADDEN	MADDEN DEEP
WELL NAME	LONG BUTTE UNIT NO. 2S-1	MADDEN DEEP UNIT NO. 1	CHEVRON NO. 1-1
LOCATION	SEC. 25, T39N, R92W	SEC. 2, T38N, R90W	SEC. 1, T38N, R91W
OWNER	MONCRIEF OIL CO.	SOHIO PETROLEUM CO.	MONSANTO CO.
COMPLETED	10/17/82	07/28/70	12/10/77
SAMPLED	09/22/83	07/28/70	05/25/78
FORMATION	CRET-SUSSEX B	EOCE-FORT UNION	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	18596	10020	14709
WELLHEAD PRESSURE,PSIG	7080	3750	8025
OPEN FLOW, MCFD	2100	14000	12400
COMPONENT, MOLE PCT			
METHANE	96.0	93.3	94.2
ETHANE	0.1	1.9	0.2
PROPANE	TRACE	0.5	TRACE
N-BUTANE	0.0	0.1	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	0.2	0.7	0.3
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.6	2.8	5.1
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	975	1026	958
SPECIFIC GRAVITY	0.587	0.615	0.605

	INDEX 12223 SAMPLE 15614	INDEX 12224 SAMPLE 16542	INDEX 12225 SAMPLE 17141
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MADDEN DEEP	MADDEN DEEP	MADDEN DEEP
WELL NAME	FLATT NO. 1	SPRATT NO. 2-4	HENERY NO. 2-8
LOCATION	SEC. 28, T39N, R91W	SEC. 4, T38N, R90W	SEC. 8, T38N, R90W
OWNER	MONSANTO CO.	MONSANTO CO.	MONSANTO CO.
COMPLETED	02/18/79	07/18/81	06/14/82
SAMPLED	05/03/79	02/07/82	11/29/83
FORMATION	CRET-CODY	CRET-SHANNON 1ST	CRET-CODY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	17859	17050	17168
WELLHEAD PRESSURE,PSIG	10432	7300	7076
OPEN FLOW, MCFD	2103	38334	250000
COMPONENT, MOLE PCT			
METHANE	96.9	96.6	96.8
ETHANE	0.1	0.1	0.1
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	0.2	0.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.6	2.9	3.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	983	981	982
SPECIFIC GRAVITY	0.581	0.583	0.585

	INDEX 12226 SAMPLE 16152	INDEX 12227 SAMPLE 15590	INDEX 12228 SAMPLE 15591
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MONETA MILLS	MUDDY RIDGE	MUDDY RIDGE
WELL NAME	MONETA NO. 1-29	TRIBAL-CHEVRON NO. 30-11	TRIBAL-CHEVRON NO. 30-11
LOCATION	SEC. 29, T38N, R90W	SEC. 30, T4N, R5E	SEC. 30, T4N, R5E
OWNER	COLUMBIA GAS DEVELOPMENT	TOM BROWN, INC.	TOM BROWN, INC.
COMPLETED	01/25/80	12/15/78	12/15/78
SAMPLED	12/12/80	03/21/79	03/21/79
FORMATION	CRET-SHANNON	CRET-MESAVERDE	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	20065	12435	11880
WELLHEAD PRESSURE,PSIG	10000	4200	3600
OPEN FLOW, MCFD	1000	1700	1200
COMPONENT, MOLE PCT			
METHANE	95.8	90.4	85.8
ETHANE	0.2	5.5	8.2
PROPANE	TRACE	1.2	2.9
N-BUTANE	TRACE	0.3	0.6
ISOBUTANE	TRACE	0.3	0.6
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.2	0.3
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	0.2	0.3
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.4	1.6	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	983	1087	1134
SPECIFIC GRAVITY	0.595	0.629	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12229 SAMPLE 16722	INDEX 12230 SAMPLE 16893	INDEX 12231 SAMPLE 16894
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MUDDY RIDGE	MUDDY RIDGE	MUDDY RIDGE
WELL NAME	TRIBAL NO. 30-21	GOVT.-HORNBECK NO. 13-16F	GOVT.-HORNBECK NO. 13-1
LOCATION	SEC. 30, T4N, R3E	SEC. 13, T4N, R2E	SEC. 13, T4N, R2E
OWNER	TOM BROWN, INC.	GETTY OIL CO.	GETTY OIL CO.
COMPLETED	10/10/81	02/15/83	01/31/83
SAMPLED	12/06/82	04/26/83	04/26/83
FORMATION	EOCE-FORT UNION	EOCE-FORT UNION	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	7350	7362	7012
WELLHEAD PRESSURE,PSIG	1000	2500	2600
OPEN FLOW, MCFD	500	944	1243
COMPONENT, MOLE PCT			
METHANE	88.0	86.4	90.0
ETHANE	6.5	7.1	6.1
PROPANE	2.2	3.2	0.8
N-BUTANE	0.5	0.7	0.3
ISOBUTANE	0.7	1.0	0.5
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.4	0.9	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	0.8	0.7	0.6
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.2	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.6
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1141	1165	1105
SPECIFIC GRAVITY	0.646	0.673	0.628

	INDEX 12232 SAMPLE 1814	INDEX 12233 SAMPLE 2112	INDEX 12234 SAMPLE 3044
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MUSKRAT	MUSKRAT	MUSKRAT
WELL NAME	NO. 1	CONNOCHAN NO. 1	NO. B-2
LOCATION	SEC. 34, T34N, R92W	SEC. 34, T34N, R92W	SEC. 4, T33N, R92W
OWNER	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.	SINCLAIR OIL & GAS CO.
COMPLETED	12/--/28	10/07/28	07/--/38
SAMPLED	07/15/29	09/10/30	12/09/81
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4340	4387	5306
WELLHEAD PRESSURE,PSIG	1625	1410	2150
OPEN FLOW, MCFD	47682	47682	40000
COMPONENT, MOLE PCT			
METHANE	97.6	97.5	94.7
ETHANE	1.6	0.2	4.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.4	2.2	0.2
OXYGEN	0.0	0.0	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.2	0.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1017	991	1044
SPECIFIC GRAVITY	0.569	0.567	0.582

	INDEX 12235 SAMPLE 6424	INDEX 12236 SAMPLE 6804	INDEX 12237 SAMPLE 9096
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	MUSKRAT	MUSKRAT	MUSKRAT
WELL NAME	UNIT NO. B-3	FED.-TRAVIS NO. 1	NO. 7
LOCATION	SEC. 7, T33N, R91W	SEC. 13, T34N, R91W	SEC. 1, T33N, R92W
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	07/10/57	06/09/58	04/26/63
SAMPLED	10/25/57	09/17/58	10/--/63
FORMATION	CRET-FRONTIER	CRET-SHANNON	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4304	2784	7342
WELLHEAD PRESSURE,PSIG	1767	1298	1090
OPEN FLOW, MCFD	5950	4	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.1	93.3	68.1
ETHANE	0.7	4.1	9.2
PROPANE	0.0	1.2	3.0
N-BUTANE	0.1	0.4	1.5
ISOBUTANE	0.0	0.2	0.6
N-PENTANE	0.0	TRACE	0.5
ISOPENTANE	0.1	0.2	0.6
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.6
NITROGEN	0.6	0.2	13.8
OXYGEN	TRACE	TRACE	1.7
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.2	0.2
HELIUM	0.01	0.01	0.05
HEATING VALUE*	1004	1004	1085
SPECIFIC GRAVITY	0.576	0.604	0.769

	INDEX 12238 SAMPLE 4373	INDEX 12239 SAMPLE 4706	INDEX 12240 SAMPLE 4707
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	EAST ANTELOPE NO. 1	UNIT NO. 8	NO. C-7
LOCATION	SEC. 26, T27N, R93W	NOT GIVEN	NOT GIVEN
OWNER	CONTINENTAL OIL CO.	SINCLAIR OIL & GAS CO.	BRITISH AMERICAN OIL CO. LTD
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/18/47	--/--/00	--/--/00
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2015	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.0	67.7	83.9
ETHANE	0.4	30.6	15.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.1	1.2	0.4
OXYGEN	0.3	0.1	---
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.4	---
HELIUM	0.01	0.03	0.02
HEATING VALUE*	959	1234	1131
SPECIFIC GRAVITY	0.581	0.715	0.634

* CALCULATED GROSS BTU PER CU FT, DRY; AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12241 SAMPLE 7844	INDEX 12242 SAMPLE 9695	INDEX 12243 SAMPLE 12309
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	UNIT 14-12	FED. TRAVIS NO. 1	SMOSMONI NO. 1
LOCATION	SEC. 12, T3N, R2E	SEC. 13, T34N, R91W	SEC. 21, T38N, R93W
OWNER	SHELL OIL CO.	SINCLAIR OIL & GAS CO.	DIAMOND SHAMROCK CORP.
COMPLETED	08/07/60	06/09/58	10/17/69
SAMPLED	02/08/61	09/05/63	06/30/70
FORMATION	EOCE-FORT UNION	CRET-SHANNON	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	3838	2784	12385
WELLHEAD PRESSURE,PSIG	1450	1298	3550
OPEN FLOW, MCFD	1949	NOT GIVEN	4750
COMPONENT, MOLE PCT			
METHANE	96.1	92.6	80.8
ETHANE	3.0	4.4	10.6
PROPANE	TRACE	1.5	3.3
N-BUTANE	TRACE	0.3	0.5
ISOBUTANE	0.2	0.3	0.9
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.4	0.3	0.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	3.2
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1039	1085	1164
SPECIFIC GRAVITY	0.578	0.608	0.704

	INDEX 12244 SAMPLE 15977	INDEX 12245 SAMPLE 16035	INDEX 12246 SAMPLE 1955
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	PAVILLION	PAVILLION	PILOT BUTTE
WELL NAME	U.S.A.-TRIBAL NO. 22-10	SHELL TRIBAL NO. 22-10	DYKEMON NO. 1
LOCATION	SEC. 10, T3N, R2E	SEC. 10, T3N, R2E	SEC. 22, T3N, R1W-IND.RES.
OWNER	SHELL OIL CO.	SHELL OIL CO.	KINNEY COASTAL OIL CO.
COMPLETED	12/05/79	12/05/79	--/--/00
SAMPLED	05/29/80	08/11/80	03/11/30
FORMATION	EOCE-FORT UNION	EOCE-WIND RIVER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4819	3274	3340
WELLHEAD PRESSURE,PSIG	1801	461	1000
OPEN FLOW, MCFD	2431	2431	80000
COMPONENT, MOLE PCT			
METHANE	94.9	96.2	72.6
ETHANE	3.7	2.9	16.0
PROPANE	0.3	0.2	---
N-BUTANE	0.1	0.1	---
ISOBUTANE	0.1	0.1	---
N-PENTANE	0.1	TRACE	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	0.5	0.4	10.9
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	TRACE	0.2
HELIUM	0.01	0.01	0.04
HEATING VALUE*	1056	1044	1022
SPECIFIC GRAVITY	0.591	0.578	0.681

	INDEX 12247 SAMPLE 9192	INDEX 12248 SAMPLE 13395	INDEX 12249 SAMPLE 11791
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	PILOT BUTTE	POISON CREEK	PONY CREEK
WELL NAME	TRIBAL D NO. 2	DAVISON NO. 6-1	PONY CREEK UNIT NO. 1
LOCATION	SEC. 15, T3N, R1W	SEC. 6, T36N, R93W	SEC. 1, T37N, R91W
OWNER	BRITISH AMERICAN OIL CO. LTD	J. M. HUBER CORP.	BUTTES GAS & OIL CO.
COMPLETED	04/13/61	07/21/72	10/17/68
SAMPLED	11/29/63	09/25/72	03/11/69
FORMATION	CRET-MUDDY	EOCE-FORT UNION	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	3330	6713	8842
WELLHEAD PRESSURE,PSIG	690	2965	2600
OPEN FLOW, MCFD	NOT GIVEN	5600	1000
COMPONENT, MOLE PCT			
METHANE	83.3	92.6	61.3
ETHANE	10.1	4.3	19.5
PROPANE	2.8	1.5	8.8
N-BUTANE	0.9	0.5	1.6
ISOBUTANE	0.2	0.5	2.3
N-PENTANE	TRACE	TRACE	0.5
ISOPENTANE	0.6	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	1.8	0.2	0.0
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	5.0
HELIUM	0.04	0.01	TRACE
HEATING VALUE*	1165	1088	1389
SPECIFIC GRAVITY	0.671	0.610	0.871

	INDEX 12250 SAMPLE 11831	INDEX 12251 SAMPLE 8723	INDEX 12252 SAMPLE 8724
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	PONY CREEK	RIVERTON DOME	RIVERTON DOME
WELL NAME	PONY CREEK NO. 1	TRIBAL NO. 8	TRIBAL NO. 8
LOCATION	SEC. 1, T37N, R91W	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E
OWNER	BUTTES GAS & OIL CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	10/17/68	--/--/00	--/--/00
SAMPLED	04/16/69	10/13/62	10/12/62
FORMATION	EOCE-FORT UNION	CRET-CODY	CRET-CODY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	8842	4669	4606
WELLHEAD PRESSURE,PSIG	2600	6	778
OPEN FLOW, MCFD	1648	3	2400
COMPONENT, MOLE PCT			
METHANE	77.1	88.8	89.1
ETHANE	11.1	4.7	5.3
PROPANE	3.8	1.7	2.8
N-BUTANE	0.9	0.4	0.9
ISOBUTANE	0.5	0.3	0.6
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.5	0.1	0.5
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	0.1
NITROGEN	2.7	0.5	0.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.7	1.1	0.2
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1190	1056	1141
SPECIFIC GRAVITY	0.745	0.628	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12253 SAMPLE 8757	INDEX 12254 SAMPLE 8765	INDEX 12255 SAMPLE 8778
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 8	TRIBAL 1-96 NO. 8	TRIBAL NO. 8
LOCATION	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	11/06/62	11/16/62	11/23/62
FORMATION	CRET-MUDDY	CRET-DAKOTA	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	9307	9517	9631
WELLHEAD PRESSURE,PSIG	NOT GIVEN	745	7
OPEN FLOW, MCFD	35	7260	100
COMPONENT, MOLE PCT			
METHANE	94.7	93.3	96.0
ETHANE	3.6	3.4	2.0
PROPANE	0.5	1.0	0.4
N-BUTANE	TRACE	0.3	0.1
ISOBUTANE	TRACE	0.2	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.3	TRACE
NITROGEN	0.5	0.5	0.7
OXYGEN	TRACE	TRACE	0.5
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.5
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1041	1077	1027
SPECIFIC GRAVITY	0.584	0.609	0.579

	INDEX 12256 SAMPLE 8816	INDEX 12257 SAMPLE 9025	INDEX 12258 SAMPLE 9040
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 8	TRIBAL NO. 10	TRIBAL NO. 9
LOCATION	SEC. 31, T1S, R5E	SEC. 25, T1S, R4E	SEC. 31, T1S, R5E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	--/--/00	07/31/63	07/12/63
SAMPLED	--/--/00	07/31/63	07/12/63
FORMATION	NOT GIVEN	CRET-DAKOTA	CRET-FRONTIER 1ST
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	NOT GIVEN	9444	8374
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	3531
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	183
COMPONENT, MOLE PCT			
METHANE	93.8	97.1	94.3
ETHANE	3.3	1.7	3.8
PROPANE	0.9	0.4	0.5
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.3	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.1	0.0	0.2
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.6	0.0	0.0
NITROGEN	0.5	0.5	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1095	1031	1065
SPECIFIC GRAVITY	0.611	0.575	0.593

	INDEX 12259 SAMPLE 9054	INDEX 12260 SAMPLE 9057	INDEX 12261 SAMPLE 9064
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 9	TRIBAL NO. 9	TRIBAL NO. 9
LOCATION	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E	SEC. 31, T1S, R5E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	07/21/63	--/--/00	--/--/00
SAMPLED	07/21/63	07/31/63	08/11/63
FORMATION	CRET-FRONTIER	CRET-MUDDY	NOT GIVEN
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	8971	9716	9170
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1642
OPEN FLOW, MCFD	2750	80	6
COMPONENT, MOLE PCT			
METHANE	91.4	95.1	75.8
ETHANE	5.0	3.5	5.8
PROPANE	1.6	0.6	2.3
N-BUTANE	0.6	0.1	0.4
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.6	0.6	13.0
OXYGEN	TRACE	0.0	2.2
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1102	1045	945
SPECIFIC GRAVITY	0.620	0.583	0.683

	INDEX 12262 SAMPLE 9179	INDEX 12263 SAMPLE 10617	INDEX 12264 SAMPLE 10618
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 9	TRIBAL 1-96 NO. 14	TRIBAL 1-96 NO. 14
LOCATION	SEC. 31, T1S, R5E	SEC. 36, T1S, R4E	SEC. 36, T1S, R4E
OWNER	ATLANTIC REFINING CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	08/05/63	06/15/66	06/15/66
SAMPLED	08/05/63	06/15/66	06/15/66
FORMATION	CRET-DAKOTA	CRET-CODY	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	9934	4652	4160
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1825	1690
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	90.7	94.9
ETHANE	3.6	5.2	1.6
PROPANE	0.2	2.0	0.3
N-BUTANE	0.0	0.6	TRACE
ISOBUTANE	0.0	0.4	TRACE
N-PENTANE	0.0	0.2	TRACE
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.1
NITROGEN	0.8	0.3	1.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.9
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1035	1124	1011
SPECIFIC GRAVITY	0.577	0.631	0.588

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12265 SAMPLE 10905	INDEX 12266 SAMPLE 10907	INDEX 12267 SAMPLE 10912
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 15	TRIBAL NO. 15	TRIBAL NO. 15
LOCATION	SEC. 25, T1S, R4E	SEC. 35, T1S, R4E	SEC. 25, T1S, R4E
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	03/22/67	03/21/67	04/06/67
FORMATION	CRET-CODY	CRET-MESAVERDE	CRET-SHANNON
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4632	2374	5935
WELLHEAD PRESSURE,PSIG	2140	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	200
COMPONENT, MOLE PCT			
METHANE	81.4	79.9	95.1
ETHANE	5.4	8.3	3.2
PROPANE	2.4	3.2	0.5
N-BUTANE	0.5	0.3	0.0
ISOBUTANE	0.5	0.6	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	7.7	6.5	1.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	1.1	0.4	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	TRACE
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1035	1077	1034
SPECIFIC GRAVITY	0.666	0.676	0.580

	INDEX 12268 SAMPLE 11135	INDEX 12269 SAMPLE 11136	INDEX 12270 SAMPLE 12229
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME	RIVERTON DOME	RIVERTON DOME
WELL NAME	TRIBAL NO. 16	TRIBAL NO. 16	TRIBAL NO. 18
LOCATION	SEC. 30, T1S, R5E	SEC. 30, T1S, R5E	SEC. 30, T1S, R5E
OWNER	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.	ATLANTIC RICHFIELD CO.
COMPLETED	--/--/00	--/--/00	03/27/70
SAMPLED	09/19/67	09/19/67	04/--/70
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	EOCE-WIND RIVER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2259	2276	2172
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1092
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	3155
COMPONENT, MOLE PCT			
METHANE	85.7	61.6	87.0
ETHANE	3.3	11.7	4.4
PROPANE	0.7	3.6	1.4
N-BUTANE	0.2	1.5	0.3
ISOBUTANE	0.1	2.9	0.8
N-PENTANE	TRACE	0.9	0.1
ISOPENTANE	0.3	0.6	0.7
CYCLOPENTANE	0.1	0.3	0.7
HEXANES PLUS	0.2	1.0	1.3
NITROGEN	7.1	12.1	2.0
OXYGEN	1.5	2.8	0.0
ARGON	0.1	0.1	0.0
HYDROGEN	0.2	0.6	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	1.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	993	1202	1161
SPECIFIC GRAVITY	0.640	0.839	0.686

	INDEX 12271 SAMPLE 9939	INDEX 12272 SAMPLE 12645	INDEX 12273 SAMPLE 14190
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	RIVERTON DOME E	RIVERTON E	RIVERTON E
WELL NAME	TRIBAL 1 NO. 1	TRIBAL 32 NO. 6	TRIBAL NO. 41-20
LOCATION	SEC. 1, T1S, R5E	SEC. 32, T1N, R6E	SEC. 20, T1S, R6E
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	ENERGETICS, INC.
COMPLETED	03/08/65	11/16/70	03/26/74
SAMPLED	06/15/65	01/30/71	10/24/74
FORMATION	CRET-FRONTIER	PERM-PHOSPHORIA	CRET-CLOVERLY&JURA-MORRISON
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	9548	13666	8860
WELLHEAD PRESSURE,PSIG	4700	2650	5071
OPEN FLOW, MCFD	15300	10700	2700
COMPONENT, MOLE PCT			
METHANE	96.3	78.9	95.3
ETHANE	1.3	0.2	2.3
PROPANE	0.3	0.1	0.8
N-BUTANE	TRACE	TRACE	0.2
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	TRACE	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.0	14.2	0.5
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	5.4	0.0
CARBON DIOXIDE	0.7	0.5	0.5
HELIUM	0.01	0.22	0.01
HEATING VALUE*	1019	865	1047
SPECIFIC GRAVITY	0.580	0.866	0.589

	INDEX 12274 SAMPLE 227	INDEX 12275 SAMPLE 1300	INDEX 12276 SAMPLE 2095
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	SAND DRAW	SAND DRAW	SAND DRAW
WELL NAME	NO. 1	NO. 3	NO. 9
LOCATION	SEC. 10, T32N, R95W	SEC. 15, T32N, R95W	SEC. 15, T32, R95
OWNER	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.
COMPLETED	05/06/18	10/27/24	11/05/29
SAMPLED	03/11/20	09/17/26	08/21/30
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2427	2295	2880
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	935
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	45241
COMPONENT, MOLE PCT			
METHANE	95.3	93.3	97.2
ETHANE	3.0	4.9	1.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.0	0.7	0.0
OXYGEN	0.3	0.0	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	1.1	1.1
HELIUM	0.00	TRACE	0.03
HEATING VALUE*	1019	1033	1013
SPECIFIC GRAVITY	0.577	0.592	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12277 SAMPLE 2137	INDEX 12278 SAMPLE 2550	INDEX 12279 SAMPLE 9091
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	SAND DRAW	SAND DRAW	SAND DRAW
WELL NAME	NO. 3	NO. 10	NO. 1-23
LOCATION	SEC. 15, T32N, R95W	SEC. 14, T32N, R95W	SEC. 23, T32N, R95W
OWNER	PRODUCERS & REFINERS CORP.	PRODUCERS & REFINERS CORP.	SINCLAIR OIL & GAS CO.
COMPLETED	01/01/24	10/04/31	08/22/55
SAMPLED	09/09/30	09/20/32	09/10/63
FORMATION	CRET-FRONTIER	JURA-MORRISON	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2422	4290	2588
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	381
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1350
COMPONENT, MOLE PCT			
METHANE	98.5	84.0	97.1
ETHANE	1.1	11.4	1.5
PROPANE	---	---	0.4
N-BUTANE	---	---	0.1
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	0.0	3.6	0.4
OXYGEN	0.1	0.7	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.01	0.03	0.01
HEATING VALUE*	1018	1055	1037
SPECIFIC GRAVITY	0.565	0.633	0.577

	INDEX 12280 SAMPLE 9092	INDEX 12281 SAMPLE 9093	INDEX 12282 SAMPLE 9094
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	SAND DRAW	SAND DRAW	SAND DRAW
WELL NAME	NO. 11-15	NO. 2	NO. 13-10
LOCATION	SEC. 15, T32N, R95W	SEC. 10, T32N, R95W	SEC. 10, T32N, R95W
OWNER	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	--/--/00	06/18/54	10/17/42
SAMPLED	09/10/63	09/10/63	09/10/63
FORMATION	JURA-MORRISON	PERM-PHOSPHORIA	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	4284	7266	4310
WELLHEAD PRESSURE,PSIG	510	1926	352
OPEN FLOW, MCFD	4000	5800	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.8	82.5	91.7
ETHANE	2.4	6.7	1.8
PROPANE	0.4	2.8	0.4
N-BUTANE	0.2	1.0	0.1
ISOBUTANE	0.1	0.6	0.1
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	0.1	0.9	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	1.5	5.0	4.9
OXYGEN	TRACE	0.4	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.3	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.03	0.03	0.03
HEATING VALUE*	1042	1113	991
SPECIFIC GRAVITY	0.590	0.683	0.601

	INDEX 12283 SAMPLE 16670	INDEX 12284 SAMPLE 16671	INDEX 12285 SAMPLE 4184
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	SAND MESA	SAND MESA	STEAMBOAT BUTTE
WELL NAME	BOYSEN-AMOCO TRIBAL NO.1-18A	BOYSEN-AMOCO TRIBAL NO. 1-24	TRIBAL E LEASE NO. 6
LOCATION	SEC. 18, T4N, R4E	SEC. 24, T4N, R4E	SEC. 5, T3N, R1W
OWNER	MICHIGAN WISCONSIN PIPELINE	MICHIGAN WISCONSIN PIPELINE	BRITISH AMERICAN OIL CO. LTD
COMPLETED	07/15/79	07/25/79	--/--/00
SAMPLED	09/28/82	09/28/82	11/10/46
FORMATION	EOCE-FORT UNION	EOCE-FORT UNION	PENN-AMSDEN
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	15620	13139	7233
WELLHEAD PRESSURE,PSIG	NOT GIVEN	8625	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2250	13000
COMPONENT, MOLE PCT			
METHANE	93.4	95.7	0.0
ETHANE	3.4	0.5	4.1
PROPANE	0.5	TRACE	---
N-BUTANE	0.1	0.0	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	TRACE	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	0.4	0.3	95.8
OXYGEN	TRACE	0.1	0.1
ARGON	TRACE	TRACE	---
HYDROGEN	0.2	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.7	3.3	0.2
HELIUM	TRACE	TRACE	0.43
HEATING VALUE*	1027	979	73
SPECIFIC GRAVITY	0.595	0.590	0.969

	INDEX 12286 SAMPLE 9190	INDEX 12287 SAMPLE 9191	INDEX 12288 SAMPLE 8227
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	STEAMBOAT BUTTE	STEAMBOAT BUTTE	WILDCAT
WELL NAME	TRIBAL C NO. 7	TRIBAL C NO. 20	POISON CREEK UNIT NO. 1
LOCATION	SEC. 32, T4N, R1W	SEC. 5, T3N, R1W	SEC. 32, T37N, R93W
OWNER	BRITISH AMERICAN OIL CO. LTD	BRITISH AMERICAN OIL CO. LTD	HUMBLE OIL & REFINING CO.
COMPLETED	09/06/63	07/03/62	08/22/61
SAMPLED	11/29/63	11/29/63	10/05/61
FORMATION	CRET-FRONTIER 1ST	CRET-FRONTIER 1ST	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	2816	2820	6432
WELLHEAD PRESSURE,PSIG	970	900	2500
OPEN FLOW, MCFD	9500	2400	2447
COMPONENT, MOLE PCT			
METHANE	96.8	97.0	86.6
ETHANE	1.5	1.5	7.1
PROPANE	0.3	0.2	2.8
N-BUTANE	0.1	TRACE	0.6
ISOBUTANE	0.1	TRACE	0.6
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.2
NITROGEN	0.8	0.8	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.2
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1030	1023	1149
SPECIFIC GRAVITY	0.575	0.572	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12289 SAMPLE 8252	INDEX 12290 SAMPLE 8979	INDEX 12291 SAMPLE 8985
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	FRENCHIE DRAW NO. 1	OCEAN LAKE GOVT. NO. 1	OCEAN LAKE GOVT. NO. 1
LOCATION	SEC. 21, T37N, R89W	SEC. 9, T3N, R3E	SEC. 9, T3N, R3E
OWNER	HUMBLE OIL & REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	08/18/61	05/23/63	05/23/63
SAMPLED	10/19/61	05/24/63	05/24/63
FORMATION	EOCE-FORT UNION L	EOCE-WIND RIVER	EOCE-WIND RIVER
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	9150	2508	3858
WELLHEAD PRESSURE,PSIG	3100	1008	510
OPEN FLOW, MCFD	NOT GIVEN	4000	2
COMPONENT, MOLE PCT			
METHANE	86.2	90.4	78.1
ETHANE	7.8	4.6	0.1
PROPANE	2.3	1.3	0.1
N-BUTANE	0.5	0.2	0.0
ISOBUTANE	0.6	0.3	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.3	2.8	17.4
OXYGEN	0.0	0.0	2.6
ARGON	0.0	TRACE	0.2
HYDROGEN	0.0	0.0	0.8
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.5	0.2	0.7
HELIUM	0.02	0.04	0.02
HEATING VALUE*	1136	1053	798
SPECIFIC GRAVITY	0.660	0.613	0.647

	INDEX 12292 SAMPLE 8987	INDEX 12293 SAMPLE 8988	INDEX 12294 SAMPLE 8990
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	OCEAN LAKE GOVT. NO. 1	OCEAN LAKE GOVT. NO. 1	OCEAN LAKE GOVT. NO. 1
LOCATION	SEC. 9, T3N, R3E	SEC. 9, T3N, R3E	SEC. 9, T3N, R3E
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	05/23/63	05/23/63	05/23/63
SAMPLED	05/24/63	05/24/63	05/24/63
FORMATION	EOCE-WIND RIVER	EOCE-WIND RIVER	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	3179	2747	5899
WELLHEAD PRESSURE,PSIG	1310	890	NOT GIVEN
OPEN FLOW, MCFD	2000	2	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.5	75.6	55.4
ETHANE	2.7	1.2	4.6
PROPANE	0.7	0.2	0.3
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	4.2	17.3	31.1
OXYGEN	0.4	0.6	2.2
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	3.7	6.4
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.3	2.8
HELIUM	0.02	0.04	0.04
HEATING VALUE*	1000	809	618
SPECIFIC GRAVITY	0.599	0.633	0.702

	INDEX 12295 SAMPLE 10229	INDEX 12296 SAMPLE 14569	INDEX 12297 SAMPLE 9428
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	FREMONT	FREMONT
FIELD	WILDCAT	WILDCAT	WINKLEMAN DOME
WELL NAME	TRIBAL M-2	FED. NO. 133	NOT GIVEN
LOCATION	SEC. 32, T1S, R6E	SEC. 33, T27N, R93W	SEC. 19, T2N, R1W
OWNER	PAN AMERICAN PETROLEUM CORP.	MAY PETROLEUM, INC.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	10/18/65	09/26/75	--/--/00
SAMPLED	01/15/65	01/24/76	07/07/64
FORMATION	CRET-MUDDY	EOCE-FORT UNION	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	6510	2850	3200
WELLHEAD PRESSURE,PSIG	2500	1136	NOT GIVEN
OPEN FLOW, MCFD	9000	22000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.3	98.6	54.1
ETHANE	2.3	0.1	19.5
PROPANE	0.7	0.1	8.0
N-BUTANE	0.8	0.0	2.9
ISOBUTANE	TRACE	0.0	3.1
N-PENTANE	TRACE	0.0	0.8
ISOPENTANE	0.3	0.0	1.3
CYCLOPENTANE	TRACE	0.0	0.3
HEXANES PLUS	0.1	0.0	1.2
NITROGEN	0.1	0.8	6.1
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.1
CARBON DIOXIDE	0.4	0.4	2.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1070	1003	1470
SPECIFIC GRAVITY	0.598	0.563	0.948

	INDEX 12298 SAMPLE 2187	INDEX 12299 SAMPLE 2113	INDEX 12300 SAMPLE 1232
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	BLACK MOUNTAIN	ENOS CREEK DOME	GOLDEN EAGLE
WELL NAME	WELLER NO. 2	NO. 1	NO. 1
LOCATION	SEC. 35, T43N, R91W	SEC. 26, T46N, R100W	SEC. 12, T45N, R97W
OWNER	UTAH OIL REFINING CO.	OHIO OIL CO.	MIDWEST REFINING CO.
COMPLETED	08/01/27	--/--/00	12/07/23
SAMPLED	10/01/30	09/10/30	09/06/25
FORMATION	PERM-EMBAR	PERM-EMBAR	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2915	3540	2455
WELLHEAD PRESSURE,PSIG	NOT GIVEN	725	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	8000	100
COMPONENT, MOLE PCT			
METHANE	86.1	99.6	94.9
ETHANE	5.5	0.0	0.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	1.6	0.3	4.9
OXYGEN	0.7	0.0	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	6.2	0.1	0.2
HELIUM	0.00	0.26	TRACE
HEATING VALUE*	971	1009	961
SPECIFIC GRAVITY	0.653	0.557	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12301 SAMPLE 1233	INDEX 12302 SAMPLE 8478	INDEX 12303 SAMPLE 9113
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	GOLDEN EAGLE	GOLDEN EAGLE	GOLDEN EAGLE
WELL NAME	NO. 3	ON TIME 4 NO. 2	ON TIME 4 NO. 1
LOCATION	SEC. 12, T45N, R97W	SEC. 12, T45N, R97W	SEC. 12, T45N, R97W
OWNER	MIDWEST REFINING CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED	--/--/20	01/10/62	--/--/00
SAMPLED	09/06/25	03/20/62	10/15/63
FORMATION	CRET-MESAVERDE	CRET-MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2606	6780	5766
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2100	1000
OPEN FLOW, MCFD	NOT GIVEN	5000	600
COMPONENT, MOLE PCT			
METHANE	97.3	72.5	92.0
ETHANE	0.0	15.5	4.4
PROPANE	---	7.0	1.0
N-BUTANE	---	1.4	0.3
ISOBUTANE	---	0.8	TRACE
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	TRACE	0.1
HEXANES PLUS	---	0.1	0.2
NITROGEN	1.5	2.1	0.4
OXYGEN	0.5	TRACE	0.0
ARGON	---	0.0	0.0
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.2	1.3
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	986	1294	1074
SPECIFIC GRAVITY	0.570	0.758	0.618

	INDEX 12304 SAMPLE 9524	INDEX 12305 SAMPLE 9525	INDEX 12306 SAMPLE 9526
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	HAMILTON DOME	HAMILTON DOME	HAMILTON DOME
WELL NAME	PLACER NO. 18	NOT GIVEN	RATHVON NO. 9T
LOCATION	SEC. 14, T44N, R98W	SEC. 13&14, T44N, R98W	SEC. 24, T44N, R98W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	07/--/64	--/--/00	01/21/56
SAMPLED	07/31/64	07/31/64	07/31/64
FORMATION	TRIA-CHUGWATER 4TH	MISS-MADISON	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1701	5400	2590
WELLHEAD PRESSURE,PSIG	50	NOT GIVEN	50
OPEN FLOW, MCFD	90	NOT GIVEN	10
COMPONENT, MOLE PCT			
METHANE	91.3	0.1	47.6
ETHANE	1.0	0.2	14.4
PROPANE	0.9	TRACE	10.8
N-BUTANE	0.8	0.2	3.6
ISOBUTANE	0.4	TRACE	1.6
N-PENTANE	0.3	0.3	1.4
ISOPENTANE	0.5	TRACE	0.2
CYCLOPENTANE	0.1	0.2	0.3
HEXANES PLUS	0.5	0.5	1.6
NITROGEN	3.9	1.6	11.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.2	0.0
CARBON DIOXIDE	0.2	96.4	6.5
HELIUM	0.11	0.06	0.12
HEATING VALUE*	1070	59	1358
SPECIFIC GRAVITY	0.634	1.526	1.001

	INDEX 12307 SAMPLE 9527	INDEX 12308 SAMPLE 2136	INDEX 12309 SAMPLE 9112
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	HOT SPRINGS	HOT SPRINGS
FIELD	HAMILTON DOME	LITTLE DOME	LITTLE GRASS CREEK
WELL NAME	PLACER NO. 6E	NO. 1	NO. 1
LOCATION	SEC. 13, T44N, R98W	SEC. 11, T46N, R99W	SEC. 11, T46N, R99W
OWNER	ATLANTIC REFINING CO.	MOUNTAIN STATES POWER CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/17	04/26/17	06/09/44
SAMPLED	07/31/64	09/13/30	10/11/63
FORMATION	PERM-EMBAR	CRET-FRONTIER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2345	2562	3568
WELLHEAD PRESSURE,PSIG	15	710	808
OPEN FLOW, MCFD	4	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	38.8	88.7	86.7
ETHANE	19.6	1.5	7.7
PROPANE	15.4	---	1.8
N-BUTANE	6.2	---	0.4
ISOBUTANE	2.9	---	0.3
N-PENTANE	1.6	---	0.1
ISOPENTANE	1.6	---	0.3
CYCLOPENTANE	0.5	---	0.1
HEXANES PLUS	2.0	---	0.2
NITROGEN	7.4	9.4	2.0
OXYGEN	TRACE	0.2	0.0
ARGON	0.1	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	3.8	0.1	0.4
HELIUM	0.07	0.05	0.04
HEATING VALUE*	1709	925	1118
SPECIFIC GRAVITY	1.132	0.602	0.648

	INDEX 12310 SAMPLE 8242	INDEX 12311 SAMPLE 879	INDEX 12312 SAMPLE 2118
STATE	WYOMING	WYOMING	WYOMING
COUNTY	HOT SPRINGS	JOHNSON	JOHNSON
FIELD	WALKER DOME	BILLY CREEK	BILLY CREEK
WELL NAME	J. E. SMITH NO. 7	FIRST NATIONAL BANK NO. 1	FIRST NATIONAL BANK NO. 1
LOCATION	SEC. 9, T46N, R99W	SEC. 17, T48N, R82W	SEC. 17, T48N, R82W
OWNER	ORIS OIL CO.	CARTER OIL CO.	CARTER OIL CO.
COMPLETED	08/30/61	01/01/25	01/01/23
SAMPLED	10/11/61	05/07/34	09/09/30
FORMATION	CRET-PEAY	CRET-WALL CREEK 2ND	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	515	515
DEPTH, FEET	3480	5182	3098
WELLHEAD PRESSURE,PSIG	763	1175	1150
OPEN FLOW, MCFD	3400	NOT GIVEN	70000
COMPONENT, MOLE PCT			
METHANE	94.5	93.4	97.5
ETHANE	2.1	4.8	0.8
PROPANE	TRACE	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	2.9	1.5	2.0
OXYGEN	0.0	0.1	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.06	0.04	0.03
HEATING VALUE*	995	1032	988
SPECIFIC GRAVITY	0.577	0.585	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ASSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12313 SAMPLE 8878	INDEX 12314 SAMPLE 9012	INDEX 12315 SAMPLE 16081
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	BILLY CREEK	DUGOUT	LITTLE BUGHER DRAW
WELL NAME	WESSE NO. 2	GOVT. JAFFA NO. 4	LITTLE BUGHER DRAW NO. 1
LOCATION	SEC. 17, T48N, R82W	SEC. 33, T43N, R80W	SEC. 12, T49N, R78W
OWNER	MONTANA-DAKOTA UTILITIES CO.	TEXACO INC.	ELF AQUITAINE OIL & GAS
COMPLETED	10/30/62	02/25/54	09/23/80
SAMPLED	02/27/63	06/14/63	09/24/80
FORMATION	CRET-FRONTIER	CRET-SHANNON	CRET-MOWRY
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	3252	2014	11039
WELLHEAD PRESSURE,PSIG	1065	48	4400
OPEN FLOW, MCFD	42000	40	2500
COMPONENT, MOLE PCT			
METHANE	90.4	88.7	78.5
ETHANE	5.8	1.7	12.5
PROPANE	1.7	3.8	4.7
N-BUTANE	0.4	2.2	1.1
ISOBUTANE	0.1	0.7	0.6
N-PENTANE	TRACE	0.5	0.2
ISOPENTANE	0.2	0.9	0.2
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	TRACE	0.6	0.2
NITROGEN	1.0	0.3	0.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.1	1.6
HELIUM	0.02	TRACE	0.01
HEATING VALUE*	1089	1227	1230
SPECIFIC GRAVITY	0.617	0.693	0.719

	INDEX 12316 SAMPLE 17134	INDEX 12317 SAMPLE 8044	INDEX 12318 SAMPLE 10685
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	LINCOLN	LINCOLN
FIELD	SAPPHIRE	BIG PINEY-LABARGE	BIG PINEY-LABARGE
WELL NAME	SAPPHIRE UNIT NO. 1	BNG NO. 39	S. HOGSBACK NO. 3-16
LOCATION	SEC. 17, T51N, R76W	SEC. 9, T26N, R113W	SEC. 16, T26N, R113W
OWNER	DAVIS OIL CO.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	06/--/83	02/06/61	06/20/66
SAMPLED	11/09/83	06/26/61	07/27/66
FORMATION	CRET-MUDDY	CRET-MUDDY & BEAR RIVER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	515	535	535
DEPTH, FEET	10374	7950	7982
WELLHEAD PRESSURE,PSIG	1000	2520	3243
OPEN FLOW, MCFD	470	2321	10098
COMPONENT, MOLE PCT			
METHANE	79.9	86.4	86.7
ETHANE	10.7	6.9	0.1
PROPANE	3.5	2.9	0.1
N-BUTANE	0.9	0.6	0.2
ISOBUTANE	0.6	0.6	0.1
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	0.5	1.9	11.7
OXYGEN	TRACE	0.1	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	0.1	TRACE
HELIUM	0.01	TRACE	0.17
HEATING VALUE*	1186	1133	920
SPECIFIC GRAVITY	0.717	0.653	0.620

	INDEX 12319 SAMPLE 17227	INDEX 12320 SAMPLE 15457	INDEX 12321 SAMPLE 13579
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	BIRD CANYON	BRUFF AREA	BRUFF UNIT
WELL NAME	HAUN-FED. NO. 20-5	STATE LAND NO. 36-1	BRUFF UNIT NO. 1
LOCATION	SEC. 5, T26N, R111W	SEC. 36, T19N, R113W	SEC. 22, T19N, R112W
OWNER	ENERGETICS, INC.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	06/08/83	02/11/78	--/--/00
SAMPLED	03/17/84	10/24/78	04/17/73
FORMATION	CRET-BEAR RIVER	CRET-FRONTIER	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	11367	18004
WELLHEAD PRESSURE,PSIG	600	3700	NOT GIVEN
OPEN FLOW, MCFD	976	2674	70
COMPONENT, MOLE PCT			
METHANE	88.2	71.5	6.3
ETHANE	6.6	11.2	TRACE
PROPANE	2.6	9.1	TRACE
N-BUTANE	0.6	0.7	0.0
ISOBUTANE	0.4	0.6	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.6	3.5	17.3
OXYGEN	TRACE	2.0	0.2
ARGON	TRACE	0.1	0.3
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	74.2
HELIUM	0.01	0.01	1.52
HEATING VALUE*	1143	1111	64
SPECIFIC GRAVITY	0.648	0.739	1.345

	INDEX 12322 SAMPLE 13591	INDEX 12323 SAMPLE 13606	INDEX 12324 SAMPLE 16395
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	BRUFF UNIT	BRUFF UNIT	CARTER CREEK
WELL NAME	BRUFF UNIT NO. 1	BRUFF UNIT NO. 1	FEDERAL 1-30M
LOCATION	SEC. 22, T19N, R112W	SEC. 22, T19N, R112W	SEC. 30, T19N,R119W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	CHEVRON U.S.A., INC.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	04/27/73	06/01/73	12/10/81
FORMATION	MISS-MADISON	PENN-MORGAN	MISS-MISSION CANYON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	17562	NOT GIVEN	14635
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	5322
OPEN FLOW, MCFD	39	NOT GIVEN	2670
COMPONENT, MOLE PCT			
METHANE	1.9	45.5	62.0
ETHANE	0.0	16.9	5.6
PROPANE	TRACE	15.9	1.5
N-BUTANE	0.0	6.5	0.4
ISOBUTANE	0.0	5.7	0.5
N-PENTANE	0.0	2.9	0.1
ISOPENTANE	0.0	2.0	0.2
CYCLOPENTANE	0.0	0.3	0.1
HEXANES PLUS	0.0	1.6	0.2
NITROGEN	5.6	2.2	0.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	21.3
CARBON DIOXIDE	92.1	0.5	7.3
HELIUM	0.27	0.06	0.02
HEATING VALUE*	19	1890	961
SPECIFIC GRAVITY	1.475	1.136	0.832

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12325 SAMPLE 16394	INDEX 12326 SAMPLE 6967	INDEX 12327 SAMPLE 16997
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	CARTER CREEK-WHITNEY CANYON	EMIGRANT SPRINGS	FABIAN DITCH
WELL NAME	CHEVRON FEDERAL 1-20M	EMIGRANT SPRINGS UNIT NO. 1	FABIAN DITCH NO. 1-34
LOCATION	SEC. 20, T17N, R119W	SEC. 21, T22N, R112W	SEC. 34, T20N, R112W
OWNER	CHEVRON U.S.A., INC.	BELCO PETROLEUM CORP., ET AL	MARATHON OIL CO.
COMPLETED	10/24/81	09/22/58	--/--/00
SAMPLED	10/10/81	01/22/59	05/03/83
FORMATION	ORDO-BIG HORN	CRET-FRONTIER	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	16262	10490	9600
WELLHEAD PRESSURE,PSIG	4400	NOT GIVEN	3250
OPEN FLOW, MCFD	11266	1881	500
COMPONENT, MOLE PCT			
METHANE	86.1	84.2	85.7
ETHANE	8.3	10.4	9.0
PROPANE	2.6	2.9	2.2
N-BUTANE	0.5	0.5	0.4
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	0.4	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.1	0.4	0.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.7
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1136	1171	1137
SPECIFIC GRAVITY	0.652	0.667	0.651

	INDEX 12328 SAMPLE 16481	INDEX 12329 SAMPLE 16553	INDEX 12330 SAMPLE 2401
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	FONTENELLE	FONTENELLE	FOSSIL
WELL NAME	FED. NO. 23-25	FONTENELLE FED. NO. 35-22	NO. 1
LOCATION	SEC. 25, T26N, R112W	SEC. 35, T26N, R112W	SEC. 14, T21N, R117W
OWNER	NATURAL GAS CORP. OF CALIF.	AMERICAN QUASAR PET. CO.	EMERALD OIL CO.
COMPLETED	08/12/81	06/28/82	--/--/00
SAMPLED	03/31/82	06/04/82	09/15/31
FORMATION	CRET-FRONTIER	DRDO-BIGHORN	TERT-L
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8664	16040	407
WELLHEAD PRESSURE,PSIG	3400	1400	NOT GIVEN
OPEN FLOW, MCFD	1800	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.8	1.7	74.8
ETHANE	4.8	TRACE	17.6
PROPANE	1.4	TRACE	---
N-BUTANE	0.3	0.0	---
ISOBUTANE	0.2	0.0	---
N-PENTANE	TRACE	0.0	---
ISOPENTANE	0.1	0.0	---
CYCLOPENTANE	0.1	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	0.8	2.0	4.2
OXYGEN	TRACE	TRACE	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.3	95.9	3.0
HELIUM	0.01	0.21	0.00
HEATING VALUE*	1082	18	1073
SPECIFIC GRAVITY	0.612	1.495	0.690

	INDEX 12331 SAMPLE 13981	INDEX 12332 SAMPLE 16604	INDEX 12333 SAMPLE 12419
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	GREEN RIVER BEND	GREEN RIVER BEND	HOGSBACK
WELL NAME	ROCKING CHAIR NO. 43-22	GREEN RIV. BEND UNIT NO.82-6	HOGSBACK NO. 84-6
LOCATION	SEC. 22, T26N, R113W	SEC. 6, T26N, R112W	SEC. 6, T26N, R113W
OWNER	WESTERN PETROLEUM, INC.	BELCO PETROLEUM CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	04/21/82	--/--/00
SAMPLED	04/--/79	08/10/82	09/11/70
FORMATION	CRET-FRONTIER	CRET-FRONTIER 2ND	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7860	6840	6383
WELLHEAD PRESSURE,PSIG	3117	3000	2550
OPEN FLOW, MCFD	2941	2168	5408
COMPONENT, MOLE PCT			
METHANE	94.4	89.3	79.2
ETHANE	3.6	5.6	6.0
PROPANE	0.2	2.2	2.7
N-BUTANE	TRACE	0.5	0.6
ISOBUTANE	0.1	0.9	0.4
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.4	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	1.5	0.7	8.7
OXYGEN	0.3	TRACE	1.7
ARGON	TRACE	0.0	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.03	0.01	0.04
HEATING VALUE*	1034	1140	1031
SPECIFIC GRAVITY	0.584	0.647	0.681

	INDEX 12334 SAMPLE 7308	INDEX 12335 SAMPLE 16926	INDEX 12336 SAMPLE 8976
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	HOGSBACK S	HORSETRAP	LA BARGE
WELL NAME	TROJAN 22X-17	HORSETRAP NO. 1	C-P NO. 1
LOCATION	SEC. 17, T26N, R113W	SEC. 26, T23N, R115W	SEC. 7, T26N, R112W
OWNER	MOBIL OIL CO.	NATURAL GAS CORP. OF CALIF.	BELCO PETROLEUM CORP.
COMPLETED	01/15/58	04/10/83	12/06/58
SAMPLED	12/09/59	05/09/83	05/29/63
FORMATION	CRET-MUDDY & FRONTIER	PENN-AMSDEN	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7302	5460	7015
WELLHEAD PRESSURE,PSIG	3100	2200	1970
OPEN FLOW, MCFD	2250	7600	6423
COMPONENT, MOLE PCT			
METHANE	87.6	76.8	90.2
ETHANE	6.9	5.3	4.8
PROPANE	2.4	0.8	1.6
N-BUTANE	0.5	0.8	0.4
ISOBUTANE	0.4	0.4	0.1
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.4	0.4	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	1.2	13.0	1.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.5
HELIUM	0.00	0.31	0.02
HEATING VALUE*	1135	1015	1084
SPECIFIC GRAVITY	0.646	0.695	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12337 SAMPLE 8983	INDEX 12338 SAMPLE 16603	INDEX 12339 SAMPLE 17712
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	LA BARGE	LA BARGE SE	LITTLE MONUMENT
WELL NAME	BNG NO. 45-B	LARSON NO. 1-17	WSA-B NO. 32-1
LOCATION	SEC. 4, T26N, R113W	SEC. 17, T26N, R112W	SEC. 32, T25N, R111W
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.	TEXACO PRODUCING, INC.
COMPLETED	10/14/68	03/05/82	10/10/84
SAMPLED	05/29/69	08/10/82	06/10/85
FORMATION	CRET-BAXTER	CRET-FRONTIER 2ND	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3751	7104	9286
WELLHEAD PRESSURE,PSIG	973	2400	3939
OPEN FLOW, MCFD	746	340	3120
COMPONENT, MOLE PCT			
METHANE	64.9	89.0	84.8
ETHANE	4.3	5.9	3.1
PROPANE	1.7	2.2	0.6
N-BUTANE	0.5	0.5	0.2
ISOBUTANE	0.2	0.4	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	22.6	0.9	10.4
OXYGEN	5.0	0.1	TRACE
ARGON	0.2	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	0.05	0.01	TRACE
HEATING VALUE*	820	1126	958
SPECIFIC GRAVITY	0.735	0.639	0.637

	INDEX 12340 SAMPLE 15029	INDEX 12341 SAMPLE 16674	INDEX 12342 SAMPLE 17571
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	MOXA	MOXA ARCH	ROAD HOLLOW UNIT
WELL NAME	BRUFF UNIT NO. 3	WHISKEY BUTTES NO. 34	ROAD HOLLOW UNIT NO. 4,8,10
LOCATION	SEC. 16, T19N, R112W	SEC. 7, T21N, R111W	SEC. 4, T19N, R119W
OWNER	MOUNTAIN FUEL SUPPLY CO.	AMOCO PRODUCTION CO.	EXXON CO., U.S.A.
COMPLETED	03/--/77	05/05/82	11/11/81
SAMPLED	06/14/77	09/20/82	01/25/85
FORMATION	CRET-FRONTIER	CRET-FRONTIER	ORDO-BIGHORN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12111	11000	15057
WELLHEAD PRESSURE,PSIG	4910	3800	3600
OPEN FLOW, MCFD	4000	748	31
COMPONENT, MOLE PCT			
METHANE	86.3	37.9	82.8
ETHANE	7.4	14.6	9.8
PROPANE	1.7	23.9	3.4
N-BUTANE	0.5	8.9	0.8
ISOBUTANE	0.6	8.3	0.7
N-PENTANE	0.3	3.3	0.2
ISOPENTANE	0.8	3.1	0.3
CYCLOPENTANE	0.3	0.4	0.1
HEXANES PLUS	0.8	1.3	0.5
NITROGEN	0.8	0.7	0.5
OXYGEN	0.0	0.1	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.7
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1187	2072	1196
SPECIFIC GRAVITY	0.679	1.240	0.690

	INDEX 12343 SAMPLE 16191	INDEX 12344 SAMPLE 17872	INDEX 12345 SAMPLE 16602
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	SEVEN MILE GULCH	SHUTE CREEK	STEAD CANYON
WELL NAME	SEVEN MILE GULCH NO. 8	COW HOLLOW NO. 1	STEAD CANYON UNIT NO. 8-11
LOCATION	SEC. 21, T20N, R112W	SEC. 10, T22N, R112W	SEC. 11, T26N, R112W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	BELCO PETROLEUM CORP.
COMPLETED	11/14/80	04/20/85	04/03/82
SAMPLED	02/17/81	09/--/85	08/10/82
FORMATION	CRET-FRONTIER	CRET-FRONTIER 2ND	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11286	10698	7693
WELLHEAD PRESSURE,PSIG	800	792	2500
OPEN FLOW, MCFD	420	1100	454
COMPONENT, MOLE PCT			
METHANE	86.6	82.6	90.6
ETHANE	6.8	10.5	4.9
PROPANE	1.5	3.1	1.9
N-BUTANE	0.9	0.6	0.4
ISOBUTANE	0.4	0.9	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.7	0.3	0.2
CYCLOPENTANE	0.2	0.2	0.1
HEXANES PLUS	0.4	0.3	0.1
NITROGEN	2.0	1.1	0.8
OXYGEN	0.5	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.7	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1127	1179	1100
SPECIFIC GRAVITY	0.661	0.682	0.626

	INDEX 12346 SAMPLE 14689	INDEX 12347 SAMPLE 17355	INDEX 12348 SAMPLE 17377
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	WHISKY BUTTE NO. 2	BROAD CANYON NO. 1	BROAD CANYON NO. 1
LOCATION	SEC. 11, T21N, R112W	SEC. 28, T32N, R116W	SEC. 28, T32N, R116W
OWNER	AMOCO PRODUCTION CO.	ARCO OIL & GAS CO.	ARCO OIL & GAS CO.
COMPLETED	--/--/00	07/--/84	08/--/84
SAMPLED	06/07/76	07/--/84	08/--/84
FORMATION	CRET-FRONTIER 2ND	MISS-MADISON	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11072	16549	14935
WELLHEAD PRESSURE,PSIG	5745	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	3290	13000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.4	11.5	31.1
ETHANE	9.2	0.1	0.6
PROPANE	2.5	0.1	0.0
N-BUTANE	0.4	0.0	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.8	4.8	13.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	2.5	34.9
CARBON DIOXIDE	0.5	80.4	19.5
HELIUM	0.01	0.43	0.12
HEATING VALUE*	1149	137	550
SPECIFIC GRAVITY	0.657	1.375	1.029

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12349 SAMPLE 6426	INDEX 12350 SAMPLE 14551	INDEX 12351 SAMPLE 14902
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	WILLOW CREEK	WILLOW CREEK	WILLOW CREEK
WELL NAME	WILLOW CREEK UNIT NO. 1	ARNOLD LARSON NO. 1	FED. NO. 4-11
LOCATION	SEC. 3, T24N, R114W	SEC. 2, T24N, R114W	SEC. 11, T24N, R114W
OWNER	PAN AMERICAN PETROLEUM CORP.	RAINBOW RESOURCES, INC.	RAINBOW RESOURCES, INC.
COMPLETED	06/25/57	07/09/75	07/--/76
SAMPLED	10/25/57	11/04/75	02/10/77
FORMATION	EOCE-FORT UNION	CRET-MILLIARD	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2370	2430	1450
WELLHEAD PRESSURE,PSIG	1175	1250	696
OPEN FLOW, MCFD	3600	2000	3800
COMPONENT, MOLE PCT			
METHANE	82.5	81.3	74.7
ETHANE	10.2	11.0	14.5
PROPANE	3.3	4.4	6.3
N-BUTANE	0.6	0.7	1.1
ISOBUTANE	0.7	0.7	0.9
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.9	1.7	1.8
OXYGEN	TRACE	0.0	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.10	0.03	0.02
HEATING VALUE*	1170	1196	1269
SPECIFIC GRAVITY	0.676	0.688	0.739

	INDEX 12352 SAMPLE 16019	INDEX 12353 SAMPLE 877	INDEX 12354 SAMPLE 7978
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	NATRONA	NATRONA
FIELD	WILSON RANCH	BOONE DOME	BOONE DOME
WELL NAME	CHRISMAN, ET AL. NO. 1	NO. 3 BOONE DOME	BOONE DOME UNIT NO. 6
LOCATION	SEC. 18, T20N, R112W	SEC. 15, T35N, R85W	SEC. 14, T35N, R85W
OWNER	C & K PETROLEUM, INC.	NEW YORK OIL CO.	RICHFIELD OIL CORP.
COMPLETED	08/18/78	05/17/23	08/30/60
SAMPLED	07/26/80	05/16/24	05/18/61
FORMATION	CRET-FRONTIER 2ND	CRET-SHANNON	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	530	530
DEPTH, FEET	11147	1530	7590
WELLHEAD PRESSURE,PSIG	2300	760	1650
OPEN FLOW, MCFD	2503	4000	20000
COMPONENT, MOLE PCT			
METHANE	81.0	84.1	67.7
ETHANE	11.8	15.7	8.7
PROPANE	4.0	---	6.6
N-BUTANE	0.7	---	6.2
ISOBUTANE	0.6	---	4.4
N-PENTANE	0.1	---	2.0
ISOPENTANE	0.3	---	1.3
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	1.0
NITROGEN	0.8	0.2	1.4
OXYGEN	TRACE	0.0	0.4
ARGON	0.0	---	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.5	0.0	0.2
HELIUM	0.01	0.04	0.02
HEATING VALUE*	1202	1133	1567
SPECIFIC GRAVITY	0.690	0.633	0.925

	INDEX 12355 SAMPLE 7979	INDEX 12356 SAMPLE 2185	INDEX 12357 SAMPLE 2166
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	BOONE DOME	CASPER CREEK N	CASPER CREEK S
WELL NAME	BOONE DOME UNIT NO. 6	YOUNG NO. 2	NO. 4
LOCATION	SEC. 14, T35N, R85W	SEC. 14, T36N, R82W	SEC. 34, T34N, R83W
OWNER	RICHFIELD OIL CORP.	LAKOTA OIL & GAS CO.	EMPIRE STATE OIL CO.
COMPLETED	08/30/60	--/--/00	07/27/20
SAMPLED	05/18/61	10/02/30	09/23/30
FORMATION	CRET-FRONTIER	CRET-MUDDY	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	7590	997	1447
WELLHEAD PRESSURE,PSIG	2500	NOT GIVEN	450
OPEN FLOW, MCFD	8500	100	18000
COMPONENT, MOLE PCT			
METHANE	67.9	65.6	90.2
ETHANE	8.7	15.6	5.3
PROPANE	5.8	---	---
N-BUTANE	6.1	---	---
ISOBUTANE	4.2	---	---
N-PENTANE	2.2	---	---
ISOPENTANE	1.4	---	---
CYCLOPENTANE	0.2	---	---
HEXANES PLUS	1.2	---	---
NITROGEN	1.7	18.5	1.7
OXYGEN	0.4	0.1	0.5
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	1.2
HELIUM	0.10	0.03	0.00
HEATING VALUE*	1565	944	1027
SPECIFIC GRAVITY	0.926	0.711	0.607

	INDEX 12358 SAMPLE 5988	INDEX 12359 SAMPLE 8994	INDEX 12360 SAMPLE 9222
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	CLARK RANCH	CLARK RANCH	CLARK RANCH
WELL NAME	UNIT NO. 3	WELL NO. 3	NO. 2-C
LOCATION	SEC. 6, T35N, R84W	SEC. 6, T35N, R84W	SEC. 6, T35N, R84W
OWNER	HOUSTON OIL CO. OF TEXAS	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	01/05/55	08/30/55	10/02/63
SAMPLED	01/05/56	05/31/63	01/13/64
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-LAKOTA
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	983	910	2463
WELLHEAD PRESSURE,PSIG	490	200	515
OPEN FLOW, MCFD	2300	31	2500
COMPONENT, MOLE PCT			
METHANE	91.2	92.6	95.9
ETHANE	4.7	4.5	0.7
PROPANE	1.6	1.0	0.1
N-BUTANE	0.5	0.2	0.0
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	1.4	1.2	3.2
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1097	1066	987
SPECIFIC GRAVITY	0.617	0.601	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12361 SAMPLE 5142		INDEX 12362 SAMPLE 17655		INDEX 12363 SAMPLE 2162	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	NATRONA		NATRONA		NATRONA	
FIELD	FISH CREEK		GRIEVE		IRON CREEK	
WELL NAME	GOVT. NO. 2		GRIEVE UNIT NO. 48		NO. 5	
LOCATION	NOT GIVEN		SEC. 27, T32N, R85W		SEC. 11, T32N, R82W	
OWNER	ATLANTIC REFINING CO.		FOREST OIL CORP.		EMPIRE STATE OIL CO.	
COMPLETED	--/--/00		10/16/84		04/17/21	
SAMPLED	10/21/51		04/25/85		09/24/30	
FORMATION	CRET-LAKOTA		CRET-MUDDY		CRET-DAKOTA	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	995		6792		653	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		4788		3500	
COMPONENT, MOLE PCT						
METHANE	98.7		86.7		85.5	
ETHANE	0.9		5.6		8.8	
PROPANE	0.8		3.9		---	
N-BUTANE	0.1		1.2		---	
ISOBUTANE	0.2		0.6		---	
N-PENTANE	0.0		0.2		---	
ISOPENTANE	0.0		0.2		---	
CYCLOPENTANE	TRACE		TRACE		---	
HEXANES PLUS	0.1		0.1		---	
NITROGEN	1.1		0.8		0.1	
OXYGEN	0.1		TRACE		0.1	
ARGON	TRACE		0.6		---	
HYDROGEN	0.1		0.0		---	
HYDROGEN SULFIDE**	---		0.0		---	
CARBON DIOXIDE	2.0		0.6		5.5	
HELIUM	0.01		0.01		0.00	
HEATING VALUE*	1012		1163		1024	
SPECIFIC GRAVITY	0.598		0.667		0.653	

	INDEX 12364 SAMPLE 5611		INDEX 12365 SAMPLE 6636		INDEX 12366 SAMPLE 2163	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	NATRONA		NATRONA		NATRONA	
FIELD	LANCE CREEK		NOT GIVEN		PINE DOME	
WELL NAME	GOVT. NO. 1		BAGWATER UNIT NO. 1		NO. 5	
LOCATION	SEC. 13, T40N, R80W		SEC. 35, T39N, R85W		SEC. 26, T35N, R84W	
OWNER	ARCO-ANSCHUTZ		PURE OIL CO.		DILLARD BAKER	
COMPLETED	--/--/54		--/--/00		04/19/26	
SAMPLED	04/26/54		06/--/58		09/24/30	
FORMATION	CRET-L		CRET-U		PERM-EMBAR	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	2045		NOT GIVEN		1791	
WELLHEAD PRESSURE,PSIG	730		NOT GIVEN		420	
OPEN FLOW, MCFD	70		NOT GIVEN		10000	
COMPONENT, MOLE PCT						
METHANE	96.2		92.6		94.0	
ETHANE	0.6		4.0		1.3	
PROPANE	0.3		0.3		---	
N-BUTANE	0.2		TRACE		---	
ISOBUTANE	0.1		0.1		---	
N-PENTANE	TRACE		0.0		---	
ISOPENTANE	0.1		TRACE		---	
CYCLOPENTANE	0.1		0.0		---	
HEXANES PLUS	0.2		TRACE		---	
NITROGEN	2.2		0.1		3.7	
OXYGEN	TRACE		0.1		0.1	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.1		TRACE		---	
HYDROGEN SULFIDE**	0.0		0.0		---	
CARBON DIOXIDE	0.0		2.8		0.3	
HELIUM	0.04		0.01		0.66	
HEATING VALUE*	1018		1021		976	
SPECIFIC GRAVITY	0.581		0.607		0.577	

	INDEX 12367 SAMPLE 17058		INDEX 12368 SAMPLE 2105		INDEX 12369 SAMPLE 2165	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	NATRONA		NATRONA		NATRONA	
FIELD	PINE MOUNTAIN		POISON SPIDER		POISON SPIDER	
WELL NAME	HAWKS-VIABLE FED. NO. 1		NO. 1		NO. 3	
LOCATION	SEC. 26, T35N, R84W		SEC. 12, T33N, R83W		SEC. 12, T33N, R83W	
OWNER	VIABLE RESOURCES, INC.		EMPIRE STATE OIL CO.		EMPIRE STATE OIL CO.	
COMPLETED	08/11/83		12/29/17		01/01/23	
SAMPLED	08/11/83		09/04/30		09/23/30	
FORMATION	PENN-TENSLEEP		JURA-SUNDANCE		JURA-SUNDANCE	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	1758		1242		1365	
WELLHEAD PRESSURE,PSIG	300		50		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		4500		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	90.1		74.1		67.6	
ETHANE	3.2		24.0		29.8	
PROPANE	0.3		---		---	
N-BUTANE	0.1		---		---	
ISOBUTANE	0.0		---		---	
N-PENTANE	TRACE		---		---	
ISOPENTANE	0.0		---		---	
CYCLOPENTANE	TRACE		---		---	
HEXANES PLUS	0.1		---		---	
NITROGEN	4.5		1.5		2.4	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.1		---		---	
HYDROGEN	0.3		---		---	
HYDROGEN SULFIDE**	0.0		---		---	
CARBON DIOXIDE	0.5		0.3		0.2	
HELIUM	0.79		0.04		0.05	
HEATING VALUE*	987		1181		1219	
SPECIFIC GRAVITY	0.597		0.683		0.714	

	INDEX 12370 SAMPLE 2249		INDEX 12371 SAMPLE 967		INDEX 12372 SAMPLE 968	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	NATRONA		NATRONA		NATRONA	
FIELD	POWDER RIVER		SALT CREEK		SALT CREEK	
WELL NAME	CUYLER NO. 1		NO. 33X		NO. 33X	
LOCATION	SEC. 24, T36N, R83W		SEC. 33, T40N, R79W		SEC. 33, T40N, R79W	
OWNER	CUYLER OIL CO.		WYOMING ASSOCIATED OIL CORP.		WYOMING ASSOCIATED OIL CORP.	
COMPLETED	10/29/30		--/--/00		--/--/00	
SAMPLED	12/18/30		01/01/25		01/14/25	
FORMATION	CRET-WALL CREEK		CRET-DAKOTA & LAKOTA		CRET-DAKOTA & LAKOTA	
GEOLOGIC PROVINCE CODE	530		530		530	
DEPTH, FEET	1314		2200		2262	
WELLHEAD PRESSURE,PSIG	530		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	10000		21000		4000	
COMPONENT, MOLE PCT						
METHANE	99.5		75.3		49.0	
ETHANE	0.0		21.6		48.0	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	0.4		1.0		0.1	
OXYGEN	0.0		0.7		0.5	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		1.4		2.4	
HELIUM	0.00		TRACE		TRACE	
HEATING VALUE*	1008		1150		1357	
SPECIFIC GRAVITY	0.557		0.683		0.819	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ADSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12373 SAMPLE 8971	INDEX 12374 SAMPLE 8973	INDEX 12375 SAMPLE 878
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	SHERWOOD	SHERWOOD	TEAPOT
WELL NAME	NO. 1	NO. 2	NO. 301A
LOCATION	SEC. 3, T40N, R77W	SEC. 40, T40N, R77W	SEC. 3, T38N, R78W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PRODUCERS MAMMOTH OIL CO.
COMPLETED	08/12/56	11/01/57	12/14/22
SAMPLED	09/25/63	05/25/63	05/12/24
FORMATION	CRET-MUDDY	CRET-FRONTIER	CRET-WALL CREEK 2ND
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	10735	9531	9914
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1100	960
OPEN FLOW, MCFD	265	5000	24000
COMPONENT, MOLE PCT			
METHANE	77.8	77.9	76.5
ETHANE	10.2	11.9	21.3
PROPANE	4.7	5.4	---
N-BUTANE	1.6	1.5	---
ISOBUTANE	0.8	0.8	---
N-PENTANE	0.4	0.2	---
ISOPENTANE	0.6	0.5	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.6	0.2	---
NITROGEN	2.0	0.8	0.7
OXYGEN	TRACE	TRACE	0.6
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.2	0.8	0.7
HELIUM	0.02	0.02	0.05
HEATING VALUE*	1255	1260	1157
SPECIFIC GRAVITY	0.747	0.732	0.672

	INDEX 12376 SAMPLE 16467	INDEX 12377 SAMPLE 17930	INDEX 12378 SAMPLE 9789
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	TEEPEE FLATS	TEPEE FLATS	WALLACE CREEK
WELL NAME	TEEPEE FLATS NO. 16-1	TEPEE FLATS NO. 18-1	UNIT NO. 4
LOCATION	SEC. 16, T37N, R86W	SEC. 18, T37N, R86W	SEC. 23, T34N, R87W
OWNER	MONCRIEF OIL CO.	MONCRIEF OIL CO.	NATIONAL COOP. REFINERY ASSN
COMPLETED	01/16/81	03/29/85	12/21/64
SAMPLED	03/26/82	12/09/85	05/08/65
FORMATION	CRET-FRONTIER	CRET-LAKOTA	CRET-MUDDY
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	18246	19386	11017
WELLHEAD PRESSURE,PSIG	8900	11652	3360
OPEN FLOW, MCFD	11000	5000	15100
COMPONENT, MOLE PCT			
METHANE	97.5	95.8	97.7
ETHANE	0.8	0.3	0.1
PROPANE	0.1	TRACE	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	0.3	1.1	2.0
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.3	2.7	TRACE
HELIUM	TRACE	0.01	0.05
HEATING VALUE*	1005	976	994
SPECIFIC GRAVITY	0.573	0.587	0.569

	INDEX 12379 SAMPLE 7304	INDEX 12380 SAMPLE 10076	INDEX 12381 SAMPLE 16986
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NIOBRARA
FIELD	WALTMAN	WALTMAN	ANT HILLS N
WELL NAME	UNIT NO. 2	UNIT NO. 4	FED. NO. 32-12
LOCATION	SEC. 1, T36N, R87W	SEC. 24, T36N, R87W	SEC. 12, T37N, R63W
OWNER	CALIFORNIA CO.	CHEVRON OIL CO.	MILESTONE PETROLEUM, INC.
COMPLETED	08/20/59	08/17/65	06/26/82
SAMPLED	12/09/59	08/17/65	07/20/83
FORMATION	CRET-LANCE	EOCH-FORT UNION	PENN-LEO
GEOLOGIC PROVINCE CODE	530	530	515
DEPTH, FEET	6140	4278	6694
WELLHEAD PRESSURE,PSIG	1845	1630	3475
OPEN FLOW, MCFD	4	20000	421
COMPONENT, MOLE PCT			
METHANE	81.0	93.7	54.1
ETHANE	9.5	2.2	11.6
PROPANE	5.0	0.7	7.2
N-BUTANE	1.1	0.1	4.0
ISOBUTANE	1.3	0.2	1.4
N-PENTANE	0.0	0.1	1.2
ISOPENTANE	0.1	TRACE	2.2
CYCLOPENTANE	TRACE	0.1	0.3
HEXANES PLUS	0.1	0.2	0.8
NITROGEN	1.7	1.2	5.7
OXYGEN	TRACE	1.0	0.3
ARGON	0.0	0.0	TRACE
HYDROGEN	0.2	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	6.3
CARBON DIOXIDE	0.1	1.5	4.7
HELIUM	0.02	0.01	0.13
HEATING VALUE*	1211	1035	1364
SPECIFIC GRAVITY	0.700	0.605	0.967

	INDEX 12382 SAMPLE 17405	INDEX 12383 SAMPLE 15625	INDEX 12384 SAMPLE 370
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	BOGGY CREEK	BUCK CREEK	LANCE CREEK
WELL NAME	CHEROKEE FED. NO. 23-13	MAYNARD FED. NO. 43-18	BUCK CREEK WELL NO. 1
LOCATION	SEC. 13, T40N, R64W	SEC. 18, T36N, R63W	SEC. 34, T36N, R65W
OWNER	CHEROKEE OIL PRODUCTION INC.	BURLINGTON NORTHERN, ET AL.	BUCK CREEK OIL CO.
COMPLETED	06/01/83	03/23/78	01/--/19
SAMPLED	09/01/84	05/23/79	06/01/20
FORMATION	CRET-TURNER	PENN-LEO	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	4898	6180	NOT GIVEN
WELLHEAD PRESSURE,PSIG	450	1800	440
OPEN FLOW, MCFD	18	1599	12000
COMPONENT, MOLE PCT			
METHANE	56.2	32.7	69.8
ETHANE	10.9	5.7	29.1
PROPANE	15.8	3.3	---
N-BUTANE	6.7	1.4	---
ISOBUTANE	3.0	0.6	---
N-PENTANE	1.8	0.5	---
ISOPENTANE	2.0	0.5	---
CYCLOPENTANE	0.5	0.1	---
HEXANES PLUS	1.1	0.3	---
NITROGEN	1.5	39.6	0.9
OXYGEN	TRACE	TRACE	0.6
ARGON	0.0	0.1	---
HYDROGEN	0.0	TRACE	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.5	14.3	0.2
HELIUM	0.01	0.76	TRACE
HEATING VALUE*	1739	648	1220
SPECIFIC GRAVITY	1.035	0.974	0.706

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12385 SAMPLE 371	INDEX 12386 SAMPLE 2102	INDEX 12387 SAMPLE 2145
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LANCE CREEK	LANCE CREEK	LANCE CREEK
WELL NAME	OHIO NO. 4	SCHURICHT NO. 1	ROHLF NO. 2
LOCATION	SEC. 4, T35N, R65W	SEC. 5, T35N, R65W	SEC. 32, T36N, R65W
OWNER	OHIO OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	--/--/00	11/20/28	09/26/23
SAMPLED	06/24/30	09/02/30	09/15/30
FORMATION	NOT GIVEN	CRET-LAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	NOT GIVEN	3135	3030
WELLHEAD PRESSURE,PSIG	400	575	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	20000	35000
COMPONENT, MOLE PCT			
METHANE	74.2	71.1	69.1
ETHANE	25.0	28.3	25.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.0	0.0	5.1
OXYGEN	0.4	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.5	0.6	0.7
HELIUM	0.10	0.03	0.03
HEATING VALUE*	1230	1227	1148
SPECIFIC GRAVITY	0.686	0.701	0.707

	INDEX 12388 SAMPLE 2164	INDEX 12389 SAMPLE 3059	INDEX 12390 SAMPLE 3061
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LANCE CREEK	LANCE CREEK	LANCE CREEK
WELL NAME	DIELMAN NO. 1	ELIZABETH LAMB NO. 17	ELIZABETH LAMB NO. 8
LOCATION	SEC. 7, T35N, R65W	SEC. 5, T35N, R65W	SEC. 5, T35N, R65E
OWNER	CONTINENTAL OIL CO.	OHIO OIL CO.	OHIO OIL CO.
COMPLETED	08/23/27	--/--/00	07/--/36
SAMPLED	09/23/30	12/19/41	12/19/41
FORMATION	CRET-MUDDY	PENN-MINNELUSA	JURA-SUNDANCE BASAL
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	3420	5004	3951
WELLHEAD PRESSURE,PSIG	NOT GIVEN	185	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	41.9	66.4	16.3
ETHANE	56.6	31.0	83.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.2	2.0	0.2
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	1.2	0.3	0.3
HELIUM	0.02	0.09	0.00
HEATING VALUE*	1439	1228	1652
SPECIFIC GRAVITY	0.848	0.720	0.970

	INDEX 12391 SAMPLE 3737	INDEX 12392 SAMPLE 3739	INDEX 12393 SAMPLE 3060
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LANCE CREEK	LANCE CREEK	LANCE CREEK E
WELL NAME	ELLIOTT 6 NO. 3	O. ROHLFF NO. 2 LEASE NO. 15	O. C. LEACH NO. 1
LOCATION	SEC. 6, T35N, R65W	SEC. 32, T36N, R65W	SEC. 29, T36N, R64W
OWNER	ARGO OIL CORP.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	07/07/43	01/13/44	12/--/38
SAMPLED	02/04/44	03/26/44	12/22/41
FORMATION	PENN-CONVERSE 1ST	PENN-CONVERSE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	4435	4425	3806
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	8000
COMPONENT, MOLE PCT			
METHANE	9.3	5.2	59.9
ETHANE	18.6	65.0	38.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	70.0	28.7	1.7
OXYGEN	0.5	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.8	0.3	0.2
HELIUM	1.01	0.26	0.03
HEATING VALUE*	428	1217	1288
SPECIFIC GRAVITY	0.941	0.999	0.753

	INDEX 12394 SAMPLE 9111	INDEX 12395 SAMPLE 2660	INDEX 12396 SAMPLE 2869
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	NIOBRARA
FIELD	LITTLE BUCK CREEK	MULE CREEK W	MULE CREEK W
WELL NAME	MEIER SAMPLE	NO. C-1	NO. C-1
LOCATION	SEC. 26, T36N, R64W	SEC. 24, T39N, R61W	SEC. 22, T39N, R61W
OWNER	CONTINENTAL OIL CO.	FALL RIVER ROYALTY & PROD.	FALL RIVER ROYALTY & PROD.
COMPLETED	--/--/00	10/22/33	--/--/00
SAMPLED	10/07/63	11/21/33	04/20/34
FORMATION	PENN-LEO	PENN-AMSDEN	PENN-AMSDEN
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	5750	2242	2525
WELLHEAD PRESSURE,PSIG	NOT GIVEN	250	300
OPEN FLOW, MCFD	NOT GIVEN	528	240
COMPONENT, MOLE PCT			
METHANE	32.3	17.5	22.6
ETHANE	8.6	11.1	16.9
PROPANE	6.9	---	---
N-BUTANE	2.8	---	---
ISOBUTANE	0.8	---	---
N-PENTANE	1.2	---	---
ISOPENTANE	0.7	---	---
CYCLOPENTANE	0.3	---	---
HEXANES PLUS	1.4	---	---
NITROGEN	36.2	69.9	59.0
OXYGEN	TRACE	0.1	0.1
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	8.1	0.1	0.0
HELIUM	0.60	1.82	1.40
HEATING VALUE*	946	376	532
SPECIFIC GRAVITY	1.024	0.890	0.876

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12397 SAMPLE 7194	INDEX 12398 SAMPLE 14874	INDEX 12399 SAMPLE 2402
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	NIOBRARA	PARK
FIELD	MULE CREEK W	YOUNG WOMAN CREEK	BADGER BASIN
WELL NAME	NO. 3	MKM FED. NO. 3	NO. 1
LOCATION	SEC. 2, T40N, R61W	SEC. 26, T35N, R64W	SEC. 17, T57N, R101W
OWNER	WEST MULE CREEK UNIT, INC.	SIMASKO PRODUCTION CO.	RESOLUTE OIL CO.
COMPLETED	11/09/56	10/19/76	07/27/31
SAMPLED	09/01/59	12/17/76	09/19/31
FORMATION	PENN-MINNELUSA	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	515	515	520
DEPTH, FEET	2332	3576	8250
WELLHEAD PRESSURE,PSIG	750	1000	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	2163	350
COMPONENT, MOLE PCT			
METHANE	29.3	94.3	36.8
ETHANE	6.7	0.5	58.2
PROPANE	0.2	0.9	---
N-BUTANE	0.1	0.3	---
ISOBUTANE	0.1	0.6	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	0.1	0.2	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	60.9	0.5	3.2
OXYGEN	TRACE	0.0	0.4
ARGON	0.1	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.1	0.0	---
CARBON DIOXIDE	0.7	2.4	0.4
HELIUM	1.56	TRACE	0.00
HEATING VALUE*	647	1041	1434
SPECIFIC GRAVITY	0.655	0.616	0.867

	INDEX 12400 SAMPLE 14316	INDEX 12401 SAMPLE 17721	INDEX 12402 SAMPLE 2139
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	BADGER BASIN W	BADGER CREEK	BIG POLECAT
WELL NAME	GPE 23-58-102 BN NO. 1	FEDERAL 5277 NO. 2-24	DANIEL J. DANKER
LOCATION	SEC. 23, T58N, R102W	SEC. 24, T50N, R100W	SEC. , T57N, R98W
OWNER	GAS PRODUCING ENTERPRISES	ANSCHUTZ CORP.	DANIEL J. DANKER
COMPLETED	--/--/00	01/26/84	--/--/00
SAMPLED	04/--/74	06/19/85	09/13/30
FORMATION	CRET-DAKOTA	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	11398	4556	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2810	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1250	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.2	85.7	70.6
ETHANE	8.1	8.3	18.0
PROPANE	2.6	1.5	---
N-BUTANE	0.9	0.3	---
ISOBUTANE	0.3	0.6	---
N-PENTANE	0.0	0.1	---
ISOPENTANE	0.1	0.4	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	TRACE	0.4	---
NITROGEN	26.0	1.6	10.0
OXYGEN	6.9	0.2	1.0
ARGON	0.3	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.7	0.8	0.3
HELIUM	0.02	0.01	0.19
HEATING VALUE*	799	1135	1038
SPECIFIC GRAVITY	1.411	0.663	0.693

	INDEX 12403 SAMPLE 9010	INDEX 12404 SAMPLE 1253	INDEX 12405 SAMPLE 1254
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	BIG POLECAT	DANKER ANTICLINE	DANKER ANTICLINE
WELL NAME	GOVT. SEDGWICK NO. 1	MCMAHON NO. 4	MCMAHON NO. 1
LOCATION	SEC. 34, T57N, R98W	SEC. 16, T57N, R98W	SEC. 27, T57N, R98W
OWNER	SOHIO PETROLEUM CO.	MCMAHON OIL & GAS CO.	MCMAHON OIL & GAS CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/12/63	10/19/25	10/19/25
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	NOT GIVEN	2490	2232
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.7	88.5	81.8
ETHANE	0.8	10.0	17.2
PROPANE	0.1	---	---
N-BUTANE	TRACE	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	5.1	0.7	0.5
OXYGEN	0.9	0.6	0.4
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.03	TRACE	TRACE
HEATING VALUE*	956	1076	1137
SPECIFIC GRAVITY	0.586	0.612	0.646

	INDEX 12406 SAMPLE 2189	INDEX 12407 SAMPLE 2190	INDEX 12408 SAMPLE 2191
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	ELK BASIN	ELK BASIN	ELK BASIN
WELL NAME	NO. 2	NO. 17	NO. 23, ELK NO. 3
LOCATION	SEC. 30, T58N, R99W	SEC. 19, T58N, R99W	SEC. 24, T58N, R99W
OWNER	MIDWEST REFINING CO.	MIDWEST REFINING CO.	OHIO OIL CO.
COMPLETED	05/23/17	10/02/19	02/24/22
SAMPLED	10/02/30	09/30/30	10/01/30
FORMATION	CRET-FRONTIER 1ST	CRET-FRONTIER 2ND	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1420	1550	2532
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	36000
COMPONENT, MOLE PCT			
METHANE	10.4	---	77.5
ETHANE	88.7	84.9	19.7
PROPANE	---	10.7	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	4.1	2.5
OXYGEN	0.1	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.00	0.02	0.07
HEATING VALUE*	1695	1798	1138
SPECIFIC GRAVITY	0.999	1.099	0.666

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12409 SAMPLE 3707	INDEX 12410 SAMPLE 3708	INDEX 12411 SAMPLE 3709
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	ELK BASIN	ELK BASIN	ELK BASIN
WELL NAME	MACK 4, NO. 4	N. P. R. R. NO. 2	ELK 2, NO. 101
LOCATION	SEC. 30, T58N, R99W	SEC. 4, T57N, R99W	SEC. 24, T58N, R100W
OWNER	OHIO OIL CO.	MACKINNIE OIL & DRILLING CO.	CONTINENTAL OIL CO.
COMPLETED	03/09/43	07/06/43	09/08/43
SAMPLED	11/05/43	10/05/43	11/04/43
FORMATION	PENN-TENSLEEP	PENN-TENSLEEP	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4338	4711	3938
WELLHEAD PRESSURE,PSIG	2082	1906	1660
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	49.9	43.3	37.7
ETHANE	45.9	42.4	43.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	3.3	0.1	1.7
OXYGEN	0.3	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.1	13.9	16.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1272	1198	1169
SPECIFIC GRAVITY	0.856	0.902	0.940

	INDEX 12412 SAMPLE 9018	INDEX 12413 SAMPLE 9019	INDEX 12414 SAMPLE 9020
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	ELK BASIN	ELK BASIN	ELK BASIN
WELL NAME	UNIT NO. 189	UNIT NO. 153	UNIT NO. 189
LOCATION	SEC. 19, T58N, R99W	SEC. 25, T58N, R100W	SEC. 19, T58N, R99W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	08/22/61	07/26/49	08/22/61
SAMPLED	06/09/63	06/09/63	06/09/63
FORMATION	DEVO-JEFFERSON	PENN-TENSLEEP	ORDO-BIGHORN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	5307	5800	5529
WELLHEAD PRESSURE,PSIG	NOT GIVEN	55	5
OPEN FLOW, MCFD	157	154	44
COMPONENT, MOLE PCT			
METHANE	59.0	47.3	63.3
ETHANE	14.3	19.4	12.9
PROPANE	6.8	7.1	6.5
N-BUTANE	5.7	3.2	5.6
ISOBUTANE	1.6	1.5	1.6
N-PENTANE	2.5	0.9	2.4
ISOPENTANE	2.0	0.8	2.2
CYCLOPENTANE	0.5	0.2	0.5
HEXANES PLUS	2.7	0.9	2.8
NITROGEN	2.0	2.5	1.5
OXYGEN	0.1	0.2	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.1	11.7	TRACE
CARBON DIOXIDE	2.8	4.2	0.7
HELIUM	0.04	0.05	0.01
HEATING VALUE*	1626	1372	1643
SPECIFIC GRAVITY	1.004	0.978	0.972

	INDEX 12415 SAMPLE 9021	INDEX 12416 SAMPLE 9119	INDEX 12417 SAMPLE 9120
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	ELK BASIN	ELK BASIN S	ELK BASIN S
WELL NAME	UNIT NO. 58	NO. 7	NOT GIVEN
LOCATION	SEC. 25, T58N, R100W	SEC. 20, T57N, R99W	SEC. 19, T57N, R99W
OWNER	PAN AMERICAN PETROLEUM CORP.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
COMPLETED	06/14/61	07/14/60	07/--/53
SAMPLED	06/09/63	10/10/63	10/10/63
FORMATION	MISS-MADISON	CRET-DAKOTA	CRET-PEAY & FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4844	5276	4944
WELLHEAD PRESSURE,PSIG	18	160	800
OPEN FLOW, MCFD	15	1000	1000
COMPONENT, MOLE PCT			
METHANE	54.4	84.5	91.4
ETHANE	19.8	7.6	4.7
PROPANE	9.8	3.0	1.7
N-BUTANE	5.2	1.1	0.6
ISOBUTANE	2.1	0.5	0.2
N-PENTANE	1.5	0.3	0.1
ISOPENTANE	1.4	0.6	0.3
CYCLOPENTANE	0.2	0.1	TRACE
HEXANES PLUS	1.1	0.5	0.1
NITROGEN	4.0	1.5	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1605	1192	1103
SPECIFIC GRAVITY	0.971	0.687	0.621

	INDEX 12418 SAMPLE 1314	INDEX 12419 SAMPLE 6119	INDEX 12420 SAMPLE 9563
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	GARLAND	HEART MOUNTAIN	HEART MOUNTAIN
WELL NAME	HARRIMAN NO. 1	T-25-B-P	NO. 1
LOCATION	SEC. 10, T56N, R98W	SEC. 8, T54N, R102W	SEC. 8, T54N, R102W
OWNER	HENRY R. HARRIMAN	MOBIL OIL CO.	MONTANA POWER CO.
COMPLETED	08/18/26	02/03/56	--/--/49
SAMPLED	10/01/26	08/03/56	09/15/64
FORMATION	CRET-FRONTIER	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2040	4213	2300
WELLHEAD PRESSURE,PSIG	785	1760	480
OPEN FLOW, MCFD	NOT GIVEN	1350	20000
COMPONENT, MOLE PCT			
METHANE	79.2	81.3	85.4
ETHANE	14.3	9.8	7.8
PROPANE	---	3.9	3.1
N-BUTANE	---	1.1	0.5
ISOBUTANE	---	0.7	0.8
N-PENTANE	---	0.3	0.1
ISOPENTANE	---	0.3	0.3
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	5.1	2.1	1.5
OXYGEN	1.1	TRACE	TRACE
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	TRACE	0.03	0.02
HEATING VALUE*	1059	1197	1151
SPECIFIC GRAVITY	0.657	0.697	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12421 SAMPLE 9566	INDEX 12422 SAMPLE 13387	INDEX 12423 SAMPLE 897
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	HEART MOUNTAIN	HEART MOUNTAIN	HORSE CENTER
WELL NAME	NO. 25-8-P	TAGGART NO. 5-8	NO. 1
LOCATION	SEC. 8, T54N, R102W	SEC. 8, T54N, R102W	NOT GIVEN
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	NOT GIVEN
COMPLETED	--/--/53	02/05/72	--/--/00
SAMPLED	09/15/69	09/19/72	06/20/24
FORMATION	CRET-DAKOTA	CRET-DAKOTA	TRIA-CHUGWATER
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	4200	4475	NOT GIVEN
WELLHEAD PRESSURE,PSIG	1710	1680	NOT GIVEN
OPEN FLOW, MCFD	2500	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	22.9	78.5	0.0
ETHANE	20.9	11.1	0.0
PROPANE	29.3	5.1	---
N-BUTANE	12.2	1.3	---
ISOBUTANE	8.9	1.0	---
N-PENTANE	1.4	0.6	---
ISOPENTANE	2.0	0.2	---
CYCLOPENTANE	0.6	TRACE	---
HEXANES PLUS	1.5	0.2	---
NITROGEN	0.2	2.3	2.0
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.0	0.1	98.0
HELIUM	TRACE	0.03	TRACE
HEATING VALUE*	2353	1240	0
SPECIFIC GRAVITY	1.387	0.723	1.518

	INDEX 12424 SAMPLE 2119	INDEX 12425 SAMPLE 2138	INDEX 12426 SAMPLE 9011
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	LITTLE BUFFALO BASIN	LITTLE BUFFALO BASIN	LITTLE BUFFALO BASIN
WELL NAME	NO. 2	NO. 19	NO. 29
LOCATION	SEC. 3, T47N, R100W	SEC. 12, T47N, R100W	SEC. 12, T47N, R100W
OWNER	OHIO OIL CO.	MIDWEST REFINING CO.	PAN AMERICAN PETROLEUM CORP.
COMPLETED	01/01/29	--/--/00	06/28/59
SAMPLED	09/10/30	09/15/30	08/10/63
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-MUDDY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1146	NOT GIVEN	2041
WELLHEAD PRESSURE,PSIG	540	540	410
OPEN FLOW, MCFD	30000	60000	1340
COMPONENT, MOLE PCT			
METHANE	81.7	86.3	89.7
ETHANE	14.5	10.7	5.6
PROPANE	---	---	1.7
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	3.6	2.7	1.6
OXYGEN	0.1	0.1	TRACE
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.04	0.04	0.04
HEATING VALUE*	1087	1066	1058
SPECIFIC GRAVITY	0.643	0.621	0.627

	INDEX 12427 SAMPLE 9014	INDEX 12428 SAMPLE 1255	INDEX 12429 SAMPLE 1256
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	LITTLE BUFFALO BASIN	LITTLE POLECAT DOME	LITTLE POLECAT DOME
WELL NAME	NO. 29	WHITESIDE NO. 1	WHITESIDE NO. 1
LOCATION	SEC. 12, T47N, R100W	SEC. 30, T57N, R98W	SEC. 30, T57N, R98W
OWNER	PAN AMERICAN PETROLEUM CORP.	TRANSCONTINENTAL OIL CO.	TRANSCONTINENTAL OIL CO.
COMPLETED	10/15/58	--/--/00	--/--/00
SAMPLED	06/10/63	10/19/25	11/01/25
FORMATION	CRET-DAKOTA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	2305	4182	4182
WELLHEAD PRESSURE,PSIG	230	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	2400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.9	94.4	95.4
ETHANE	5.9	4.4	2.5
PROPANE	2.2	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.4	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	2.3	1.2	1.0
OXYGEN	TRACE	0.6	0.6
ARGON	0.0	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	TRACE	0.4	0.6
HELIUM	0.05	TRACE	TRACE
HEATING VALUE*	1103	1017	1011
SPECIFIC GRAVITY	0.638	0.593	0.581

	INDEX 12430 SAMPLE 16580	INDEX 12431 SAMPLE 16581	INDEX 12432 SAMPLE 2110
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	MEETEETSE	MEETEETSE	OREGON BASIN
WELL NAME	FED. NO. 2-21	FED. NO. 1-28	CACTUS NO. 1
LOCATION	SEC. 21, T49N, R99W	SEC. 28, T49N, R99W	SEC. 9, T51N, R100W
OWNER	TERRA RESOURCES, INC.	TERRA RESOURCES, INC.	OHIO OIL CO.
COMPLETED	03/03/82	02/25/82	08/15/28
SAMPLED	07/16/82	07/15/82	09/10/30
FORMATION	CRET-MUDDY	CRET-MUDDY	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	9008	8900	3480
WELLHEAD PRESSURE,PSIG	2390	2410	NOT GIVEN
OPEN FLOW, MCFD	2784	427	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.6	81.0	87.0
ETHANE	7.0	7.0	11.3
PROPANE	1.4	1.7	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.2	0.1	---
HEXANES PLUS	0.6	0.2	---
NITROGEN	1.9	8.7	0.9
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.1	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.4	0.2	1.5
HELIUM	0.02	0.01	0.05
HEATING VALUE*	1112	1031	1064
SPECIFIC GRAVITY	0.643	0.667	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12433 SAMPLE 2111		INDEX 12434 SAMPLE 2127		INDEX 12435 SAMPLE 2129	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	OREGON BASIN		OREGON BASIN		OREGON BASIN	
WELL NAME	SIDNEY NO. 1		WILSON NO. 2		HALENE NO. 1	
LOCATION	SEC. 5, T51N, R100W		SEC. 4 NW, T50N, R100W		SEC. 29, T51N, R100W	
OWNER	OHIO OIL CO.		OHIO OIL CO.		ENALPAC OIL CO.	
COMPLETED	12/05/16		07/03/28		01/01/15	
SAMPLED	09/10/30		09/11/30		05/11/30	
FORMATION	JURA-MORRISON		PERM-EMBAR		CRET-CLOVERLY	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	1320		3572		1368	
WELLHEAD PRESSURE, PSIG	705		150		225	
OPEN FLOW, MCFD	25000		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	86.6		78.4		82.7	
ETHANE	10.1		17.2		2.9	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	3.2		4.1		13.2	
OXYGEN	0.0		0.1		0.8	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	0.1		0.1		0.3	
HELIUM	0.05		0.12		0.07	
HEATING VALUE*	1058		1102		890	
SPECIFIC GRAVITY	0.619		0.658		0.630	

	INDEX 12436 SAMPLE 7930		INDEX 12437 SAMPLE 11046		INDEX 12438 SAMPLE 11047	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	OREGON BASIN		OREGON BASIN		OREGON BASIN	
WELL NAME	SIDNEY NO. 6		CUSTER NO. 17		CUSTER NO. 17	
LOCATION	SEC. 5, T51N, R100W		SEC. 32, T52N, R100W		SEC. 32, T52N, R100W	
OWNER	OHIO OIL CO.		MARATHON OIL CO., ET AL.		MARATHON OIL CO., ET AL.	
COMPLETED	02/01/61		07/24/67		07/24/67	
SAMPLED	04/17/61		07/27/67		07/26/67	
FORMATION	TRIA-CHUGWATER		CAMB-FLATHEAD		CAMB-FLATHEAD	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	2348		5983		6035	
WELLHEAD PRESSURE, PSIG	1013		2510		NOT GIVEN	
OPEN FLOW, MCFD	3008		532		3	
COMPONENT, MOLE PCT						
METHANE	90.5		87.5		84.6	
ETHANE	4.8		5.5		6.8	
PROPANE	1.3		2.1		2.8	
N-BUTANE	0.4		0.7		0.8	
ISOBUTANE	0.3		0.6		0.8	
N-PENTANE	0.1		0.1		0.4	
ISOPENTANE	TRACE		0.1		0.1	
CYCLOPENTANE	TRACE		0.1		0.2	
HEXANES PLUS	0.1		0.4		0.6	
NITROGEN	2.1		1.7		2.7	
OXYGEN	0.2		0.0		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.1	
HELIUM	0.18		0.16		0.23	
HEATING VALUE*	1010		1134		1160	
SPECIFIC GRAVITY	0.617		0.650		0.677	

	INDEX 12439 SAMPLE 9433		INDEX 12440 SAMPLE 16512		INDEX 12441 SAMPLE 9032	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	OREGON BASIN SE		OREGON BASIN SE		SILVERTIP	
WELL NAME	GOVT. SIMMONS NO. 1		DUNCAN STATE 2537 NO.12-30A		NO. 68-28	
LOCATION	SEC. 13, T50N, R100W		SEC. 30, T50N, R99W		SEC. 28, T57N, R100W	
OWNER	SOHIO PETROLEUM CO.		ANSCHUTZ CORP.		TEXACO INC.	
COMPLETED	12/08/55		--/--/81		--/--/48	
SAMPLED	07/14/69		04/30/82		07/03/63	
FORMATION	CRET-MUDDY		CRET-MUDDY		CRET-PEAY	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	5771		6800		6000	
WELLHEAD PRESSURE, PSIG	1200		2100		700	
OPEN FLOW, MCFD	5000		1000		200	
COMPONENT, MOLE PCT						
METHANE	91.4		24.7		51.2	
ETHANE	5.6		1.4		16.5	
PROPANE	1.1		0.3		8.8	
N-BUTANE	0.3		0.0		6.5	
ISOBUTANE	0.2		0.0		2.7	
N-PENTANE	0.1		0.0		1.2	
ISOPENTANE	0.1		0.0		3.3	
CYCLOPENTANE	TRACE		0.0		0.4	
HEXANES PLUS	0.1		0.0		2.0	
NITROGEN	0.8		73.3		6.5	
OXYGEN	TRACE		0.1		0.3	
ARGON	TRACE		TRACE		0.1	
HYDROGEN	0.0		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.2		0.1		0.4	
HELIUM	0.02		TRACE		0.02	
HEATING VALUE*	1087		283		1663	
SPECIFIC GRAVITY	0.612		0.868		1.040	

	INDEX 12442 SAMPLE 9034		INDEX 12443 SAMPLE 9035		INDEX 12444 SAMPLE 10424	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	PARK		PARK		PARK	
FIELD	SILVERTIP		SILVERTIP		SILVERTIP	
WELL NAME	NO. 31-33		NO. 55-33		74-A-33	
LOCATION	SEC. 33, T58N, R100W		SEC. 33, T58N, R100W		SEC. 33, T58N, R100W	
OWNER	TEXACO INC.		TEXACO INC.		TEXACO INC.	
COMPLETED	--/--/49		07--/63		07/23/65	
SAMPLED	07/03/63		07/03/63		02/28/66	
FORMATION	PERM-EMBAR & PENN-TENSLEEP		MISS-MADISON		CRET-LANCE	
GEOLOGIC PROVINCE CODE	520		520		520	
DEPTH, FEET	8800		9037		1723	
WELLHEAD PRESSURE, PSIG	1460		40		625	
OPEN FLOW, MCFD	600		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	58.3		37.0		80.6	
ETHANE	12.0		24.2		8.3	
PROPANE	7.9		11.7		4.8	
N-BUTANE	1.9		8.3		1.2	
ISOBUTANE	0.6		2.8		1.0	
N-PENTANE	0.6		2.8		0.3	
ISOPENTANE	0.7		2.4		0.1	
CYCLOPENTANE	0.6		0.6		TRACE	
HEXANES PLUS	0.7		3.0		0.1	
NITROGEN	0.3		2.2		3.2	
OXYGEN	0.2		0.0		0.0	
ARGON	0.0		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	16.2		0.0		0.0	
CARBON DIOXIDE	4.3		4.8		0.1	
HELIUM	0.03		0.04		0.06	
HEATING VALUE*	1194		1886		1195	
SPECIFIC GRAVITY	0.883		1.200		0.705	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12445 SAMPLE 9029	INDEX 12446 SAMPLE 9030	INDEX 12447 SAMPLE 13988
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	WHISTLE CREEK	WHISTLE CREEK	WHISTLE CREEK S
WELL NAME	NO. 4-16	NO. 45-16	GOVT.-SEABOARD NO. 1
LOCATION	SEC. 45, T56N, R98W	LOT 45, T56N, R98W	SEC. 35, T56N, R98W
OWNER	TEXACO INC.	TEXACO INC.	PHILLIPS PETROLEUM CO.
COMPLETED	06/17/52	09/12/52	02/01/73
SAMPLED	07/03/63	07/03/63	04/30/74
FORMATION	PENN-TENSLEEP	JURA-MORRISON	CRET-PEAY
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	5832	4373	3112
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	800
OPEN FLOW, MCFD	33	8	7000
COMPONENT, MOLE PCT			
METHANE	64.7	47.5	91.2
ETHANE	13.9	6.9	5.1
PROPANE	7.2	9.7	1.3
N-BUTANE	5.8	12.6	0.2
ISOBUTANE	1.9	3.0	0.4
N-PENTANE	1.6	5.8	TRACE
ISOPENTANE	2.2	5.9	0.1
CYCLOPENTANE	0.3	0.8	0.1
HEXANES PLUS	1.8	6.5	0.1
NITROGEN	1.3	1.1	0.5
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.8
HELIUM	0.01	0.03	0.01
HEATING VALUE*	1601	2247	1082
SPECIFIC GRAVITY	0.938	1.330	0.617

	INDEX 12448 SAMPLE 8231	INDEX 12449 SAMPLE 8246	INDEX 12450 SAMPLE 8263
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	PARK	PARK
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	MCCULLOCH PEAKS GOVT. NO. 1	MCCULLOCH PEAKS GOVT. NO. 1	MCCULLOCH PEAKS GOVT. NO. 1
LOCATION	SEC. 21, T54N, R100W	SEC. 21, T54N, R100W	SEC. 21, T54N, R100W
OWNER	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/06/61	10/13/61	11/01/61
FORMATION	EOCE-FORT UNION	EOCE-FORT UNION	CRET-MEETEETSE
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	3486	4750	7230
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	300	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.8	80.6	67.0
ETHANE	8.6	7.8	12.2
PROPANE	5.0	4.9	10.0
N-BUTANE	1.3	1.5	3.5
ISOBUTANE	1.6	1.5	3.3
N-PENTANE	0.3	0.3	0.8
ISOPENTANE	0.6	0.6	1.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.4	0.4	0.6
NITROGEN	2.3	2.4	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.04	0.15	0.02
HEATING VALUE*	1249	1244	1506
SPECIFIC GRAVITY	0.730	0.726	0.879

	INDEX 12451 SAMPLE 15465	INDEX 12452 SAMPLE 2856	INDEX 12453 SAMPLE 2204
STATE	WYOMING	WYOMING	WYOMING
COUNTY	PARK	SHERIDAN	SUBLETTE
FIELD	WILDCAT	WILDCAT	BIG PINEY
WELL NAME	SELLER DRAW UNIT NO. 1	ANNA KESTER	NO. 1
LOCATION	SEC. 21, T48N, R98W	SEC. 24, T58N, R85W	SEC. 5, T29N, R111W
OWNER	AMERICAN QUASAR PET. CO.	ANNA KESTER	BENEFICIAL OIL CO.
COMPLETED	--/--/00	12/--/40	09/28/27
SAMPLED	10/26/78	02/02/41	10/03/30
FORMATION	CRET-MUDDY	EOCE-WASATCH BASAL	EOCE-WASATCH
GEOLOGIC PROVINCE CODE	520	515	535
DEPTH, FEET	19580	434	2582
WELLHEAD PRESSURE,PSIG	10260	50	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.5	98.0	88.6
ETHANE	1.9	0.0	0.0
PROPANE	0.2	---	---
N-BUTANE	0.1	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	2.0	0.3	10.9
OXYGEN	0.4	0.4	0.1
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	1.6	0.5	0.5
HELIUM	0.01	TRACE	0.00
HEATING VALUE*	995	912	898
SPECIFIC GRAVITY	0.595	0.599	0.605

	INDEX 12454 SAMPLE 3032	INDEX 12455 SAMPLE 6752	INDEX 12456 SAMPLE 8984
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	BIG PINEY	BIG PINEY	BIG PINEY
WELL NAME	CRISMAN NO. 1	TRESNER STATE NO. 9	C-8
LOCATION	SEC. 10, T29N, R113W	SEC. 36, T29N, R113W	SEC. 14, T28N, R113W
OWNER	SUNSET OIL & GAS CO.	GULF OIL CORP.	BELCO PETROLEUM CORP.
COMPLETED	09/--/41	04/28/58	06/29/55
SAMPLED	11/29/41	07/16/58	05/29/63
FORMATION	EOCE-WASATCH	PALE-ALMY	PALE-ALMY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	944	2684	2261
WELLHEAD PRESSURE,PSIG	393	1025	140
OPEN FLOW, MCFD	13400	58000	16514
COMPONENT, MOLE PCT			
METHANE	83.5	89.2	80.9
ETHANE	15.1	7.0	3.1
PROPANE	---	2.2	0.3
N-BUTANE	---	0.4	0.1
ISOBUTANE	---	0.8	0.1
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.9	0.2	12.0
OXYGEN	0.2	TRACE	2.6
ARGON	---	TRACE	0.1
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.3
HELIUM	0.05	0.03	0.02
HEATING VALUE*	1116	1134	903
SPECIFIC GRAVITY	0.635	0.633	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12457 SAMPLE 8991	INDEX 12458 SAMPLE 8992	INDEX 12459 SAMPLE 16301
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	BIG PINEY	BIG PINEY	BIG PINEY
WELL NAME	8-35	E-24	GREEN RIVER BEND UNIT 73-17
LOCATION	SEC. 35, T29N, R113W	SEC. 31, T29N, R112W	SEC. 17, T27N, R112W
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	12/03/59	12/03/59	11/22/80
SAMPLED	05/28/63	05/28/63	08/05/81
FORMATION	CRET-MESAVERDE	PALE-ALMY	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3058	NOT GIVEN	7266
WELLHEAD PRESSURE,PSIG	1100	600	3525
OPEN FLOW, MCFD	1500	300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.7	91.1	93.9
ETHANE	6.4	5.7	3.5
PROPANE	2.1	1.5	1.1
N-BUTANE	0.5	0.4	0.3
ISOBUTANE	0.4	0.3	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.2
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1120	1105	1065
SPECIFIC GRAVITY	0.640	0.620	0.596

	INDEX 12460 SAMPLE 6764	INDEX 12461 SAMPLE 8418	INDEX 12462 SAMPLE 8419
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	BIRCH CREEK	BIRCH CREEK	BIRCH CREEK
WELL NAME	BIRCH CREEK UNIT NO. 1	BIRCH CREEK UNIT NO. 13	BIRCH CREEK UNIT NO. 13
LOCATION	SEC. 14, T27N, R113W	SEC. 22, T27N, R113W	SEC. 22, T27N, R113W
OWNER	CALIFORNIA CO.	CALIFORNIA CO.	CALIFORNIA CO.
COMPLETED	04/10/57	12/14/61	12/14/61
SAMPLED	07/29/58	02/24/62	05/24/62
FORMATION	CRET-BEAR RIVER	CRET-BEAR RIVER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7583	7980	7068
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3250	3159
OPEN FLOW, MCFD	1440	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	87.7	92.1
ETHANE	6.6	6.8	4.3
PROPANE	2.5	2.9	1.1
N-BUTANE	0.6	0.7	0.2
ISOBUTANE	0.2	0.4	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.9	0.4	0.6
CYCLOPENTANE	0.0	0.1	0.3
HEXANES PLUS	0.2	0.1	0.3
NITROGEN	0.5	0.6	0.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.2
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1152	1149	1098
SPECIFIC GRAVITY	0.648	0.650	0.620

	INDEX 12463 SAMPLE 14787	INDEX 12464 SAMPLE 13213	INDEX 12465 SAMPLE 13214
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	BIRCH CREEK	BIRD CANYON	BIRD CANYON
WELL NAME	BIRCH CREEK UNIT 94	FED. NO. 22-25	FED. NO. 22-25
LOCATION	SEC. 11, T27N, R113W	SEC. 25, T27N, R112W	SEC. 25, T27N, R112W
OWNER	CHEVRON OIL CO.	WESTERN PETROLEUM, INC..	WESTERN PETROLEUM, INC.
COMPLETED	09/28/76	01/--/72	01/--/72
SAMPLED	09/27/76	05/12/72	05/12/72
FORMATION	CRET-FRONTIER & BEAR RIVER	CRET-BEAR RIVER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7779	8822	8142
WELLHEAD PRESSURE,PSIG	2250	NOT GIVEN	3700
OPEN FLOW, MCFD	7000	435	1000
COMPONENT, MOLE PCT			
METHANE	90.7	92.3	92.9
ETHANE	5.1	4.1	4.3
PROPANE	2.0	1.3	1.3
N-BUTANE	0.5	0.2	0.2
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.7	1.2	0.7
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1112	1069	1079
SPECIFIC GRAVITY	0.626	0.607	0.606

	INDEX 12466 SAMPLE 13982	INDEX 12467 SAMPLE 16574	INDEX 12468 SAMPLE 17050
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	BIRD CANYON	BIRD CANYON	CASTLE CREEK UNIT
WELL NAME	BIRD CANYON NO. 41-36	FED. NO. 30-31	CASTLE CREEK NO. 21-28
LOCATION	SEC. 36, T27N, R112W	SEC. 31, T28N, R111W	SEC. 28, T32N, R114W
OWNER	WESTRANS PETROLEUM, INC.	ENERGETICS, INC.	CELERON OIL & GAS CO.
COMPLETED	07/06/72	--/--/00	07/22/82
SAMPLED	--/--/00	07/11/82	09/02/83
FORMATION	CRET-FRONTIER	CRET-BEAR RIVER	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8542	10290	5252
WELLHEAD PRESSURE,PSIG	4000	NOT GIVEN	1490
OPEN FLOW, MCFD	3190	2172	3703
COMPONENT, MOLE PCT			
METHANE	90.5	95.1	89.8
ETHANE	5.1	3.1	5.3
PROPANE	1.8	0.6	1.9
N-BUTANE	0.3	0.1	0.5
ISOBUTANE	0.4	TRACE	0.5
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	0.5	0.5	0.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1111	1042	1124
SPECIFIC GRAVITY	0.626	0.583	0.634

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12469 SAMPLE 8779	INDEX 12470 SAMPLE 16659	INDEX 12471 SAMPLE 16801
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	CHIMNEY BUTTE	CHIMNEY BUTTE	CHIMNEY BUTTE
WELL NAME	C. B. UNIT NO. 17	C 75-36	C-79-23
LOCATION	SEC. 35, T28N, R113W	SEC. 36, T28N, R113W	SEC. 23, T28N, R113W
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	10/04/62	03/29/82	09/14/82
SAMPLED	11/27/62	09/--/82	03/09/83
FORMATION	CRET-FRONTIER	CRET-MESAVERDE	PALE---
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6720	2900	2560
WELLHEAD PRESSURE,PSIG	2725	1225	1000
OPEN FLOW, MCFD	17195	1579	100
COMPONENT, MOLE PCT			
METHANE	92.4	92.3	85.7
ETHANE	2.9	3.2	4.0
PROPANE	1.2	1.7	3.8
N-BUTANE	0.4	0.4	1.3
ISOBUTANE	0.2	0.4	1.6
N-PENTANE	TRACE	0.1	0.3
ISOPENTANE	0.2	0.2	1.1
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	TRACE	0.1	0.5
NITROGEN	2.0	0.9	0.5
OXYGEN	0.4	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.4
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1048	1082	1240
SPECIFIC GRAVITY	0.604	0.615	0.709

	INDEX 12472 SAMPLE 12280	INDEX 12473 SAMPLE 2202	INDEX 12474 SAMPLE 6625
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	DEER MILL UNIT	DRY PINEY	DRY PINEY
WELL NAME	DEER MILL UNIT NO. 2-23	NO. 2	DRY PINEY UNIT NO. 3
LOCATION	SEC. 23, T30N, R113W	SEC. 12, T28N, R114W	SEC. 4, T27N, R114W
OWNER	CHANDLER & ASSOCIATES, INC.	CHARLES LACKEY	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	11/23/69	04/30/28	02/12/58
SAMPLED	06/02/70	10/10/30	05/04/58
FORMATION	PALE-ALMY	CRET-ADAVILLE	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2946	510	7641
WELLHEAD PRESSURE,PSIG	1100	3	2677
OPEN FLOW, MCFD	2235	NOT GIVEN	5080
COMPONENT, MOLE PCT			
METHANE	91.7	80.0	90.6
ETHANE	2.7	17.9	5.5
PROPANE	0.6	---	1.6
N-BUTANE	0.1	---	0.5
ISOBUTANE	0.1	---	0.5
N-PENTANE	TRACE	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	3.5	1.5	0.6
OXYGEN	0.3	0.3	0.1
ARGON	TRACE	---	TRACE
HYDROGEN	0.4	---	TRACE
HYDROGEN SULFIDE**	0.0	---	0.0
CARBON DIOXIDE	0.9	0.3	0.1
HELIUM	0.06	0.00	TRACE
HEATING VALUE*	1020	1131	1112
SPECIFIC GRAVITY	0.599	0.654	0.626

	INDEX 12475 SAMPLE 13612	INDEX 12476 SAMPLE 13613	INDEX 12477 SAMPLE 7191
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	DRY PINEY	DRY PINEY	FIGURE FOUR
WELL NAME	DRY PINEY UNIT NO. 22	DRY PINEY UNIT NO. 22	FIGURE FOUR CANYON NO. 1
LOCATION	SEC. 10, T27N, R114W	SEC. 10, T27N, R114W	SEC. 15, T27N, R112W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	CARTER OIL CO.
COMPLETED	09/07/72	09/07/72	07/13/59
SAMPLED	04/06/73	04/06/73	08/--/59
FORMATION	CRET-FRONTIER	CRET-BEAR RIVER	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6450	8143	7626
WELLHEAD PRESSURE,PSIG	1400	1800	NOT GIVEN
OPEN FLOW, MCFD	2040	1210	18000
COMPONENT, MOLE PCT			
METHANE	88.4	87.0	95.4
ETHANE	5.6	6.3	2.7
PROPANE	2.5	3.1	0.8
N-BUTANE	0.5	0.8	0.1
ISOBUTANE	0.3	0.6	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.0	1.6	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.03	0.11
HEATING VALUE*	1108	1144	1052
SPECIFIC GRAVITY	0.637	0.656	0.589

	INDEX 12478 SAMPLE 17352	INDEX 12479 SAMPLE 15714	INDEX 12480 SAMPLE 8982
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	FIGURE FOUR CANYON	FOGARTY CREEK	GOAT HILL
WELL NAME	FIGURE FOUR CANYON 2-12	FOGARTY CREEK UNIT 7-9	GOAT HILL NO. 3
LOCATION	SEC. 12, T27N, R112W	SEC. 9, T28N, R114W	SEC. 32, T31N, R113W
OWNER	BELCO DEVELOPMENT CORP.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	10/09/83	11/14/77	06/06/62
SAMPLED	07/12/84	07/27/79	05/27/63
FORMATION	CRET-BEAR RIVER	CRET-FRONTIER	PALE-ALMY
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9393	7166	2229
WELLHEAD PRESSURE,PSIG	4350	1875	745
OPEN FLOW, MCFD	2271	2328	41441
COMPONENT, MOLE PCT			
METHANE	93.7	85.9	85.8
ETHANE	3.4	5.4	5.9
PROPANE	0.7	3.7	3.2
N-BUTANE	0.2	1.2	0.8
ISOBUTANE	TRACE	1.1	0.9
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	TRACE	0.4	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.3	0.2
NITROGEN	1.0	1.6	2.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.01	0.03	0.10
HEATING VALUE*	1048	1189	1138
SPECIFIC GRAVITY	0.592	0.684	0.664

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12481 SAMPLE 7129	INDEX 12482 SAMPLE 8977	INDEX 12483 SAMPLE 12154
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	GREEN RIVER BEND	GREEN RIVER BEND	GREEN RIVER BEND
WELL NAME	GREEN RIVER BEND UNIT NO. 1	T-5	GRB UNIT NO. T-79-7
LOCATION	SEC. 19, T27N, R112W	SEC. 36, T27N, R113W	SEC. 7, T27N, R112W
OWNER	PAN AMERICAN PETROLEUM CORP.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	02/20/59	11/24/62	09/25/69
SAMPLED	06/25/59	05/29/63	12/19/67
FORMATION	CRET-FRONTIER 2ND	PALE-ALMY	PALE-ALMY & BIRCH CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6728	2458	2771
WELLHEAD PRESSURE,PSIG	2500	920	1157
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	2443
COMPONENT, MOLE PCT			
METHANE	94.1	82.2	90.7
ETHANE	3.6	7.2	4.0
PROPANE	0.9	3.0	1.9
N-BUTANE	0.2	1.1	0.4
ISOBUTANE	0.2	1.0	0.6
N-PENTANE	TRACE	0.2	0.0
ISOPENTANE	TRACE	0.7	0.2
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.7	0.1
NITROGEN	0.5	3.0	1.9
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.00	0.01	0.05
HEATING VALUE*	1060	1196	1091
SPECIFIC GRAVITY	0.594	0.708	0.625

	INDEX 12484 SAMPLE 17365	INDEX 12485 SAMPLE 6055	INDEX 12486 SAMPLE 8818
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	GREEN RIVER BEND	HOGSBACK	HOGSBACK
WELL NAME	GREEN RIVER BEND NO. 81-36	HOGSBACK UNIT 87-19	HOGSBACK NO. 76-36
LOCATION	SEC. 36, T27N, R113W	SEC. 19, T27N, R113W	SEC. 36, T27N, R114W
OWNER	BELCO DEVELOPMENT CORP.	GENERAL PETROLEUM CORP.	MOBIL OIL CO.
COMPLETED	09/25/83	10/31/55	08/--/62
SAMPLED	07/31/84	09/09/56	01/03/63
FORMATION	CRET-FRONTIER & MUDDY	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6845	6488	7543
WELLHEAD PRESSURE,PSIG	1890	2900	2300
OPEN FLOW, MCFD	3557	19500	1950
COMPONENT, MOLE PCT			
METHANE	90.7	36.5	86.5
ETHANE	5.9	4.1	6.7
PROPANE	0.5	42.0	3.0
N-BUTANE	0.6	0.0	0.8
ISOBUTANE	0.1	0.0	0.7
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.4	4.8	0.3
CYCLOPENTANE	0.1	0.3	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.1	9.2	1.4
OXYGEN	0.1	1.3	TRACE
ARGON	TRACE	0.6	TRACE
HYDROGEN	0.0	0.3	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.8	0.1
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1097	1752	1147
SPECIFIC GRAVITY	0.621	1.152	0.656

	INDEX 12487 SAMPLE 15709	INDEX 12488 SAMPLE 17156	INDEX 12489 SAMPLE 2200
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	JOHNSON RIDGE	JOHNSON RIDGE	LA BARGE
WELL NAME	S 27-33	S 34-34	NO. 5H-1
LOCATION	SEC. 33, T30N, R113W	SEC. 34, T30N, R113W	SEC. 34, T27N, R113W
OWNER	BELCO PETROLEUM CORP.	BELCO DEVELOPMENT CORP.	CALIFORNIA CO.
COMPLETED	12/17/78	09/09/83	04/01/27
SAMPLED	07/27/79	01/09/84	10/09/30
FORMATION	EOCE-FORT UNION	CRET-MESAVERDE TRANSITIONAL	CRET-FRONTIER 1ST
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2150	2800	660
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1205	5
OPEN FLOW, MCFD	2229	3068	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.9	85.9	69.6
ETHANE	7.3	7.3	28.6
PROPANE	2.9	2.6	---
N-BUTANE	0.6	0.6	---
ISOBUTANE	0.8	0.7	---
N-PENTANE	0.2	0.2	---
ISOPENTANE	0.2	0.2	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.1	0.2	---
NITROGEN	0.8	0.1	0.6
OXYGEN	TRACE	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	1.2	2.2	0.9
HELIUM	0.02	0.02	0.03
HEATING VALUE*	1149	1143	1218
SPECIFIC GRAVITY	0.668	0.674	0.709

	INDEX 12490 SAMPLE 2201	INDEX 12491 SAMPLE 8980	INDEX 12492 SAMPLE 11238
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	LA BARGE	LA BARGE	LA BARGE E
WELL NAME	NO. 5 M-2	BNG NO. 34	EAST LA BARGE NO. 20-21
LOCATION	SEC. 34, T27N, R113W	SEC. 4, T26N, R113W	SEC. 21, T27N, R112W
OWNER	CALIFORNIA CO.	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.
COMPLETED	06/18/27	05/20/60	09/12/67
SAMPLED	10/10/30	05/29/63	12/05/67
FORMATION	CRET-SECOND SAND	CRET-FRONTIER & MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	790	6928	7038
WELLHEAD PRESSURE,PSIG	5	1031	2106
OPEN FLOW, MCFD	NOT GIVEN	5976	9558
COMPONENT, MOLE PCT			
METHANE	64.1	85.4	95.5
ETHANE	34.1	6.8	2.9
PROPANE	---	2.9	0.5
N-BUTANE	---	0.8	0.1
ISOBUTANE	---	0.5	TRACE
N-PENTANE	---	0.1	0.1
ISOPENTANE	---	0.3	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	0.7	2.7	0.4
OXYGEN	0.3	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.3
HELIUM	0.03	0.04	0.01
HEATING VALUE*	1260	1128	1058
SPECIFIC GRAVITY	0.734	0.661	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12493 SAMPLE 17719	INDEX 12494 SAMPLE 16609	INDEX 12495 SAMPLE 16497
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	LA BARGE E	LA BARGE N	NEW FORK
WELL NAME	EAST LA BARGE NO. 40-32	N LA BARGE UNIT NO. 27-17	NEW FORK NO. 1
LOCATION	SEC. 32, T27N, R112W	SEC. 17, T27N, R113W	SEC. 25, T30N, R108W
OWNER	BELNORTH PETROLEUM CORP.	BELCO PETROLEUM CORP.	AMERICAN HUNTER EXP. CO.
COMPLETED	11/16/84	08/20/80	04/14/82
SAMPLED	--/--/00	08/10/82	04/14/82
FORMATION	CRET-MESAVERDE	CRET-FRONTIER 1ST & 2ND	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2489	6301	10812
WELLHEAD PRESSURE,PSIG	1143	1100	NOT GIVEN
OPEN FLOW, MCFD	4358	1756	1476
COMPONENT, MOLE PCT			
METHANE	88.0	91.3	79.6
ETHANE	5.7	4.9	4.4
PROPANE	2.9	1.5	5.0
N-BUTANE	0.6	0.4	3.7
ISOBUTANE	0.2	0.2	1.9
N-PENTANE	0.1	0.1	0.7
ISOPENTANE	0.2	0.2	0.8
CYCLOPENTANE	TRACE	0.1	0.4
HEXANES PLUS	0.1	0.1	0.7
NITROGEN	1.2	0.7	0.6
OXYGEN	0.1	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.0
HELIUM	0.02	0.02	TRACE
HEATING VALUE*	1137	1094	1386
SPECIFIC GRAVITY	0.650	0.618	0.798

	INDEX 12496 SAMPLE 16606	INDEX 12497 SAMPLE 16605	INDEX 12498 SAMPLE 10096
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	OTE CREEK	PINE GROVES	PINEDALE
WELL NAME	OTE CREEK NO. 3-8	FOGARTY CREEK UNIT NO. 8-20	PINEDALE UNIT NO. 8
LOCATION	SEC. 8, T32N, R114W	SEC. 8, T28N, R114W	SEC. 20, T33N, R109W
OWNER	BELCO PETROLEUM CORP.	BELCO PETROLEUM CORP.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	10/30/80	01/13/78	01/06/64
SAMPLED	08/10/82	08/10/82	08/27/65
FORMATION	CRET-MESAVERDE	CRET-FRONTIER 2ND	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5174	7967	7275
WELLHEAD PRESSURE,PSIG	1100	660	5250
OPEN FLOW, MCFD	129	827	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.5	90.0	93.4
ETHANE	7.4	5.0	4.4
PROPANE	3.9	1.9	0.8
N-BUTANE	0.9	0.5	0.1
ISOBUTANE	1.6	0.3	0.3
N-PENTANE	0.5	0.1	TRACE
ISOPENTANE	0.5	0.3	0.1
CYCLOPENTANE	0.2	0.2	TRACE
HEXANES PLUS	0.4	0.2	TRACE
NITROGEN	1.0	1.3	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.03	0.04	0.01
HEATING VALUE*	1226	1113	1063
SPECIFIC GRAVITY	0.702	0.634	0.596

	INDEX 12499 SAMPLE 8208	INDEX 12500 SAMPLE 8349	INDEX 12501 SAMPLE 12296
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	TIP TOP 22-19G	TIP TOP 22-19G	HOBACK II UNIT, NO. 2
LOCATION	SEC. 19, T28N, R113W	SEC. 19, T28N, R113W	SEC. 15, T28N, R115W
OWNER	MOBIL OIL CO.	MOBIL OIL CO.	HUMBLE OIL & REFINING CO.
COMPLETED	12/19/61	--/--/00	06/11/70
SAMPLED	09/19/61	12/28/61	06/14/70
FORMATION	PENN-TENSLEEP	ORDO-BIGHORN	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12878	15095	15750
WELLHEAD PRESSURE,PSIG	5098	6790	1500
OPEN FLOW, MCFD	336	9800	70
COMPONENT, MOLE PCT			
METHANE	26.3	6.7	25.8
ETHANE	0.1	0.1	0.2
PROPANE	TRACE	0.2	0.0
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	8.4	6.5	9.0
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	3.9
CARBON DIOXIDE	64.2	85.5	60.4
HELIUM	0.75	0.80	0.64
HEATING VALUE*	268	78	290
SPECIFIC GRAVITY	1.213	1.416	1.204

	INDEX 12502 SAMPLE 12537	INDEX 12503 SAMPLE 15731	INDEX 12504 SAMPLE 15732
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	HOBACK II UNIT, NO. 2	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G
LOCATION	SEC. 15, T28N, R115W	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W
OWNER	HUMBLE OIL & REFINING CO.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	07/08/70	08/01/79	08/01/79
FORMATION	CRET-MOWRY	ORDO-BIGHORN	ORDO-BIGHORN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8687	15153	15153
WELLHEAD PRESSURE,PSIG	2580	2578	2578
OPEN FLOW, MCFD	660	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.0	7.3	10.0
ETHANE	7.0	TRACE	TRACE
PROPANE	4.1	0.0	0.0
N-BUTANE	1.1	0.0	0.0
ISOBUTANE	0.9	0.0	0.0
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.9	0.0	0.0
CYCLOPENTANE	0.4	0.0	0.0
HEXANES PLUS	0.8	0.0	0.0
NITROGEN	2.5	7.7	10.7
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE**	0.0	1.6	1.2
CARBON DIOXIDE	0.1	82.2	76.6
HELIUM	0.05	0.92	1.32
HEATING VALUE*	1237	85	109
SPECIFIC GRAVITY	0.721	1.394	1.348

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12505 SAMPLE 15733	INDEX 12506 SAMPLE 15734	INDEX 12507 SAMPLE 15735
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G
LOCATION	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/22/79	08/17/79	08/17/79
FORMATION	MISS-MADISON	MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14335	14335	14335
WELLHEAD PRESSURE,PSIG	3120	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.6	22.8	22.8
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	8.0	7.7	7.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	5.7	6.4	6.4
CARBON DIOXIDE	62.5	62.7	63.4
HELIUM	0.61	0.59	0.51
HEATING VALUE*	277	271	266
SPECIFIC GRAVITY	1.227	1.234	1.243

	INDEX 12508 SAMPLE 15736	INDEX 12509 SAMPLE 15737	INDEX 12510 SAMPLE 15751
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G
LOCATION	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/07/79	08/07/79	09/08/79
FORMATION	DEVO-DARBY	DEVO-DARBY	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14818	14818	12767
WELLHEAD PRESSURE,PSIG	2962	2962	3145
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	19.4	19.4	23.2
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.9	7.9	8.5
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	4.6	4.5	5.2
CARBON DIOXIDE	67.6	67.3	62.4
HELIUM	0.66	0.66	0.62
HEATING VALUE*	288	287	270
SPECIFIC GRAVITY	1.270	1.270	1.229

	INDEX 12511 SAMPLE 15752	INDEX 12512 SAMPLE 15753	INDEX 12513 SAMPLE 15755
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G
LOCATION	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/07/79	09/07/79	09/04/79
FORMATION	PERM-PHOSPHORIA	PERM-PHOSPHORIA	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12774	12774	13006
WELLHEAD PRESSURE,PSIG	3155	3155	3145
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.6	23.8	23.6
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.8	8.0	8.0
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	6.2	6.2	2.0
CARBON DIOXIDE	61.6	61.3	65.7
HELIUM	0.62	0.63	0.62
HEATING VALUE*	281	285	254
SPECIFIC GRAVITY	1.225	1.224	1.240

	INDEX 12514 SAMPLE 15756	INDEX 12515 SAMPLE 15757	INDEX 12516 SAMPLE 15758
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G
LOCATION	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	09/06/79	09/06/79	09/04/79
FORMATION	PERM-PHOSPHORIA	PERM-PHOSPHORIA	PERM-PHOSPHORIA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12842	12842	13006
WELLHEAD PRESSURE,PSIG	3147	3147	3145
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	23.2	21.7	23.0
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.8	7.2	7.7
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	6.3	6.8	6.4
CARBON DIOXIDE	61.9	63.5	62.1
HELIUM	0.65	0.64	0.57
HEATING VALUE*	277	265	276
SPECIFIC GRAVITY	1.229	1.245	1.231

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12517 SAMPLE 15759	INDEX 12518 SAMPLE 15760	INDEX 12519 SAMPLE 15802
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G
LOCATION	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	08/27/79	08/27/79	10/11/79
FORMATION	PENN-TENSLEEP	PENN-TENSLEEP	-COMMINGLED DEEP ZONES
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	13084	13084	12760
WELLHEAD PRESSURE,PSIG	3145	3145	3120
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	6834
COMPONENT, MOLE PCT			
METHANE	22.8	22.7	22.3
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.7	7.7	7.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	6.7	6.7	5.8
CARBON DIOXIDE	62.2	62.2	63.3
HELIUM	0.56	0.56	0.61
HEATING VALUE*	275	275	265
SPECIFIC GRAVITY	1.234	1.234	1.239

	INDEX 12520 SAMPLE 15803	INDEX 12521 SAMPLE 15830	INDEX 12522 SAMPLE 15831
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G	TIP TOP UNIT F14-13G
LOCATION	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W	SEC. 13, T28N, R114W
OWNER	MOBIL OIL CORP.	MOBIL OIL CORP.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	10/11/79	10/26/79	10/26/79
FORMATION	-COMMINGLED DEEP ZONES	MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12760	13904	13904
WELLHEAD PRESSURE,PSIG	3120	3300	3300
OPEN FLOW, MCFD	6834	7200	7200
COMPONENT, MOLE PCT			
METHANE	22.2	24.0	23.3
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.7	10.6	9.6
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	5.9	5.5	6.1
CARBON DIOXIDE	63.9	59.2	60.2
HELIUM	0.61	0.52	0.59
HEATING VALUE*	264	263	277
SPECIFIC GRAVITY	1.239	1.208	1.218

	INDEX 12523 SAMPLE 16082	INDEX 12524 SAMPLE 16083	INDEX 12525 SAMPLE 16100
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	RILEY RIDGE-FED. NO. 8-24	RILEY RIDGE-FED. NO. 8-24	TIP TOP T5a-2G
LOCATION	SEC. 8, T29N, R114W	SEC. 8, T29N, R114W	SEC. 2, T28N, R114W
OWNER	AMERICAN QUASAR PET. CO.	AMERICAN QUASAR PET. CO.	MOBIL OIL CORP.
COMPLETED	--/--/00	--/--/00	10/07/80
SAMPLED	09/24/80	09/24/80	10/13/80
FORMATION	MISS-MADISON	MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14437	14437	14627
WELLHEAD PRESSURE,PSIG	3050	3050	2910
OPEN FLOW, MCFD	150000	150000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	19.4	18.8	18.7
ETHANE	0.1	0.1	0.1
PROPANE	0.0	0.0	0.1
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.3	7.5	7.3
OXYGEN	0.0	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	4.2	3.7	3.5
CARBON DIOXIDE	68.4	69.4	69.7
HELIUM	0.54	0.56	0.59
HEATING VALUE*	215	216	216
SPECIFIC GRAVITY	1.277	1.284	1.288

	INDEX 12526 SAMPLE 16560	INDEX 12527 SAMPLE 16564	INDEX 12528 SAMPLE 16645
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SUBLETTE	SUBLETTE
FIELD	RILEY RIDGE	RILEY RIDGE	RILEY RIDGE
WELL NAME	FOGARTY CREEK UNIT NO. 11-24	RILEY RIDGE-FED. NO. 12-43	RILEY RIDGE N FED. NO. 33-24
LOCATION	SEC. 24, T28N, R115W	SEC. 12, T29N, R115W	SEC. 33, T30N, R114W
OWNER	EXXON CO., U.S.A.	AMERICAN QUASAR PET. CO.	AMERICAN QUASAR PET. CO.
COMPLETED	08/09/82	--/--/00	--/--/00
SAMPLED	08/24/82	05/05/82	08/26/82
FORMATION	DRDO-BIGHORN	MISS-MADISON	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	17316	14480	15893
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4280	NOT GIVEN
OPEN FLOW, MCFD	9950	9866	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	5.8	17.2	14.4
ETHANE	TRACE	TRACE	TRACE
PROPANE	0.0	TRACE	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	4.6	7.2	6.5
OXYGEN	0.1	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	1.6	0.1	2.2
CARBON DIOXIDE	87.2	72.8	76.2
HELIUM	0.63	0.60	0.56
HEATING VALUE*	69	184	160
SPECIFIC GRAVITY	1.432	1.285	1.337

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12529 SAMPLE 8978		INDEX 12530 SAMPLE 17091		INDEX 12531 SAMPLE 5599	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SUBLETTE		SUBLETTE	
FIELD	STAR CORRAL		STAR CORRAL		TIP TOP	
WELL NAME	STAR CORRAL NO. 1		JOHNSON RIDGE NO. 6		TIP TOP 18-20	
LOCATION	SEC. 16, T30N, R113W		SEC. 20, T30N, R113W		SEC. 20, T28N, R113W	
OWNER	BELCO PETROLEUM CORP.		WEXPRO CO.		GENERAL PETROLEUM CORP.	
COMPLETED	08/18/61		07/14/82		03/01/54	
SAMPLED	05/29/63		10/12/83		02/27/54	
FORMATION	PALE-ALMY		CRET-MESAVERDE		CRET-FRONTIER	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	4505		3106		6660	
WELLHEAD PRESSURE,PSIG	409		1200		3150	
OPEN FLOW, MCFD	1204		NOT GIVEN		1900	
COMPONENT, MOLE PCT						
METHANE	86.4		84.5		87.1	
ETHANE	5.0		7.8		7.2	
PROPANE	2.6		3.1		3.0	
N-BUTANE	0.7		0.7		0.5	
ISOBUTANE	0.9		0.8		0.4	
N-PENTANE	0.1		0.2		0.2	
ISOPENTANE	0.2		0.2		0.3	
CYCLOPENTANE	TRACE		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	3.5		2.0		0.9	
OXYGEN	0.2		0.2		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		TRACE		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.3		0.1	
HELIUM	0.10		0.03		0.02	
HEATING VALUE*	1104		1149		1155	
SPECIFIC GRAVITY	0.653		0.669		0.655	

	INDEX 12532 SAMPLE 15343		INDEX 12533 SAMPLE 13083		INDEX 12534 SAMPLE 9413	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SUBLETTE		SWEETWATER		SWEETWATER	
FIELD	TIP TOP		ANTELOPE		BAXTER BASIN N	
WELL NAME	TIP TOP F44-7G		FED. A NO. 1		UPRR NO. 1-7	
LOCATION	SEC. 7, T28N, R113W		SEC. 24, T13N, R100W		SEC. 7, T18N, R103W	
OWNER	MOBIL OIL CORP.		SKELLY OIL CO.		UNION PACIFIC RAILROAD CO.	
COMPLETED	06/10/78		06/16/71		10/19/59	
SAMPLED	08/10/78		10/10/71		06/17/64	
FORMATION	CRET-FRONTIER		CRET-ALMOND		CRET-FRONTIER & DAKOTA	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	6372		5963		2981	
WELLHEAD PRESSURE,PSIG	2640		1350		350	
OPEN FLOW, MCFD	9707		15000		800	
COMPONENT, MOLE PCT						
METHANE	77.3		98.3		94.8	
ETHANE	7.5		0.0		1.9	
PROPANE	5.7		0.0		0.4	
N-BUTANE	3.4		0.0		0.0	
ISOBUTANE	2.0		0.0		0.0	
N-PENTANE	0.7		0.0		0.0	
ISOPENTANE	1.6		0.0		0.0	
CYCLOPENTANE	0.2		0.0		0.0	
HEXANES PLUS	0.5		0.0		0.0	
NITROGEN	1.0		1.5		1.3	
OXYGEN	TRACE		0.1		0.0	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	TRACE		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		0.1		1.5	
HELIUM	0.01		0.04		0.10	
HEATING VALUE*	1379		996		1005	
SPECIFIC GRAVITY	0.795		0.562		0.587	

	INDEX 12535 SAMPLE 2108		INDEX 12536 SAMPLE 2123		INDEX 12537 SAMPLE 2146	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	BAXTER BASIN N		BAXTER BASIN N		BAXTER BASIN N	
WELL NAME	ARNOLD NO. 1		UNION PACIFIC NO. 1		UNION PACIFIC NO. 1	
LOCATION	SEC. 24, T19N, R104W		SEC. 11, T19N, R104W		SEC. 11, T19N, R104W	
OWNER	MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.	
COMPLETED	08/26/29		11/01/26		11/01/26	
SAMPLED	09/02/30		09/06/30		09/12/30	
FORMATION	JURA-SUNDANCE		CRET-DAKOTA		CRET-FRONTIER	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	3504		2920		2391	
WELLHEAD PRESSURE,PSIG	200		1325		NOT GIVEN	
OPEN FLOW, MCFD	3800		15000		10000	
COMPONENT, MOLE PCT						
METHANE	98.4		96.2		89.8	
ETHANE	0.0		0.3		0.7	
PROPANE	---		---		---	
N-BUTANE	---		---		---	
ISOBUTANE	---		---		---	
N-PENTANE	---		---		---	
ISOPENTANE	---		---		---	
CYCLOPENTANE	---		---		---	
HEXANES PLUS	---		---		---	
NITROGEN	0.6		2.3		9.2	
OXYGEN	0.0		0.7		0.1	
ARGON	---		---		---	
HYDROGEN	---		---		---	
HYDROGEN SULFIDE**	---		---		---	
CARBON DIOXIDE	1.5		0.5		0.2	
HELIUM	0.09		0.06		0.04	
HEATING VALUE*	997		980		922	
SPECIFIC GRAVITY	0.569		0.574		0.598	

	INDEX 12538 SAMPLE 8407		INDEX 12539 SAMPLE 8478		INDEX 12540 SAMPLE 13516	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	BAXTER BASIN N		BAXTER BASIN N		BAXTER BASIN N	
WELL NAME	UNION PACIFIC 11-19-104 NO.4		UNION PACIFIC NO. 4		CHAMPLIN NO. 104 NO. 1	
LOCATION	SEC. 11, T19N, R104W		SEC. 11, T19N, R104W		SEC. 7, T20N, R103W	
OWNER	MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.		AMOCO PRODUCTION CO.	
COMPLETED	--/--/00		--/--/00		12/01/71	
SAMPLED	02/05/62		03/19/62		01/--/73	
FORMATION	PENN-WEBER		PENN-MORGAN		JURA-MORRISON	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	6214		7507		4158	
WELLHEAD PRESSURE,PSIG	2770		3396		1700	
OPEN FLOW, MCFD	8170		5862		7800	
COMPONENT, MOLE PCT						
METHANE	1.5		1.6		95.4	
ETHANE	0.1		0.1		2.6	
PROPANE	0.1		0.1		0.6	
N-BUTANE	TRACE		TRACE		0.1	
ISOBUTANE	0.1		0.0		0.1	
N-PENTANE	0.0		TRACE		0.1	
ISOPENTANE	0.0		0.0		TRACE	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	TRACE		0.2		TRACE	
NITROGEN	21.8		14.2		0.8	
OXYGEN	1.6		0.1		TRACE	
ARGON	0.2		0.1		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.2		0.7		0.0	
CARBON DIOXIDE	72.1		82.0		0.1	
HELIUM	0.36		0.64		0.03	
HEATING VALUE*	20		39		1040	
SPECIFIC GRAVITY	1.370		1.423		0.581	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12541 SAMPLE 15023	INDEX 12542 SAMPLE 918	INDEX 12543 SAMPLE 951
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN N	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	CHAMPLIN NO. 4-11	NO. 1	NO. 29
LOCATION	SEC. 11, T19N, R103W	SEC. 36, T17N, R104W	SEC. 36, T16, R104
OWNER	CHANDLER & ASSOCIATES, INC.	PRODUCERS & REFINERS CORP.	MIDWEST REFINING CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/14/77	08/12/24	12/24/24
FORMATION	NOT GIVEN	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	3422	1728
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	800
OPEN FLOW, MCFD	NOT GIVEN	25000	4000
COMPONENT, MOLE PCT			
METHANE	97.3	69.0	92.4
ETHANE	1.8	3.6	3.5
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.4	23.8	1.1
OXYGEN	0.0	0.2	0.3
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE**	0.0	---	---
CARBON DIOXIDE	0.4	3.4	2.5
HELIUM	0.03	0.97	0.09
HEATING VALUE*	1020	763	999
SPECIFIC GRAVITY	0.570	0.691	0.601

	INDEX 12544 SAMPLE 1143	INDEX 12545 SAMPLE 2147	INDEX 12546 SAMPLE 2148
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	NO. 2	POSTEN NO. 2	MURPHY NO. 1
LOCATION	SEC. 13, T17N, R104W	SEC. 32, T16N, R104W	SEC. 26, T17N, R104W
OWNER	PRODUCERS & REFINERS CORP.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	04/--/25	11/02/28	11/04/29
SAMPLED	08/26/25	09/16/30	09/15/30
FORMATION	CRET-DAKOTA	CRET-FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	19	2365	3410
WELLHEAD PRESSURE,PSIG	735	810	810
OPEN FLOW, MCFD	22500	7000	33000
COMPONENT, MOLE PCT			
METHANE	68.2	92.8	70.9
ETHANE	6.4	4.2	1.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.1	2.0	26.0
OXYGEN	0.8	0.1	0.0
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.8	0.8	1.1
HELIUM	0.77	0.08	0.90
HEATING VALUE*	805	1015	738
SPECIFIC GRAVITY	0.702	0.591	0.674

	INDEX 12547 SAMPLE 3034	INDEX 12548 SAMPLE 3035	INDEX 12549 SAMPLE 3036
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	U.P.R.R. NO. 1	U.P.R.R. NO. 1	POSTEN NO. 2
LOCATION	SEC. 11, T17N, R104W	SEC. 23, T17N, R104W	SEC. 22, T16N, R104W
OWNER	MOUNTAIN FUEL SUPPLY CO.	WYOMING CALIFORNIA PET. CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	--/--/27	--/--/00	--/--/22
SAMPLED	12/02/41	12/02/41	12/02/41
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2418	3283	2805
WELLHEAD PRESSURE,PSIG	680	865	520
OPEN FLOW, MCFD	23500	7000	63000
COMPONENT, MOLE PCT			
METHANE	88.5	76.0	75.1
ETHANE	1.4	1.7	0.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.1	19.2	20.7
OXYGEN	0.1	0.3	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.6	2.1	2.3
HELIUM	0.26	0.31	0.79
HEATING VALUE*	922	800	777
SPECIFIC GRAVITY	0.615	0.651	0.664

	INDEX 12550 SAMPLE 3037	INDEX 12551 SAMPLE 3038	INDEX 12552 SAMPLE 3039
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	STATE NO. 1	JOE HAY NO. 1	HALLETT NO. 2
LOCATION	SEC. 16, T16N, R104W	SEC. 26, T17N, R104W	SEC. 24, T17N, R104W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	WYOMING CALIFORNIA PET. CO.
COMPLETED	--/--/22	08/--/30	--/--/39
SAMPLED	12/02/41	12/02/41	12/02/41
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2475	1540	3098
WELLHEAD PRESSURE,PSIG	625	737	735
OPEN FLOW, MCFD	18000	1,000	4800
COMPONENT, MOLE PCT			
METHANE	79.7	76.6	76.4
ETHANE	1.3	0.5	0.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	18.9	19.9	20.6
OXYGEN	0.1	0.0	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.7	2.9	1.4
HELIUM	0.74	0.72	0.72
HEATING VALUE*	805	767	783
SPECIFIC GRAVITY	0.659	0.658	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12553 SAMPLE 3040	INDEX 12554 SAMPLE 3041	INDEX 12555 SAMPLE 3042
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BAXTER BASIN S
WELL NAME	U.P.R.R. NO. 2	U.P.R.R. NO. 1	PAT SULLIVAN NO. 1
LOCATION	SEC. 23, T17N, R104W	SEC. 21, T16N, R104W	SEC. 12, T16N, R104W
OWNER	WYOMING CALIFORNIA PET. CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	11/--/33	09/--/23	06/--/30
SAMPLED	12/02/41	12/02/41	12/02/41
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3570	2905	2620
WELLHEAD PRESSURE,PSIG	655	650	500
OPEN FLOW, MCFD	23000	65000	12000
COMPONENT, MOLE PCT			
METHANE	73.5	75.6	74.7
ETHANE	1.4	1.3	0.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	21.2	19.4	21.5
OXYGEN	0.6	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	2.5	2.7	2.3
HELIUM	0.76	0.75	0.83
HEATING VALUE*	778	788	767
SPECIFIC GRAVITY	0.673	0.665	0.686

	INDEX 12556 SAMPLE 3769	INDEX 12557 SAMPLE 6779	INDEX 12558 SAMPLE 17226
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BAXTER BASIN S	BAXTER BASIN S	BIRD CANYON
WELL NAME	UNIT WELL NO. 1	FED. NO. 4-8	MAUN-FED. NO. 40-9
LOCATION	SEC. 21, T16N, R104W	SEC. 8, T15N, 104W	SEC. 9, T26N, R111W
OWNER	MOUNTAIN FUEL SUPPLY CO.	CAULKINS OIL CO.	ENERGETICS, INC.
COMPLETED	11/01/43	--/--/00	08/17/83
SAMPLED	04/01/44	08/07/58	03/29/84
FORMATION	CRET-DAKOTA	CRET-LAKOTA	CRET-BEAR RIVER & FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	2818	NOT GIVEN	9204
WELLHEAD PRESSURE,PSIG	640	NOT GIVEN	500
OPEN FLOW, MCFD	3000	NOT GIVEN	280
COMPONENT, MOLE PCT			
METHANE	76.6	91.6	88.0
ETHANE	1.7	3.9	5.6
PROPANE	---	1.5	2.5
N-BUTANE	---	0.5	0.9
ISOBUTANE	---	0.0	0.4
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.3	0.4
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	18.3	0.9	1.8
OXYGEN	0.5	TRACE	TRACE
ARGON	---	0.0	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	2.2	2.0	0.4
HELIUM	0.73	0.04	0.01
HEATING VALUE*	806	1065	1132
SPECIFIC GRAVITY	0.660	0.623	0.652

	INDEX 12559 SAMPLE 8826	INDEX 12560 SAMPLE 13552	INDEX 12561 SAMPLE 14110
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BITTER CREEK	BRADY DEEP UNIT	BRADY DEEP UNIT
WELL NAME	BITTER CREEK 36 NO. 3	BRADY UNIT 41-2 NO. 2	BRADY UNIT NO. 6 D
LOCATION	SEC. 36, T17N, R99W	SEC. 2, T16N, R101W	SEC. 2, T15W, R101W
OWNER	CONTINENTAL OIL CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	01/09/63	--/--/00	--/--/00
SAMPLED	01/05/63	03/01/73	--/--/00
FORMATION	CRET-LANCE	PENN-WEBER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7844	13825	11116
WELLHEAD PRESSURE,PSIG	1526	NOT GIVEN	3291
OPEN FLOW, MCFD	17	NOT GIVEN	3500
COMPONENT, MOLE PCT			
METHANE	79.5	76.2	92.4
ETHANE	9.5	8.4	3.2
PROPANE	4.4	4.2	0.8
N-BUTANE	1.3	1.5	0.2
ISOBUTANE	1.2	1.2	0.2
N-PENTANE	0.3	0.5	0.1
ISOPENTANE	0.8	0.9	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.4	0.9	0.1
NITROGEN	0.6	0.9	2.0
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.0	0.7
HELIUM	0.01	0.20	0.02
HEATING VALUE*	1245	1195	1045
SPECIFIC GRAVITY	0.736	0.736	0.608

	INDEX 12562 SAMPLE 14595	INDEX 12563 SAMPLE 14596	INDEX 12564 SAMPLE 14597
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP UNIT	BRADY DEEP UNIT	BRADY DEEP UNIT
WELL NAME	BRADY NO. 3W	BRADY NO. 9N	BRADY NO. 5N
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/26/76	02/27/76	02/27/76
FORMATION	PENN-WEBER	JURA-NUGGET	JURA-NUGGET
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14400	12600	12000
WELLHEAD PRESSURE,PSIG	2800	1000	1000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.0	5.1	6.6
ETHANE	9.8	0.6	0.5
PROPANE	2.3	2.6	2.8
N-BUTANE	0.5	2.5	2.4
ISOBUTANE	0.5	1.9	1.9
N-PENTANE	0.1	0.9	0.5
ISOPENTANE	0.2	1.2	1.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.9	0.5
NITROGEN	6.9	80.4	80.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.2	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.3	0.1
CARBON DIOXIDE	26.4	74.2	73.9
HELIUM	0.15	0.23	0.25
HEATING VALUE*	793	430	413
SPECIFIC GRAVITY	0.916	1.474	1.463

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12565 SAMPLE 14598	INDEX 12566 SAMPLE 14599	INDEX 12567 SAMPLE 14600
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP UNIT	BRADY DEEP UNIT	BRADY DEEP UNIT
WELL NAME	BRADY NO. 2W	BRADY NO. 16W	BRADY NO. 13W
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/26/76	02/26/76	02/26/76
FORMATION	PENN-WEBER	PENN-WEBER	PENN-WEBER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	14400	14400	14400
WELLHEAD PRESSURE,PSIG	2800	2800	2800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.3	55.3	57.3
ETHANE	6.0	6.2	6.2
PROPANE	2.8	2.8	2.8
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.6	0.7	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.4	0.2	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	5.3	5.2	5.6
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.5	0.5	1.1
CARBON DIOXIDE	24.8	27.6	24.7
HELIUM	0.14	0.15	0.15
HEATING VALUE*	849	820	845
SPECIFIC GRAVITY	0.920	0.938	0.916

	INDEX 12568 SAMPLE 14601	INDEX 12569 SAMPLE 14602	INDEX 12570 SAMPLE 14603
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP UNIT	BRADY DEEP UNIT	BRADY DEEP UNIT
WELL NAME	BRADY NO. 20D	BRADY NO. 31N	BRADY NO. 11W
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	02/26/76	02/26/76	02/26/76
FORMATION	CRET-DAKOTA	JURA-NUGGET	PENN-WEBER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11400	12600	14400
WELLHEAD PRESSURE,PSIG	3200	1100	2800
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.4	7.8	54.4
ETHANE	5.2	0.6	6.0
PROPANE	0.9	2.8	2.9
N-BUTANE	0.2	2.9	0.7
ISOBUTANE	0.2	1.7	0.8
N-PENTANE	0.0	0.3	0.1
ISOPENTANE	0.1	1.6	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	0.3	12.2	5.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.2	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	1.1
CARBON DIOXIDE	0.6	69.6	27.5
HELIUM	0.02	0.34	0.17
HEATING VALUE*	1075	410	814
SPECIFIC GRAVITY	0.607	1.427	0.943

	INDEX 12571 SAMPLE 14606	INDEX 12572 SAMPLE 14607	INDEX 12573 SAMPLE 16151
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRADY DEEP UNIT	BRADY DEEP UNIT	BRUFF
WELL NAME	BRADY NO. 8N	BRADY NO. 1W	GOVT. R. M. DONLEY NO. 1
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 2, T18N, R112W
OWNER	CHAMPLIN PETROLEUM CO.	CHAMPLIN PETROLEUM CO.	TEXACO INC.
COMPLETED	--/--/00	--/--/00	08/18/80
SAMPLED	02/27/76	02/26/76	12/15/80
FORMATION	JURA-NUGGET	PENN-WEBER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12600	14400	12030
WELLHEAD PRESSURE,PSIG	1000	2800	5400
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	10240
COMPONENT, MOLE PCT			
METHANE	7.6	55.4	88.1
ETHANE	0.7	6.2	6.7
PROPANE	2.7	2.8	2.1
N-BUTANE	2.1	1.0	0.4
ISOBUTANE	1.5	0.8	0.4
N-PENTANE	0.5	0.3	0.1
ISOPENTANE	1.2	1.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.7	6.0	0.8
OXYGEN	0.0	0.1	TRACE
ARGON	0.2	0.1	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.1	0.9	0.0
CARBON DIOXIDE	72.3	25.8	0.7
HELIUM	0.27	0.14	0.01
HEATING VALUE*	161	839	1121
SPECIFIC GRAVITY	1.426	0.935	0.642

	INDEX 12574 SAMPLE 16161	INDEX 12575 SAMPLE 16197	INDEX 12576 SAMPLE 17225
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BRUFF	BRUFF	BLACKHORN CANYON
WELL NAME	A. M. TRIPP NO. 1	CHAMPLIN NO. 149-J	LITTLE MONUMENT U.II NO30-11
LOCATION	SEC. 14, T19N, R112W	SEC. 11, T19N, R112W	SEC. 11, T25N, R111W
OWNER	TEXACO INC.	AMOCO PRODUCTION CO.	ENERGETICS, INC.
COMPLETED	07/31/80	09/30/80	06/15/83
SAMPLED	01/05/81	02/17/81	01/29/84
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11332	11424	9355
WELLHEAD PRESSURE,PSIG	5600	1250	850
OPEN FLOW, MCFD	2250	4027	137
COMPONENT, MOLE PCT			
METHANE	88.4	88.3	92.6
ETHANE	7.9	6.8	3.8
PROPANE	1.8	1.3	1.2
N-BUTANE	0.3	0.2	0.3
ISOBUTANE	0.2	0.2	0.1
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.1	0.5	0.1
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.4	0.1
NITROGEN	0.6	1.3	1.1
OXYGEN	TRACE	0.3	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1118	1113	1068
SPECIFIC GRAVITY	0.635	0.642	0.607

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12577 SAMPLE 15870	INDEX 12578 SAMPLE 15901	INDEX 12579 SAMPLE 16169
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	BUSH LAKE	CAMEL ROCK	CAMEL ROCK
WELL NAME	FED. G NO. 1	AMOCO-CHAMPLIN NO. 33-34	FEDERAL NO. 21-4
LOCATION	SEC. 28, T25N, R96W	SEC. 33, T18N, R102W	SEC. 4, T17N, R102W
OWNER	TEXAS OIL & GAS CORP.	HOUSTON OIL & MINERALS CORP.	HOUSTON OIL & MINERALS CORP.
COMPLETED	06/29/78	11/27/79	08/15/80
SAMPLED	12/18/79	02/08/80	01/12/81
FORMATION	CRET-ALMOND	CRET-FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12750	5138	5617
WELLHEAD PRESSURE,PSIG	7700	1750	1525
OPEN FLOW, MCFD	2100	7062	2103
COMPONENT, MOLE PCT			
METHANE	92.9	87.1	59.1
ETHANE	0.8	5.3	3.5
PROPANE	0.1	1.3	1.6
N-BUTANE	0.0	0.2	0.4
ISOBUTANE	0.0	0.1	0.3
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.4	5.0	30.1
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.7	0.3	3.5
HELIUM	TRACE	0.43	0.76
HEATING VALUE*	958	1021	760
SPECIFIC GRAVITY	0.617	0.618	0.762

	INDEX 12580 SAMPLE 16398	INDEX 12581 3048	INDEX 12582 8993
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	CAMEL ROCK	CANYON CREEK	CANYON CREEK
WELL NAME	FEDERAL NO. 21-4	NO. 1	UNIT NO. 3
LOCATION	SEC. 4, T17N, R102W	SEC. 10, T12N, R101W	SEC. 3, T12N, R101W
OWNER	TENNECO OIL EXPL. & PROD. CO	WEST STATES OIL CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	06/18/80	08/--/41	07/24/62
SAMPLED	12/16/81	11/27/41	05/31/63
FORMATION	CRET-DAKOTA	EOCE-WASATCH	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5000	2680	6431
WELLHEAD PRESSURE,PSIG	1650	1075	1855
OPEN FLOW, MCFD	2000	750	6360
COMPONENT, MOLE PCT			
METHANE	59.3	88.4	88.5
ETHANE	3.4	10.8	5.7
PROPANE	1.7	---	2.1
N-BUTANE	0.4	---	0.6
ISOBUTANE	0.3	---	0.3
N-PENTANE	0.1	---	0.1
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.1	---	0.1
HEXANES PLUS	0.2	---	0.3
NITROGEN	30.0	0.6	0.2
OXYGEN	0.2	0.1	0.0
ARGON	0.5	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE**	0.5	---	0.0
CARBON DIOXIDE	3.2	0.1	2.0
HELIUM	0.78	0.04	0.01
HEATING VALUE*	752	1089	1115
SPECIFIC GRAVITY	0.764	0.612	0.653

	INDEX 12583 SAMPLE 6062	INDEX 12584 17780	INDEX 12585 14561
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	CHIMNEY ROCK	CHURCH BUTTES	DEADMAN WASH
WELL NAME	GOVT. NO. 1	UNIT NO. 31	CHAMPLIN 195 AMOCO NO. A-1
LOCATION	SEC. 12, T18N, R102W	SEC. 21, T16N, R112W	SEC. 5, T20N, R101W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MEXPRO CO.	AMOCO PRODUCTION CO.
COMPLETED	01/10/56	08/13/84	05/01/74
SAMPLED	05/16/56	07/19/85	01/15/76
FORMATION	CRET-ROCK SPRINGS	PENN-MORGAN	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	895	18086	7800
WELLHEAD PRESSURE,PSIG	264	8365	NOT GIVEN
OPEN FLOW, MCFD	5000	11160	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	97.2	43.5	97.9
ETHANE	1.7	5.4	1.0
PROPANE	0.2	1.2	0.1
N-BUTANE	0.1	0.5	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.4	7.5	0.3
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.1	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	6.2	0.0
CARBON DIOXIDE	0.1	29.5	0.6
HELIUM	0.02	0.23	0.01
HEATING VALUE*	1107	1149	1012
SPECIFIC GRAVITY	0.573	0.969	0.567

	INDEX 12586 SAMPLE 8821	INDEX 12587 14504	INDEX 12588 17699
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	DESERT SPRINGS	DESERT SPRINGS	DRIPPING ROCK
WELL NAME	DESERT SPRINGS I66-16-S	PLAYA UNIT NO. 2	LIEMER FEDERAL NO. 32-1
LOCATION	SEC. 16, T20N, R98W	SEC. 5, T20N, R98W	SEC. 32, T14N, R94W
OWNER	MOBIL OIL CO.	MESA PETROLEUM CO.	CELSIUS ENERGY CO.
COMPLETED	08/29/62	05/01/75	12/10/84
SAMPLED	12/21/62	10/15/75	06/06/85
FORMATION	CRET-ALMOND	CRET-LEWIS	CRET-FOX HILLS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5615	5866	10050
WELLHEAD PRESSURE,PSIG	1900	1150	2050
OPEN FLOW, MCFD	54000	3050	590
COMPONENT, MOLE PCT			
METHANE	89.0	88.2	79.4
ETHANE	5.1	6.1	10.1
PROPANE	1.2	1.7	4.2
N-BUTANE	0.5	0.3	1.0
ISOBUTANE	0.4	0.5	0.8
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.7	0.5	1.4
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.4	2.0	1.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1105	1101	1209
SPECIFIC GRAVITY	0.640	0.647	0.718

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12589 SAMPLE 17727		INDEX 12590 SAMPLE 16413		INDEX 12591 SAMPLE 17354	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	DRIPPING ROCK		ECHO SPRINGS		FABIAN DITCH	
WELL NAME	CEDAR BREAKS NO. 6-1		CHAMPLIN 254 AMOCO C NO. 1		STRANGE NO. 1-22	
LOCATION	SEC. 6, T13N, R99W		SEC. 21, T20N, R93W		SEC. 22, T22N, R112W	
OWNER	CELSIUS ENERGY CO.		AMOCO PRODUCTION CO.		TENNECO OIL EXPL. & PROD. CO	
COMPLETED	06/29/84		10/02/81		07/12/84	
SAMPLED	08/06/85		01/22/82		07/13/84	
FORMATION	CRET-ALMOND		CRET-ALMOND U		CRET-DAKOTA	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	13010		9804		12030	
WELLHEAD PRESSURE,PSIG	280		3950		4500	
OPEN FLOW, MCFD	1249		2519		305	
COMPONENT, MOLE PCT						
METHANE	94.5		86.9		81.0	
ETHANE	0.9		7.6		9.5	
PROPANE	0.1		2.1		3.1	
N-BUTANE	0.0		0.4		0.6	
ISOBUTANE	0.0		0.4		0.8	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	0.0		0.2		0.7	
CYCLOPENTANE	0.0		TRACE		0.3	
HEXANES PLUS	0.0		0.1		0.5	
NITROGEN	0.9		0.4		2.3	
OXYGEN	0.1		TRACE		0.9	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		1.8		0.6	
CARBON DIOXIDE	3.4		0.01		0.01	
HELIUM	TRACE		1116		1189	
HEATING VALUE*	976		0.653		0.704	
SPECIFIC GRAVITY	0.597					

	INDEX 12592 SAMPLE 15117		INDEX 12593 SAMPLE 15118		INDEX 12594 SAMPLE 1854	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	HAY RESERVOIR		HAY RESERVOIR		MIAWATHA	
WELL NAME	HAY RESERVOIR NO. 3		HAY RESERVOIR NO. 5		NENSEMGER NO. 1	
LOCATION	SEC. 27, T24N, R97W		SEC. 22, T24N, R97W		SEC. 13, T12N, R100W	
OWNER	DAVIS OIL CO.		DAVIS OIL CO.		MOUNTAIN FUEL SUPPLY CO.	
COMPLETED	08/23/76		04/08/77		09/19/29	
SAMPLED	09/30/77		09/30/77		11/13/29	
FORMATION	CRET-LEWIS		CRET-LEWIS		TERT-	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	9970		10152		2375	
WELLHEAD PRESSURE,PSIG	5800		5400		60	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		20000	
COMPONENT, MOLE PCT						
METHANE	80.4		85.8		70.8	
ETHANE	11.0		9.1		18.2	
PROPANE	4.6		2.7		---	
N-BUTANE	1.2		0.6		---	
ISOBUTANE	0.7		0.3		---	
N-PENTANE	0.2		0.2		---	
ISOPENTANE	0.3		0.1		---	
CYCLOPENTANE	0.1		TRACE		---	
HEXANES PLUS	0.2		0.1		---	
NITROGEN	0.5		0.1		10.2	
OXYGEN	0.0		0.0		0.8	
ARGON	TRACE		TRACE		---	
HYDROGEN	0.0		0.0		---	
HYDROGEN SULFIDE**	0.0		0.9		---	
CARBON DIOXIDE	1.0		0.9		0.1	
HELIUM	TRACE		TRACE		0.00	
HEATING VALUE*	1230		1151		1093	
SPECIFIC GRAVITY	0.711		0.657		0.693	

	INDEX 12595 SAMPLE 7217		INDEX 12596 SAMPLE 15613		INDEX 12597 SAMPLE 17229	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	HIAWATHA W		HIGGINS		HORN CANYON	
WELL NAME	HIAWATHA B NO. 1		HIGGINS NO. 7		BLUE FOREST UNIT NO. 30-5	
LOCATION	SEC. 24, T12N, R101W		SEC. 33, T18N, R98W		SEC. 5, T24N, R110W	
OWNER	SKELLY OIL CO.		CHAMPLIN PETROLEUM CO.		ENERGETICS, INC.	
COMPLETED	03/25/56		05/06/78		03/17/83	
SAMPLED	09/--/59		04/30/78		03/29/84	
FORMATION	CRET-LANCE		JURA-NUGGET		CRET-DAKOTA	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	4555		16030		11218	
WELLHEAD PRESSURE,PSIG	1675		4200		950	
OPEN FLOW, MCFD	3200		6000		832	
COMPONENT, MOLE PCT						
METHANE	93.6		93.5		86.1	
ETHANE	5.8		2.6		6.4	
PROPANE	0.8		0.5		3.6	
N-BUTANE	0.1		0.1		1.0	
ISOBUTANE	0.2		0.1		0.5	
N-PENTANE	TRACE		0.1		0.2	
ISOPENTANE	0.2		0.1		0.4	
CYCLOPENTANE	0.1		TRACE		0.1	
HEXANES PLUS	0.1		0.1		0.2	
NITROGEN	0.2		0.9		0.9	
OXYGEN	TRACE		TRACE		0.1	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.2		TRACE		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		2.0		0.5	
HELIUM	0.01		0.04		0.01	
HEATING VALUE*	1065		1027		1175	
SPECIFIC GRAVITY	0.601		0.605		0.675	

	INDEX 12598 SAMPLE 14377		INDEX 12599 SAMPLE 14616		INDEX 12600 SAMPLE 15001	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	KINNEY		KINNEY		LEUCITE HILLS	
WELL NAME	KINNEY UNIT NO. 1		KINNEY UNIT NO. 2		AMOCO CHAMPLIN NO. 1-1	
LOCATION	SEC. 18, T13N, R99W		SEC. 18, T13N, R99W		SEC. 1, T21N, R104W	
OWNER	MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.		KENNETH D. LUFF	
COMPLETED	08/29/75		10/01/75		12/25/77	
SAMPLED	05/22/75		02/25/76		05/19/77	
FORMATION	JURA-NUGGET		CRET-DAKOTA		CRET-FRONTIER	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	14722		14016		5584	
WELLHEAD PRESSURE,PSIG	4100		8745		600	
OPEN FLOW, MCFD	4000		2915		2800	
COMPONENT, MOLE PCT						
METHANE	93.1		96.0		89.9	
ETHANE	0.4		0.3		5.8	
PROPANE	TRACE		TRACE		2.0	
N-BUTANE	0.0		0.0		0.6	
ISOBUTANE	0.0		0.0		0.3	
N-PENTANE	0.0		0.0		0.2	
ISOPENTANE	0.0		0.0		0.2	
CYCLOPENTANE	0.0		0.0		TRACE	
HEXANES PLUS	0.0		0.0		0.1	
NITROGEN	4.0		0.5		0.8	
OXYGEN	0.0		0.0		0.0	
ARGON	TRACE		0.0		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	2.5		3.2		0.1	
HELIUM	0.08		0.01		0.02	
HEATING VALUE*	950		978		1119	
SPECIFIC GRAVITY	0.597		0.589		0.631	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12601 SAMPLE 15002	INDEX 12602 SAMPLE 16195	INDEX 12603 SAMPLE 17483
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	LEUCITE HILLS	LEUCITE HILLS	LEUCITE HILLS
WELL NAME	AMOCO CHAMPLIN NO. 1-5	AMOCO CHAMPLIN NO. 3-17	ANADARKO-FED. NO. B-32
LOCATION	SEC. 5, T21N, R103W	SEC. 17, T21N, R103W	SEC. 32, T22N, R103W
OWNER	KENNETH D. LUFF	LUFF EXPLORATION CO.	LUFF EXPLORATION CO.
COMPLETED	01/20/77	10/23/80	03/03/83
SAMPLED	05/19/77	02/27/81	10/10/84
FORMATION	CRET-FRONTIER	JURA-MORRISON	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6387	6620	6532
WELLHEAD PRESSURE,PSIG	800	1925	520
OPEN FLOW, MCFD	1559	1041	1450
COMPONENT, MOLE PCT			
METHANE	93.7	90.8	94.1
ETHANE	3.8	4.9	3.5
PROPANE	1.1	1.9	0.8
N-BUTANE	0.3	0.7	0.2
ISOBUTANE	0.1	0.9	0.1
N-PENTANE	TRACE	0.3	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.6	1.3	0.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.02	0.02	0.01
HEATING VALUE	1069	1116	1060
SPECIFIC GRAVITY	0.599	0.635	0.598

	INDEX 12604 SAMPLE 17228	INDEX 12605 SAMPLE 15205	INDEX 12606 SAMPLE 15743
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	LINCOLN ROAD	LINCOLN ROAD UNIT	LOST CREEK
WELL NAME	LMU FED. NO. 30-28	LINCOLN ROAD UNIT NO. 1	RED DESERT NO. 1
LOCATION	SEC. 28, T25N, R111W	SEC. 9, T24N, R111W	SEC. 4, T23N, R94W
OWNER	ENEASETICS, INC.	C & K PETROLEUM, INC.	MICHIGAN WISCONSIN PIPELINE
COMPLETED	05/13/83	03/03/77	08/10/78
SAMPLED	03/29/84	02/06/78	09/05/79
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	10010	9681	11794
WELLHEAD PRESSURE,PSIG	900	3614	4900
OPEN FLOW, MCFD	1477	NOT GIVEN	1825
COMPONENT, MOLE PCT			
METHANE	94.9	90.6	85.7
ETHANE	3.8	6.2	8.1
PROPANE	0.6	1.4	2.8
N-BUTANE	0.2	0.3	0.5
ISOBUTANE	TRACE	0.2	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.6	0.6	0.8
OXYGEN	0.0	0.0	0.6
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.5	1.6
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1047	1095	1141
SPECIFIC GRAVITY	0.595	0.621	0.663

	INDEX 12607 SAMPLE 2160	INDEX 12608 SAMPLE 2161	INDEX 12609 SAMPLE 9568
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	LOST SOLDIER	LOST SOLDIER	LOST SOLDIER
WELL NAME	NO. 32	NO. 65	WEST WERTZ NO. 2
LOCATION	SEC. 20, T26N, R90W	SEC. 11, T26N, R90W	SEC. 23, T26N, R90W
OWNER	PRAIRIE OIL & GAS CO.	PRAIRIE OIL & GAS CO.	SINCLAIR OIL & GAS CO.
COMPLETED	10/07/20	06/11/56	04/09/63
SAMPLED	09/25/30	09/28/30	10/--/64
FORMATION	CRET-FRONTIER	CRET-LAKOTA	PENN-TENSLEEP
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	301	1610	4980
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.4	91.1	17.7
ETHANE	8.6	3.1	6.2
PROPANE	---	---	13.0
N-BUTANE	---	---	5.2
ISOBUTANE	---	---	0.5
N-PENTANE	---	---	2.7
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	1.4
NITROGEN	4.7	0.3	19.1
OXYGEN	1.2	0.1	0.5
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE**	---	---	0.5
CARBON DIOXIDE	8.1	3.7	31.5
HELIUM	0.00	0.00	1.30
HEATING VALUE*	928	978	1064
SPECIFIC GRAVITY	0.756	0.625	1.290

	INDEX 12610 SAMPLE 12939	INDEX 12611 SAMPLE 5648	INDEX 12612 SAMPLE 17150
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	MASTERSON	MIDDLE MOUNTAIN	MONUMENT BUTTE
WELL NAME	GOVT--O'CONNELL B NO. 1	MIDDLE MOUNTAIN UNIT NO. 3	MONUMENT BUTTE UNIT NO. 31-3
LOCATION	SEC. 30, T20N, R101W	SEC. 10, T12N, R103W	SEC. 3, T25N, R110W
OWNER	TEXACO INC.	STANOLIND OIL & GAS CO.	ENERGETICS, INC.
COMPLETED	05/10/71	12/18/53	12/--/82
SAMPLED	07/24/71	07/13/54	12/--/83
FORMATION	CRET-DAKOTA	CRET-MESAVERDE	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6744	4468	11606
WELLHEAD PRESSURE,PSIG	2140	1752	1025
OPEN FLOW, MCFD	1006	4930	1797
COMPONENT, MOLE PCT			
METHANE	97.4	88.9	89.9
ETHANE	1.0	7.1	3.7
PROPANE	0.1	0.7	2.4
N-BUTANE	0.1	0.8	0.8
ISOBUTANE	0.0	0.8	0.6
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.9	2.6	1.4
OXYGEN	0.0	0.0	0.2
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.4
HELIUM	0.03	0.03	0.01
HEATING VALUE*	1031	1197	1125
SPECIFIC GRAVITY	0.577	0.673	0.652

* CALCULATED GROSS BTU PER CU. FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12613 SAMPLE 8630	INDEX 12614 SAMPLE 15545	INDEX 12615 SAMPLE 6160
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	MOXA	MOXA ARCH	MUD FLAT
WELL NAME	MOXA UNIT NO. 1	7 MILE GULCH NO. 7	UNION PACIFIC NO. 1
LOCATION	SEC. 22, T19N, R112W	SEC. 13, T20N, R112W	SEC. 23, T20N, R104W
OWNER	TEXACO INC.	AMOCO PRODUCTION CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	09/22/61	05/--/82	08/30/56
SAMPLED	08/04/62	06/09/82	10/10/56
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11416	11676	5854
WELLHEAD PRESSURE,PSIG	5700	4900	1962
OPEN FLOW, MCFD	1500	4700	7000
COMPONENT, MOLE PCT			
METHANE	91.6	81.9	96.1
ETHANE	5.7	11.1	1.4
PROPANE	1.5	4.9	0.6
N-BUTANE	0.2	0.7	TRACE
ISOBUTANE	TRACE	0.6	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.2	1.0	1.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1087	1190	1003
SPECIFIC GRAVITY	0.611	0.685	0.576

	INDEX 12616 SAMPLE 16561	INDEX 12617 SAMPLE 9749	INDEX 12618 SAMPLE 9795
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	NICKEY	NITCHIE GULCH	NITCHIE GULCH
WELL NAME	NICKEY UNIT NO. 1-13A	UNIT NO. 4	UNIT NO. 6-7
LOCATION	SEC. 13, T24N, R96W	SEC. 17, T25N, R103W	SEC. 7, T23N, R103W
OWNER	ENERGY RESERVES GROUP, INC.	AMAX PETROLEUM CORP.	AMAX PETROLEUM CORP.
COMPLETED	05/11/81	10/03/53	01/31/65
SAMPLED	06/30/82	02/17/65	03/01/65
FORMATION	CRET-ALMOND	CRET-DAKOTA & FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12307	7893	8628
WELLHEAD PRESSURE,PSIG	5817	2900	2320
OPEN FLOW, MCFD	643	14000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.7	95.1	94.9
ETHANE	0.4	2.5	1.9
PROPANE	TRACE	1.5	0.4
N-BUTANE	0.0	0.2	0.1
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.3
NITROGEN	0.2	0.9	1.3
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	5.6	0.4	0.5
HELIUM	TRACE	0.02	0.01
HEATING VALUE*	957	1054	1033
SPECIFIC GRAVITY	0.611	0.590	0.592

	INDEX 12619 SAMPLE 17315	INDEX 12620 SAMPLE 6734	INDEX 12621 SAMPLE 6738
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	NITCHIE GULCH	NOT GIVEN	NOT GIVEN
WELL NAME	UNIT NO. 12-18	DESERT SPRINGS NO. 1	DESERT SPRINGS NO. 2
LOCATION	SEC. 18, T23N, R103W	SEC. 26, T21N, R98W	SEC. 22, T21N, R98W
OWNER	TERRA RESOURCES, INC.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
COMPLETED	12/09/83	01/21/58	03/25/58
SAMPLED	06/07/84	07/05/58	07/06/58
FORMATION	CRET-FRONTIER 3RD	CRET-ALMOND	CRET-LEWIS E
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8050	5897	5083
WELLHEAD PRESSURE,PSIG	840	1900	1824
OPEN FLOW, MCFD	1800	7700	28100
COMPONENT, MOLE PCT			
METHANE	94.8	88.3	84.6
ETHANE	3.4	6.5	6.8
PROPANE	0.7	2.2	3.2
N-BUTANE	0.2	0.5	1.0
ISOBUTANE	0.1	0.4	1.1
N-PENTANE	0.1	0.0	0.3
ISOPENTANE	TRACE	0.4	0.5
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	0.4	0.9	1.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.3	0.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1059	1124	1200
SPECIFIC GRAVITY	0.591	0.646	0.693

	INDEX 12622 SAMPLE 13354	INDEX 12623 SAMPLE 15098	INDEX 12624 SAMPLE 16442
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
WELL NAME	CONTINENTAL DIVIDE NO. 16-1	FIVE MILE GULCH UNIT NO. 1	SIERRA RIDGE UNIT NO. 12
LOCATION	SEC. 16, T21N, R99W	SEC. 27, T21W, R93W	SEC. 29, T22N, R95W
OWNER	TERRA RESOURCES, INC.	AMOCO PRODUCTION CO.	DIAMOND SHAMROCK CORP.
COMPLETED	06/23/72	01/09/77	09/29/81
SAMPLED	08/16/72	09/17/77	03/04/82
FORMATION	CRET-LEWIS	CRET-ALMOND	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3513	10796	10246
WELLHEAD PRESSURE,PSIG	1280	4600	3600
OPEN FLOW, MCFD	16500	NOT GIVEN	699
COMPONENT, MOLE PCT			
METHANE	90.7	86.3	73.9
ETHANE	2.7	6.9	11.6
PROPANE	2.0	1.8	6.5
N-BUTANE	0.8	0.4	1.9
ISOBUTANE	0.6	0.3	1.3
N-PENTANE	0.0	0.2	0.5
ISOPENTANE	0.6	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	0.2
HEXANES PLUS	0.1	0.1	0.5
NITROGEN	2.2	0.0	0.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	3.8	3.4
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1097	1086	1283
SPECIFIC GRAVITY	0.634	0.662	0.786

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12625 SAMPLE 16530		INDEX 12626 SAMPLE 9168		INDEX 12627 SAMPLE 15042	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	NOT GIVEN		PATRICK DRAW		PICKETT LAKE UNIT	
WELL NAME	FED. NO. 12-1		ARCH UNIT NO. 71		PICKETT LAKE NO. 1	
LOCATION	SEC. 21, T24N, R103W		SEC. 11, T19N, R99W		SEC. 24, T26N, R97W	
OWNER	WOODS PETROLEUM CORP.		FOREST OIL CORP.		DAVIS OIL CO.	
COMPLETED	02/--/82		05/14/63		02/09/79	
SAMPLED	06/01/82		11/11/63		06/12/79	
FORMATION	NOT GIVEN		CRET-ALMOND NO. 6		CRET-LEWIS	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	NOT GIVEN		4294		13142	
WELLHEAD PRESSURE,PSIG	4600		290		6275	
OPEN FLOW, MCFD	960		NOT GIVEN		8198	
COMPONENT, MOLE PCT						
METHANE	95.4		81.9		88.6	
ETHANE	2.6		10.0		6.7	
PROPANE	0.3		3.9		1.4	
N-BUTANE	TRACE		0.9		0.2	
ISOBUTANE	TRACE		0.8		0.5	
N-PENTANE	0.0		0.1		0.1	
ISOPENTANE	TRACE		0.3		0.1	
CYCLOPENTANE	TRACE		0.1		0.1	
HEXANES PLUS	TRACE		0.2		0.3	
NITROGEN	0.6		0.5		0.5	
OXYGEN	0.1		TRACE		0.0	
ARGON	TRACE		0.0		0.0	
HYDROGEN	0.1		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.7		1.3		1.8	
HELIUM	TRACE		TRACE		TRACE	
HEATING VALUE*	1021		1198		1108	
SPECIFIC GRAVITY	0.579		0.698		0.648	

	INDEX 12628 SAMPLE 9405		INDEX 12629 SAMPLE 8799		INDEX 12630 SAMPLE 10434	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	PINE CANYON		PIONEER		PIONEER	
WELL NAME	PINE CANYON UNIT NO. 1		UNIT NO. 4		UNIT NO. 7	
LOCATION	SEC. 32, T23N, R103W		SEC. 12, T13N, R100W		SEC. 5, T13N, R99W	
OWNER	SOHIO PETROLEUM CO.		MOUNTAIN FUEL SUPPLY CO.		MOUNTAIN FUEL SUPPLY CO.	
COMPLETED	02/--/64		09/23/62		07/04/65	
SAMPLED	06/16/64		11/28/62		03/04/66	
FORMATION	CRET-DAKOTA		CRET-ALMOND		EOCE-WASATCH	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	8342		4660		2324	
WELLHEAD PRESSURE,PSIG	2800		1615		780	
OPEN FLOW, MCFD	1400		4630		2930	
COMPONENT, MOLE PCT						
METHANE	86.5		90.1		98.3	
ETHANE	5.2		4.2		0.2	
PROPANE	3.2		1.6		0.3	
N-BUTANE	1.1		0.4		0.0	
ISOBUTANE	0.7		0.4		0.0	
N-PENTANE	0.1		0.1		0.0	
ISOPENTANE	1.2		0.8		0.0	
CYCLOPENTANE	0.3		0.3		0.0	
HEXANES PLUS	0.4		0.4		0.0	
NITROGEN	1.0		0.5		0.5	
OXYGEN	0.0		0.1		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.2		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.3		1.3		0.7	
HELIUM	0.01		0.01		0.01	
HEATING VALUE*	1204		1110		1007	
SPECIFIC GRAVITY	0.687		0.643		0.567	

	INDEX 12631 SAMPLE 16998		INDEX 12632 SAMPLE 9403		INDCX 12633 SAMPLE 12346	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	PIPELINE CROSSING		POINT OF ROCKS		POWDER SPRINGS	
WELL NAME	PIPELINE CROSSING NO. 1-20		UPRR NO. 44-25		GOVT. POLLY NO. 1	
LOCATION	SEC. 20, T18N, R111W		SEC. 25, T20N, R101W		SEC. 23, T12N, R97W	
OWNER	MARATHON OIL CO.		UNION PACIFIC RAILROAD CO.		INEXCO OIL CO.	
COMPLETED	06/--/82		09/27/63		02/--/70	
SAMPLED	05/03/83		06/11/64		07/20/70	
FORMATION	CRET-DAKOTA 1ST		CRET-BLAIR		EOCE-FORT UNION	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	10000		3446		5400	
WELLHEAD PRESSURE,PSIG	2700		1455		1950	
OPEN FLOW, MCFD	1800		2069		5600	
COMPONENT, MOLE PCT						
METHANE	85.6		98.3		79.8	
ETHANE	6.7		0.8		9.1	
PROPANE	2.1		0.3		4.3	
N-BUTANE	0.4		0.0		1.6	
ISOBUTANE	0.3		0.0		1.3	
N-PENTANE	0.1		0.0		0.4	
ISOPENTANE	0.3		0.0		0.1	
CYCLOPENTANE	TRACE		0.0		TRACE	
HEXANES PLUS	0.1		0.0		0.2	
NITROGEN	0.8		0.3		1.0	
OXYGEN	TRACE		0.0		TRACE	
ARGON	2.3		TRACE		TRACE	
HYDROGEN	0.3		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.1		0.3		0.2	
HELIUM	0.01		0.01		0.02	
HEATING VALUE*	1088		1017		1264	
SPECIFIC GRAVITY	0.661		0.566		0.727	

	INDEX 12634 SAMPLE 17172		INDEX 12635 SAMPLE 17060		INDEX 12636 SAMPLE 15195	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	SWEETWATER		SWEETWATER		SWEETWATER	
FIELD	PRETTY WATER CREEK		RED DESERT		RED LAKES	
WELL NAME	FED. NO. 1-2		GREAT DIVIDE NO. 24		CHAMPLIN 337 AMOCO A NO. 1	
LOCATION	SEC. 2, T15N, R104W		SEC. 35, T23N, R96W		SEC. 5, T18N, R94W	
OWNER	GREAT WESTERN DRILLING CO.		HOME PETROLEUM CORP.		AMOCO PRODUCTION CO.	
COMPLETED	08/22/81		04/05/82		10/14/77	
SAMPLED	12/05/84		09/09/83		02/10/78	
FORMATION	PERM-PHOSPHORIA		CRET-LEWIS		CRET-ALMOND	
GEOLOGIC PROVINCE CODE	535		535		535	
DEPTH, FEET	6910		9634		5734	
WELLHEAD PRESSURE,PSIG	1854		4100		3275	
OPEN FLOW, MCFD	5390		1206		2130	
COMPONENT, MOLE PCT						
METHANE	34.7		67.5		80.6	
ETHANE	2.5		11.5		9.4	
PROPANE	1.5		7.3		3.9	
N-BUTANE	1.1		3.3		0.8	
ISOBUTANE	0.9		1.7		0.7	
N-PENTANE	0.9		0.6		0.2	
ISOPENTANE	0.6		3.5		0.3	
CYCLOPENTANE	0.1		0.4		TRACE	
HEXANES PLUS	0.7		1.0		0.1	
NITROGEN	27.6		2.0		0.5	
OXYGEN	TRACE		0.1		TRACE	
ARGON	0.2		TRACE		TRACE	
HYDROGEN	0.0		0.3		TRACE	
HYDROGEN SULFIDE**	TRACE		0.6		0.9	
CARBON DIOXIDE	28.2		0.8		0.3	
HELIUM	0.92		TRACE		0.01	
HEATING VALUE*	606		1491		1163	
SPECIFIC GRAVITY	1.046		0.887		0.708	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12637 SAMPLE 13162	INDEX 12638 SAMPLE 14981	INDEX 12639 SAMPLE 7649
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	ROBIN	SALT WELLS S	SAND BUTTE
WELL NAME	GOVT. UNION NO. 2	SOUTH SALT WELLS UNIT NO. 1	NO. 2
LOCATION	SEC. 8, T19N, R97W	SEC. 14, T14N, R103W	SEC. 5, T17N, R99W
OWNER	TEXACO INC.	RESERVE OIL, INC.	CONTINENTAL OIL CO.
COMPLETED	04/17/72	07/15/75	02/04/60
SAMPLED	02/29/72	04/21/77	08/17/60
FORMATION	CRET-MESAVERDE & ERICSON	CRET-FRONTIER	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7018	6658	4816
WELLHEAD PRESSURE,PSIG	NOT GIVEN	1200	1810
OPEN FLOW, MCFD	352	900	15500
COMPONENT, MOLE PCT			
METHANE	88.6	93.9	88.4
ETHANE	4.4	4.1	6.6
PROPANE	1.9	0.9	2.2
N-BUTANE	0.5	0.2	0.5
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	0.1	0.3	0.9
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	0.3	1.6
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1062	1002	1109
SPECIFIC GRAVITY	0.651	0.594	0.646

	INDEX 12640 SAMPLE 13964	INDEX 12641 SAMPLE 16212	INDEX 12642 SAMPLE 13152
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	SIXMILE SPRING	SIXMILE SPRING	STAGE STOP
WELL NAME	GOVT. NO. 30-1	LEAR FEDERAL NO. 1	STAGE STOP UNIT NO. 15
LOCATION	SEC. 30, T18N, R104W	SEC. 30, T18N, R104W	SEC. 27, T18N, R99W
OWNER	COLUMBUS CORP.	COLUMBINE EXPLORATION CORP.	CESSNA NATURAL CORP.
COMPLETED	02/20/74	--/--/00	06/27/71
SAMPLED	03/21/74	03/24/81	02/20/72
FORMATION	CRET-FRONTIER	CRET-FRONTIER	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	4632	4767	5650
WELLHEAD PRESSURE,PSIG	1650	1400	1780
OPEN FLOW, MCFD	3000	NOT GIVEN	3560
COMPONENT, MOLE PCT			
METHANE	88.3	89.0	90.6
ETHANE	6.6	7.5	4.9
PROPANE	1.3	1.7	1.4
N-BUTANE	0.4	0.3	0.4
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.6	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.5	0.2	0.3
NITROGEN	2.9	0.7	0.3
OXYGEN	0.6	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.1
HELIUM	0.03	0.02	0.01
HEATING VALUE*	1112	1111	1098
SPECIFIC GRAVITY	0.655	0.627	0.630

	INDEX 12643 SAMPLE 12259	INDEX 12644 SAMPLE 8188	INDEX 12645 SAMPLE 15125
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	STAGE STOP UNIT	STATE LINE	STORM SHELTER
WELL NAME	STAGE STOP UNIT NO. 7	STATE LINE UNIT FED. NO. 14	STORM SHELTER UNIT NO.6
LOCATION	SEC. 24, T18N, R99W	SEC. 6, T12N, R93W	SEC. 20, T23N, R111W
OWNER	EL PASO OIL & GAS CO.	GULF OIL CORP.	DAVIS OIL CO.
COMPLETED	10/18/69	03/17/61	--/--/00
SAMPLED	11/12/70	11/02/61	10/18/77
FORMATION	CRET-ALMOND	EOCE-WASATCH	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6540	3374	10486
WELLHEAD PRESSURE,PSIG	2034	860	4000
OPEN FLOW, MCFD	2875	2390	3117
COMPONENT, MOLE PCT			
METHANE	80.2	94.6	77.9
ETHANE	4.4	3.1	12.2
PROPANE	5.5	0.3	4.0
N-BUTANE	1.8	TRACE	0.6
ISOBUTANE	1.6	0.2	0.6
N-PENTANE	1.3	TRACE	0.1
ISOPENTANE	0.9	TRACE	0.5
CYCLOPENTANE	0.4	TRACE	0.3
HEXANES PLUS	1.7	TRACE	0.6
NITROGEN	1.3	1.2	1.4
OXYGEN	0.0	TRACE	0.3
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE**	0.0	0.2	0.6
CARBON DIOXIDE	1.4	TRACE	0.5
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1315	1034	1216
SPECIFIC GRAVITY	0.777	0.581	0.719

	INDEX 12646 SAMPLE 4578	INDEX 12647 SAMPLE 4579	INDEX 12648 SAMPLE 5618
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	TABLE ROCK NO. 3	TABLE ROCK NO. 1	TABLE ROCK UNIT NO. 5
LOCATION	SEC. 22, T18N, R98W	SEC. 1, T18N, R98W	SEC. 22, T18N, R98W
OWNER	TEXAS CO.	TEXAS CO.	TEXAS CO.
COMPLETED	08/09/47	04/13/46	01/16/54
SAMPLED	09/30/48	09/30/48	05/08/54
FORMATION	EOCE-WASATCH	EOCE-WASATCH	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	3770	3308	5764
WELLHEAD PRESSURE,PSIG	1250	1250	1985
OPEN FLOW, MCFD	9500	5692	13800
COMPONENT, MOLE PCT			
METHANE	83.0	90.0	87.6
ETHANE	15.9	7.2	4.1
PROPANE	---	---	2.6
N-BUTANE	---	---	0.5
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.2
NITROGEN	0.7	2.5	0.0
OXYGEN	0.2	0.2	TRACE
ARGON	---	---	0.0
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE**	---	---	---
CARBON DIOXIDE	0.2	0.1	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1126	1041	1117
SPECIFIC GRAVITY	0.639	0.602	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12649 SAMPLE 8047	INDEX 12650 SAMPLE 10879	INDEX 12651 SAMPLE 14425
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	GOVT. MORRISON NO. 1	TABLE ROCK UNIT NO. 15	TABLE ROCK UNIT NO. 19
LOCATION	SEC. 25, T19N, R98W	SEC. 2, T18N, R98W	SEC. 35, T19N, R98W
OWNER	TEXACO INC.	TEXACO INC.	TEXACO INC.
COMPLETED	03/06/61	09/08/65	07/30/75
SAMPLED	06/29/61	02/28/67	07/30/75
FORMATION	CRET-ALMOND	JURA-NUGGET	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	6328	15213	16020
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5000	5210
OPEN FLOW, MCFD	NOT GIVEN	6800	20000
COMPONENT, MOLE PCT			
METHANE	89.4	95.4	75.0
ETHANE	7.4	0.5	2.0
PROPANE	2.6	0.1	0.6
N-BUTANE	0.5	0.0	0.2
ISOBUTANE	0.7	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	TRACE	1.2	4.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	1.8
CARBON DIOXIDE	2.5	2.8	15.0
HELIUM	0.01	0.05	0.28
HEATING VALUE*	1138	975	837
SPECIFIC GRAVITY	0.674	0.590	0.752

	INDEX 12652 SAMPLE 14511	INDEX 12653 SAMPLE 15119	INDEX 12654 SAMPLE 15157
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	TABLE ROCK UNIT NO. 19	TABLE ROCK UNIT NO. 21	DELANEY RIM NO. 2
LOCATION	SEC. 35, T19N, R98W	SEC. 10, T18N, R98W	SEC. 7, T18N, R97W
OWNER	NEUMIN PRODUCTION CO.	TEXACO INC.	TEXACO INC.
COMPLETED	07/28/75	12/09/76	08/30/77
SAMPLED	10/29/75	09/29/77	11/28/77
FORMATION	MISS-MADISON	MISS-MADISON	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	19000	16287	NOT GIVEN
WELLHEAD PRESSURE,PSIG	5200	6400	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	9923	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.7	72.4	89.5
ETHANE	2.0	2.0	5.3
PROPANE	0.5	0.4	2.7
N-BUTANE	0.3	0.3	0.8
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	4.8	5.2	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	2.2	1.7	0.0
CARBON DIOXIDE	15.8	17.0	0.2
HELIUM	0.29	0.35	0.01
HEATING VALUE*	836	827	1131
SPECIFIC GRAVITY	0.768	0.783	0.637

	INDEX 12655 SAMPLE 15158	INDEX 12656 SAMPLE 15159	INDEX 12657 SAMPLE 15187
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TABLE ROCK
WELL NAME	TABLE ROCK NO. 15	CHAMPLIN NO. 21-15	TABLE ROCK UNIT NO. 22
LOCATION	SEC. 2, T18N, R98W	SEC. 15, T18N, R98W	SEC. 2, T18N, R98W
OWNER	TEXACO INC.	CHAMPLIN PETROLEUM CO.	TEXACO INC.
COMPLETED	7-/-/68	11/23/66	11/01/77
SAMPLED	11/28/77	11/28/77	01/10/78
FORMATION	JURA-NUGGET	CRET-ALMOND	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	18116
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.0	91.0	74.0
ETHANE	0.5	4.6	2.1
PROPANE	TRACE	1.4	0.5
N-BUTANE	TRACE	0.4	0.2
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.9	0.1	4.6
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	1.4
CARBON DIOXIDE	3.1	2.0	16.5
HELIUM	0.03	TRACE	0.30
HEATING VALUE*	965	1074	829
SPECIFIC GRAVITY	0.597	0.627	0.768

	INDEX 12658 SAMPLE 15188	INDEX 12659 SAMPLE 16925	INDEX 12660 SAMPLE 8629
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TABLE ROCK	TABLE ROCK	TEN MILE DRAW
WELL NAME	TABLE ROCK UNIT NO. 22	TABLE ROCK UNIT NO. 37	UNIT NO. 4
LOCATION	SEC. 2, T18N, R98W	SEC. 25, T19N, R98W	SEC. 33, T21N, R99W
OWNER	TEXACO INC.	TEXACO INC.	JOHN L. KEMMERER, JR.
COMPLETED	11/01/77	05/07/82	07/26/62
SAMPLED	01/10/78	05/09/83	07/24/62
FORMATION	MISS-MADISON	PENN-WEBER	CRET-LANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	18116	17240	2134
WELLHEAD PRESSURE,PSIG	NOT GIVEN	5380	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	1050	4220
COMPONENT, MOLE PCT			
METHANE	75.1	75.2	95.2
ETHANE	2.0	1.5	1.1
PROPANE	0.9	0.7	0.6
N-BUTANE	0.2	0.8	TRACE
ISOBUTANE	TRACE	0.5	0.0
N-PENTANE	0.1	0.6	0.1
ISOPENTANE	0.1	1.0	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.6	TRACE
NITROGEN	4.5	4.4	2.5
OXYGEN	TRACE	0.1	0.2
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE**	1.3	1.6	0.0
CARBON DIOXIDE	15.8	10.6	0.2
HELIUM	0.30	0.12	0.03
HEATING VALUE*	836	981	1004
SPECIFIC GRAVITY	0.758	0.773	0.581

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12661 SAMPLE 15790	INDEX 12662 SAMPLE 6778	INDEX 12663 SAMPLE 16693
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	TIERNEY	TRAIL UNIT AREA	TRITON
WELL NAME	TIERNEY II UNIT NO. 4-22	UNIT WELL NO. 2	TRITON UNIT NO. 6
LOCATION	SEC. 22, T19N, R94W	SEC. 10, T13N, R100W	SEC. 5, T14N, R95W
OWNER	MARATHON OIL CO.	MOUNTAIN FUEL SUPPLY CO.	HPC, INC.
COMPLETED	05/28/79	08/01/58	11/16/81
SAMPLED	09/27/79	07/31/58	10/17/82
FORMATION	CRET-MESAVERDE	CRET-MESAVERDE	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	9567	5870	13276
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2349	6700
OPEN FLOW, MCFD	2109	45500	620
COMPONENT, MOLE PCT			
METHANE	80.1	85.9	96.8
ETHANE	9.1	6.9	0.8
PROPANE	4.5	2.9	0.1
N-BUTANE	0.9	0.7	0.0
ISOBUTANE	0.9	0.7	0.0
N-PENTANE	0.2	0.2	0.0
ISOPENTANE	0.2	0.6	0.0
CYCLOPENTANE	TRACE	0.2	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	0.3	0.1	0.1
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.5	1.3	2.0
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1171	1197	998
SPECIFIC GRAVITY	0.714	0.691	0.578

	INDEX 12664 SAMPLE 9556	INDEX 12665 SAMPLE 10481	INDEX 12666 SAMPLE 15102
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	WAMSUTTER	WAMSUTTER	WAMSUTTER UNIT
WELL NAME	WAMSUTTER A NO. 4	WAMSUTTER UNIT A NO. 6	CHAMPLIN UPRR4-31 NO. 2
LOCATION	SEC. 1, T20N, R95W	SEC. 29, T21S, R94W	NOT GIVEN
OWNER	MARATHON OIL CO.	MARATHON OIL CO.	CHAMPLIN PETROLEUM CO.
COMPLETED	10/23/63	09/16/65	--/--/00
SAMPLED	09/07/84	03/28/86	09/14/77
FORMATION	CRET-MESAVERDE & ALMOND	CRET-MESAVERDE	CRET-LEWIS
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7695	9869	NOT GIVEN
WELLHEAD PRESSURE,PSIG	4000	4800	1025
OPEN FLOW, MCFD	11100	10MC	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	90.4	86.7	92.2
ETHANE	5.6	6.2	4.7
PROPANE	1.9	2.8	1.6
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.1	0.4	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.1	2.3	0.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.9	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1092	1035	1100
SPECIFIC GRAVITY	0.625	0.633	0.617

	INDEX 12667 SAMPLE 17178	INDEX 12668 SAMPLE 17179	INDEX 12669 SAMPLE 8087
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	WILD MARE GULCH	WILD MARE GULCH	WILDCAT
WELL NAME	SEVEN MILE GULCH NO. 14	SEVEN MILE GULCH NO. 14	PLUNGE UNIT NO. 2
LOCATION	SEC. 19, T20N, R111W	SEC. 19, T20N, R111W	SEC. 17, T25N, R103W
OWNER	ANADARKO PRODUCTION CO.	ANADARKO PRODUCTION CO.	ATLANTIC REFINING CO.
COMPLETED	05/17/82	05/17/82	--/--/00
SAMPLED	02/15/84	02/15/84	07/17/61
FORMATION	CRET-FRONTIER	CRET-DAKOTA	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	11919	12534	8317
WELLHEAD PRESSURE,PSIG	3500	2200	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.0	74.6	77.9
ETHANE	11.7	11.1	9.7
PROPANE	3.7	4.9	7.2
N-BUTANE	0.7	1.8	1.8
ISOBUTANE	0.6	0.8	1.8
N-PENTANE	0.1	0.3	0.4
ISOPENTANE	0.4	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.9	0.9	0.0
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.5	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1200	1257	1242
SPECIFIC GRAVITY	0.695	0.715	0.787

	INDEX 12670 SAMPLE 9716	INDEX 12671 SAMPLE 12107	INDEX 12672 SAMPLE 13202
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	GOVT. ROWLAND NO. 1	REDCITE HILLS UNIT NO. 1	ROSEN FED. NO. 1
LOCATION	SEC. 5, T19N, R100W	SEC. 29, T22N, R103W	SEC. 14, T21N, R100W
OWNER	CHANDLER & BYLLESBY, INC.	MOUNTAIN FUEL SUPPLY CO.	DAVIS OIL CO.
COMPLETED	--/--/00	09/30/69	10/07/71
SAMPLED	10/02/62	11/26/69	05/13/73
FORMATION	NOT GIVEN	CRET-DAKOTA	CRET-ALMOND
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	7277	3505
WELLHEAD PRESSURE,PSIG	NOT GIVEN	3146	975
OPEN FLOW, MCFD	NOT GIVEN	7016	2000
COMPONENT, MOLE PCT			
METHANE	96.1	94.9	90.1
ETHANE	0.6	2.3	3.6
PROPANE	0.3	0.5	1.7
N-BUTANE	0.1	0.1	0.3
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.1	0.3	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	TRACE	0.5	0.1
NITROGEN	2.5	0.7	0.8
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	2.4
HELIUM	0.01	0.02	0.01
HEATING VALUE*	1001	1068	1067
SPECIFIC GRAVITY	0.588	0.600	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12673 SAMPLE 14627	INDEX 12674 SAMPLE 14669	INDEX 12675 SAMPLE 17051
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	FED. NO. 1-18	BLACK ROCK FED. NO. A-1	WINDMILL DRAW UNIT NO. 3
LOCATION	SEC. 18, T17N, R99W	SEC. 14, T23N, R99W	SEC. 12, T15N, R99W
OWNER	LADD PETROLEUM CORP.	ANADARKO PRODUCTION CO.	CITIES SERVICE OIL & GAS COR
COMPLETED	10/16/79	03/28/73	10/15/81
SAMPLED	03/29/76	05/27/76	08/--/83
FORMATION	CRET-MESAVERDE	CRET-LEWIS	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	10490	6825	10931
WELLHEAD PRESSURE, PSIG	3052	1933	2500
OPEN FLOW, MCFD	1626	4800	735
COMPONENT, MOLE PCT			
METHANE	73.0	84.4	84.6
ETHANE	10.1	6.6	6.9
PROPANE	5.1	4.1	1.7
N-BUTANE	2.1	1.1	0.4
ISOBUTANE	1.9	0.8	0.3
N-PENTANE	0.8	0.2	TRACE
ISOPENTANE	1.0	0.3	0.7
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.8	0.2	0.4
NITROGEN	0.9	2.0	0.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.3
HYDROGEN SULFIDE**	0.0	0.0	0.6
CARBON DIOXIDE	1.2	0.2	0.2
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1415	1182	1116
SPECIFIC GRAVITY	0.834	0.686	0.688

	INDEX 12676 SAMPLE 17253	INDEX 12677 SAMPLE 9580	INDEX 12678 SAMPLE 17324
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	SWEETWATER
FIELD	WILDCAT	WINDMILL	WINDMILL DRAW
WELL NAME	DRIPPING ROCK NO. 1	WELL NO. 1	WINDMILL DRAW NO. 4
LOCATION	SEC. 17, T14N, R94W	SEC. 33, T23N, R105W	SEC. 1, T15N, R94W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	CITIES SERVICE OIL & GAS COR
COMPLETED	01/16/84	12/25/64	10/07/82
SAMPLED	04/19/84	12/19/64	06/14/84
FORMATION	CRET-ALMOND	ROCE-FORT UNION	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12557	7168	10948
WELLHEAD PRESSURE, PSIG	7400	NOT GIVEN	4930
OPEN FLOW, MCFD	8500	400	1734
COMPONENT, MOLE PCT			
METHANE	92.4	98.0	93.8
ETHANE	3.9	0.7	5.6
PROPANE	0.5	1.2	0.3
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	0.1	0.7	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.8	1.6	0.0
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.5	0.1	0.9
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1024	1078	1061
SPECIFIC GRAVITY	0.618	0.614	0.632

	INDEX 12679 SAMPLE 4726	INDEX 12680 SAMPLE 16190	INDEX 12681 SAMPLE 13163
STATE	WYOMING	WYOMING	WYOMING
COUNTY	TETON	UINTA	UINTA
FIELD	RAMSHORN	BRUFF	BUTCHER KNIFE SPRINGS
WELL NAME	G. G. TRAVIS NO. 1	CHAMPLIN NO. 136-F	BUTCHER KNIFE SPRINGS NO. 1
LOCATION	SEC. 5, T43N, R114W	SEC. 5, T18N, R112W	SEC. 29, T15N, R112W
OWNER	U.S. GEOLOGICAL SURVEY	AMOCO PRODUCTION CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	09/12/49	04/28/80	--/--/00
SAMPLED	--/12/61	09/17/81	03/08/72
FORMATION	PERM-PHOSPHORIA	CRET-DAKOTA	PENN-MORGAN
GEOLOGIC PROVINCE CODE	525	535	535
DEPTH, FEET	190	12044	18213
WELLHEAD PRESSURE, PSIG	NOT GIVEN	750	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	165	600
COMPONENT, MOLE PCT			
METHANE	0.1	87.1	54.5
ETHANE	TRACE	7.2	6.3
PROPANE	0.0	2.0	1.9
N-BUTANE	0.0	0.5	0.6
ISOBUTANE	0.0	0.5	0.5
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	0.0	0.3	0.9
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.3
NITROGEN	97.9	1.4	6.0
OXYGEN	0.2	0.2	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	---	0.0	6.4
CARBON DIOXIDE	1.3	0.08	23.1
HELIUM	0.52	0.01	0.17
HEATING VALUE*	1	1110	828
SPECIFIC GRAVITY	0.970	0.646	0.929

	INDEX 12682 SAMPLE 13285	INDEX 12683 SAMPLE 13288	INDEX 12684 SAMPLE 13299
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	BUTCHER KNIFE SPRINGS	BUTCHER KNIFE SPRINGS	BUTCHER KNIFE SPRINGS
WELL NAME	BUTCHER KNIFE SPRINGS NO. 1	BUTCHER KNIFE SPRINGS NO. 1	BUTCHER KNIFE SPRINGS NO. 1
LOCATION	SEC. 29, T15N, R112W	SEC. 29, T15N, R112W	SEC. 29, T15N, R112W
OWNER	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	06/25/72	07/03/72	07/16/72
FORMATION	PENN-WEBER	PENN-MORGAN	PENN-MORGAN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	17260	18200	18200
WELLHEAD PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	3000
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.6	53.4	53.4
ETHANE	1.2	7.3	7.9
PROPANE	TRACE	1.7	1.8
N-BUTANE	TRACE	0.9	0.6
ISOBUTANE	0.0	0.7	0.6
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	TRACE	0.5	0.2
NITROGEN	4.1	6.0	3.5
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	1.7	0.1	0.0
HYDROGEN SULFIDE**	0.0	5.6	11.8
CARBON DIOXIDE	14.7	23.8	20.2
HELIUM	0.13	0.19	0.16
HEATING VALUE*	826	863	862
SPECIFIC GRAVITY	0.716	0.946	0.925

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12685 SAMPLE 15575	INDEX 12686 SAMPLE 17163	INDEX 12687 SAMPLE 4289
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	BUTCHER KNIFE SPRINGS	BUTCHER KNIFE SPRINGS	CHURCH BUTTES
WELL NAME	BUTCHER KNIFE SPRINGS NO. 6	UNIT NO. 8	UNIT NO. 1
LOCATION	SEC. 22, T14N, R113W	SEC. 12, T14N, R113W	SEC. 8, T16N, R112W
OWNER	WEXPRO CO.	CELSIUS ENERGY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	11/18/78	10/11/83	04/28/46
SAMPLED	03/06/79	01/23/84	03/17/47
FORMATION	CRET-DAKOTA	CRET-DAKOTA	CRET-
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12319	13040	12550
WELLHEAD PRESSURE,PSIG	5100	5516	5425
OPEN FLOW, MCFD	8000	7560	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.0	89.5	89.9
ETHANE	7.5	6.2	8.9
PROPANE	2.9	1.6	---
N-BUTANE	0.7	0.3	---
ISOBUTANE	0.7	0.3	---
N-PENTANE	0.2	0.1	---
ISOPENTANE	0.6	0.2	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.6	0.4	---
NITROGEN	1.3	0.7	0.5
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE**	0.0	0.0	---
CARBON DIOXIDE	0.2	0.9	0.6
HELIUM	0.02	0.02	0.01
HEATING VALUE*	1191	1097	1070
SPECIFIC GRAVITY	0.683	0.631	0.607

	INDEX 12688 SAMPLE 4418	INDEX 12689 SAMPLE 11014	INDEX 12690 SAMPLE 11015
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	CHURCH BUTTES	CHURCH BUTTES	CHURCH BUTTES
WELL NAME	UNIT NO. 5	CHURCH BUTTES UNIT NO. 19	CHURCH BUTTES UNIT NO. 19
LOCATION	SEC. 12, T16N, R113W	SEC. 8, T16N, R112W	SEC. 8, T16N, R112W
OWNER	UNION PACIFIC & MT. FUEL SUP	MOUNTAIN FUEL SUPPLY CO.	MOUNTAIN FUEL SUPPLY CO.
COMPLETED	08/15/47	--/--/02	--/--/03
SAMPLED	01/16/48	05/30/67	05/30/67
FORMATION	CRET-DAKOTA	PENN-MORGAN	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12933	18060	18931
WELLHEAD PRESSURE,PSIG	5398	8021	7987
OPEN FLOW, MCFD	NOT GIVEN	2450	10500
COMPONENT, MOLE PCT			
METHANE	79.9	55.4	6.1
ETHANE	17.5	7.2	0.3
PROPANE	---	1.4	0.1
N-BUTANE	---	0.8	0.0
ISOBUTANE	---	0.5	0.0
N-PENTANE	---	0.2	0.0
ISOPENTANE	---	0.4	0.0
CYCLOPENTANE	---	0.1	0.0
HEXANES PLUS	---	0.4	0.0
NITROGEN	1.5	10.5	6.9
OXYGEN	0.4	0.0	0.1
ARGON	---	0.1	0.1
HYDROGEN	---	2.6	0.0
HYDROGEN SULFIDE**	---	0.0	0.1
CARBON DIOXIDE	0.7	20.4	86.6
HELIUM	0.01	0.15	0.26
HEATING VALUE*	1123	829	70
SPECIFIC GRAVITY	0.656	0.882	1.429

	INDEX 12691 SAMPLE 11259	INDEX 12692 SAMPLE 17147	INDEX 12693 SAMPLE 17353
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	CHURCH BUTTES	CHURCH BUTTES	CHURCH BUTTES
WELL NAME	UNIT NO. 19	CHURCH BUTTES UNIT NO. 36	CHURCH BUTTES NO. 31
LOCATION	SEC. 8, T16N, R112W	SEC. 15, T17N, R112W	SEC. 9, T17N, R112W
OWNER	MOUNTAIN FUEL SUPPLY CO.	WEXPRO CO.	MT. FUEL SUPPLY & CHAMPLIN P
COMPLETED	--/--/00	11/12/82	--/--/00
SAMPLED	01/18/68	12/--/83	07/12/84
FORMATION	PENN-MORGAN	CRET-FRONTIER	MISS-MADISON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	17740	12160	16398
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	4361	13723
COMPONENT, MOLE PCT			
METHANE	51.8	87.8	2.8
ETHANE	6.9	8.4	0.1
PROPANE	1.2	1.9	0.2
N-BUTANE	0.7	0.3	0.1
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	10.6	0.3	7.8
OXYGEN	0.9	TRACE	0.6
ARGON	0.1	TRACE	0.1
HYDROGEN	6.0	0.0	TRACE
HYDROGEN SULFIDE**	0.7	0.6	0.8
CARBON DIOXIDE	22.9	0.6	85.5
HELIUM	0.17	0.01	0.35
HEATING VALUE*	753	1131	107
SPECIFIC GRAVITY	0.923	0.642	1.461

	INDEX 12694 SAMPLE 16070	INDEX 12695 SAMPLE 16426	INDEX 12696 SAMPLE 16504
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	CLEAR CREEK	EAST PAINTER	GLASSCOCK HOLLOW
WELL NAME	PRV22-9B	J.R. BROADBENT NO. 1	MILLS WI UNIT NO. 1
LOCATION	SEC. 9, T16N, R119W	SEC. 8, T15N, R119W	SEC. 10, T15N, R120W
OWNER	CHEVRON U.S.A., INC.	AMOCO PROD CO & CHEVRON USA	AMOCO PRODUCTION CO.
COMPLETED	04/23/80	01/13/81	12/13/80
SAMPLED	09/17/80	12/29/81	04/14/82
FORMATION	JURA-NUGGET	JURA-NUGGET	JURA-NUGGET
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	8713	11370	13744
WELLHEAD PRESSURE,PSIG	NOT GIVEN	2500	1900
OPEN FLOW, MCFD	3228	2500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	81.2	73.7
ETHANE	11.0	11.6	13.4
PROPANE	4.8	4.0	5.5
N-BUTANE	1.1	0.8	1.0
ISOBUTANE	1.1	0.5	0.9
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	1.9	1.6	2.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.0
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1231	1185	1235
SPECIFIC GRAVITY	0.714	0.682	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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	INDEX 12697 SAMPLE 17065	INDEX 12698 SAMPLE 17119	INDEX 12699 SAMPLE 17911
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	GLASSCOCK HOLLOW	HENRY	LUCKEY DITCH
WELL NAME	BROKEN CIRCLE NO. 2-35-4C	HENRY UNIT NO. 6	LUCKEY DITCH STATE NO. 1
LOCATION	SEC. 35, T15N, R120W	SEC. 33, T14N, R113W	SEC. 16, T12N, R114W
OWNER	GULF OIL EXPL. & PROD. CO.	FOREST OIL CORP.	SUN EXPLORATION & PRODUCTION
COMPLETED	12/--/82	07/21/83	05/25/85
SAMPLED	09/14/83	10/19/83	11/16/85
FORMATION	JURA-WATTON CANYON	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12985	15522	15235
WELLHEAD PRESSURE,PSIG	1700	3900	4400
OPEN FLOW, MCFD	250	1636	8785
COMPONENT, MOLE PCT			
METHANE	72.6	89.5	78.6
ETHANE	14.0	7.3	7.8
PROPANE	7.5	1.5	3.5
N-BUTANE	1.3	0.8	1.5
ISOBUTANE	1.1	0.9	0.5
N-PENTANE	0.2	0.2	1.9
ISOPENTANE	0.9	0.3	1.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.5	0.5
NITROGEN	2.7	1.0	3.0
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.3	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	1.0
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1289	1174	1133
SPECIFIC GRAVITY	0.761	0.584	0.712

	INDEX 12700 SAMPLE 16902	INDEX 12701 SAMPLE 16903	INDEX 12702 SAMPLE 16352
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	MOXA ARCH-VERNE	MOXA ARCH-VERNE	NOT GIVEN
WELL NAME	CHAMPLIN 185 AMOCO "M" NO. 1	CHAMPLIN 185 AMOCO "M" NO. 1	HENRY UNIT NO. 1
LOCATION	SEC. 1, T18N, R113W	SEC. 1, T18N, R113W	SEC. 5, T13N, R113W
OWNER	AMOCO PRODUCTION CO. (USA)	AMOCO PRODUCTION CO. (USA)	FOREST OIL CORP.
COMPLETED	02/--/82	11/03/82	--/--/00
SAMPLED	04/26/83	04/26/83	10/04/81
FORMATION	CRET-DAKOTA	CRET-FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12072	11320	NOT GIVEN
WELLHEAD PRESSURE,PSIG	5000	4800	NOT GIVEN
OPEN FLOW, MCFD	2200	444	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.0	76.2	85.5
ETHANE	9.5	13.5	7.9
PROPANE	3.2	5.3	2.7
N-BUTANE	0.6	1.1	0.5
ISOBUTANE	0.5	0.6	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.1	1.0	1.6
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.3	0.2	0.0
HYDROGEN SULFIDE**	0.3	0.0	0.0
CARBON DIOXIDE	1.0	0.8	0.9
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1160	1260	1148
SPECIFIC GRAVITY	0.675	0.734	0.664

	INDEX 12703 SAMPLE 14770	INDEX 12704 SAMPLE 15196	INDEX 12705 SAMPLE 17389
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	RYCKMAN CREEK	WHITNEY CANYON	WHITNEY CANYON-CARTER CREEK
WELL NAME	RYCKMAN CREEK UNIT NO. 1	AMOCO-CHEVRON-GULF W1 NO. 1	FED. NO. 2-6E
LOCATION	SEC. 19, T17N, R118W	SEC. 13, T17N, R119W	SEC. 6, T17N, R119W
OWNER	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	CHEVRON U.S.A., INC.
COMPLETED	--/--/80	08/22/77	10/--/83
SAMPLED	09/14/76	01/11/78	08/23/84
FORMATION	JURA-NUGGET	TRIA-THAYNES	MISS-MISSION CANYON
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	7455	9178	12840
WELLHEAD PRESSURE,PSIG	2200	2850	3200
OPEN FLOW, MCFD	NOT GIVEN	4700	23000
COMPONENT, MOLE PCT			
METHANE	78.2	82.5	5.1
ETHANE	11.5	9.5	0.5
PROPANE	3.2	5.4	0.1
N-BUTANE	1.2	1.7	0.0
ISOBUTANE	1.1	0.5	0.0
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.4	0.5	0.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.7
CARBON DIOXIDE	TRACE	0.1	93.3
HELIUM	0.32	0.07	0.01
HEATING VALUE*	1239	1085	80
SPECIFIC GRAVITY	0.722	0.670	1.478

	INDEX 12706 SAMPLE 17591	INDEX 12707 SAMPLE 14734	INDEX 12708 SAMPLE 15010
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	WHITNEY CANYON-CARTER CREEK	WILDCAT	WILDCAT
WELL NAME	FED. NO. 2-6E	CHAMPLIN 224 AMOCO A NO. 1	BRUFF UNIT NO. 4
LOCATION	SEC. 6, T17N, R119W	SEC. 19, T17N, R118W	SEC. 17, T18N, R112W
OWNER	CHEVRON U.S.A., INC.	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.
COMPLETED	--/--/83	--/--/00	04/11/77
SAMPLED	08/10/85	07/27/76	05/26/77
FORMATION	MISS-MISSION CANYON	JURA-NUGGET	CRET-FRONTIER
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	12840	7450	11514
WELLHEAD PRESSURE,PSIG	3350	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	24000	NOT GIVEN	4024
COMPONENT, MOLE PCT			
METHANE	55.9	67.6	93.8
ETHANE	5.1	14.3	3.5
PROPANE	1.3	9.5	0.4
N-BUTANE	0.4	3.2	0.3
ISOBUTANE	0.1	2.0	0.1
N-PENTANE	0.2	0.6	0.2
ISOPENTANE	0.1	0.7	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.1	1.5	1.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	12.5	0.0	0.0
CARBON DIOXIDE	24.3	0.1	0.1
HELIUM	0.02	0.01	0.02
HEATING VALUE*	830	1425	1064
SPECIFIC GRAVITY	0.928	0.836	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12709 SAMPLE 14707	INDEX 12710 SAMPLE 14708	INDEX 12711 SAMPLE 15647
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	YELLOW CREEK	YELLOW CREEK	YELLOW CREEK
WELL NAME	AMOCO GULF WI UNIT NO. 1	AMOCO GULF WI UNIT NO. 1	BURNT MILL STATE NO. 1-31
LOCATION	SEC. 2, T14N, R121W	SEC. 2, T14N, R121W	SEC. 31, T15N, R120W
OWNER	AMOCO & GULF	AMOCO & GULF	MESA PETROLEUM CO.
COMPLETED	07/27/76	07/27/76	10/22/78
SAMPLED	06/09/76	06/10/76	06/09/79
FORMATION	JURA-TWIN CREEK	JURA-TWIN CREEK	JURA-TWIN CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5260	5260	6007
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	1575
OPEN FLOW, MCFD	2750	2750	9000
COMPONENT, MOLE PCT			
METHANE	77.5	77.6	77.8
ETHANE	8.8	8.7	9.0
PROPANE	4.0	4.1	4.1
N-BUTANE	1.3	1.3	1.2
ISOBUTANE	1.2	1.2	1.2
N-PENTANE	0.2	0.4	0.3
ISOPENTANE	0.6	0.5	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	5.8	5.7	5.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.08	0.08	0.08
HEATING VALUE*	1188	1186	1186
SPECIFIC GRAVITY	0.728	0.724	0.726

	INDEX 12712 SAMPLE 15648	INDEX 12713 SAMPLE 15832	INDEX 12714 SAMPLE 15947
STATE	WYOMING	WYOMING	WYOMING
COUNTY	UINTA	UINTA	UINTA
FIELD	YELLOW CREEK	YELLOW CREEK	YELLOW CREEK
WELL NAME	BURNT MILL STATE NO. 2-31	YELLOW CREEK NO. 3-36	APOCO-ANSCHUTZ NO. 1
LOCATION	SEC. 31, T15N, R120W	SEC. 36, T15N, R121W	SEC. 11, T14N, R121W
OWNER	MESA PETROLEUM CO.	WEXPRO CO.	AMOCO PRODUCTION CO.
COMPLETED	01/15/79	05/15/79	12/04/79
SAMPLED	06/09/79	11/07/79	04/18/80
FORMATION	JURA-TWIN CREEK	JURA-TWIN CREEK	JURA-TWIN CREEK
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	5733	5770	5968
WELLHEAD PRESSURE,PSIG	1600	2550	900
OPEN FLOW, MCFD	12500	9044	3500
COMPONENT, MOLE PCT			
METHANE	77.4	76.9	77.6
ETHANE	9.1	9.3	9.7
PROPANE	4.1	4.3	4.3
N-BUTANE	1.2	1.3	1.3
ISOBUTANE	1.1	1.3	1.3
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.4	0.5	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	6.1	5.7	4.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.08	0.07	0.05
HEATING VALUE*	1171	1189	1208
SPECIFIC GRAVITY	0.719	0.726	0.729

	INDEX 12715 SAMPLE 2188	INDEX 12716 SAMPLE 10049	INDEX 12717 SAMPLE 9143
STATE	WYOMING	WYOMING	WYOMING
COUNTY	WASHAKIE	WASHAKIE	WASHAKIE
FIELD	MIDDLE DOME	NEIBER DOME	NOT GIVEN
WELL NAME	TENSLEEP NO 2., WELL NO. 1	NEIBER DOME UNIT NO. 8	NO. 31
LOCATION	SEC. 5, T47N, R90W	SEC. 30, T45N, R91W	SEC. 17, T48N, R92W
OWNER	OHIO OIL CO.	CHEVRON OIL CO.	PURE OIL CO.
COMPLETED	05/15/19	09/19/54	01/03/52
SAMPLED	07/13/30	07/14/65	11/06/63
FORMATION	CRET-FRONTIER	MIOC-CRISTELLARIA	CRET-FRONTIER 2ND
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	1320	10486	7706
WELLHEAD PRESSURE,PSIG	70	22	1700
OPEN FLOW, MCFD	2000	NOT GIVEN	4130
COMPONENT, MOLE PCT			
METHANE	98.8	37.2	85.9
ETHANE	0.3	32.1	8.1
PROPANE	---	12.1	2.5
N-BUTANE	---	6.1	0.9
ISOBUTANE	---	2.5	0.9
N-PENTANE	---	1.7	0.1
ISOPENTANE	---	2.1	0.5
CYCLOPENTANE	---	0.4	0.1
HEXANES PLUS	---	2.1	0.3
NITROGEN	0.4	1.3	0.9
OXYGEN	0.0	0.0	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE**	---	0.0	0.0
CARBON DIOXIDE	0.6	0.2	0.3
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1006	1845	1169
SPECIFIC GRAVITY	0.564	1.115	0.667

	INDEX 12718 SAMPLE 9144	INDEX 12719 SAMPLE 9145	INDEX 12720 SAMPLE 9156
STATE	WYOMING	WYOMING	WYOMING
COUNTY	WASHAKIE	WASHAKIE	WASHAKIE
FIELD	NOT GIVEN	WORLAND	WORLAND
WELL NAME	NO. 35 F4	NO. 7 F3	NO. 5E
LOCATION	SEC. 28, T48N, R92W	SEC. 21, T48N, R92W	SEC. 21, T48N, R92W
OWNER	PURE OIL CO.	PURE OIL CO.	PURE OIL CO.
COMPLETED	06/19/55	02/02/55	08/29/47
SAMPLED	11/06/63	11/06/63	11/06/63
FORMATION	CRET-FRONTIER 4TH	CRET-FRONTIER 3RD	PERM-EMBAR
GEOLOGIC PROVINCE CODE	520	520	520
DEPTH, FEET	7393	7287	10078
WELLHEAD PRESSURE,PSIG	1700	1700	200
OPEN FLOW, MCFD	2750	5540	574
COMPONENT, MOLE PCT			
METHANE	82.8	88.2	68.2
ETHANE	9.5	6.9	9.3
PROPANE	3.6	2.0	2.5
N-BUTANE	1.1	0.9	1.1
ISOBUTANE	0.8	0.5	0.4
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.5	0.1	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	1.0	0.7	8.3
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	6.9
CARBON DIOXIDE	0.4	0.7	2.5
HELIUM	0.02	0.01	0.03
HEATING VALUE*	1192	1123	1053
SPECIFIC GRAVITY	0.687	0.642	0.772

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 1. - SAMPLES FROM GAS AND OIL WELLS IN THE UNITED STATES

	INDEX 12721 SAMPLE 9001		INDEX 12722 SAMPLE 8999		INDEX 12723 SAMPLE 9004	
STATE	WYOMING		WYOMING		WYOMING	
COUNTY	WESTON		WESTON		WESTON	
FIELD	CLARETON		FIDDLER CREEK		MUSH CREEK	
WELL NAME	T. R. ELLIOTT NO. 2		GILMER NO. 3		UPDIKE NO. 2	
LOCATION	SEC. 1, T43N, R65W		SEC. 18, T46N, R64W		SEC. 21, T44N, R63W	
OWNER	TEXACO INC.		TEXACO INC.		TEXACO INC.	
COMPLETED	07/31/51		05/30/59		05/12/48	
SAMPLED	05/06/63		05/05/63		06/06/63	
FORMATION	CRET-MUDDY & NEWCASTLE		CRET-MUDDY & NEWCASTLE		CRET-MUDDY & NEWCASTLE	
GEOLOGIC PROVINCE CODE	515		515		515	
DEPTH, FEET	5847		*4880		4145	
WELLHEAD PRESSURE, PSIG	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OPEN FLOW, MCFD	NOT GIVEN		5		2	
COMPONENT, MOLE PCT						
METHANE	56.6		32.7		68.9	
ETHANE	15.3		22.5		9.2	
PROPANE	13.2		27.6		10.4	
N-BUTANE	6.3		9.0		4.1	
ISOBUTANE	2.1		3.4		1.8	
N-PENTANE	0.9		1.7		0.6	
ISOPENTANE	1.7		1.5		1.4	
CYCLOPENTANE	0.4		0.4		0.3	
HEXANES PLUS	1.2		1.1		0.7	
NITROGEN	1.2		0.0		1.0	
OXYGEN	0.0		0.0		0.0	
ARGON	0.0		0.0		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.9		0.2		1.5	
HELIUM	0.01		TRACE		0.01	
HEATING VALUE*	1665		2277		1464	
SPECIFIC GRAVITY	0.992		1.239		0.875	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1 SAMPLE 14308	INDEX 2 SAMPLE 14536	INDEX 3 SAMPLE 11926
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	ESCAMBIA	ESCAMBIA	HALE
FIELD	BIG ESCAMBIA CREEK	BIG ESCAMBIA CREEK	GULF COAST AREA
LOCATION	6 IN. TO MALLARD PLANT	NOT GIVEN	15, 24 & 12 IN. LINES
OWNER	EXXON CO., U.S.A.	EXXON CO., U.S.A.	SOUTHERN NATURAL GAS CO.
SAMPLED	03/19/75	11/12/74	06/06/39
FORMATION	JURA-SMACKOVER	JURA-SMACKOVER	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	840	780	1200
FLOW, MCFD	1400	5042	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	47.7	72.3	94.6
ETHANE	34.6	15.1	2.8
PROPANE	15.7	7.1	0.7
N-BUTANE	1.9	2.1	0.2
ISOBUTANE	0.9	1.5	0.0
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.2	0.5	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	0.8	1.1	0.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.9
HELIUM	0.01	0.04	0.01
HEATING VALUE*	2129	1294	1033
SPECIFIC GRAVITY	1.023	0.775	0.589

	INDEX 4 SAMPLE 14218	INDEX 5 SAMPLE 15869	INDEX 6 SAMPLE 11925
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	HALE	HALE	MARENGO
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION	18, 20 & 24 IN.	2-18 & 1-24 IN.	20, 8-36 & 42 IN. LINES
OWNER	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.	TRANSCONTINENTAL GAS PL. COR
SAMPLED	11/11/74	12/17/79	06/06/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	560	1180	800
FLOW, MCFD	1134000	940000	602000
COMPONENT, MOLE PCT			
METHANE	96.3	96.8	95.2
ETHANE	2.1	1.6	2.7
PROPANE	0.3	0.5	0.5
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	TRACE	0.1	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	0.4	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.7	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1018	1039	1026
SPECIFIC GRAVITY	0.577	0.580	0.580

	INDEX 7 SAMPLE 14220	INDEX 8 SAMPLE 15865	INDEX 9 SAMPLE 14219
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	MARENGO	MARENGO	PICKENS
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION	30 IN., 2-36 & 1-42 IN.	1-30, 2-36 & 1-42 IN.	22, 24 & 26 IN.
OWNER	TRANSCONTINENTAL GAS PL. COR	TRANSCONTINENTAL GAS PL. COR	SOUTHERN NATURAL GAS CO.
SAMPLED	11/11/74	12/17/79	11/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	210	200
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	560	760
FLOW, MCFD	1500000	3000000	641000
COMPONENT, MOLE PCT			
METHANE	96.4	96.5	95.3
ETHANE	2.1	1.8	2.4
PROPANE	0.3	0.3	0.4
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	TRACE	0.1	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.4	0.4	0.5
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.7	0.8
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1023	1029	1027
SPECIFIC GRAVITY	0.575	0.580	0.586

	INDEX 10 SAMPLE 11927	INDEX 11 SAMPLE 15862	INDEX 12 SAMPLE 15863
STATE	ALABAMA	ALABAMA	ALABAMA
COUNTY	PICKENS	PICKENS	PICKENS
FIELD	LOUISIANA	LOUISIANA	LOUISIANA
LOCATION	NOT GIVEN	1-22 & 1-24 IN.	24 IN.
OWNER	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.	SOUTHERN NATURAL GAS CO.
SAMPLED	06/06/69	12/17/79	12/17/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	750	685	730
FLOW, MCFD	NOT GIVEN	3880000	3220000
COMPONENT, MOLE PCT			
METHANE	96.2	96.8	96.7
ETHANE	2.6	1.7	1.9
PROPANE	0.5	0.2	0.3
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	1.3	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.6	0.2
HELIUM	0.01	TRACE	0.01
HEATING VALUE*	1021	1020	1026
SPECIFIC GRAVITY	0.588	0.574	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 13 SAMPLE 16857	INDEX 14 SAMPLE 16859	INDEX 15 SAMPLE 11798
STATE	ALASKA	ALASKA	ARIZONA
COUNTY	N SLOPE-NPR4	N SLOPE-NPR4	APACHE
FIELD	SOUTH BARROW EAST & BARROW E	SOUTH BARROW EAST & BARROW E	NAVAJO SPRINGS E
LOCATION	TRANSMISSION LINE	TRANSMISSION LINE	NOT GIVEN
OWNER	U.S. GEOLOGICAL SURVEY	U.S. GEOLOGICAL SURVEY	ARIZONA HELIUM CORP.
SAMPLED	03/29/83	03/28/83	03/21/69
FORMATION	JURA-BARROW	JURA-BARROW	PERM-COCONINO
GEOLOGIC PROVINCE CODE	972	972	590
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	855	NOT GIVEN	NOT GIVEN
FLOW,MCFD	7700	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.3	95.0	TRACE
ETHANE	0.6	0.7	0.0
PROPANE	0.0	TRACE	0.0
N-BUTANE	0.2	0.1	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	4.0	3.5	90.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.8
HYDROGEN	0.2	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.6
HELIUM	0.18	0.15	8.43
HEATING VALUE*	973	979	0
SPECIFIC GRAVITY	0.583	0.573	0.903

	INDEX 16 SAMPLE 8490	INDEX 17 SAMPLE 15677	INDEX 18 SAMPLE 13614
STATE	ARIZONA	ARKANSAS	ARKANSAS
COUNTY	APACHE	CLARK	CLARK
FIELD	PINTA	LOUISIANA & ARKANSAS FIELDS	NOT GIVEN
LOCATION	SEC. 29, T20N, R26E	18 IN. A LINE	20 IN. LINE
OWNER	KERR-MCGEE CORP.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
SAMPLED	03/06/62	06/26/79	06/07/73
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	590	400	400
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	85	640	655
FLOW,MCFD	2500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	TRACE	87.3	95.3
ETHANE	0.0	4.9	1.6
PROPANE	TRACE	1.3	0.3
N-BUTANE	0.0	0.3	0.0
ISOBUTANE	0.0	0.2	0.0
N-PENTANE	0.0	0.1	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	89.6	4.7	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.6	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.2	0.8	2.3
HELIUM	8.50	0.03	0.05
HEATING VALUE*	0	1036	1000
SPECIFIC GRAVITY	0.905	0.632	0.590

	INDEX 19 SAMPLE 13615	INDEX 20 SAMPLE 17116	INDEX 21 SAMPLE 17117
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CLARK	CLARK	CLARK
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	18 IN. "A" LINE	18 IN. A LINE	20 IN. LINE
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
SAMPLED	06/07/73	10/25/83	10/25/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	400	400	400
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	240	285	650
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	83.4	95.0
ETHANE	4.2	5.8	1.6
PROPANE	1.2	2.2	0.3
N-BUTANE	0.3	0.8	0.1
ISOBUTANE	0.4	0.5	0.0
N-PENTANE	0.1	0.3	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	5.6	6.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.0	2.3
HELIUM	0.04	0.03	0.06
HEATING VALUE*	1024	1035	1000
SPECIFIC GRAVITY	0.636	0.667	0.590

	INDEX 22 SAMPLE 15678	INDEX 23 SAMPLE 11922	INDEX 24 SAMPLE 14207
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	CLARK	HOT SPRING	HOT SPRING
FIELD	OKLA., ARK. & LA.	GULF COAST AREA	GULF COAST AREA
LOCATION	20 IN.	2-30 & 36 IN. LINES	2-30 IN. & 1-36 IN.
OWNER	ARKANSAS LOUISIANA GAS CO.	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF
SAMPLED	06/26/79	06/03/69	11/05/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	400	400	400
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	620	830	710
FLOW,MCFD	NOT GIVEN	1000000	1300000
COMPONENT, MOLE PCT			
METHANE	93.2	94.9	95.6
ETHANE	3.2	3.0	2.9
PROPANE	0.9	0.5	0.3
N-BUTANE	0.2	0.2	0.1
ISOBUTANE	0.1	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	0.7	0.6	0.7
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.6	0.8	0.8
HELIUM	0.04	TRACE	TRACE
HEATING VALUE*	1042	1035	1026
SPECIFIC GRAVITY	0.607	0.588	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 25 SAMPLE 14208	INDEX 26 SAMPLE 15851	INDEX 27 SAMPLE 15852
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	HOT SPRING	HOT SPRING	HOT SPRING
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION	24 IN.	24 IN.	2-30 & 1-36 IN.
OWNER	TEXAS EASTERN TRANS. CORP.	TEXAS EASTERN TRANS. CORP.	NATURAL GAS PIPELINE CO. OF
SAMPLED	11/05/74	12/11/79	12/11/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	400	400	400
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	715	713	858
FLOW, MCFD	215000	200000	1600000
COMPONENT, MOLE PCT			
METHANE	92.2	91.8	96.6
ETHANE	4.6	3.3	1.6
PROPANE	0.8	0.6	0.4
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.1	0.6	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	5.0	0.0
CARBON DIOXIDE	1.0	1.3	0.6
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1044	1044	1034
SPECIFIC GRAVITY	0.602	0.601	0.582

	INDEX 28 SAMPLE 11921	INDEX 29 SAMPLE 11923	INDEX 30 SAMPLE 14209
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	HOT SPRING	LINCOLN	LINCOLN
FIELD	NOT GIVEN	GULF COAST AREA	GULF COAST AREA
LOCATION	24 IN. LINE	22, 20 & 36 IN. LOOPS	22, 24, & 26 IN. LOOP
OWNER	TEXAS EASTERN TRANS. CORP.	MISS. RIVER TRANS. CORP.	MISS. RIVER TRANS. CORP.
SAMPLED	06/03/69	06/03/69	11/06/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	400	240	240
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	777	335	720
FLOW, MCFD	250000	500000	600000
COMPONENT, MOLE PCT			
METHANE	92.3	94.5	96.1
ETHANE	4.0	3.9	2.5
PROPANE	0.6	0.5	0.6
N-BUTANE	0.2	0.0	0.1
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	1.5	0.9	0.3
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.2	1.1	0.0
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1029	1024	1050
SPECIFIC GRAVITY	0.601	0.589	0.581

	INDEX 31 SAMPLE 15853	INDEX 32 SAMPLE 15676	INDEX 33 SAMPLE 17115
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LINCOLN	LOGAN	LOGAN
FIELD	GULF COAST AREA	ARKANSAS FIELDS	NORTHWEST ARKANSAS FIELDS
LOCATION	24 IN.	16 IN.	16 IN. LINE
OWNER	MISS. RIVER TRANS. CORP.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
SAMPLED	12/11/79	06/25/79	10/24/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	240	345	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	608	800	650
FLOW, MCFD	417000	80000	65000
COMPONENT, MOLE PCT			
METHANE	96.2	97.4	97.4
ETHANE	2.1	1.2	1.2
PROPANE	0.4	0.1	0.1
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.5	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.8
HELIUM	TRACE	0.07	0.09
HEATING VALUE*	1039	1011	1011
SPECIFIC GRAVITY	0.582	0.569	0.570

	INDEX 34 SAMPLE 13623	INDEX 35 SAMPLE 15675	INDEX 36 SAMPLE 17114
STATE	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY	LOGAN	LOGAN	LOGAN
FIELD	NOT GIVEN	TEXAS, OKLAHOMA & ARKANSAS	W. AR. OK & TX PANHANDLE
LOCATION	30 IN. LINE	30 IN.	30 IN. LINE
OWNER	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.	ARKANSAS LOUISIANA GAS CO.
SAMPLED	06/07/73	06/25/79	10/24/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	345	345
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	948	870	500
FLOW, MCFD	300000	325000	400000
COMPONENT, MOLE PCT			
METHANE	95.5	94.8	94.7
ETHANE	1.5	2.1	1.5
PROPANE	0.1	0.4	0.2
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	0.5	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.1	1.8	2.6
HELIUM	0.05	0.05	0.06
HEATING VALUE*	1002	1017	1009
SPECIFIC GRAVITY	0.587	0.591	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 37 SAMPLE 3165	INDEX 38 SAMPLE 15767	INDEX 39 SAMPLE 17440
STATE	ARKANSAS	CALIFORNIA	CALIFORNIA
COUNTY	POPE	CONTRA COSTA	CONTRA COSTA
FIELD	TATES ISLAND	CANADIAN GAS	CANADIAN GAS
LOCATION	DRIP LINE	36 IN. LINE NO. 403	36 IN. LINE VALVE 146
OWNER	ARKANSAS LOUISIANA GAS CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	02/16/42	09/12/79	09/19/84
FORMATION	PENN-ATOKA SAND	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	345	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	400	510	810
FLOW,MCFD	NOT GIVEN	248000	600000
COMPONENT, MOLE PCT			
METHANE	95.6	89.3	96.2
ETHANE	3.2	3.1	1.5
PROPANE	---	0.3	TRACE
N-BUTANE	---	0.0	0.1
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	TRACE
NITROGEN	0.1	5.8	1.6
OXYGEN	0.1	1.1	TRACE
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.9	0.4	0.2
HELIUM	0.12	TRACE	0.05
HEATING VALUE*	1026	968	1009
SPECIFIC GRAVITY	0.580	0.608	0.572

	INDEX 40 SAMPLE 14067	INDEX 41 SAMPLE 14069	INDEX 42 SAMPLE 17441
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	CONTRA COSTA	CONTRA COSTA
FIELD	DUTCH SLOUGH	FIELDS W OF SACRAMENTO RIVER	OAKLEY
LOCATION	12 IN. LINE NO. 316	16 IN. LINE NO. 114	12 IN. LINE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/11/74	07/11/74	09/19/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	450	280	550
FLOW,MCFD	12000	76800	55000
COMPONENT, MOLE PCT			
METHANE	93.7	94.0	92.9
ETHANE	3.1	2.9	4.1
PROPANE	1.1	0.7	1.2
N-BUTANE	0.2	0.1	0.3
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	0.8	1.6	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1068	1035	1080
SPECIFIC GRAVITY	0.604	0.591	0.609

	INDEX 43 SAMPLE 14068	INDEX 44 SAMPLE 15768	INDEX 45 SAMPLE 15766
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	CONTRA COSTA	CONTRA COSTA
FIELD	RIO VISTA	SACRAMENTO RIVER E	SACRAMENTO RIVER W
LOCATION	12 IN. LINE NO. 131	12 & 16 IN. STAN PAK 4	16 IN. LINE NO. 114
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/11/74	09/12/79	09/12/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	280	310	310
FLOW,MCFD	17000	20000	22000
COMPONENT, MOLE PCT			
METHANE	93.7	93.8	93.5
ETHANE	2.8	2.9	2.9
PROPANE	0.8	0.6	0.7
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.2	0.1	0.1
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.9	1.8	2.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1040	1034	1041
SPECIFIC GRAVITY	0.594	0.594	0.599

	INDEX 46 SAMPLE 17439	INDEX 47 SAMPLE 15763	INDEX 48 SAMPLE 17436
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	CONTRA COSTA	FRESNO	FRESNO
FIELD	SACRAMENTO RIVER W&E	CHENEY	CHENEY
LOCATION	16 IN. LINE VALVE 50	4 IN. DISCHARGE	4 IN. DISCHARGE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/19/84	09/11/79	09/18/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	315	360	485
FLOW,MCFD	44000	550	200
COMPONENT, MOLE PCT			
METHANE	92.8	84.9	83.6
ETHANE	3.3	5.4	5.9
PROPANE	0.9	4.3	4.5
N-BUTANE	0.2	1.2	1.4
ISOBUTANE	0.2	1.3	1.5
N-PENTANE	TRACE	0.3	0.3
ISOPENTANE	0.1	0.5	0.6
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.9	1.5	1.5
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.6
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1049	1201	1219
SPECIFIC GRAVITY	0.604	0.695	0.708

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 49 SAMPLE 14059	INDEX 50 SAMPLE 14058	INDEX 51 SAMPLE 14085
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	FRESNO	FRESNO	KERN
FIELD	CHENEY RANCH GAS	RAISIN CITY	BELRIDGE N
LOCATION	4 IN. NO. 204 LINE	PACIFIC GAS & ELECTRIC	METER STA. NO. 4319, 12 IN.
OWNER	PACIFIC GAS & ELECTRIC CO.	TEXACO INC.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/10/74	07/09/74	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	500	550	430
FLOW, MCFD	5000	500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.7	95.0	92.1
ETHANE	7.0	2.5	5.0
PROPANE	1.6	0.5	0.8
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.2	0.1	TRACE
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	1.2	1.5	0.8
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.0	1.1
HELIUM	0.03	0.01	TRACE
HEATING VALUE*	1076	1035	1043
SPECIFIC GRAVITY	0.623	0.584	0.600

	INDEX 52 SAMPLE 15775	INDEX 53 SAMPLE 14078	INDEX 54 SAMPLE 15872
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	BELRIDGE N	BUENA VISTA HILLS & ELK HILL	COLES LEVEE N
LOCATION	16 IN. LINE NO. 102	METER STA. NO. 4432, 10 IN.	10 IN. LINE 103
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/18/79	07/15/74	12/28/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	390	360	430
FLOW, MCFD	10000	3000	3000
COMPONENT, MOLE PCT			
METHANE	92.6	84.5	88.9
ETHANE	4.5	7.1	7.8
PROPANE	0.3	1.5	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.9	3.6	1.0
OXYGEN	TRACE	0.8	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.5	2.4	2.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1032	1022	1043
SPECIFIC GRAVITY	0.600	0.647	0.618

	INDEX 55 SAMPLE 17452	INDEX 56 SAMPLE 14080	INDEX 57 SAMPLE 15871
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	COLES LEVEE N	COLES LEVEE S	COLES LEVEE S
LOCATION	10 IN. LINE NO. 103	METER STA. NO. 4709 & 4710	34 IN. LINE 225
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/18/84	07/15/74	12/31/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	420	100	650
FLOW, MCFD	3060	NOT GIVEN	70000
COMPONENT, MOLE PCT			
METHANE	84.2	91.4	91.7
ETHANE	10.4	6.3	6.2
PROPANE	2.1	0.9	0.7
N-BUTANE	TRACE	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	TRACE	0.0
NITROGEN	1.0	0.3	0.4
OXYGEN	0.1	TRACE	0.0
ARGON	TRACE	0.5	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.0	1.1	1.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1098	1062	1058
SPECIFIC GRAVITY	0.652	0.607	0.605

	INDEX 58 SAMPLE 17451	INDEX 59 SAMPLE 15778	INDEX 60 SAMPLE 17449
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	COLES LEVEE S	CYMRIC	CYMRIC
LOCATION	34 IN. LINE NO. 225	16 IN. LINE NO. 133	10 IN. LINE NO. 131
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/19/84	09/19/79	09/18/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	590	590	360
FLOW, MCFD	42500	5000	1200
COMPONENT, MOLE PCT			
METHANE	91.3	87.8	85.9
ETHANE	7.1	5.2	6.9
PROPANE	0.8	0.1	5.5
N-BUTANE	0.1	0.1	1.0
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	0.3	3.0	2.3
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	3.5	TRACE
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1080	989	1136
SPECIFIC GRAVITY	0.605	0.630	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 61 SAMPLE 14082	INDEX 62 SAMPLE 1956	INDEX 63 SAMPLE 15776
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	CYMRIC, BELGIAN & MCKITTRICK	ELK HILLS	GOSFORD
LOCATION	METER STA. NO. 4320, 8 IN.	SEC. 6, T30S, R24E	4 IN. LINE NO. 5024
OWNER	SOUTHERN CALIFORNIA GAS CO.	STANDARD OIL CO. OF CALIF.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/15/74	03/14/39	09/18/79
FORMATION	NOT GIVEN	PLIO-ETCHEGOIN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	380	2550	380
FLOW, MCFD	5000		1500
COMPONENT, MOLE PCT			
METHANE	91.2	86.0	86.5
ETHANE	4.6	7.8	7.1
PROPANE	0.1	---	3.5
N-BUTANE	TRACE	---	0.7
ISOBUTANE	TRACE	---	0.3
N-PENTANE	TRACE	---	0.1
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	TRACE	---	TRACE
NITROGEN	2.5	1.6	0.9
OXYGEN	0.1	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	1.6	4.4	0.9
HELIUM	TRACE	0.00	0.01
HEATING VALUE*	1009	1011	1131
SPECIFIC GRAVITY	0.603	0.645	0.654

	INDEX 64 SAMPLE 17448	INDEX 65 SAMPLE 14087	INDEX 66 SAMPLE 14084
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	GOSFORD	LOST HILLS	MCDONALD ANTICLINE
LOCATION	4 IN. LINE NO. 5024	METER STA. NO. 4334, 6 IN.	METER STA. NO. 4324, 6 IN.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/19/84	07/15/74	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	388	380	380
FLOW, MCFD	210	2000	2000
COMPONENT, MOLE PCT			
METHANE	77.5	90.2	81.5
ETHANE	8.0	4.0	7.9
PROPANE	4.9	1.2	5.6
N-BUTANE	0.9	0.3	1.5
ISOBUTANE	0.5	0.2	1.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	5.3	0.3	1.1
OXYGEN	1.2	0.0	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.5	3.9	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1107	1038	1229
SPECIFIC GRAVITY	0.710	0.632	0.709

	INDEX 67 SAMPLE 17450	INDEX 68 SAMPLE 14081	INDEX 69 SAMPLE 14079
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	MCKITTRICK, ELK HILLS	RIO BRAVO	SAN JOAQUIN VALLEY AREA
LOCATION	12 IN. LINE NO. 303	METER STA. NO. 5993, 8 IN.	METER STA. NO. 4702, 10 IN.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/18/84	07/15/74	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	375	580	380
FLOW, MCFD	7600	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.7	88.3	87.7
ETHANE	9.2	8.5	8.0
PROPANE	1.1	0.5	0.3
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	0.0	0.1	0.0
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	0.1	1.3	2.9
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	4.5	1.0	1.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1062	1071	1043
SPECIFIC GRAVITY	0.661	0.621	0.622

	INDEX 70 SAMPLE 14083	INDEX 71 SAMPLE 14086	INDEX 72 SAMPLE 15717
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KERN	KERN	KERN
FIELD	SAN JOAQUIN VALLEY AREA	TRICO, TRICO NW & HARVESTER	YOWLUMNE
LOCATION	METER STA. NO. 4339, 12 IN.	METER STA. NO. 952-2, 12 IN.	4 IN. LINE NO. 5023
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/15/74	07/15/74	09/18/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	380	380	380
FLOW, MCFD	12000	2000	7000
COMPONENT, MOLE PCT			
METHANE	87.9	99.2	82.0
ETHANE	9.1	0.2	9.5
PROPANE	0.7	TRACE	4.8
N-BUTANE	TRACE	0.0	0.7
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	0.6	0.2	0.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.5	0.3	1.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1058	1008	1171
SPECIFIC GRAVITY	0.627	0.559	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 73 SAMPLE 14056	INDEX 74 SAMPLE 15873	INDEX 75 SAMPLE 14088
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	KINGS
FIELD	KETTLEMAN HILLS	KETTLEMAN HILLS	SAN JOAQUIN VALLEY AREA
LOCATION	22 IN. SP NO. 1	26 IN. LINE	METER STA. NO. 4228, 8 IN.
OWNER	PACIFIC GAS & ELECTRIC CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/09/74	01/01/80	07/15/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	400	400	395
FLOW, MCFD	11000	5000	3000
COMPONENT, MOLE PCT			
METHANE	93.8	93.5	94.8
ETHANE	4.2	4.4	3.3
PROPANE	TRACE	0.2	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	1.0	1.1	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.8
HELIUM	0.06	TRACE	TRACE
HEATING VALUE	1025	1031	1019
SPECIFIC GRAVITY	0.587	0.592	0.582

	INDEX 76 SAMPLE 17435	INDEX 77 SAMPLE 14055	INDEX 78 SAMPLE 15762
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	KINGS	KINGS
FIELD	TEXAS GAS	TEXAS GAS FIELDS	TEXAS GAS FIELDS
LOCATION	2-34 DISCH.	34 IN. NO. 300	2-34 IN. DISCHARGE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/18/84	07/09/74	09/11/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	755	540	604
FLOW, MCFD	1021000	950000	650000
COMPONENT, MOLE PCT			
METHANE	89.9	86.8	88.9
ETHANE	6.1	7.1	7.1
PROPANE	1.3	1.7	1.6
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.3	2.2	1.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	0.8
HELIUM	0.04	0.06	0.03
HEATING VALUE	1073	1070	1082
SPECIFIC GRAVITY	0.621	0.644	0.625

	INDEX 79 SAMPLE 17574	INDEX 80 SAMPLE 14133	INDEX 81 SAMPLE 15785
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	KINGS	LOS ANGELES	LOS ANGELES
FIELD	TULARE LAKE	CASTAIC JUNCTION	CASTAIC, PICO PORTERIO
LOCATION	SEC. 17, T22S, R20E	METER 4512 TO LINE 163&1001	8 IN.
OWNER	SHELL CALIFORNIA PROD., INC.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	01/19/85	08/16/74	09/19/79
FORMATION	MIOC-TEMBLOR	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	760	760
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	500	272
FLOW, MCFD	500	4500	2100
COMPONENT, MOLE PCT			
METHANE	72.3	93.9	96.2
ETHANE	10.6	3.8	3.2
PROPANE	8.6	0.2	TRACE
N-BUTANE	3.2	0.0	0.0
ISOBUTANE	1.8	0.0	0.0
N-PENTANE	0.7	0.0	0.0
ISOPENTANE	1.0	0.0	0.0
CYCLOPENTANE	0.2	0.0	0.0
HEXANES PLUS	0.6	0.0	0.0
NITROGEN	0.5	1.6	0.4
OXYGEN	0.1	0.3	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE	1029	1024	1032
SPECIFIC GRAVITY	0.825	0.585	0.572

	INDEX 82 SAMPLE 17458	INDEX 83 SAMPLE 1372	INDEX 84 SAMPLE 1373
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	CASTAIC, PICO PORTERIO	DOMINGUEZ	DOMINGUEZ
LOCATION	8 IN. LINE	NOT GIVEN	NOT GIVEN
OWNER	SOUTHERN CALIFORNIA GAS CO.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
SAMPLED	09/26/84	03/25/27	03/25/27
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	240	NOT GIVEN	NOT GIVEN
FLOW, MCFD	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.9	74.4	74.3
ETHANE	3.4	22.5	22.3
PROPANE	0.1	---	---
N-BUTANE	0.0	---	---
ISOBUTANE	0.0	---	---
N-PENTANE	0.0	---	---
ISOPENTANE	0.0	---	---
CYCLOPENTANE	0.0	---	---
HEXANES PLUS	0.0	---	---
NITROGEN	0.4	1.3	1.8
OXYGEN	TRACE	1.2	1.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.2	0.6	0.5
HELIUM	TRACE	0.00	0.00
HEATING VALUE	1035	1157	1152
SPECIFIC GRAVITY	0.576	0.684	0.683

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 85 SAMPLE 14096	INDEX 86 SAMPLE 14131	INDEX 87 SAMPLE 15786
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	DOMINGUEZ ROSECRANS LASCIENE	MONOR RANCHO	INGLEWOOD
LOCATION	METER 732, 15 IN. LINE 77	FIELD METER 4510 TO LINE 174	10 IN.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/12/74	08/16/74	09/20/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	170	200	154
FLOW, MCFD	2500	1600	3000
COMPONENT, MOLE PCT			
METHANE	90.3	86.6	88.4
ETHANE	7.2	11.6	6.5
PROPANE	TRACE	0.1	0.8
N-BUTANE	TRACE	0.1	TRACE
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	2.2	0.4	1.0
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	2.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1044	1094	1038
SPECIFIC GRAVITY	0.599	0.626	0.624

	INDEX 88 SAMPLE 14097	INDEX 89 SAMPLE 14099	INDEX 90 SAMPLE 14098
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	LOS ANGELES BASIN FIELDS	LOS ANGELES BASIN FIELDS	LOS ANGELES, DOWTOWN
LOCATION	16 IN. LINE 125	METER STA. NO. A-2	MTR NO. 6004, 6 IN. LINE 296
OWNER	SOUTHERN CALIFORNIA GAS CO.	LOMITA GASOLINE CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/15/74	07/12/74	07/12/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	155	60	160
FLOW, MCFD	4200	2500	2000
COMPONENT, MOLE PCT			
METHANE	86.3	81.8	80.3
ETHANE	7.4	6.4	8.3
PROPANE	3.8	4.3	6.4
N-BUTANE	TRACE	0.7	2.0
ISOBUTANE	TRACE	0.7	1.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.8
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	2.4	3.4	0.4
OXYGEN	0.2	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.9	0.0
CARBON DIOXIDE	1.9	2.3	0.6
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1057	1112	1283
SPECIFIC GRAVITY	0.635	0.695	0.735

	INDEX 91 SAMPLE 1965	INDEX 92 SAMPLE 1962	INDEX 93 SAMPLE 14132
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	LOS ANGELES	LOS ANGELES	LOS ANGELES
FIELD	MONTEBELLO	SANTA FE SPRINGS	TORREY CANYON
LOCATION	NOT GIVEN	SEC. 5, T3S, R11W	LINE 1001 FIELD METER 3723
OWNER	STANDARD OIL CO. OF CALIF.	STANDARD OIL CO. OF CALIF.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	03/17/30	03/15/30	08/16/74
FORMATION	PLIO-	PLIO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	760
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	2000	300
FLOW, MCFD	NOT GIVEN	385	8000
COMPONENT, MOLE PCT			
METHANE	89.6	77.1	89.7
ETHANE	8.1	21.9	6.2
PROPANE	---	---	1.9
N-BUTANE	---	---	0.2
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	TRACE
ISOPENTANE	---	---	TRACE
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	TRACE
NITROGEN	1.4	0.4	1.1
OXYGEN	0.3	0.3	0.1
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.7	0.3	0.6
HELIUM	0.00	0.00	TRACE
HEATING VALUE*	1428	1173	1079
SPECIFIC GRAVITY	0.633	0.669	0.619

	INDEX 94 SAMPLE 14062	INDEX 95 SAMPLE 14061	INDEX 96 SAMPLE 14060
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MADERA	MADERA	MADERA
FIELD	CHOWCHILLA	GILL RANCH	MOFFAT RANCH
LOCATION	4 IN. NO. 186 LINE	6 IN. NO. 133 LINE	4 IN. NO. 183 LINE
OWNER	PACIFIC GAS & ELECTRIC CO.	TEXACO INC.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/10/74	07/10/74	07/10/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	745	745	745
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1428	400	150
FLOW, MCFD	4000	3000	200
COMPONENT, MOLE PCT			
METHANE	96.5	91.2	88.9
ETHANE	0.9	0.4	0.3
PROPANE	0.1	TRACE	TRACE
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	1.0	8.0	10.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.4	0.4
HELIUM	0.01	0.01	0.03
HEATING VALUE*	420	931	906
SPECIFIC GRAVITY	0.861	0.595	0.661

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 97 SAMPLE 15764	INDEX 98 SAMPLE 17437	INDEX 99 SAMPLE 1966
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	MADERA	MADERA	ORANGE
FIELD	VERNALIS	VERNALIS	HUNTINGTON BEACH
LOCATION	6 IN. SUCTION	6 IN. SUCTION	NOT GIVEN
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	STANDARD OIL CO. OF CALIF.
SAMPLED	09/12/79	09/19/84	03/17/30
FORMATION	NOT GIVEN	NOT GIVEN	MIOC~
GEOLOGIC PROVINCE CODE	745	745	760
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	150	410	NOT GIVEN
FLOW,MCFD	6000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.4	88.4	63.6
ETHANE	0.6	0.7	35.5
PROPANE	0.1	0.1	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	9.9	10.7	0.3
OXYGEN	0.0	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.1	TRACE	0.3
HELIUM	0.01	0.01	0.00
HEATING VALUE*	919	911	1280
SPECIFIC GRAVITY	0.601	0.604	0.736

	INDEX 100 SAMPLE 14100	INDEX 101 SAMPLE 1964	INDEX 102 SAMPLE 15772
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	ORANGE	ORANGE	SACRAMENTO
FIELD	HUNTINGTON BEACH	MURPHY-COYOTE	BEEHIVE BEND AREA
LOCATION	METER STA. NO. 2343	SEC. 18, T3S, R10W	12 IN.
OWNER	SIGNAL OIL CO.	STANDARD OIL CO. OF CALIF.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/12/74	03/17/30	09/14/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	760	760	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	150	NOT GIVEN	500
FLOW,MCFD	2000	NOT GIVEN	80000
COMPONENT, MOLE PCT			
METHANE	79.5	76.9	92.1
ETHANE	3.9	22.1	2.4
PROPANE	2.6	---	0.2
N-BUTANE	0.5	---	0.0
ISOBUTANE	0.5	---	0.0
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.1	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	TRACE	---	0.0
NITROGEN	8.8	0.9	5.1
OXYGEN	TRACE	0.5	0.0
ARGON	0.1	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	4.5	0.2	0.2
HELIUM	TRACE	0.00	0.02
HEATING VALUE*	972	1170	981
SPECIFIC GRAVITY	0.695	0.673	0.591

	INDEX 103 SAMPLE 17445	INDEX 104 SAMPLE 14073	INDEX 105 SAMPLE 15769
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SACRAMENTO	SACRAMENTO
FIELD	BEEMIVE BEND,T.MUNTER,ZAMORA	MARYSVILLE & HERSHEY JCT.	RIO VISTA E
LOCATION	12 IN. LINE	12 IN. LINE 172	12 IN.
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/21/84	07/11/74	09/13/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	500	500	700
FLOW,MCFD	60000	70000	40000
COMPONENT, MOLE PCT			
METHANE	93.9	91.9	92.7
ETHANE	0.3	0.3	3.4
PROPANE	TRACE	TRACE	1.2
N-BUTANE	0.0	TRACE	0.3
ISOBUTANE	0.0	0.0	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	5.7	7.6	1.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	957	936	1065
SPECIFIC GRAVITY	0.579	0.588	0.609

	INDEX 106 SAMPLE 17442	INDEX 107 SAMPLE 14070	INDEX 108 SAMPLE 14066
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SACRAMENTO	SACRAMENTO	SAN JOAQUIN
FIELD	RIO VISTA, LINDSEY SLOUGH	RIVER ISLANDS	LATHROP
LOCATION	12 IN. LINE	12 IN. LINE 196	10 IN. NO. 304
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/20/84	07/11/74	07/11/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	645	482	400
FLOW,MCFD	50000	48000	50000
COMPONENT, MOLE PCT			
METHANE	91.8	93.4	82.6
ETHANE	3.6	3.1	0.3
PROPANE	1.3	0.9	TRACE
N-BUTANE	0.3	0.1	0.0
ISOBUTANE	0.2	0.2	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	1.9	1.7	16.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.0
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1065	1044	842
SPECIFIC GRAVITY	0.613	0.597	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 109 SAMPLE 15765	INDEX 110 SAMPLE 17438	INDEX 111 SAMPLE 14064
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SAN JOAQUIN
FIELD	LATHROP	LATHROP, UNION ISLAND	MCMULLIN RANCH
LOCATION	12 IN. SUCTION	12 IN. SUCTION	6 IN. NO. 194 LINE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/12/79	09/19/80	07/10/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	200	700	150
FLOW,MCFD	15000	60000	2500
COMPONENT, MOLE PCT			
METHANE	85.6	84.9	85.1
ETHANE	0.5	0.4	0.6
PROPANE	TRACE	0.1	0.1
N-BUTANE	0.0	0.0	TRACE
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	13.5	14.4	13.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.5
HELIUM	0.01	0.01	0.01
HEATING VALUE*	876	870	880
SPECIFIC GRAVITY	0.617	0.622	0.620

	INDEX 112 SAMPLE 14065	INDEX 113 SAMPLE 14063	INDEX 114 SAMPLE 17453
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SAN JOAQUIN	SAN JOAQUIN	SANTA BARBARA
FIELD	ROBERTS ISLAND	VERNALIS	CAT CANYONSANTA MARIA BASIN
LOCATION	8 IN. NO. 176	6 IN. NO. 112 LINE	8 IN. LINE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/11/74	07/10/74	09/26/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	750
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	1700	450	390
FLOW,MCFD	250	6000	1500
COMPONENT, MOLE PCT			
METHANE	92.9	89.5	77.2
ETHANE	0.3	0.5	10.6
PROPANE	TRACE	0.1	0.8
N-BUTANE	0.0	0.0	0.1
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	4.8	9.7	9.5
OXYGEN	0.0	0.0	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	8.5
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	946	920	1000
SPECIFIC GRAVITY	0.584	0.599	0.713

	INDEX 115 SAMPLE 17454	INDEX 116 SAMPLE 14091	INDEX 117 SAMPLE 14090
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SANTA BARBARA	SANTA BARBARA	SANTA BARBARA
FIELD	EL MOLINO	GAVIOTA & CALIENTE	MOLINO
LOCATION	8 IN. LINE	16 IN. LINE 1010	12 IN. LINE 260
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/18/84	07/16/74	07/16/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	750	750	750
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	990	940	830
FLOW,MCFD	1500	3000	14000
COMPONENT, MOLE PCT			
METHANE	84.5	90.0	95.4
ETHANE	6.5	5.2	4.1
PROPANE	2.7	2.5	TRACE
N-BUTANE	0.8	0.4	0.0
ISOBUTANE	0.6	0.4	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.1	0.4	0.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1152	1115	1040
SPECIFIC GRAVITY	0.645	0.623	0.576

	INDEX 118 SAMPLE 15781	INDEX 119 SAMPLE 14089	INDEX 120 SAMPLE 15780
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SANTA BARBARA	SANTA BARBARA	SANTA BARBARA
FIELD	MOLINO	SANTA MARIA VALLEY	SANTA MARIA, ET AL.
LOCATION	10 IN. NO. 260	METER STA. NO. 5805, 12 IN.	10 IN. DISCHARGE
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/19/79	07/12/74	09/19/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	750	750	750
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	750	179	400
FLOW,MCFD	50000	13000	8000
COMPONENT, MOLE PCT			
METHANE	81.9	35.5	80.4
ETHANE	7.2	5.6	6.7
PROPANE	4.4	1.4	2.4
N-BUTANE	1.3	TRACE	0.1
ISOBUTANE	1.2	0.1	0.2
N-PENTANE	0.8	0.0	TRACE
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.2	TRACE	TRACE
HEXANES PLUS	0.4	TRACE	TRACE
NITROGEN	0.3	51.1	3.3
OXYGEN	0.0	0.2	0.4
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE	0.0	0.3	0.0
CARBON DIOXIDE	0.0	5.9	6.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1275	1011	1000
SPECIFIC GRAVITY	0.723	0.651	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM GATHERING LINES IN THE UNITED STATES

	INDEX 121 SAMPLE 14092	INDEX 122 SAMPLE 15770	INDEX 123 SAMPLE 14071
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SANTA BARBARA	SOLANO	SOLANO
FIELD	SUMMERLAND & CARPINTERIA	LINDSEY SLOUGH	LINDSEY SLOUGH & RIO VISTA W
LOCATION	16 IN. LINE 1003	12 IN.	16 IN. LINE 200
OWNER	SOUTHERN CALIFORNIA GAS CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	07/16/74	09/13/79	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	750	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	375	500	480
FLOW, MCFD	4000	79000	80000
COMPONENT, MOLE PCT			
METHANE	83.0	90.9	94.1
ETHANE	9.8	5.6	3.0
PROPANE	4.2	1.4	0.8
N-BUTANE	0.7	0.3	0.1
ISOBUTANE	0.5	0.2	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.3	2.8	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.0	0.2	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1155	1065	1034
SPECIFIC GRAVITY	0.586	0.620	0.589

	INDEX 124 SAMPLE 17443	INDEX 125 SAMPLE 15771	INDEX 126 SAMPLE 14072
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SOLANO	SOLANO
FIELD	LINDSEY SLOUGH &RIO VISTA NW	MILLAR W. ET AL.	MILLAR, SAXON & BUNKER
LOCATION	12 IN. LINE	10 IN.	10 IN. LINE 220
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/20/84	09/13/79	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	700	550	518
FLOW, MCFD	41900	7000	6200
COMPONENT, MOLE PCT			
METHANE	90.3	83.3	81.9
ETHANE	4.5	1.1	1.3
PROPANE	1.6	0.2	0.3
N-BUTANE	0.4	0.1	TRACE
ISOBUTANE	0.3	TRACE	0.1
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.3	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	2.2	15.1	16.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1087	877	864
SPECIFIC GRAVITY	0.624	0.629	0.633

	INDEX 127 SAMPLE 17444	INDEX 128 SAMPLE 15773	INDEX 129 SAMPLE 17446
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SOLANO	SUTTER	SUTTER
FIELD	TREMONT, MILLAR, SAXON&BUNKER	NORTHERN CALIFORNIA GAS	NORTHERN CALIFORNIA GAS
LOCATION	10 IN. LINE NO. 220	34 IN.	34 IN. INLET
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/20/84	09/14/79	09/21/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	520	500	520
FLOW, MCFD	42000	25000	40000
COMPONENT, MOLE PCT			
METHANE	89.1	94.4	95.6
ETHANE	2.7	0.4	0.1
PROPANE	0.7	TRACE	TRACE
N-BUTANE	0.1	TRACE	0.0
ISOBUTANE	0.2	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	6.8	5.0	4.0
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	969	969	974
SPECIFIC GRAVITY	0.613	0.580	0.573

	INDEX 130 SAMPLE 14074	INDEX 131 SAMPLE 14075	INDEX 132 SAMPLE 14093
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	SUTTER	SUTTER	VENTURA
FIELD	NOT GIVEN	SUTTER CREEK & SUTTER BUTTES	FEDERAL OFFSHORE 401 & 402
LOCATION	16 IN. LINE 167	6 IN. LINE NO. 121	16 IN. LINE 1004
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	07/12/74	07/12/74	07/16/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	755
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	680	400	1080
FLOW, MCFD	7500	600	14000
COMPONENT, MOLE PCT			
METHANE	92.6	95.4	79.5
ETHANE	0.3	0.1	2.3
PROPANE	TRACE	TRACE	4.6
N-BUTANE	0.0	0.0	1.3
ISOBUTANE	0.0	0.0	0.5
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	7.1	4.3	TRACE
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	11.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	943	968	1035
SPECIFIC GRAVITY	0.585	0.573	0.755

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 133 SAMPLE 17455	INDEX 134 SAMPLE 15782	INDEX 135 SAMPLE 17456
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	VENTURA	VENTURA	VENTURA
FIELD	MOBIL'S OFFSHORE FIELDS	RINCON OFFSHORE	SCHOOL CANYON
LOCATION	10 IN. DISCH.	16 IN. LINE NO. 1004	6 IN. DISCH.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.
SAMPLED	09/25/84	09/19/79	09/25/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	755	958	755
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	945	750	123
FLOW, MCFD	6700	7000	2500
COMPONENT, MOLE PCT			
METHANE	87.5	82.4	82.2
ETHANE	2.8	2.4	7.6
PROPANE	3.9	5.2	4.3
N-BUTANE	1.2	2.6	TRACE
ISOBUTANE	0.4	0.7	TRACE
N-PENTANE	0.1	0.3	0.0
ISOPENTANE	0.1	0.4	TRACE
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	0.0	0.1	5.3
OXYGEN	0.0	0.0	0.6
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.9	5.8	1.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE	1108	1160	1088
SPECIFIC GRAVITY	0.673	0.742	0.667

	INDEX 136 SAMPLE 15784	INDEX 137 SAMPLE 17457	INDEX 138 SAMPLE 1969
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	VENTURA	VENTURA	VENTURA
FIELD	TORREY CANYON	TORREY CANYON	NOT GIVEN
LOCATION	10 IN.	10 IN. LINE	ASSOC. OIL & GAS CO.
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	03/18/30
SAMPLED	09/19/79	09/26/84	PLIC-
FORMATION	NOT GIVEN	NOT GIVEN	755
GEOLOGIC PROVINCE CODE	755	755	NOT GIVEN
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	285	252	NOT GIVEN
FLOW, MCFD	11500	8000	
COMPONENT, MOLE PCT			
METHANE	89.7	86.8	83.3
ETHANE	6.2	6.0	15.7
PROPANE	2.3	1.4	---
N-BUTANE	0.3	0.3	---
ISOBUTANE	0.2	0.2	---
N-PENTANE	TRACE	TRACE	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	TRACE	---
NITROGEN	0.8	0.6	0.6
OXYGEN	0.0	0.1	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.4	4.5	0.2
HELIUM	TRACE	TRACE	0.00
HEATING VALUE	1096	1040	1125
SPECIFIC GRAVITY	0.622	0.652	0.639

	INDEX 139 SAMPLE 15783	INDEX 140 SAMPLE 14095	INDEX 141 SAMPLE 14077
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	VENTURA	VENTURA	YOLO
FIELD	VENTURA	VENTURA&SANTA MARIE BSN FLDS	CANADIAN GAS
LOCATION	6 IN.	15 IN. LINE 37	20 IN. NO. 302 W LINE
OWNER	SOUTHERN CALIFORNIA GAS CO.	SOUTHERN CALIFORNIA GAS CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/19/79	07/16/74	07/12/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	755	755	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	150	400	695
FLOW, MCFD	6000	5000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	88.8	87.9
ETHANE	5.5	5.2	6.1
PROPANE	1.6	0.4	1.0
N-BUTANE	TRACE	TRACE	0.5
ISOBUTANE	TRACE	0.1	0.4
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	0.0	0.4
CYCLOPENTANE	TRACE	TRACE	0.4
HEXANES PLUS	TRACE	TRACE	0.5
NITROGEN	4.2	3.6	2.1
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.7	0.1
HELIUM	TRACE	TRACE	0.06
HEATING VALUE	1015	1007	1123
SPECIFIC GRAVITY	0.632	0.616	0.650

	INDEX 142 SAMPLE 15774	INDEX 143 SAMPLE 17447	INDEX 144 SAMPLE 14076
STATE	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY	YOLO	YOLO	YOLO
FIELD	NORTHERN CALIFORNIA GAS	NORTHERN CALIFORNIA GAS	VARIOUS
LOCATION	20 IN. INLET	20 IN. INLET	20 IN. NO. 302 E LINE
OWNER	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.	PACIFIC GAS & ELECTRIC CO.
SAMPLED	09/19/79	09/21/84	07/11/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	730	730	730
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1000	705	600
FLOW, MCFD	100000	70000	31000
COMPONENT, MOLE PCT			
METHANE	95.1	96.2	96.6
ETHANE	0.3	0.3	0.3
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.6
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	4.5	3.3	3.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE	969	980	978
SPECIFIC GRAVITY	0.575	0.570	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 145 SAMPLE 15433	INDEX 146 SAMPLE 17039	INDEX 147 SAMPLE 13434
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	CHEYENNE	CHEYENNE
FIELD	COMPOSITE	NORTHEAST COLORADO FIELDS	NOT GIVEN
LOCATION	20 IN. DISCHARGE	20 IN. DISCHARGE	2-20 IN. DISCHARGE LINES
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/19/78	09/01/83	10/02/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	450	450	450
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	725	634	520
FLOW, MCFD	50000	137000	275000
COMPONENT, MOLE PCT			
METHANE	85.4	89.2	76.2
ETHANE	10.2	6.3	6.6
PROPANE	1.0	0.9	2.2
N-BUTANE	0.0	0.1	0.2
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.9	2.1	14.0
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.3	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.5	1.8	0.1
HELIUM	0.02	0.05	0.37
HEATING VALUE*	1079	1038	961
SPECIFIC GRAVITY	0.643	0.623	0.673

	INDEX 148 SAMPLE 17038	INDEX 149 SAMPLE 8694	INDEX 150 SAMPLE 16994
STATE	COLORADO	COLORADO	COLORADO
COUNTY	CHEYENNE	GARFIELD	HUERFANO
FIELD	WATTENBURG (WY & DEN. AREA)	PRAIRIE CANYON & CARBONERA	SHEEP MOUNTAIN
LOCATION	20 IN. DISCHARGE	NOT GIVEN	GATHERING SYSTEM
OWNER	COLORADO INTERSTATE GAS CO.	WESTERN SLOPE GAS CO.	ARCO OIL & GAS CO.
SAMPLED	09/01/83	10/06/62	07/27/83
FORMATION	NOT GIVEN	NOT GIVEN	CRET-DAKOTA & JURA-ENTRADA
GEOLOGIC PROVINCE CODE	450	595	455
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	773	NOT GIVEN	1460
FLOW, MCFD	50000	NOT GIVEN	85000
COMPONENT, MOLE PCT			
METHANE	83.8	68.3	1.5
ETHANE	9.7	3.3	0.2
PROPANE	1.9	1.0	0.0
N-BUTANE	0.2	0.3	0.2
ISOBUTANE	0.1	0.3	0.0
N-PENTANE	0.0	0.1	0.4
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.0	10.9	1.1
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.3	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.0	14.8	96.5
HELIUM	0.02	0.57	0.03
HEATING VALUE*	1087	815	52
SPECIFIC GRAVITY	0.660	0.787	1.516

	INDEX 151 SAMPLE 8342	INDEX 152 SAMPLE 8343	INDEX 153 SAMPLE 16120
STATE	COLORADO	COLORADO	COLORADO
COUNTY	JACKSON	JACKSON	LA PLATA
FIELD	MCCALLUM UNIT	MCCALLUM UNIT	COLORADO
LOCATION	MORRISON POOL	DAKOTA-LAKOTA RESERVOIR	8 IN.
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	WESTERN SLOPE GAS CO.
SAMPLED	11/02/61	11/02/61	10/28/80
FORMATION	JURA-MORRISON	CRET-DAKOTA-LAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	545	545	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	710	750
FLOW, MCFD	34590	72021	14500
COMPONENT, MOLE PCT			
METHANE	2.3	3.1	95.0
ETHANE	0.5	0.3	1.2
PROPANE	2.1	1.4	0.2
N-BUTANE	1.1	0.3	TRACE
ISOBUTANE	0.4	0.0	0.1
N-PENTANE	0.5	0.2	TRACE
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.5	0.3	0.1
NITROGEN	0.1	1.9	TRACE
OXYGEN	0.1	0.1	0.0
ARGON	3.0	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	91.7	92.5	3.3
HELIUM	0.02	0.17	0.01
HEATING VALUE*	205	111	958
SPECIFIC GRAVITY	1.526	1.495	0.598

	INDEX 154 SAMPLE 12061	INDEX 155 SAMPLE 14481	INDEX 156 SAMPLE 8323
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LA PLATA
FIELD	IGNACIO	IGNACIO	NOT GIVEN
LOCATION	TIFFANY COMPRESSOR STA.	8 IN.	IGNACIO PLANT
OWNER	WESTERN SLOPE GAS CO.	WESTERN SLOPE GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/06/69	10/01/75	12/05/61
FORMATION	CRET-MESAVERDE & DAKOTA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	625	700	467
FLOW, MCFD	13000	7400	162900
COMPONENT, MOLE PCT			
METHANE	94.7	98.9	87.7
ETHANE	1.1	1.5	6.6
PROPANE	0.2	0.2	2.6
N-BUTANE	0.0	TRACE	0.6
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.3	0.2	0.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.6	3.3	1.0
HELIUM	0.01	0.01	0.01
HEATING VALUE*	985	993	1122
SPECIFIC GRAVITY	0.598	0.594	0.647

* CALCULATED GROSS BTU PER CU.FT. DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 157 SAMPLE 8324	INDEX 158 SAMPLE 6914	INDEX 159 SAMPLE 1736
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LA PLATA	LA PLATA	LAS ANIMAS
FIELD	NOT GIVEN	SAN JUAN BASIN	SAN FRANCISCO CREEK
LOCATION	IGNACIO PLANT	NOT GIVEN	SEC. 9, T34S, R62W
OWNER	EL PASO NATURAL GAS CO.	PACIFIC NORTHWEST PIPELINE	MOUNTAIN STATES OIL CORP.
SAMPLED	12/05/61	12/22/58	04/06/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	455
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	466	650	NOT GIVEN
FLOW, MCFD	54400	118167	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.3	94.3	11.7
ETHANE	1.5	2.1	73.7
PROPANE	0.5	0.4	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	TRACE	0.0	---
N-PENTANE	0.0	TRACE	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.0	TRACE	---
NITROGEN	0.4	0.0	9.0
OXYGEN	TRACE	TRACE	2.4
ARGON	0.0	0.0	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	3.0	2.8	3.1
HELIUM	0.07	TRACE	0.02
HEATING VALUE*	999	1010	139
SPECIFIC GRAVITY	0.598	0.598	0.999

	INDEX 160 SAMPLE 16010	INDEX 161 SAMPLE 5463	INDEX 162 SAMPLE 8332
STATE	COLORADO	COLORADO	COLORADO
COUNTY	LOGAN	LOGAN	MESA
FIELD	SOUTHERN WYOMING	SPRINGDALE S	BAR X
LOCATION	20 IN. WERING W	SEC. 28, T8N, R53W	6 IN. LINE
OWNER	CITIES SERVICE CO.	SHELL OIL CO.	EL PASO NATURAL GAS CO.
SAMPLED	07/15/80	04/16/53	12/07/61
FORMATION	NOT GIVEN	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	595
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	560	NOT GIVEN	600
FLOW, MCFD	40000	NOT GIVEN	3800
COMPONENT, MOLE PCT			
METHANE	84.0	52.9	78.8
ETHANE	8.8	16.0	4.3
PROPANE	3.1	12.5	1.5
N-BUTANE	0.7	5.3	0.5
ISOBUTANE	0.6	2.6	0.3
N-PENTANE	0.2	1.1	0.2
ISOPENTANE	0.2	1.1	0.2
CYCLOPENTANE	TRACE	0.2	0.3
HEXANES PLUS	0.1	0.6	0.5
NITROGEN	1.0	1.8	10.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.3	1.0	3.2
HELIUM	0.01	0.01	0.20
HEATING VALUE*	1155	1675	996
SPECIFIC GRAVITY	0.681	1.008	0.701

	INDEX 163 SAMPLE 2211	INDEX 164 SAMPLE 3052	INDEX 165 SAMPLE 17758
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MOFFAT	MOFFAT	MORGAN
FIELD	ILES	POWDER WASH	DENVER JULESBURG BASIN
LOCATION	T4, R92W	SEC. 4,5&31, T12N&11N, R97W	16 IN. LINE
OWNER	MIDWEST REFINING CO.	MOUNTAIN FUEL SUPPLY CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/08/30	11/27/41	07/17/85
FORMATION	JURA-SUNDANCE	CODE-WASATCH	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	540
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	500	650
FLOW, MCFD	NOT GIVEN	55000	7000
COMPONENT, MOLE PCT			
METHANE	83.6	90.6	84.9
ETHANE	11.6	7.8	8.3
PROPANE	---	---	1.3
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.1
NITROGEN	0.8	1.3	3.5
OXYGEN	0.2	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	TRACE
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	3.8	0.2	1.5
HELIUM	0.00	0.03	0.04
HEATING VALUE*	1055	1058	1073
SPECIFIC GRAVITY	0.633	0.601	0.652

	INDEX 166 SAMPLE 16012	INDEX 167 SAMPLE 8334	INDEX 168 SAMPLE 8690
STATE	COLORADO	COLORADO	COLORADO
COUNTY	MORGAN	RIO BLANCO	RIO BLANCO
FIELD	WYOMING & KANSAS	4 CORNERS & PICEANCE CREEK	DOUGLAS N
LOCATION	16 IN.	OUTLET	COMPOSITE SAMPLE
OWNER	COLORADO INTERSTATE GAS CO.	EL PASO NATURAL GAS CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/15/80	12/07/61	09/21/62
FORMATION	NOT GIVEN	NOT GIVEN	CRET-
GEOLOGIC PROVINCE CODE	540	595	595
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1600	786	NOT GIVEN
FLOW, MCFD	53000	288000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.3	90.8	95.8
ETHANE	6.9	9.6	2.1
PROPANE	0.8	1.3	0.1
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.7	1.0	1.7
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.0	1.8	0.1
HELIUM	0.03	0.02	0.11
HEATING VALUE*	1056	1043	1011
SPECIFIC GRAVITY	0.621	0.614	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 169 SAMPLE 8333	INDEX 170 SAMPLE 8011	INDEX 171 SAMPLE 13661
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	RIO BLANCO	RIO BLANCO
FIELD	PICEANCE CREEK	RANGELY	RANGELY
LOCATION	10 IN. LINE	COMPOSITE SAMPLE	FIELD COMP. STA. 8 IN. LINE
OWNER	EL PASO NATURAL GAS CO.	CALIFORNIA OIL CO.	CHEVRON OIL CO.
SAMPLED	12/07/61	06/07/61	07/31/73
FORMATION	NOT GIVEN	PENN-WEBER	PENN-WEBER
GEOLOGIC PROVINCE CODE	595	595	595
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	460	NOT GIVEN	1800
FLOW, MCFD	10800	NOT GIVEN	5000
COMPONENT, MOLE PCT			
METHANE	91.1	61.7	55.7
ETHANE	4.6	7.8	15.9
PROPANE	1.4	3.1	8.6
N-BUTANE	0.1	1.1	2.6
ISOBUTANE	0.1	1.0	2.1
N-PENTANE	TRACE	0.5	0.6
ISOPENTANE	0.1	0.2	0.9
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	TRACE	0.4	0.3
NITROGEN	2.2	22.8	11.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.8	0.9	1.4
HELIUM	0.03	0.40	0.18
HEATING VALUE*	1057	970	1314
SPECIFIC GRAVITY	0.619	0.784	0.891

	INDEX 172 SAMPLE 13732	INDEX 173 SAMPLE 2208	INDEX 174 SAMPLE 16011
STATE	COLORADO	COLORADO	COLORADO
COUNTY	RIO BLANCO	ROUTT	WELD
FIELD	RANGELY	TOW CREEK	WESTERN WYOMING
LOCATION	MAGOOD COMPRESSOR PLANT	NOT GIVEN	22 IN. & 24 IN.
OWNER	CHEVRON OIL CO.	TEXAS PRODUCTION CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/01/73	10/04/30	07/14/80
FORMATION	PENN-WEBER	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	595	535	540
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	540
FLOW, MCFD	NOT GIVEN	NOT GIVEN	315000
COMPONENT, MOLE PCT			
METHANE	65.4	35.8	89.1
ETHANE	13.9	48.4	5.8
PROPANE	11.3	---	1.1
N-BUTANE	5.9	---	0.2
ISOBUTANE	4.5	---	0.1
N-PENTANE	3.0	---	0.1
ISOPENTANE	1.8	---	0.1
CYCLOPENTANE	0.3	---	TRACE
HEXANES PLUS	1.8	---	0.1
NITROGEN	10.6	2.5	1.7
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	1.1	10.1	1.7
HELIUM	0.21	0.07	0.02
HEATING VALUE*	1661	1030	1059
SPECIFIC GRAVITY	1.089	0.932	0.629

	INDEX 175 SAMPLE 17762	INDEX 176 SAMPLE 17756	INDEX 177 SAMPLE 8284
STATE	COLORADO	COLORADO	GEORGIA
COUNTY	WELD	WELD	MONTGOMERY
FIELD	WESTERN WYOMING	WYOMING FIELDS	NOT GIVEN
LOCATION	36 IN. WIC - TRAILBLAZER SYS	MAIN LINE, 22 IN. & 24 IN.	NOT GIVEN
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	DIXIE DRILLING CO.
SAMPLED	07/15/85	07/16/85	05/05/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	130
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	770	530	NOT GIVEN
FLOW, MCFD	250000	200000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.5	88.4	94.1
ETHANE	4.1	6.2	0.0
PROPANE	2.0	0.9	0.1
N-BUTANE	0.4	0.2	0.0
ISOBUTANE	0.3	TRACE	0.0
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	5.4	2.0	1.6
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.9	0.0
CARBON DIOXIDE	TRACE	1.3	3.7
HELIUM	0.01	0.32	0.00
HEATING VALUE*	1112	1050	955
SPECIFIC GRAVITY	0.653	0.630	0.641

	INDEX 178 SAMPLE 8285	INDEX 179 SAMPLE 8286	INDEX 180 SAMPLE 3528
STATE	GEORGIA	GEORGIA	INDIANA
COUNTY	MONTGOMERY	WHEELER	PIKE
FIELD	NOT GIVEN	NOT GIVEN	ALFORD
LOCATION	NOT GIVEN	OIL SPRINGS	SEC. 17, T1N, R7W
OWNER	DIXIE DRILLING CO.	DIXIE DRILLING CO.	HOOSIER GAS CO.
SAMPLED	05/05/61	05/25/61	05/15/42
FORMATION	NOT GIVEN	NOT GIVEN	MISS-BROWN SAND
GEOLOGIC PROVINCE CODE	130	130	515
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	40
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.2	82.0	84.8
ETHANE	TRACE	0.0	0.4
PROPANE	0.0	0.0	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	0.0	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	0.0	0.0	---
NITROGEN	4.5.1	13.4	7.0
OXYGEN	0.4	TRACE	0.4
ARGON	0.7	0.7	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	2.8	3.8	1.2
HELIUM	TRACE	0.00	0.17
HEATING VALUE*	505	925	974
SPECIFIC GRAVITY	0.778	0.817	0.628

* CALCULATED GROSS BTU PER CU.FT., DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 181 SAMPLE 7545	INDEX 182 SAMPLE 7546	INDEX 183 SAMPLE 8768
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARBER	BARBER	BARTON
FIELD	BARBER COUNTY FIELDS	MEDICINE LODGE W	ADOLPH STORAGE
LOCATION	OUTLET	NOT GIVEN	NOT GIVEN
OWNER	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	05/10/60	05/11/60	11/07/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	92.1	97.6	79.0
ETHANE	4.2	1.9	4.1
PROPANE	0.1	0.6	1.8
N-BUTANE	0.0	0.3	0.7
ISOBUTANE	0.0	0.2	0.3
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.3	0.2
NITROGEN	3.4	0.3	11.7
OXYGEN	0.0	0.4	TRACE
ARGON	0.0	TRACE	0.1
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.1	0.2
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.10	0.02	1.29
HEATING VALUE*	1011	1091	986
SPECIFIC GRAVITY	0.591	0.645	0.668

	INDEX 184 SAMPLE 8769	INDEX 185 SAMPLE 4505	INDEX 186 SAMPLE 6346
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	ADOLPH, SWEENEY, MACKSVILLE	BEHRENS	HUNTON, MCKINNEY & OTHERS
LOCATION	NOT GIVEN	PIPELINE TO JONES PLANT	SE OF GREAT BEND
OWNER	KANSAS-NEBRASKA NATURAL GAS	A. B. JONES OIL & OPER. CO.	KANSAS POWER & LIGHT CO.
SAMPLED	11/07/62	06/--/48	05/19/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	
COMPONENT, MOLE PCT			
METHANE	78.8	80.8	77.3
ETHANE	4.0	11.9	5.3
PROPANE	1.8	---	2.7
N-BUTANE	0.7	---	0.6
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.1	---	0.2
ISOPENTANE	0.2	---	TRACE
CYCLOPENTANE	0.1	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	12.2	5.7	11.8
OXYGEN	TRACE	0.2	TRACE
ARGON	0.1	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	1.34	0.89	0.48
HEATING VALUE*	976	1052	1016
SPECIFIC GRAVITY	0.665	0.640	0.681

	INDEX 187 SAMPLE 6650	INDEX 188 SAMPLE 9791	INDEX 189 SAMPLE 2858
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	NOT GIVEN	NOT GIVEN	OTIS
LOCATION	NOT GIVEN	24, 26 & 36 IN. LINES	INLET
OWNER	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF	PRODUCERS GAS CO.
SAMPLED	06/--/58	03/12/65	06/30/41
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	8000
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.2	83.9	73.5
ETHANE	6.8	6.5	10.4
PROPANE	2.5	2.2	---
N-BUTANE	0.5	0.4	---
ISOBUTANE	0.3	0.3	---
N-PENTANE	0.1	0.1	---
ISOPENTANE	0.1	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	7.6	5.0	13.8
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.30	0.25	1.36
HEATING VALUE*	1050	1056	931
SPECIFIC GRAVITY	0.663	0.650	0.664

	INDEX 190 SAMPLE 4485	INDEX 191 SAMPLE 4488	INDEX 192 SAMPLE 4506
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	OTIS	OTIS	OTIS
LOCATION	NOT GIVEN	NOT GIVEN	OUTLET
OWNER	NORTHERN NATURAL GAS CO.	PRODUCERS GAS CO.	PRODUCERS GAS CO.
SAMPLED	05/--/48	05/--/48	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.8	72.3	78.2
ETHANE	11.4	15.4	10.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.8	10.2	10.6
OXYGEN	0.3	0.5	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.4	0.3
HELIUM	1.36	1.18	0.32
HEATING VALUE*	982	1008	979
SPECIFIC GRAVITY	0.650	0.674	0.652

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
-- DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 193 4509	INDEX SAMPLE 194 4511	INDEX SAMPLE 195 4512
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	OTIS	OTIS	OTIS
LOCATION	INLET	INLET	OUTLET
OWNER	PRODUCERS GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	06/--/48	06/--/48	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.4	72.3	76.6
ETHANE	11.5	15.8	13.2
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.2	10.0	8.3
OXYGEN	0.1	0.2	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.4	0.4
HELIUM	1.41	1.35	1.34
HEATING VALUE*	980	1016	1013
SPECIFIC GRAVITY	0.652	0.674	0.654

	INDEX SAMPLE 196 4990	INDEX SAMPLE 197 4991	INDEX SAMPLE 198 4487
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	PAWNEE	PAWNEE	PAWNEE ROCK
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	KANSAS-NEBRASKA NATURAL GAS	NORTHERN NATURAL GAS CO.	PRODUCERS GAS CO.
SAMPLED	02/14/51	02/14/51	05/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.3	77.8	74.3
ETHANE	3.8	4.2	10.1
PROPANE	1.7	2.8	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	1.1	1.4	---
NITROGEN	15.6	12.4	13.2
OXYGEN	0.2	0.1	0.3
ARGON	0.1	0.1	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.5	0.5
HELIUM	1.76	1.47	1.56
HEATING VALUE*	924	976	934
SPECIFIC GRAVITY	0.679	0.680	0.659

	INDEX SAMPLE 199 4493	INDEX SAMPLE 200 4508	INDEX SAMPLE 201 4510
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BARTON
FIELD	PAWNEE ROCK	PAWNEE ROCK	PAWNEE ROCK
LOCATION	OUTLET	LINE TO PRODUCERS PLANT	LINE TO NORTHERN PLANT
OWNER	PRODUCERS GAS CO.	PRODUCERS GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	06/--/48	06/--/48	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.0	76.6	75.6
ETHANE	11.3	12.2	13.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.8	9.2	8.5
OXYGEN	0.1	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.4	0.7
HELIUM	1.35	1.37	1.37
HEATING VALUE*	993	995	1011
SPECIFIC GRAVITY	0.645	0.652	0.659

	INDEX SAMPLE 202 4484	INDEX SAMPLE 203 4489	INDEX SAMPLE 204 148
STATE	KANSAS	KANSAS	KANSAS
COUNTY	BARTON	BARTON	BUTLER
FIELD	PAWNEE ROCK & OTIS	PAWNEE ROCK & OTIS	EL DORADO
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	NORTHERN NATURAL GAS CO.	PRODUCERS GAS CO.	EMPIRE GAS & FUEL CO.
SAMPLED	05/--/48	05/--/48	03/12/20
FORMATION	NOT GIVEN	NOT GIVEN	PENN-
GEOLOGIC PROVINCE CODE	385	385	370
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	11000
COMPONENT, MOLE PCT			
METHANE	76.8	76.4	71.8
ETHANE	11.7	11.1	7.8
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	9.3	10.5	12.6
OXYGEN	0.4	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	1.27	1.35	0.89
HEATING VALUE*	988	973	867
SPECIFIC GRAVITY	0.652	0.651	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 205 SAMPLE 13249	INDEX 206 SAMPLE 15671	INDEX 207 SAMPLE 17110
STATE	KANSAS	KANSAS	KANSAS
COUNTY	CHASE	CHASE	CHASE
FIELD	NOT GIVEN	PAMPA & WESTERN OKLAHOMA	RAWLINS, WY AREA
LOCATION	20 IN. LINE	20 IN.	20 IN. BYPASS
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE CO.	NORTHWEST CENTRAL PIPELINE C
SAMPLED	06/08/72	06/21/79	10/20/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	370	340
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	407	307	245
FLOW, MCFD	107000	NOT GIVEN	27000
COMPONENT, MOLE PCT			
METHANE	85.1	85.1	92.4
ETHANE	6.2	6.3	3.9
PROPANE	2.5	3.1	1.2
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	5.5	0.5	1.1
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.27	0.26	0.10
HEATING VALUE*	1045	1038	1011
SPECIFIC GRAVITY	0.638	0.634	0.591

	INDEX 208 SAMPLE 1191	INDEX 209 SAMPLE 16835	INDEX 210 SAMPLE 13308
STATE	KANSAS	KANSAS	KANSAS
COUNTY	COWLEY	DICKINSON	DICKINSON
FIELD	RAINBOW BEND	HUGOTON ANADARKO C KS W PANH	PANHANDLE HUGOTON AREA
LOCATION	NOT GIVEN	2-24 IN.	DISCHARGE
OWNER	MARLAND OIL CO.	MICHIGAN WISCONSIN PIPELINE	MICHIGAN WISCONSIN PIPELINE
SAMPLED	12/10/25	03/17/83	07/27/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	370	380	380
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	790	973
FLOW, MCFD	NOT GIVEN	220000	650000
COMPONENT, MOLE PCT			
METHANE	37.5	92.4	87.9
ETHANE	54.0	2.5	5.7
PROPANE	---	0.4	1.4
N-BUTANE	---	0.2	0.1
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.1	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	7.3	3.1	4.4
OXYGEN	0.8	0.1	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.2	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.2
HELIUM	0.10	0.08	0.08
HEATING VALUE*	1348	1003	1036
SPECIFIC GRAVITY	0.862	0.597	0.619

	INDEX 211 SAMPLE 15491	INDEX 212 SAMPLE 5317	INDEX 213 SAMPLE 5336
STATE	KANSAS	KANSAS	KANSAS
COUNTY	DICKINSON	DOUGLAS	DOUGLAS
FIELD	PANHANDLE W, ET AL.	NOT GIVEN	NOT GIVEN
LOCATION	24 IN.	NOT GIVEN	NOT GIVEN
OWNER	MICHIGAN WISCONSIN PIPELINE	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	11/17/78	11/14/52	11/21/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	380	335	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	700	NOT GIVEN	NOT GIVEN
FLOW, MCFD	590000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.0	77.1	76.6
ETHANE	3.1	5.9	6.2
PROPANE	0.8	2.8	2.9
N-BUTANE	0.1	0.3	0.3
ISOBUTANE	TRACE	0.2	0.2
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	4.2	12.6	12.6
OXYGEN	1.0	0.1	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.7
HELIUM	0.08	0.34	0.25
HEATING VALUE*	1006	976	979
SPECIFIC GRAVITY	0.604	0.677	0.679

	INDEX 214 SAMPLE 5339	INDEX 215 SAMPLE 5351	INDEX 216 SAMPLE 5361
STATE	KANSAS	KANSAS	KANSAS
COUNTY	DOUGLAS	DOUGLAS	DOUGLAS
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.
SAMPLED	11/26/52	12/05/52	01/08/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	78.5	80.4
ETHANE	6.8	6.2	6.7
PROPANE	2.9	2.9	2.9
N-BUTANE	0.3	0.4	0.4
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	10.6	10.7	8.6
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.2
HELIUM	0.13	0.28	0.29
HEATING VALUE*	1003	1003	1039
SPECIFIC GRAVITY	0.672	0.674	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 217 SAMPLE 12135	INDEX 218 SAMPLE 13309	INDEX 219 SAMPLE 15488
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELLSWORTH	ELLSWORTH	ELLSWORTH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	24, 26 & 36 IN. LINES	24, 26 & 36 IN.
OWNER	NORTHERN HELEX CO.	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF
SAMPLED	12/05/69	07/26/72	11/16/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	647	580
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.4	88.3	85.3
ETHANE	5.8	4.6	3.6
PROPANE	2.9	1.7	1.2
N-BUTANE	1.0	0.4	0.3
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	13.2	3.9	7.2
OXYGEN	0.0	0.0	1.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.6
HELIUM	0.40	0.15	0.15
HEATING VALUE*	987	1051	961
SPECIFIC GRAVITY	0.680	0.626	0.639

	INDEX 220 SAMPLE 16834	INDEX 221 SAMPLE 5542	INDEX 222 SAMPLE 6815
STATE	KANSAS	KANSAS	KANSAS
COUNTY	ELLSWORTH	FINNEY	FINNEY
FIELD	OK, NM, TX PAN & PERM. BASIN	HUGOTON	HUGOTON
LOCATION	42 IN.	20 IN. DISCHARGE	24 IN. INLET
OWNER	NATURAL GAS PIPELINE CO. OF	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	03/17/83	08/12/53	--/--/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	162	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.5	72.5	71.1
ETHANE	3.6	6.7	5.8
PROPANE	1.6	3.6	3.2
N-BUTANE	0.2	0.8	0.9
ISOBUTANE	0.1	0.4	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	TRACE	0.3
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	2.9	15.2	17.6
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.3	0.6	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.12	0.42	0.45
HEATING VALUE*	1042	1002	970
SPECIFIC GRAVITY	0.603	0.712	0.718

	INDEX 223 SAMPLE 6816	INDEX 224 SAMPLE 6817	INDEX 225 SAMPLE 13314
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FINNEY
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	24 IN. INLET	20 IN. OUTLET	DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	09/30/58	09/30/58	07/25/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP X
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	800
FLOW, MCFD	NOT GIVEN	NOT GIVEN	200000
COMPONENT, MOLE PCT			
METHANE	63.6	73.2	72.2
ETHANE	5.0	5.9	6.4
PROPANE	3.9	3.3	3.7
N-BUTANE	0.8	0.7	0.9
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	26.2	15.6	15.4
OXYGEN	0.1	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.58	0.42	0.40
HEATING VALUE*	866	988	1004
SPECIFIC GRAVITY	0.740	0.705	0.712

	INDEX 226 SAMPLE 15501	INDEX 227 SAMPLE 16819	INDEX 228 SAMPLE 5337
STATE	KANSAS	KANSAS	KANSAS
COUNTY	FINNEY	FINNEY	FRANKLIN
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	20 IN. DISCHARGE	20 IN. DISCHARGE	26 IN.
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	CITIES SERVICE OIL CO.
SAMPLED	11/1/78	03/15/83	11/21/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	798	600	NOT GIVEN
FLOW, MCFD	200000	51000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.1	72.4	71.4
ETHANE	6.2	6.3	5.6
PROPANE	3.6	3.6	4.7
N-BUTANE	1.0	0.8	0.2
ISOBUTANE	0.4	0.3	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	0.1	TRACE	0.0
HEXANES PLUS	0.2	TRACE	0.0
NITROGEN	15.2	15.3	17.7
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.1
HELIUM	0.42	0.35	0.35
HEATING VALUE*	1014	990	952
SPECIFIC GRAVITY	0.719	0.708	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ASSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 229 SAMPLE 5531	INDEX 230 SAMPLE 6722	INDEX 231 SAMPLE 6726
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	26 IN. OUTLET	NOT GIVEN	20 IN.
OWNER	CITIES SERVICE OIL CO.	HUGOTON PRODUCTION CO.	CITIES SERVICE GAS CO.
SAMPLED	08/12/53	07/17/58	07/17/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	280	300
FLOW, MCFD	NOT GIVEN	79000	60000
COMPONENT, MOLE PCT			
METHANE	66.1	71.7	74.6
ETHANE	11.3	9.8	6.1
PROPANE	8.0	3.7	2.9
N-BUTANE	0.9	1.1	0.6
ISOBUTANE	0.6	0.5	0.1
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.2	0.4	0.0
NITROGEN	12.9	14.7	14.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	0.32	0.40	0.40
HEATING VALUE*	1149	1045	972
SPECIFIC GRAVITY	0.772	0.731	0.687

	INDEX 232 SAMPLE 6727	INDEX 233 SAMPLE 6728	INDEX 234 SAMPLE 6729
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	26 IN.	26 IN.	30 IN.
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	07/17/58	07/17/58	07/17/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	300	850	320
FLOW, MCFD	20000	320000	170000
COMPONENT, MOLE PCT			
METHANE	74.5	73.8	74.7
ETHANE	6.0	5.9	6.1
PROPANE	3.2	2.6	2.5
N-BUTANE	0.9	0.6	0.5
ISOBUTANE	0.5	0.1	0.1
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	13.9	15.1	15.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.49	0.50	0.40
HEATING VALUE*	1018	937	960
SPECIFIC GRAVITY	0.707	0.691	0.684

	INDEX 235 SAMPLE 6730	INDEX 236 SAMPLE 7342	INDEX 237 SAMPLE 7343
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	22 IN.	25 IN.	26 IN. INLET
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	07/17/58	01/21/60	01/21/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	260	323	326
FLOW, MCFD	45000	69600	2300
COMPONENT, MOLE PCT			
METHANE	68.0	67.4	72.6
ETHANE	4.3	4.4	6.4
PROPANE	2.2	2.3	3.0
N-BUTANE	0.5	0.6	0.3
ISOBUTANE	0.4	0.3	TRACE
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	23.4	23.6	17.0
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.60	0.60	0.40
HEATING VALUE*	873	870	943
SPECIFIC GRAVITY	0.717	0.714	0.692

	INDEX 238 SAMPLE 7344	INDEX 239 SAMPLE 7345	INDEX 240 SAMPLE 7346
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	26 IN. INLET	25 IN. INLET	26 IN.
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	01/21/60	01/21/60	01/22/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	270	279	305
FLOW, MCFD	43500	89500	394600
COMPONENT, MOLE PCT			
METHANE	73.2	73.7	72.3
ETHANE	6.8	5.5	5.5
PROPANE	3.1	2.8	2.7
N-BUTANE	0.8	0.5	0.3
ISOBUTANE	0.4	0.2	0.2
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	15.1	13.5	17.8
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.40	0.40
HEATING VALUE*	989	965	934
SPECIFIC GRAVITY	0.705	0.691	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 241 7533	INDEX SAMPLE 242 13239	INDEX SAMPLE 243 13240
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	NOT GIVEN	MOBIL LINE	ASHLAND LINE
OWNER	HUGOTON PRODUCTION CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	05/00/60	06/06/72	06/06/72
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	285	140
FLOW, MCFD	NOT GIVEN	190000	105000
COMPONENT, MOLE PCT			
METHANE	78.5	78.1	73.6
ETHANE	7.1	6.3	5.8
PROPANE	2.7	3.4	3.6
N-BUTANE	0.3	0.6	0.9
ISOBUTANE	0.2	0.3	0.5
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	10.6	10.7	14.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.40	0.43	0.43
HEATING VALUE*	969	982	1007
SPECIFIC GRAVITY	0.683	0.691	0.710

	INDEX SAMPLE 244 13241	INDEX SAMPLE 245 13242	INDEX SAMPLE 246 13243
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	AMOCO A & B LINES	AMOCO C SYSTEM	MELEX DISCHARGE
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	06/06/72	06/06/72	06/06/72
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	PERM-CHASE GROUP X
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	335	345	335
FLOW, MCFD	320000	65000	460000
COMPONENT, MOLE PCT			
METHANE	73.3	69.5	79.8
ETHANE	6.6	6.7	6.8
PROPANE	2.9	2.5	2.7
N-BUTANE	0.1	0.6	TRACE
ISOBUTANE	0.1	0.4	TRACE
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	16.4	21.3	12.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.38	0.55	0.04
HEATING VALUE*	952	900	948
SPECIFIC GRAVITY	0.691	0.709	0.646

	INDEX SAMPLE 247 13244	INDEX SAMPLE 248 13245	INDEX SAMPLE 249 15658
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	26 IN. DISCHARGE	DISCHARGE	36 IN. STAT. DISCHARGE
OWNER	CITIES SERVICE GAS CO.	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	06/06/72	06/06/72	06/19/79
FORMATION	PERM-CHASE GROUP X	PERM-CHASE GROUP X	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	811	600	980
FLOW, MCFD	130000	200000	70000
COMPONENT, MOLE PCT			
METHANE	74.0	74.1	74.1
ETHANE	6.2	6.7	6.6
PROPANE	3.5	3.2	2.9
N-BUTANE	0.6	0.4	0.1
ISOBUTANE	0.4	0.2	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	14.8	14.8	12.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.43	0.41	0.41
HEATING VALUE*	989	974	958
SPECIFIC GRAVITY	0.697	0.687	0.680

	INDEX SAMPLE 250 15659	INDEX SAMPLE 251 15660	INDEX SAMPLE 252 15661
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	26 IN. AMOCO A&B	MELEX DISCHARGE	AMOCO C SYSTEM
OWNER	CITIES SERVICE CO.	CITIES SERVICE CO.	CITIES SERVICE CO.
SAMPLED	06/19/79	06/19/79	06/19/79
FORMATION	PERM-CHASE GROUP	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	320	320	320
FLOW, MCFD	277800	438951	39900
COMPONENT, MOLE PCT			
METHANE	72.8	80.3	69.6
ETHANE	5.6	6.9	4.6
PROPANE	2.0	0.6	2.3
N-BUTANE	0.2	0.1	0.7
ISOBUTANE	0.1	0.0	0.3
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	17.0	12.0	21.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.45	0.05	0.55
HEATING VALUE*	936	961	899
SPECIFIC GRAVITY	0.686	0.648	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 253 SAMPLE 15662	INDEX 254 SAMPLE 15663	INDEX 255 SAMPLE 15664
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	20 IN. MOBIL LINE	26 IN. DISCHARGE	26 IN. ASHLAND LINE
OWNER	CITIES SERVICE CO.	CITIES SERVICE CO.	CITIES SERVICE CO.
SAMPLED	06/19/79	06/19/79	06/19/79
FORMATION	PERM-CHASE GROUP	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	250	NOT GIVEN	90
FLOW, MCFD	109350	NOT GIVEN	88326
COMPONENT, MOLE PCT			
METHANE	74.1	80.3	73.3
ETHANE	6.2	6.9	5.9
PROPANE	3.1	0.5	3.3
N-BUTANE	0.5	TRACE	0.9
ISOBUTANE	0.2	TRACE	0.4
N-PENTANE	0.1	TRACE	0.5
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.2
NITROGEN	15.2	12.1	14.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.0
HELIUM	0.03	0.05	0.43
HEATING VALUE*	970	950	1009
SPECIFIC GRAVITY	0.689	0.642	0.710

	INDEX 256 SAMPLE 17103	INDEX 257 SAMPLE 17123	INDEX 258 SAMPLE 17124
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	24 IN. DISCHARGE	26 IN. ASHLAND LINE	20 IN. MOBIL LINE
OWNER	KANSAS POWER & LIGHT CO.	NORTHWEST CENTRAL PIPELINE C	NORTHWEST CENTRAL PIPELINE C
SAMPLED	10/28/83	10/24/83	10/24/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	580	85	197
FLOW, MCFD	40000	22000	65000
COMPONENT, MOLE PCT			
METHANE	70.4	73.2	74.1
ETHANE	7.2	5.9	6.5
PROPANE	4.3	3.1	2.8
N-BUTANE	1.3	0.9	0.3
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	14.7	15.4	15.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	TRACE
HELIUM	0.39	0.99	0.44
HEATING VALUE*	1059	995	971
SPECIFIC GRAVITY	0.739	0.706	0.692

	INDEX 259 SAMPLE 17125	INDEX 260 SAMPLE 17126	INDEX 261 SAMPLE 17127
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	AMOCO 6 IN. SYSTEM	HELIX DISCH.	26 IN. DISCHARGE
OWNER	NORTHWEST CENTRAL PIPELINE C	NORTHWEST CENTRAL PIPELINE C	NORTHWEST CENTRAL PIPELINE C
SAMPLED	10/29/83	10/25/83	10/25/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	334	100	764
FLOW, MCFD	20000	210000	210000
COMPONENT, MOLE PCT			
METHANE	65.7	77.7	78.1
ETHANE	4.9	7.5	6.5
PROPANE	2.6	0.9	0.8
N-BUTANE	0.7	0.1	0.1
ISOBUTANE	0.3	TRACE	TRACE
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	TRACE
NITROGEN	24.7	13.4	13.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.60	0.19	0.20
HEATING VALUE*	801	953	950
SPECIFIC GRAVITY	0.732	0.658	0.653

	INDEX 262 SAMPLE 17144	INDEX 263 SAMPLE 6391	INDEX 264 SAMPLE 6392
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GRANT
FIELD	HUGOTON	NOT GIVEN	NOT GIVEN
LOCATION	AMOCO A & B 26 IN. LINE	STA. INLET	STA. INLET
OWNER	NORTHWEST CENTRAL PIPELINE C	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	12/05/83	08/20/57	08/20/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	327	NOT GIVEN	NOT GIVEN
FLOW, MCFD	140000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.7	72.1	74.1
ETHANE	6.8	5.5	6.7
PROPANE	3.1	3.7	2.7
N-BUTANE	0.1	1.0	0.3
ISOBUTANE	0.1	0.5	0.2
N-PENTANE	TRACE	0.3	0.0
ISOPENTANE	0.0	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	17.6	15.1	15.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.44	0.41	0.42
HEATING VALUE*	935	1017	962
SPECIFIC GRAVITY	0.692	0.721	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 265 SAMPLE 12133	INDEX 266 SAMPLE 13746	INDEX 267 SAMPLE 880
STATE	KANSAS	KANSAS	KANSAS
COUNTY	GRANT	GRANT	GREENWOOD
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	PLANT INLET	INLET FEED GAS	SEC. 8, T23S, R11E
OWNER	CITIES SERVICE HELEX, INC.	CITIES SERVICE HELEX, INC.	EMPIRE GASOLINE CO.
SAMPLED	11/26/69	10/11/73	05/20/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	365
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	350	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.1	73.4	5.9
ETHANE	6.0	5.1	64.3
PROPANE	2.9	2.8	---
N-BUTANE	0.3	0.3	---
ISOBUTANE	0.1	0.5	---
N-PENTANE	TRACE	0.1	---
ISOPENTANE	TRACE	TRACE	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	TRACE	0.1	---
NITROGEN	16.9	16.4	26.5
OXYGEN	0.0	0.0	1.0
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.49	0.42	0.28
HEATING VALUE*	937	955	1212
SPECIFIC GRAVITY	0.686	0.692	0.996

	INDEX 268 SAMPLE 10825	INDEX 269 SAMPLE 6398	INDEX 270 SAMPLE 6399
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARPER	HARPER	HARPER
FIELD	BAUER	SPIVEY-GRABS	SPIVEY-GRABS
LOCATION	SEC. 9, T31S, R6W	OUTLET	NOT GIVEN
OWNER	PETROLEUM, INC.	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	12/21/46	08/29/57	08/29/57
FORMATION	MISS-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.6	90.3	89.4
ETHANE	9.5	5.2	5.0
PROPANE	6.7	1.2	1.9
N-BUTANE	3.4	TRACE	0.7
ISOBUTANE	0.9	TRACE	0.4
N-PENTANE	0.7	0.0	0.2
ISOPENTANE	0.7	TRACE	0.1
CYCLOPENTANE	0.2	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.9	0.0	1.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.27	0.18	0.11
HEATING VALUE*	1250	1039	1108
SPECIFIC GRAVITY	0.773	0.605	0.635

	INDEX 271 SAMPLE 15665	INDEX 272 SAMPLE 13248	INDEX 273 SAMPLE 17105
STATE	KANSAS	KANSAS	KANSAS
COUNTY	HARVEY	HARVEY	HARVEY
FIELD	HUGOTON & P.E.P.L.	NOT GIVEN	RAWLINS, WY AREA
LOCATION	26 IN. DISCHARGE	2-26 IN. LINES	2-26 IN. DISCH.
OWNER	CITIES SERVICE CO.	CITIES SERVICE GAS CO.	NORTHWEST CENTRAL PIPELINE C
SAMPLED	06/20/79	06/07/72	10/19/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	720	792	730
FLOW, MCFD	300000	455000	59000
COMPONENT, MOLE PCT			
METHANE	80.6	90.0	86.5
ETHANE	6.5	5.5	6.8
PROPANE	3.1	1.9	3.4
N-BUTANE	1.1	0.1	0.4
ISOBUTANE	0.4	0.1	0.4
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	1.1	1.2	1.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	1.9
HELIUM	0.08	0.08	0.03
HEATING VALUE*	957	960	1101
SPECIFIC GRAVITY	0.645	0.649	0.653

	INDEX 274 SAMPLE 5535	INDEX 275 SAMPLE 5541	INDEX 276 SAMPLE 6719
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	NOT GIVEN	NOT GIVEN	SEC. 29, T24S, R36W
OWNER	KANSAS-NEBRASKA NATURAL GAS	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/13/53	08/12/53	07/15/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	203
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.9	72.7	68.8
ETHANE	7.0	6.2	6.0
PROPANE	3.7	3.5	4.8
N-BUTANE	1.0	0.8	1.0
ISOBUTANE	0.5	0.2	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	16.2	12.8	16.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.39	0.45	0.50
HEATING VALUE*	1027	965	985
SPECIFIC GRAVITY	0.713	0.712	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 277 SAMPLE 6720	INDEX 278 SAMPLE 6721	INDEX 279 SAMPLE 6725
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	SEC. 29, T24S, R36W	SEC. 29, T24S, R36W	SEC. 16, T24S, R35W
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	07/16/58	07/16/58	07/16/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	740	200	480
FLOW, MCFD	80000	80000	90000
COMPONENT, MOLE PCT			
METHANE	72.1	73.2	75.8
ETHANE	5.3	6.1	5.5
PROPANE	2.8	3.2	2.4
N-BUTANE	0.8	0.9	0.5
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	17.8	15.0	14.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.40	0.40
HEATING VALUE*	961	1007	961
SPECIFIC GRAVITY	0.708	0.711	0.681

	INDEX 280 SAMPLE 7366	INDEX 281 SAMPLE 7367	INDEX 282 SAMPLE 7368
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	F1-20 IN.	F8-8 IN.	SEC. 29, T24S, R36W
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/02/60	02/02/60	02/02/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	45000	4400	123000
COMPONENT, MOLE PCT			
METHANE	71.2	66.3	70.9
ETHANE	5.8	5.9	5.6
PROPANE	2.8	3.3	2.9
N-BUTANE	0.8	0.9	0.6
ISOBUTANE	0.5	0.4	0.3
N-PENTANE	0.1	0.2	TRACE
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	17.8	21.9	18.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.44	0.51	0.46
HEATING VALUE*	960	925	929
SPECIFIC GRAVITY	0.711	0.731	0.701

	INDEX 283 SAMPLE 7369	INDEX 284 SAMPLE 7370	INDEX 285 SAMPLE 13435
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KEARNY
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	SEC. 29, T24S, R36W	SEC. 20, T24S, R36W	20 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/02/60	02/02/60	10/03/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	800
FLOW, MCFD	11000	11000	140000
COMPONENT, MOLE PCT			
METHANE	65.5	67.7	71.4
ETHANE	5.9	6.1	6.2
PROPANE	3.2	3.4	3.5
N-BUTANE	0.8	0.9	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	21.6	20.3	17.4
OXYGEN	1.4	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.39	0.58	0.46
HEATING VALUE*	915	945	961
SPECIFIC GRAVITY	0.740	0.727	0.707

	INDEX 286 SAMPLE 15432	INDEX 287 SAMPLE 17037	INDEX 288 SAMPLE 15665
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KEARNY	KEARNY	KINGMAN
FIELD	HUGOTON	HUGOTON	CENTRAL KANSAS
LOCATION	20 IN. DISCHARGE	20 IN. DISCHARGE	18 & 16 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	KANSAS POWER & LIGHT CO.
SAMPLED	10/18/78	08/31/83	06/20/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	375
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	739	816	360
FLOW, MCFD	34500	78400	60000
COMPONENT, MOLE PCT			
METHANE	71.0	63.5	76.8
ETHANE	6.2	6.1	6.4
PROPANE	3.3	4.2	2.5
N-BUTANE	0.8	0.8	0.3
ISOBUTANE	0.5	0.3	0.1
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	17.6	18.7	11.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.2	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.46	0.47	0.38
HEATING VALUE*	967	972	980
SPECIFIC GRAVITY	0.712	0.729	0.674

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 289 SAMPLE 2839	INDEX 290 SAMPLE 2840	INDEX 291 SAMPLE 2841
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	CUNNINGHAM	CUNNINGHAM	CUNNINGHAM
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	SKELLY OIL CO.
SAMPLED	09/07/40	09/07/40	09/07/40
FORMATION	PENN-LANSING-KANSAS CITY	ORDO-VIOLA	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	61.1	68.5	70.2
ETHANE	24.4	15.6	13.5
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	12.4	12.8	13.8
OXYGEN	0.6	0.6	0.8
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.6	0.4	0.6
HELIUM	0.93	1.13	1.10
HEATING VALUE*	1056	991	953
SPECIFIC GRAVITY	0.732	0.692	0.684

	INDEX 292 SAMPLE 13247	INDEX 293 SAMPLE 7538	INDEX 294 SAMPLE 17104
STATE	KANSAS	KANSAS	KANSAS
COUNTY	KINGMAN	KINGMAN	KINGMAN
FIELD	NOT GIVEN	SPIVEY-GRABS	SPIVEY-ULYSSES
LOCATION	DISCHARGE	COMPOSITE OF PROCESSED GAS	16", 18", & 24" IN. LINES INLET
OWNER	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	06/07/72	05/05/60	10/19/83
FORMATION	NOT GIVEN	MISS-	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	375	375
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	600	NOT GIVEN	496
FLOW, MCFD	150000	NOT GIVEN	27000
COMPONENT, MOLE PCT			
METHANE	74.6	83.6	84.3
ETHANE	6.8	5.6	5.6
PROPANE	3.0	1.5	1.7
N-BUTANE	0.5	0.1	0.5
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.2
NITROGEN	14.6	6.7	6.8
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.11	0.20	0.23
HEATING VALUE*	972	1056	1049
SPECIFIC GRAVITY	0.684	0.612	0.651

	INDEX 295 SAMPLE 17106	INDEX 296 SAMPLE 15668	INDEX 297 SAMPLE 15669
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	ANADARKO BASIN	HUGOTON	HUGOTON
LOCATION	300 LINE 30 IN. SUCTION	24 IN.-100 LINE	26 IN.- 200 LINE
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	10/20/83	06/21/79	06/21/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	860	450	615
FLOW, MCFD	274000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.1	89.7	89.8
ETHANE	9.5	5.7	5.8
PROPANE	5.8	0.6	0.9
N-BUTANE	1.1	0.1	0.2
ISOBUTANE	0.6	0.1	TRACE
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.6	TRACE	TRACE
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	15.4	4.5	4.3
OXYGEN	1.7	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.0	1.0
HELIUM	0.05	0.16	0.16
HEATING VALUE*	1099	1007	1025
SPECIFIC GRAVITY	0.801	0.612	0.611

	INDEX 298 SAMPLE 15670	INDEX 299 SAMPLE 17107	INDEX 300 SAMPLE 17108
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	HUGOTON	HUGOTON & ANADARKO BASIN	HUGOTON & ANADARKO BASIN
LOCATION	36 IN.- 400 LINE	100 LINE 24 IN. SUCTION	200 LINE 26 IN. SUCTION
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	06/21/79	10/20/83	10/20/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	772	589	692
FLOW, MCFD	NOT GIVEN	190000	240000
COMPONENT, MOLE PCT			
METHANE	87.7	87.5	90.2
ETHANE	5.1	5.9	5.7
PROPANE	0.8	0.7	0.6
N-BUTANE	0.1	0.3	0.1
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	7.6	5.9	3.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	3.5	TRACE
HELIUM	0.27	0.26	0.22
HEATING VALUE*	962	991	1001
SPECIFIC GRAVITY	0.614	0.622	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 301 SAMPLE 17109	INDEX 302 SAMPLE 13250	INDEX 303 SAMPLE 13251
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	HUGOTON & ANADARKO BASIN	NOT GIVEN	NOT GIVEN
LOCATION	400 LINE 36 IN. SUCTION	100 LINE	200 LINE
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	10/20/83	--/--/00	06/08/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	333	335	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	770	560	782
FLOW, MCFD	60*000	188	342000
COMPONENT, MOLE PCT			
METHANE	87.9	84.9	86.2
ETHANE	4.8	7.9	5.4
PROPANE	0.9	1.2	1.0
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	7.6	7.8	6.7
OXYGEN	0.0	0.0	0.8
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.4
HELIUM	0.29	0.02	0.11
HEATING VALUE*	954	999	1003
SPECIFIC GRAVITY	0.612	0.630	0.623

	INDEX 304 SAMPLE 13252	INDEX 305 SAMPLE 13253	INDEX 306 SAMPLE 13618
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	300 LINE	400 LINE	100 LINE
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	06/08/72	06/08/72	06/06/73
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	897	R25	900
FLOW, MCFD	417000	777	188000
COMPONENT, MOLE PCT			
METHANE	76.3	81.5	93.7
ETHANE	7.7	4.7	3.8
PROPANE	4.3	2.9	1.6
N-BUTANE	0.5	0.7	0.1
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	10.4	9.6	0.4
OXYGEN	0.0	1.8	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.0	0.2
HELIUM	0.07	0.03	0.03
HEATING VALUE*	1063	945	1009
SPECIFIC GRAVITY	0.700	0.652	0.639

	INDEX 307 SAMPLE 13619	INDEX 308 SAMPLE 13620	INDEX 309 SAMPLE 13621
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	LYON	LYON
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	200 LINE	300 LINE	400 INLET LINE
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	06/06/73	06/06/73	06/06/73
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	335	335
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	490	530	510
FLOW, MCFD	342000	417000	777000
COMPONENT, MOLE PCT			
METHANE	83.7	77.4	90.2
ETHANE	5.8	7.5	4.7
PROPANE	1.2	5.7	0.9
N-BUTANE	0.0	0.5	0.1
ISOBUTANE	0.0	0.4	0.1
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	8.9	10.0	3.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.5
HELIUM	0.09	0.02	0.04
HEATING VALUE*	983	1053	1028
SPECIFIC GRAVITY	0.633	0.689	0.610

	INDEX 310 SAMPLE 15667	INDEX 311 SAMPLE 11793	INDEX 312 SAMPLE 9533
STATE	KANSAS	KANSAS	KANSAS
COUNTY	LYON	MARION	MEADE
FIELD	WESTERN OKLAHOMA	DURHAM & DURHAM E	HUGOTON
LOCATION	30 IN.300 LINE	NOT GIVEN	24 IN. DISCHARGE
OWNER	PANHANDLE EASTERN PIPELINE C	ROUNDS & STEWART NATURAL GAS	MICHIGAN WISCONSIN PIPELINE
SAMPLED	06/21/79	03/20/69	08/14/53
FORMATION	PERM-CHASE GROUP	MISS---	NOT GIVEN
GEOLOGIC PROVINCE CODE	335	375	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	637	123	NOT GIVEN
FLOW, MCFD	NOT GIVEN	2300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.9	68.0	71.7
ETHANE	8.3	5.9	7.0
PROPANE	2.8	4.2	3.6
N-BUTANE	0.4	1.3	0.5
ISOBUTANE	0.1	0.7	0.4
N-PENTANE	0.1	0.5	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.3	0.0
NITROGEN	6.6	17.8	15.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.22	0.32	0.71
HEATING VALUE*	1068	1027	975
SPECIFIC GRAVITY	0.666	0.753	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 313 SAMPLE 7534	INDEX 314 SAMPLE 3190	INDEX 315 SAMPLE 1346
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MEADE	MONTGOMERY	MONTGOMERY
FIELD	MCKINNEY	BOLTON	NOT GIVEN
LOCATION	COMPOSITE GAS-MCKINNEY FIELD	SEC. 29, T33S, R15E	CONEY
OWNER	KANSAS POWER & LIGHT CO.	CONSOLIDATED GAS, OIL & MFG.	EMPIRE GAS & FUEL CO.
SAMPLED	05/02/60	03/24/42	02/14/27
FORMATION	NOT GIVEN	MISS-LIME	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	365	365
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	500	NOT GIVEN
FLOW, MCFD	NOT GIVEN	1500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.8	93.8	47.7
ETHANE	6.0	1.0	37.9
PROPANE	3.9	---	---
N-BUTANE	1.3	---	---
ISOBUTANE	0.7	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.4	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.2	---	---
NITROGEN	4.0	3.6	11.5
OXYGEN	0.1	0.3	2.1
ARGON	TRACE	---	---
HYDROGEN	0.1	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.2	1.1	0.8
HELIUM	0.10	0.21	0.12
HEATING VALUE*	1155	968	1162
SPECIFIC GRAVITY	0.691	0.586	0.809

	INDEX 316 SAMPLE 5705	INDEX 317 SAMPLE 5706	INDEX 318 SAMPLE 6999
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
LOCATION	HOOKER STA. INLET	HOOKER STA. OUTLET	INLET
OWNER	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.
SAMPLED	10/15/54	10/15/54	03/09/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	325	680	NOT GIVEN
FLOW, MCFD	43000	43000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.1	68.0	65.8
ETHANE	6.1	6.0	5.0
PROPANE	3.4	3.7	3.8
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.6	0.4	0.5
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	19.4	19.3	20.8
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.52	0.55	0.60
HEATING VALUE*	976	979	962
SPECIFIC GRAVITY	0.738	0.737	0.746

	INDEX 319 SAMPLE 7000	INDEX 320 SAMPLE 7374	INDEX 321 SAMPLE 7380
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD
LOCATION	24 IN. & 12 IN.	24 IN. GREENWOOD DISCHARGE	SEC. 18, T33S, R43W
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	03/20/59	02/02/60	02/04/60
FORMATION	NOT GIVEN	NOT GIVEN	PENN-VIRGIL
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	750
FLOW, MCFD	NOT GIVEN	104000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.9	66.0	52.3
ETHANE	6.2	6.4	8.1
PROPANE	3.4	3.7	9.0
N-BUTANE	1.0	1.0	5.6
ISOBUTANE	0.9	0.3	2.2
N-PENTANE	0.1	0.3	2.2
ISOPENTANE	0.2	0.2	2.2
CYCLOPENTANE	TRACE	TRACE	0.5
HEXANES PLUS	0.1	0.1	2.0
NITROGEN	19.5	21.2	15.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.60	0.55	0.40
HEATING VALUE*	952	950	1477
SPECIFIC GRAVITY	0.731	0.740	1.010

	INDEX 322 SAMPLE 13439	INDEX 323 SAMPLE 17036	INDEX 324 SAMPLE 15430
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD	GREENWOOD	GREENWOOD GAS AREA
LOCATION	12 IN. INLET	12 IN. SUCTION	24 IN. INLET
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/31/72	08/31/63	10/14/76
FORMATION	PENN-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	795	238	238
FLOW, MCFD	50000	20300	33800
COMPONENT, MOLE PCT			
METHANE	71.7	67.7	70.4
ETHANE	7.5	6.9	7.6
PROPANE	3.7	3.8	4.1
N-BUTANE	0.4	0.5	0.3
ISOBUTANE	0.2	0.3	0.1
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	16.3	19.6	17.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.2	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.02	0.77	0.01
HEATING VALUE*	977	940	969
SPECIFIC GRAVITY	0.705	0.720	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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	INDEX 325 SAMPLE 15431	INDEX 326 SAMPLE 17035	INDEX 327 SAMPLE 13246
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	GREENWOOD GAS AREA	GREENWOOD-SPARKS	KEYES & GREENWOOD
LOCATION	12 IN. INLET	24 IN. SUCTION	DISCHARGE LINE
OWNER	PHILLIPS PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	PANHANDLE EASTERN PIPELINE C
SAMPLED	10/19/78	08/31/83	06/06/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	238	230	457
FLOW, MCFD	43800	21700	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.6	61.3	65.6
ETHANE	6.7	5.6	5.2
PROPANE	4.5	4.6	3.6
N-BUTANE	1.4	1.7	1.1
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.4	0.4	0.3
ISOPENTANE	0.4	0.8	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.4
NITROGEN	21.2	24.2	20.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.2	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.67	0.69	0.74
HEATING VALUE*	1002	1027	976
SPECIFIC GRAVITY	0.773	0.785	0.756

	INDEX 328 SAMPLE 15657	INDEX 329 SAMPLE 17102	INDEX 330 SAMPLE 7373
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	KEYES & GREENWOOD	KEYES & GREENWOOD	MOCANE-LAVERNE GAS AREA
LOCATION	24 IN. DISCHARGE	24 IN. DISCHARGE	20 IN. MOCANE OUTLET
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	COLORADO INTERSTATE GAS CO.
SAMPLED	06/19/79	10/18/83	02/02/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	375	500	NOT GIVEN
FLOW, MCFD	40000	30000	53000
COMPONENT, MOLE PCT			
METHANE	45.1	69.2	86.9
ETHANE	7.0	9.0	6.3
PROPANE	17.3	9.4	1.8
N-BUTANE	9.5	1.0	0.4
ISOBUTANE	3.9	3.3	0.1
N-PENTANE	2.3	0.5	0.0
ISOPENTANE	3.0	0.5	TRACE
CYCLOPENTANE	0.4	0.5	TRACE
HEXANES PLUS	1.5	0.9	TRACE
NITROGEN	10.8	17.0	2.2
OXYGEN	0.0	0.4	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	5.0	0.1	0.1
HELIUM	0.40	0.41	0.14
HEATING VALUE*	1816	1037	1071
SPECIFIC GRAVITY	1.171	0.755	0.616

	INDEX 331 SAMPLE 13440	INDEX 332 SAMPLE 15429	INDEX 333 SAMPLE 7001
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	MOCANE-LAVERNE GAS AREA	MOCANE-LAVERNE GAS AREA	SPARKS
LOCATION	24 IN. INLET	20 IN. INLET	SPARKS FIELD
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/20/72	10/18/78	03/29/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	658	674	NOT GIVEN
FLOW, MCFD	60000	19300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.1	90.0	82.6
ETHANE	4.3	5.1	5.9
PROPANE	0.8	0.9	2.4
N-BUTANE	0.0	0.1	0.7
ISOBUTANE	0.0	0.0	0.4
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	3.6	3.7	6.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	2.4
HELIUM	0.17	0.20	0.80
HEATING VALUE*	1036	1022	1029
SPECIFIC GRAVITY	0.608	0.604	0.670

	INDEX 334 SAMPLE 7371	INDEX 335 SAMPLE 7379	INDEX 336 SAMPLE 7372
STATE	KANSAS	KANSAS	KANSAS
COUNTY	MORTON	MORTON	MORTON
FIELD	SPARKS	SPARKS	SPARKS, GREENWOOD, & MOCANE
LOCATION	12 INC LINE	12 IN. LINE	12 & 24 IN. LINES
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/02/60	02/29/60	02/02/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	22000	25000	180000
COMPONENT, MOLE PCT			
METHANE	81.9	82.1	86.5
ETHANE	4.0	4.0	7.2
PROPANE	1.2	1.5	3.0
N-BUTANE	0.6	0.6	1.2
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	7.4	7.1	2.1
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.8	2.7	0.1
HELIUM	0.86	0.80	0.59
HEATING VALUE*	1021	999	952
SPECIFIC GRAVITY	0.671	0.655	0.745

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 337 SAMPLE 4502	INDEX 338 SAMPLE 4507	INDEX 339 SAMPLE 4503
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	ASH CREEK	NOT GIVEN	PAWNEE
LOCATION	INLET FROM ASH CREEK FIELD	SEC. 1, T21S, R16W	INLET FROM PAWNEE FIELD
OWNER	A. R. JONES OIL & OPER. CO.	BEN F. BRACK OIL CO.	A. R. JONES OIL & OPER. CO.
SAMPLED	06/--/48	06/--/48	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	390	NOT GIVEN	350
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.8	80.5	80.4
ETHANE	10.5	13.4	12.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	5.2	4.7	5.9
OXYGEN	0.1	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.6	0.5	0.4
HELIUM	0.79	0.74	0.93
HEATING VALUE*	1027	1056	1037
SPECIFIC GRAVITY	0.631	0.643	0.641

	INDEX 340 SAMPLE 4070	INDEX 341 SAMPLE 4501	INDEX 342 SAMPLE 4504
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PAWNEE	PAWNEE
FIELD	PAWNEE ROCK	RYAN	RYAN
LOCATION	SEC. 13, T20S, R16W	INLET FROM RYAN FIELD	INLET FROM RYAN FIELD
OWNER	STANOLIND OIL & GAS CO.	A. R. JONES OIL & OPER. CO.	A. R. JONES OIL & OPER. CO.
SAMPLED	09/21/45	06/--/48	06/--/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	30	385	40
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	98.7	75.8	69.2
ETHANE	47.7	12.4	17.4
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	2.1	11.3	11.0
OXYGEN	0.0	0.2	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	1.2	0.5	0.7
HELIUM	0.32	1.82	1.60
HEATING VALUE*	1138	970	1013
SPECIFIC GRAVITY	0.810	0.661	0.687

	INDEX 343 SAMPLE 9268	INDEX 344 SAMPLE 2898	INDEX 345 SAMPLE 16828
STATE	KANSAS	KANSAS	KANSAS
COUNTY	PAWNEE	PRATT	RICE
FIELD	SHADY	CUNNINGHAM	ANADARKO
LOCATION	T22 & 23S, R16W	SKELLY OIL CO. PLANT	30 IN. D FROM BEAVER
OWNER	KANSAS POWER & LIGHT CO.	SKELLY OIL CO.	NORTHERN NATURAL GAS CO.
SAMPLED	03/--/44	10/04/41	03/16/83
FORMATION	NOT GIVEN	ORDO-VIOLA	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	430	NOT GIVEN	615
FLOW, MCFD	1750	NOT GIVEN	250000
COMPONENT, MOLE PCT			
METHANE	84.5	65.0	92.3
ETHANE	3.8	20.6	3.1
PROPANE	1.6	---	0.6
N-BUTANE	0.5	---	0.1
ISOBUTANE	0.3	---	TRACE
N-PENTANE	0.1	---	TRACE
ISOPENTANE	0.1	---	TRACE
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.2	---	TRACE
NITROGEN	7.7	12.1	2.6
OXYGEN	0.0	0.5	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.2
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.3	0.7	0.8
HELIUM	0.91	1.10	0.13
HEATING VALUE*	1011	1028	1010
SPECIFIC GRAVITY	0.641	0.711	0.593

	INDEX 346 SAMPLE 19507	INDEX 347 SAMPLE 16827	INDEX 348 SAMPLE 15508
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	ANADARKO BASIN	ANADARKO BASIN	BEAVER
LOCATION	26 IN. "C" FROM ANADARKO	26 IN. C FROM ANADARKO	30 IN. "D" FROM BEAVER
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/16/78	03/16/83	11/16/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	580	570	650
FLOW, MCFD	400000	300000	950000
COMPONENT, MOLE PCT			
METHANE	84.2	91.5	90.1
ETHANE	5.8	3.5	3.7
PROPANE	2.6	0.9	0.9
N-BUTANE	0.7	0.2	0.2
ISOBUTANE	0.3	TRACE	0.1
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	5.0	2.6	4.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.2	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.9
HELIUM	0.20	0.13	0.16
HEATING VALUE*	1089	1027	1031
SPECIFIC GRAVITY	0.660	0.584	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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	INDEX 349 SAMPLE 15506	INDEX 350 SAMPLE 16826	INDEX 351 SAMPLE 6281
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	BURDETT	BURDETT	HUGOTON
LOCATION	28 IN. "B" FROM BURDETT	28 IN. 9 FROM BURDETT	NELSON GAS SAMPLE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/16/78	03/15/83	04/08/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	550	535	NOT GIVEN
FLOW, MCFD	220000	73000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.4	72.6	72.9
ETHANE	6.2	5.5	6.6
PROPANE	3.5	3.0	3.2
N-BUTANE	1.0	0.5	0.6
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	16.3	17.0	15.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.44	0.50	0.44
HEATING VALUE	1004	948	991
SPECIFIC GRAVITY	0.721	0.697	0.708

	INDEX 352 SAMPLE 6282	INDEX 353 SAMPLE 6283	INDEX 354 SAMPLE 6807
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	MULLINVILLE-MACKSVILLE	NOT GIVEN	NELSON LINE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	04/08/57	04/08/57	--/--/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.2	79.2	78.7
ETHANE	6.8	6.9	6.9
PROPANE	2.6	2.6	2.9
N-BUTANE	0.4	0.4	0.5
ISOBUTANE	0.2	0.2	0.2
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	10.2	10.2	10.0
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.38	0.36	0.35
HEATING VALUE	1012	1012	1016
SPECIFIC GRAVITY	0.664	0.665	0.674

	INDEX 355 SAMPLE 13328	INDEX 356 SAMPLE 15504	INDEX 357 SAMPLE 16824
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	26 IN. A INLET	26 IN. "A" FROM SUBLETTE	26 IN. A FROM SUBLETTE CO.
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/26/72	11/13/78	03/16/83
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	340	350	345
FLOW, MCFD	290000	170000	200000
COMPONENT, MOLE PCT			
METHANE	76.3	76.4	75.2
ETHANE	5.2	5.1	5.6
PROPANE	3.5	3.4	2.0
N-BUTANE	0.7	0.9	0.5
ISOBUTANE	0.4	0.4	0.2
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	TRACE	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	11.4	12.6	14.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.37	0.90	0.18
HEATING VALUE	1016	1034	1068
SPECIFIC GRAVITY	0.690	0.701	0.693

	INDEX 358 SAMPLE 13326	INDEX 359 SAMPLE 2843	INDEX 360 SAMPLE 15505
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	HUGOTON, ET AL.	LYONS	MACKSVILLE
LOCATION	20 IN. B INLET	T19 & 20 S, R8W	24 IN. "B" FROM MACKSVILLE
OWNER	NORTHERN NATURAL GAS CO.	CITIES SERVICE GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/26/72	09/24/40	11/16/78
FORMATION	NOT GIVEN	CAMO-ARBUCKLE	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	332	NOT GIVEN	350
FLOW, MCFD	198000	NOT GIVEN	130000
COMPONENT, MOLE PCT			
METHANE	72.1	31.3	75.7
ETHANE	5.4	34.8	5.0
PROPANE	3.7	---	3.2
N-BUTANE	0.9	---	0.5
ISOBUTANE	0.4	---	0.4
N-PENTANE	0.2	---	0.2
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	0.1	---	0.2
NITROGEN	15.8	33.7	12.4
OXYGEN	0.0	0.3	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.41	1.43	0.39
HEATING VALUE	999	936	1032
SPECIFIC GRAVITY	0.713	0.871	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 361 SAMPLE 16825	INDEX 362 SAMPLE 13320	INDEX 363 SAMPLE 13321
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	MACKSVILLE	MACKSVILLE AREA, ET AL.	NOT GIVEN
LOCATION	24 IN. B FROM MACKSVILLE	24 IN. B INLET	36 IN. E DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	03/16/83	07/25/72	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	495	650	990
FLOW, MCFD	100000	360000	835000
COMPONENT, MOLE PCT			
METHANE	89.7	86.7	90.0
ETHANE	5.7	5.7	4.2
PROPANE	0.9	1.4	1.0
N-BUTANE	0.3	0.2	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	3.5	5.0	3.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	1.0
HELIUM	0.16	0.00	0.04
HEATING VALUE*	1029	1027	1020
SPECIFIC GRAVITY	0.614	0.629	0.611

	INDEX 364 SAMPLE 13323	INDEX 365 SAMPLE 13324	INDEX 366 SAMPLE 13325
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	HELIUM PLANT DISCHARGE	26 IN. A DISCHARGE	30 IN. D INLET
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/26/72	07/26/72	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	520	520	600
FLOW, MCFD	420000	215000	160000
COMPONENT, MOLE PCT			
METHANE	84.4	87.0	89.4
ETHANE	2.9	5.0	4.3
PROPANE	0.1	0.4	1.0
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	TRACE	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	13.1	5.5	3.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	1.3
HELIUM	0.21	0.19	0.04
HEATING VALUE*	901	1003	1015
SPECIFIC GRAVITY	0.623	0.615	0.616

	INDEX 367 SAMPLE 13327	INDEX 368 SAMPLE 13329	INDEX 369 SAMPLE 13330
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	26 IN. C DISCHARGE	30 IN. D DISCHARGE	24 IN. B DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/26/72	07/26/72	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	860	797
FLOW, MCFD	425000	615000	350000
COMPONENT, MOLE PCT			
METHANE	85.8	85.7	86.4
ETHANE	4.6	5.4	5.2
PROPANE	0.5	0.9	1.0
N-BUTANE	TRACE	TRACE	0.1
ISOBUTANE	0.1	TRACE	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	8.6	9.9	6.5
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.9	0.6
HELIUM	0.69	0.04	0.07
HEATING VALUE*	939	939	1021
SPECIFIC GRAVITY	0.620	0.619	0.625

	INDEX 370 SAMPLE 15509	INDEX 371 SAMPLE 15510	INDEX 372 SAMPLE 15511
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	A-26 IN. DISCHARGE	B-24 IN. DISCHARGE	C-26 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/1/78	11/16/78	11/16/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	520	650	800
FLOW, MCFD	150000	195000	285000
COMPONENT, MOLE PCT			
METHANE	87.5	86.3	86.7
ETHANE	5.2	4.5	4.5
PROPANE	0.4	0.7	0.7
N-BUTANE	0.1	0.2	0.2
ISOBUTANE	TRACE	0.1	TRACE
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	6.1	7.1	7.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.5
HELIUM	0.19	0.16	0.15
HEATING VALUE*	999	994	995
SPECIFIC GRAVITY	0.615	0.623	0.623

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 373 SAMPLE 15512	INDEX 374 SAMPLE 15513	INDEX 375 SAMPLE 16829
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	NOT GIVEN	NOT GIVEN	OK., SW KAN. & TX. PANHANDLE
LOCATION	0-30 IN. DISCHARGE	E-30 IN. DISCHARGE	A-26 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/16/78	11/16/78	03/16/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	860	940	515
FLOW,MCFD	520000	650000	119000
COMPONENT, MOLE PCT			
METHANE	87.5	87.3	90.8
ETHANE	3.5	3.9	5.5
PROPANE	0.6	0.8	0.5
N-BUTANE	0.2	0.3	0.1
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	7.4	5.9	1.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.8	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.7
HELIUM	0.12	0.13	0.18
HEATING VALUE*	968	997	1059
SPECIFIC GRAVITY	0.617	0.611	0.602

	INDEX 376 SAMPLE 16830	INDEX 377 SAMPLE 16831	INDEX 378 SAMPLE 16832
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RICE
FIELD	OK., SW KAN. & TX. PANHANDLE	OK., SW KAN. & TX. PANHANDLE	OK., SW KAN. & TX. PANHANDLE
LOCATION	B-24 IN. DISCHARGE	C-26 IN. DISCH.	B-30 IN. DISCH.
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	03/16/83	03/16/83	03/16/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	590	720	785
FLOW,MCFD	91000	416000	309000
COMPONENT, MOLE PCT			
METHANE	89.6	91.9	87.3
ETHANE	3.8	3.4	4.0
PROPANE	1.9	0.4	0.5
N-BUTANE	0.3	TRACE	0.2
ISOBUTANE	0.1	TRACE	0.2
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	0.1	TRACE	0.2
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	3.6	3.1	5.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.7	0.5
HELIUM	0.17	0.14	0.20
HEATING VALUE*	1033	1003	1039
SPECIFIC GRAVITY	0.618	0.592	0.636

	INDEX 379 SAMPLE 16833	INDEX 380 SAMPLE 13322	INDEX 381 SAMPLE 4812
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RICE	RICE	RUSH
FIELD	OK., SW KAN. & TX. PANHANDLE	OKLAHOMA-TEXAS AREA	BRACK THALHEIM LEASE
LOCATION	E-30 IN. DISCH.	25 IN. C INLET	SEC. 27, T19S, R16W
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	03/16/83	07/26/72	01/09/50
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	780	960	NOT GIVEN
FLOW,MCFD	422000	610000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.8	84.9	54.0
ETHANE	4.5	6.0	3.8
PROPANE	0.3	2.6	2.0
N-BUTANE	0.1	0.5	0.7
ISOBUTANE	0.0	0.3	0.4
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	5.1	4.3	34.9
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	0.2
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.6	0.3	0.6
HELIUM	0.20	0.20	3.07
HEATING VALUE*	996	1080	729
SPECIFIC GRAVITY	0.608	0.652	0.757

	INDEX 382 SAMPLE 4813	INDEX 383 SAMPLE 4811	INDEX 384 SAMPLE 13321
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	BRACK-RANKIN ESTATE	CAMPBELL-KUHN-CHRISTIANSON	CENTRAL KANSAS
LOCATION	SEC. 27, T19S, R16W	SEC. 28, T19S, R16W	8 IN. DISCHARGE
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	01/09/50	01/09/50	07/26/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	315
FLOW,MCFD	NOT GIVEN	NOT GIVEN	16500
COMPONENT, MOLE PCT			
METHANE	69.6	53.0	74.7
ETHANE	5.2	3.6	3.8
PROPANE	2.8	1.7	1.9
N-BUTANE	1.2	0.6	0.6
ISOBUTANE	0.5	0.5	0.3
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.7	0.3	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	16.9	36.5	16.4
OXYGEN	0.1	0.2	0.0
ARGON	0.1	0.2	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.6	0.3	0.1
HELIUM	1.88	3.29	1.37
HEATING VALUE*	974	692	936
SPECIFIC GRAVITY	0.726	0.759	0.684

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 385 SAMPLE 15487	INDEX 386 SAMPLE 17072	INDEX 387 SAMPLE 5914
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	CENTRAL KANSAS	CENTRAL KS FIELDS	FLYNN
LOCATION	8 IN. DISCHARGE	INLET	NOT GIVEN
OWNER	KANSAS-NEBRASKA NATURAL GAS	AIRCO INDUSTRIAL GASES	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	11/15/79	09/27/83	08/16/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	335	370	NOT GIVEN
FLOW, MCFD	14000	8000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.0	80.9	80.8
ETHANE	3.7	3.8	5.8
PROPANE	1.5	1.6	2.6
N-BUTANE	0.5	0.7	0.1
ISOBUTANE	0.5	0.5	0.2
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.1	0.3	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.0	11.9	9.7
OXYGEN	0.6	0.6	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.3	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.4
HELIUM	1.15	1.05	1.03
HEATING VALUE*	951	970	1009
SPECIFIC GRAVITY	0.663	0.656	0.654

	INDEX 388 SAMPLE 6345	INDEX 389 SAMPLE 6347	INDEX 390 SAMPLE 14642
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	HUGOTON, MCKINNEY & OTHERS	HUGOTON, MCKINNEY & OTHERS	INLET GAS
LOCATION	6 IN. LINE	8 IN. LINE	OTIS, KANSAS
OWNER	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.	KANSAS REFINED HELIUM CO.
SAMPLED	06/19/57	06/19/57	04/23/76
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.9	80.2	75.0
ETHANE	4.6	4.5	4.1
PROPANE	1.9	1.7	1.4
N-BUTANE	0.4	0.4	0.4
ISOBUTANE	0.4	0.3	0.7
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	11.1	11.2	15.7
OXYGEN	TRACE	0.0	0.6
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	1.60	1.03	2.30
HEATING VALUE*	979	976	915
SPECIFIC GRAVITY	0.596	0.592	0.665

	INDEX 391 SAMPLE 4809	INDEX 392 SAMPLE 6588	INDEX 393 SAMPLE 6589
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	SEC. 34, T19S, R16W	SEC. 22, T18S, R17W	SEC. 26, T17S, R16W
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.
SAMPLED	01/--/58	05/--/58	05/--/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.9	79.6	75.2
ETHANE	4.5	5.4	4.6
PROPANE	2.1	2.0	1.9
N-BUTANE	0.8	0.9	0.5
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	7.2	10.1	16.7
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	2.42	0.34	0.89
HEATING VALUE*	937	948	886
SPECIFIC GRAVITY	0.734	0.660	0.665

	INDEX 394 SAMPLE 6590	INDEX 395 SAMPLE 6803	INDEX 396 SAMPLE 7540
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	SEC. 27, T17S, R17W	HOLCOMB LINE	OTIS, KANSAS
OWNER	KANSAS POWER & LIGHT CO.	NORTHERN NATURAL GAS CO.	KANSAS POWER & LIGHT CO.
SAMPLED	05/--/58	--/--/58	05/09/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	74.0	73.8
ETHANE	5.1	9.8	5.7
PROPANE	2.1	2.9	3.6
N-BUTANE	0.8	0.8	0.6
ISOBUTANE	0.4	0.3	0.4
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	11.8	10.2	9.8
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.86	0.50	0.90
HEATING VALUE*	989	988	1023
SPECIFIC GRAVITY	0.667	0.701	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 397 SAMPLE 8075	INDEX 398 SAMPLE 8076	INDEX 399 SAMPLE 8077
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	4 IN.	INLET	8 IN. LINE TO KNNG
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	07/19/61	07/19/61	07/19/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	240	238	240
FLOW, MCFD	1500	7000	6000
COMPONENT, MOLE PCT			
METHANE	68.8	73.6	79.1
ETHANE	5.4	5.4	5.8
PROPANE	1.2	2.4	2.8
N-BUTANE	0.4	0.8	0.8
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	22.8	15.5	13.9
OXYGEN	TRACE	TRACE	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	2.20	0.90	0.90
HEATING VALUE*	838	980	1001
SPECIFIC GRAVITY	0.692	0.702	0.700

	INDEX 400 SAMPLE 8078	INDEX 401 SAMPLE 8079	INDEX 402 SAMPLE 8080
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	8 IN. LINE TO KNNG	6 IN. LINE TO KNNG	NOT GIVEN
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	07/19/61	07/19/61	07/19/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	393	245	610
FLOW, MCFD	7000	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	74.5	74.1	69.2
ETHANE	5.4	7.4	6.3
PROPANE	2.5	3.8	3.5
N-BUTANE	0.8	1.8	0.9
ISOBUTANE	0.5	1.3	0.5
N-PENTANE	0.2	0.6	0.2
ISOPENTANE	0.1	0.4	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.4	0.1
NITROGEN	15.4	8.5	18.6
OXYGEN	TRACE	0.2	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.5	TRACE
HELIUM	0.20	0.90	0.90
HEATING VALUE*	986	1153	970
SPECIFIC GRAVITY	0.701	0.747	0.724

	INDEX 403 SAMPLE 8082	INDEX 404 SAMPLE 8093	INDEX 405 SAMPLE 8110
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	4 IN. LINE TO KNNG PLANT	TIE IN FROM NORTHERN NAT.	NOT GIVEN
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	07/19/61	07/20/61	08/04/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	270	NOT GIVEN	NOT GIVEN
FLOW, MCFD	1000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.5	69.8	69.9
ETHANE	9.1	6.0	6.2
PROPANE	1.6	5.3	5.9
N-BUTANE	0.5	0.8	0.8
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.1	15.8	15.0
OXYGEN	0.0	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	TRACE
HELIUM	0.80	0.50	0.80
HEATING VALUE*	1034	958	960
SPECIFIC GRAVITY	0.642	0.721	0.722

	INDEX 406 SAMPLE 9265	INDEX 407 SAMPLE 14643	INDEX 408 SAMPLE 5245
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	NOT GIVEN	NOT GIVEN	PAWNEE & ASH CREEK
LOCATION	NOT GIVEN	PLANT OUTLET	DISCHARGE
OWNER	KANSAS POWER & LIGHT CO.	KANSAS REFINED HELIUM CO.	A. B. JONES OIL & OPER. CO.
SAMPLED	03/--/64	04/23/76	06/18/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	350	NOT GIVEN	NOT GIVEN
FLOW, MCFD	160	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.9	85.5	73.1
ETHANE	4.0	4.6	4.1
PROPANE	1.9	1.7	2.1
N-BUTANE	0.3	0.4	0.8
ISOBUTANE	0.3	0.2	0.3
N-PENTANE	TRACE	0.0	0.3
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	9.0	3.5	16.2
OXYGEN	TRACE	0.0	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.3	0.0	0.6
HELIUM	0.62	0.06	1.79
HEATING VALUE*	1064	995	940
SPECIFIC GRAVITY	0.653	0.643	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 409 SAMPLE 16823	INDEX 410 SAMPLE 8081	INDEX 411 SAMPLE 5915
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	PAWNEE & EDWARDS CO. KS AREA	PAWNEE ROCK	REICHEL
LOCATION	8 IN. DISCHARGE	6 IN. LINE TO KNNG PLANT	FIELD LINE
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	03/16/53	09/19/51	08/16/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	335	252	NOT GIVEN
FLOW, MCFD	1500	1000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.4	78.4	72.4
ETHANE	3.7	5.3	3.4
PROPANE	1.4	2.5	1.4
N-BUTANE	0.5	1.0	0.5
ISOBUTANE	0.2	0.8	0.4
N-PENTANE	0.1	0.4	0.1
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.4	0.2
NITROGEN	6.1	9.1	19.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.1
HELIUM	0.60	1.20	1.88
HEATING VALUE*	1020	1065	988
SPECIFIC GRAVITY	0.630	0.695	0.685

	INDEX 412 SAMPLE 5944	INDEX 413 SAMPLE 8381	INDEX 414 SAMPLE 8517
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	RUSH	RUSH
FIELD	REICHEL	REICHEL	REICHEL
LOCATION	REICHEL WELLS	6 & 8 IN. OUTLET	8 IN. DISCH. TO GTIS PLANT
OWNER	U.S. BUREAU OF MINES	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	09/22/55	01/24/62	04/19/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	280	280
FLOW, MCFD	NOT GIVEN	1000	3000
COMPONENT, MOLE PCT			
METHANE	73.4	71.6	73.0
ETHANE	3.3	4.0	3.1
PROPANE	1.4	1.2	1.2
N-BUTANE	0.5	0.6	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	20.7	20.9	22.1
OXYGEN	0.0	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.62	0.82	0.09
HEATING VALUE*	893	851	837
SPECIFIC GRAVITY	0.696	0.680	0.686

	INDEX 415 SAMPLE 8083	INDEX 416 SAMPLE 13332	INDEX 417 SAMPLE 15496
STATE	KANSAS	KANSAS	KANSAS
COUNTY	RUSH	SCOTT	SCOTT
FIELD	SWEENEY	BRADSHAW	BRADSHAW
LOCATION	4 IN. INLET	10 IN. SYRACUSE INLET	SYRACUSE 10 IN. INLET
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	07/15/61	07/20/72	11/15/73
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	385	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	112	380	365
FLOW, MCFD	2200	16000	13000
COMPONENT, MOLE PCT			
METHANE	84.4	56.9	57.5
ETHANE	4.7	7.4	5.7
PROPANE	1.9	5.3	3.7
N-BUTANE	0.7	1.8	1.2
ISOBUTANE	0.5	1.0	0.5
N-PENTANE	0.2	0.4	0.4
ISOPENTANE	0.1	TRACE	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	5.8	25.1	30.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	TRACE	0.2	0.0
CARBON DIOXIDE	0.5	TRACE	0.0
HELIUM	0.70	0.74	0.69
HEATING VALUE*	1056	827	873
SPECIFIC GRAVITY	0.654	0.790	0.791

	INDEX 418 SAMPLE 7377	INDEX 419 SAMPLE 7378	INDEX 420 SAMPLE 13333
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	3-12 IN. OUTLET LINES	12 & 18 IN. INLET	12 IN. DEERFIELD INLET
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	02/05/50	02/05/50	07/25/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	530	365
FLOW, MCFD	134015	134014	70000
COMPONENT, MOLE PCT			
METHANE	70.3	62.7	73.4
ETHANE	5.1	5.2	6.4
PROPANE	3.1	5.3	3.5
N-BUTANE	0.9	2.9	0.8
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.2	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	19.4	19.3	14.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.50	0.46	0.49
HEATING VALUE*	951	956	1002
SPECIFIC GRAVITY	0.718	0.728	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 421 SAMPLE 13334	INDEX 422 SAMPLE 13337	INDEX 423 SAMPLE 15492
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	12 IN. LAKIN INLET	12 IN. HOLCOMB INLET	DEERFIELD 12 IN. INLET
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	07/25/72	07/25/72	11/15/78
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	385	385	365
FLOW,MCFD	85975	51000	18350
COMPONENT, MOLE PCT			
METHANE	71.9	67.5	72.4
ETHANE	6.5	6.1	6.3
PROPANE	3.6	3.6	3.5
N-BUTANE	1.0	1.0	0.9
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.7	18.3	15.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.53	0.44	0.42
HEATING VALUE*	1002	979	1005
SPECIFIC GRAVITY	0.719	0.727	0.713

	INDEX 424 SAMPLE 15497	INDEX 425 SAMPLE 15498	INDEX 426 SAMPLE 16321
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	HOLCOMB 12 IN. INLET	LAKIN 12 IN. INLET	LAKIN 12 IN. INLET
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	11/15/78	11/15/78	03/19/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	365	365	365
FLOW,MCFD	67300	121000	42000
COMPONENT, MOLE PCT			
METHANE	68.5	72.1	71.2
ETHANE	5.8	6.5	6.5
PROPANE	3.5	3.8	3.7
N-BUTANE	1.0	1.1	1.2
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.4
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	19.5	15.1	15.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	0.0	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.48	0.41	0.41
HEATING VALUE*	971	1027	1016
SPECIFIC GRAVITY	0.734	0.723	0.725

	INDEX 427 SAMPLE 16822	INDEX 428 SAMPLE 13335	INDEX 429 SAMPLE 13336
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON	HUGOTON & BRADSHAW	HUGOTON & BRADSHAW
LOCATION	12 IN. HELIUM PLT. INLET	20 IN. DISCHARGE	HELIUM PLANT INLET
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	03/19/83	07/25/72	07/25/72
FORMATION	NOT GIVEN	PERM-CHASE GROUP	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	365	NOT GIVEN	365
FLOW,MCFD	86000	186000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.0	75.0	66.8
ETHANE	5.5	5.7	5.1
PROPANE	2.9	2.1	3.6
N-BUTANE	0.7	0.2	1.0
ISOBUTANE	0.2	0.1	0.5
N-PENTANE	0.1	TRACE	0.3
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.3
NITROGEN	20.6	15.4	20.6
OXYGEN	0.0	0.2	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.53	0.28	0.49
HEATING VALUE*	917	944	962
SPECIFIC GRAVITY	0.713	0.674	0.740

	INDEX 430 SAMPLE 15490	INDEX 431 SAMPLE 15493	INDEX 432 SAMPLE 16820
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SCOTT	SCOTT	SCOTT
FIELD	HUGOTON & BRADSHAW	HUGOTON & BRADSHAW	HUGOTON & BRADSHAW
LOCATION	20 IN. DISCHARGE	12 IN. HELIUM PLANT INLET	20 IN. DISCHARGE
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	11/15/78	11/15/78	03/15/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	320	365	320
FLOW,MCFD	215000	200300	84000
COMPONENT, MOLE PCT			
METHANE	77.0	67.0	69.6
ETHANE	6.5	5.8	5.8
PROPANE	1.5	1.6	0.9
N-BUTANE	0.1	1.0	0.1
ISOBUTANE	0.0	0.5	TRACE
N-PENTANE	TRACE	0.3	0.0
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	TRACE	0.5	0.0
NITROGEN	14.3	20.6	20.8
OXYGEN	0.0	0.0	2.3
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.50	0.50	0.15
HEATING VALUE*	939	963	841
SPECIFIC GRAVITY	0.659	0.741	0.695

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 433 SAMPLE 15655	INDEX 434 SAMPLE 13235	INDEX 435 SAMPLE 17100
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	ANADARKO AREA	FIELDS S OF LIBERAL INLET	FORGAN, OK AREA
LOCATION	20 IN. HUBER LINE	TEXAS 100 & 200 LINES	20 IN. HUBER LINE
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	06/18/79	06/05/72	10/17/83
FORMATION	PERM-CHASE GROUP	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	400	518	500
FLOW, MCFD	NOT GIVEN	193800	25000
COMPONENT, MOLE PCT			
METHANE	85.4	83.6	90.8
ETHANE	7.6	7.3	3.3
PROPANE	1.8	2.4	1.6
N-BUTANE	0.5	0.2	0.5
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.2	TRACE	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	3.5	5.8	2.7
OXYGEN	1.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.11	0.22	0.15
HEATING VALUE*	1026	1050	1066
SPECIFIC GRAVITY	0.647	0.643	0.620

	INDEX 436 SAMPLE 17101	INDEX 437 SAMPLE 17098	INDEX 438 SAMPLE 5528
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	HUGOTON
FIELD	GRANT CO., KS AREA	HANSFORD-BORGER TX AREA	20 & 24 IN. DISCHARGE
LOCATION	26 IN. GRANT CO. LINE	24 & 26 IN. TX 300 INLET	NORTHERN NATURAL GAS CO.
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	08/13/53
SAMPLED	10/17/83	10/17/83	NOT GIVEN
FORMATION	NOT GIVEN	NOT GIVEN	360
GEOLOGIC PROVINCE CODE	360	360	NOT GIVEN
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	500	500	NOT GIVEN
FLOW, MCFD	15000	240000	
COMPONENT, MOLE PCT			
METHANE	71.3	81.9	73.0
ETHANE	6.4	5.6	6.0
PROPANE	3.5	2.5	3.1
N-BUTANE	1.0	0.8	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	16.3	7.5	16.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	0.0
HELIUM	0.45	0.32	0.47
HEATING VALUE*	994	1062	972
SPECIFIC GRAVITY	0.715	0.668	0.701

	INDEX 439 SAMPLE 5539	INDEX 440 SAMPLE 5540	INDEX 441 SAMPLE 5545
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	20 & 24 IN. LINE	20 IN. DISCHARGE	22 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	PANHANDLE EASTERN PIPELINE C
SAMPLED	08/13/53	08/13/53	08/13/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.5	76.9	73.0
ETHANE	6.5	6.0	7.0
PROPANE	3.4	2.2	3.7
N-BUTANE	0.6	0.2	1.0
ISOBUTANE	0.3	0.2	0.6
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	14.2	13.9	13.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.42	0.45	0.38
HEATING VALUE*	990	957	1033
SPECIFIC GRAVITY	0.692	0.668	0.715

	INDEX 442 SAMPLE 13231	INDEX 443 SAMPLE 13232	INDEX 444 SAMPLE 13313
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	GRANT CO. INLET	SEWARD CO. LINE	20 IN. A DISCHARGE
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	NORTHERN NATURAL GAS CO.
SAMPLED	06/05/72	06/05/72	07/25/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	509	190	600
FLOW, MCFD	761000	16200	80000
COMPONENT, MOLE PCT			
METHANE	71.6	82.1	73.3
ETHANE	6.3	8.6	6.9
PROPANE	4.0	2.2	3.5
N-BUTANE	1.2	0.2	0.8
ISOBUTANE	0.6	0.2	0.5
N-PENTANE	0.4	TRACE	0.1
ISOPENTANE	0.3	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	TRACE
NITROGEN	14.6	6.0	15.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	TRACE
HELIUM	0.21	0.30	0.44
HEATING VALUE*	1057	1056	987
SPECIFIC GRAVITY	0.739	0.651	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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	INDEX 445 SAMPLE 13338	INDEX 446 SAMPLE 15436	INDEX 447 SAMPLE 15489
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	24 IN. # DISCHARGE	A-30 IN.	8-24 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/25/72	11/14/78	11/14/78
FORMATION	PERM-CHASE GROUP X	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	780	350	800
FLOW, MCFD	210000	70000	140000
COMPONENT, MOLE PCT			
METHANE	74.2	73.7	73.7
ETHANE	6.8	5.4	5.6
PROPANE	3.9	3.8	4.2
N-BUTANE	0.9	0.9	1.2
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.3	0.3	0.3
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	12.9	15.5	13.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.37	0.47	0.36
HEATING VALUE*	1090	986	1080
SPECIFIC GRAVITY	0.710	0.707	0.725

	INDEX 448 SAMPLE 15654	INDEX 449 SAMPLE 15656	INDEX 450 SAMPLE 16817
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON
LOCATION	16 IN. SEWARD CO. LINE	26 IN. GRANT CO. INLET	8 IN. SUCTION
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	NORTHERN NATURAL GAS CO.
SAMPLED	06/18/79	06/19/79	03/15/83
FORMATION	PERM-CHASE GROUP	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	190	490	115
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.5	76.0	72.0
ETHANE	5.3	5.4	5.6
PROPANE	2.8	2.8	3.7
N-BUTANE	0.8	0.7	0.5
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	14.1	12.8	20.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.45	0.58	0.60
HEATING VALUE*	992	1009	880
SPECIFIC GRAVITY	0.691	0.689	0.693

	INDEX 451 SAMPLE 16818	INDEX 452 SAMPLE 17097	INDEX 453 SAMPLE 13237
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON	HUGOTON	HUGOTON & PANHANDLE
LOCATION	A-20 IN. SUCTION	26 IN. HUGOTON INLET	100,100&00 DISCHARGE LINES
OWNER	NORTHERN NATURAL GAS CO.	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	03/15/83	10/17/83	06/05/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	408	500	800
FLOW, MCFD	9700	70000	441000
COMPONENT, MOLE PCT			
METHANE	74.3	71.9	84.1
ETHANE	5.0	6.8	6.5
PROPANE	3.7	3.6	1.7
N-BUTANE	0.8	1.0	0.0
ISOBUTANE	0.3	0.4	0.0
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.1	0.2	0.0
CYCLOPENTANE	TRACE	0.1	0.0
HEXANES PLUS	0.1	0.2	0.0
NITROGEN	15.5	13.0	7.0
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.47	0.44	TRACE
HEATING VALUE*	912	1022	993
SPECIFIC GRAVITY	0.694	0.721	0.634

	INDEX 454 SAMPLE 13238	INDEX 455 SAMPLE 13236	INDEX 456 SAMPLE 15652
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON & PANHANDLE	HUGOTON, GREENWOOD & KEYES	HUGOTON, GREENWOOD & KEYES
LOCATION	20& DISCHARGE LINE	HUGOTON INLET	26 IN. HUGOTON INLET
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	06/05/72	06/05/72	06/18/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	509	490
FLOW, MCFD	305000	243900	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.7	73.3	75.6
ETHANE	6.6	6.8	6.8
PROPANE	4.7	3.7	3.1
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	13.2	13.8	12.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.02	0.44	0.37
HEATING VALUE*	1061	1029	1024
SPECIFIC GRAVITY	0.730	0.711	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 457 SAMPLE 13617	INDEX 458 SAMPLE 13616	INDEX 459 SAMPLE 11049
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	HUGOTON-GRANT CO.	HUGOTON-SEWARD CO.	KISMET
LOCATION	16 IN. INLET	18 IN. INLET	NOT GIVEN
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	A. L. ABERCROMBIE, INC.
SAMPLED	06/04/73	06/04/73	08/04/67
FORMATION	NOT GIVEN	NOT GIVEN	-COMMINGLED
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	525	160	NOT GIVEN
FLOW, MCFD	86000	23000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.3	77.2	76.1
ETHANE	6.1	5.3	5.9
PROPANE	5.6	2.9	4.1
N-BUTANE	0.9	0.6	1.5
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.2	0.6
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	12.6	12.6	9.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.42	0.42	0.25
HEATING VALUE	1015	1004	1121
SPECIFIC GRAVITY	0.710	0.682	0.728

	INDEX 460 SAMPLE 7093	INDEX 461 SAMPLE 7095	INDEX 462 SAMPLE 12134
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	18 & 26 IN. INLET	PLANT INLET
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	NATIONAL HELIUM CORP.
SAMPLED	06/17/59	06/17/59	11/26/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	470	500	NOT GIVEN
FLOW, MCFD	425	375	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	72.5	78.2
ETHANE	6.8	6.7	5.6
PROPANE	3.2	5.7	3.2
N-BUTANE	0.5	1.0	0.6
ISOBUTANE	0.3	0.8	0.2
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.0	0.3	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	9.4	14.1	10.4
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.40	0.40	0.35
HEATING VALUE	1040	1038	1034
SPECIFIC GRAVITY	0.676	0.725	0.680

	INDEX 463 SAMPLE 15233	INDEX 464 SAMPLE 13234	INDEX 465 SAMPLE 15653
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	SEWARD
FIELD	NOT GIVEN	NOT GIVEN	PANHANDLE AREA
LOCATION	HUBER LINE INLET	TEXAS 300 INLET LINE	24 & 26 IN. TEXAS 300 INLET
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C
SAMPLED	06/05/72	06/05/72	06/18/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	320	924	900
FLOW, MCFD	35500	196100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.4	81.1	87.4
ETHANE	5.9	7.6	4.5
PROPANE	2.4	2.2	1.0
N-BUTANE	0.4	0.2	0.1
ISOBUTANE	0.3	0.2	0.0
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	1.8	3.0	6.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.43	0.37	0.22
HEATING VALUE	1105	1028	1000
SPECIFIC GRAVITY	0.635	0.653	0.616

	INDEX 466 SAMPLE 17099	INDEX 467 SAMPLE 13745	INDEX 468 SAMPLE 9269
STATE	KANSAS	KANSAS	KANSAS
COUNTY	SEWARD	SEWARD	STAFFORD
FIELD	SEWARD CO., KS AREA	UNDESIGNATED	BELPRE
LOCATION	16 IN. SEWARD CO. LINE	LIBERAL PLANT INLET LINE	NOT GIVEN
OWNER	PANHANDLE EASTERN PIPELINE C	NATIONAL HELIUM CORP.	KANSAS POWER & LIGHT CO.
SAMPLED	10/17/73	10/09/73	03/--/64
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	180	500	450
FLOW, MCFD	15000	NOT GIVEN	1250
COMPONENT, MOLE PCT			
METHANE	73.9	77.5	76.6
ETHANE	5.7	6.5	4.5
PROPANE	3.0	3.2	2.3
N-BUTANE	0.9	0.6	0.9
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	14.9	10.8	13.9
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.46	0.37	0.35
HEATING VALUE	998	1017	991
SPECIFIC GRAVITY	0.705	0.686	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 469 SAMPLE 9270	INDEX 470 SAMPLE 8518	INDEX 471 SAMPLE 9267
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STAFFORD
FIELD	DILLWIN W	MACKSVILLE	MACKSVILLE
LOCATION	NOT GIVEN	FIELD OUTLET TO OTIS PLANT	NOT GIVEN
OWNER	KANSAS POWER & LIGHT CO.	KANSAS-NEBRASKA NATURAL GAS	KANSAS POWER & LIGHT CO.
SAMPLED	03/--/64	04/19/62	03/--/64
FORMATION	NOT GIVEN	NOT GIVEN	ORDO-VIOLA
GEOLOGIC PROVINCE CODE	385	385	385
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	420	360	430
FLOW, MCFD	1250	4000	1500
COMPONENT, MOLE PCT			
METHANE	87.2	91.0	87.7
ETHANE	3.8	3.9	3.9
PROPANE	1.5	1.5	1.6
N-BUTANE	0.5	0.5	0.6
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	5.4	1.5	4.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.5
HELIUM	0.71	1.26	0.72
HEATING VALUE*	1035	981	1035
SPECIFIC GRAVITY	0.630	0.654	0.633

	INDEX 472 SAMPLE 9266	INDEX 473 SAMPLE 9273	INDEX 474 SAMPLE 5751
STATE	KANSAS	KANSAS	KANSAS
COUNTY	STAFFORD	STAFFORD	STEVENS
FIELD	NOT GIVEN	RATTLESNAKE	HUGOTON
LOCATION	FARMINGTON & FOLEY GAS COMP.	NOT GIVEN	KANSAS 12 IN. LINE
OWNER	KANSAS POWER & LIGHT CO.	KANSAS POWER & LIGHT CO.	HUGOTON-PLAINS GAS & OIL CO.
SAMPLED	03/--/64	03/--/64	01/01/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	385	385	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	930	420	NOT GIVEN
FLOW, MCFD	2200	750	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.1	76.3	73.3
ETHANE	4.0	5.5	4.6
PROPANE	1.5	2.6	1.9
N-BUTANE	0.6	1.1	0.6
ISOBUTANE	0.3	0.1	0.3
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	8.5	12.0	12.2
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	TRACE
HELIUM	0.67	1.20	0.59
HEATING VALUE*	1016	1019	979
SPECIFIC GRAVITY	0.654	0.687	0.663

	INDEX 475 SAMPLE 1189	INDEX 476 SAMPLE 10057	INDEX 477 SAMPLE 15271
STATE	KANSAS	KENTUCKY	LOUISIANA
COUNTY	SUMNER	CLARK	ASCENSION
FIELD	AREA COMPOSITE	TRAPP	PLANT SAMPLE
LOCATION	ARK. CITY COMPRESSOR STA.	TRAPP, KENTUCKY	CYLINDER NO. 3181
OWNER	EMPIRE GAS & FUEL CO.	MELCHER-ATKINS OIL CO., LTD.	AGRICO CHEMICAL CO.
SAMPLED	12/10/28	08/12/6-	04/--/78
FORMATION	NOT GIVEN	ORDO-ST. PETER	NOT GIVEN
GEOLOGIC PROVINCE CODE	375	380	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	500	500
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	57.6	87.7	96.2
ETHANE	30.4	1.5	2.6
PROPANE	---	9.7	0.9
N-BUTANE	---	0.2	0.1
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	0.0	0.1
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	0.0	0.1
HEXANES PLUS	---	0.0	0.1
NITROGEN	11.4	0.9	0.3
OXYGEN	0.3	0.2	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.4	0.5	0.0
HELIUM	0.30	0.20	TRACE
HEATING VALUE*	1124	940	1052
SPECIFIC GRAVITY	0.756	0.624	0.590

	INDEX 478 SAMPLE 15272	INDEX 479 SAMPLE 13008	INDEX 480 SAMPLE 11827
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ASCENSION	CAMERON	CAMERON
FIELD	PLANT SAMPLE	CAMERON E BLK. 365	CAMERON E BLK. 69
LOCATION	CYLINDER 9134	NOT GIVEN	NOT GIVEN
OWNER	AGRICO CHEMICAL CO.	TEXACO INC.	MOBIL OIL CORP.
SAMPLED	--/--/00	08/22/71	04/08/69
FORMATION	NOT GIVEN	PLIO-9500 M SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	225	225
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	5	NOT GIVEN	1050
FLOW, MCFD	NOT GIVEN	75000	55000
COMPONENT, MOLE PCT			
METHANE	96.1	96.5	97.5
ETHANE	0.0	1.9	0.7
PROPANE	TRACE	0.5	1.3
N-BUTANE	0.0	0.1	0.9
ISOBUTANE	0.0	0.0	0.3
N-PENTANE	0.0	0.1	0.2
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	2.3	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.6	0.0	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.7
HELIUM	0.00	TRACE	TRACE
HEATING VALUE*	995	1030	1089
SPECIFIC GRAVITY	0.599	0.592	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 481 SAMPLE 11818	INDEX 482 SAMPLE 11750	INDEX 483 SAMPLE 11736
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	CAMERON	JEFFERSON	LAFOURCHE
FIELD	CAMERON 6 BLK. 110	GRAND ISLE BLK. 16	BAY MARCHAND BLK. 2
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	MOBIL OIL CORP.	HUMBLE OIL & REFINING CO.	CHEVRON OIL CO.
SAMPLED	04/00/69	01/22/69	01/07/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1060	1200	NOT GIVEN
FLOW, MCFD	35000	24000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.7	91.8	92.0
ETHANE	1.4	3.8	3.2
PROPANE	0.3	1.8	1.8
N-BUTANE	0.2	0.6	0.5
ISOBUTANE	0.0	0.3	0.2
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.9	0.9	1.1
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1037	1098	1072
SPECIFIC GRAVITY	0.585	0.624	0.614

	INDEX 484 SAMPLE 11749	INDEX 485 SAMPLE 1659	INDEX 486 SAMPLE 1660
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	PLAQUEMINES	RICHLAND	RICHLAND
FIELD	DELTA BLK. 73 S	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	RICHLAND PARISH FIELD	RICHLAND PARISH FIELD
OWNER	HUMBLE OIL & REFINING CO.	NAT. GAS & FUEL CORP. ARK.	NAT. GAS & FUEL CORP. ARK.
SAMPLED	01/28/69	06/26/28	06/26/28
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	230	230
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1075	NOT GIVEN	NOT GIVEN
FLOW, MCFD	46000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.2	83.0	90.5
ETHANE	3.5	3.6	4.6
PROPANE	1.3	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.2	---	---
ISOPENTANE	0.2	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.6	4.7	4.3
OXYGEN	0.1	0.4	0.6
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	TRACE	0.10	0.19
HEATING VALUE*	1083	1002	999
SPECIFIC GRAVITY	0.609	0.693	0.599

	INDEX 487 SAMPLE 11823	INDEX 488 SAMPLE 11824	INDEX 489 SAMPLE 11745
STATE	LOUISIANA	LOUISIANA	LOUISIANA
PARISH	ST. MARY	ST. MARY	TERREBONNE
FIELD	EUGENE ISLAND BLK. 126	EUGENE ISLAND BLK. 128	TIMBALIER S BLK. 135
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	TRANSCO PIPELINE CO.	TRANSCO PIPELINE CO.	GULF OIL CO.
SAMPLED	01/22/69	01/13/69	01/23/69
FORMATION	MIOC-	MIOC-	MIOC---
GEOLOGIC PROVINCE CODE	220	220	951
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	900	900	1300
FLOW, MCFD	15134	7000	210000
COMPONENT, MOLE PCT			
METHANE	99.9	89.8	88.0
ETHANE	4.7	6.1	4.4
PROPANE	1.8	2.3	2.4
N-BUTANE	0.4	0.5	0.8
ISOBUTANE	0.4	0.5	0.7
N-PENTANE	0.3	0.2	0.4
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	0.4	0.0	2.0
OXYGEN	TRACE	0.0	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.3
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1101	1134	1124
SPECIFIC GRAVITY	0.624	0.636	0.655

	INDEX 490 SAMPLE 14828	INDEX 491 SAMPLE 11481	INDEX 492 SAMPLE 7431
STATE	MARYLAND	MICHIGAN	MICHIGAN
COUNTY	GARRETT	KENT	NEWAYGO
FIELD	NEGRO MOUNTAIN	WALKER	ENSLEY
LOCATION	6 IN. WELLHEAD	NOT GIVEN	SEC. 7 & 17, T11N, R11W
OWNER	COLUMBIA GAS TRANS. CORP.	SMITH PETROLEUM CO.	MESS & RYDER
SAMPLED	10/22/76	05/07/68	03/03/60
FORMATION	NOT GIVEN	DEVO-DUNDEE	MISS-
GEOLOGIC PROVINCE CODE	160	305	305
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	2220	NOT GIVEN	319
FLOW, MCFD	200	NOT GIVEN	4000
COMPONENT, MOLE PCT			
METHANE	93.0	84.0	65.4
ETHANE	1.3	9.5	6.4
PROPANE	TRACE	2.8	2.2
N-BUTANE	0.0	0.7	0.3
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	0.5	2.1	23.5
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.4
HELIUM	3.04	0.11	1.30
HEATING VALUE*	1016	1143	852
SPECIFIC GRAVITY	0.585	0.662	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 493 SAMPLE 11480	INDEX 494 SAMPLE 11478	INDEX 495 SAMPLE 11497
STATE	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY	OSCEOLA	OTSEGO	ST. CLAIR
FIELD	MIDDLE BRANCH	OTSEGO	KESSEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	MICHIGAN CONSOLIDATED GAS CO	M. FRUEHAUF	CONSUMERS POWER CO.
SAMPLED	05/03/68	05/08/68	05/07/68
FORMATION	MISS-MICHIGAN STRAY	DEVO-ANTRIM	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE	305	305	305
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	91.7	88.1
ETHANE	8.9	5.2	4.2
PROPANE	3.9	0.1	1.8
N-BUTANE	0.9	0.0	0.8
ISOBUTANE	0.0	0.0	0.9
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.0	0.0	0.3
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	6.6	0.5	3.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	5.7	TRACE
HELIUM	0.35	0.02	0.12
HEATING VALUE	1075	956	1099
SPECIFIC GRAVITY	0.670	0.612	0.646

	INDEX 496 SAMPLE 11484	INDEX 497 SAMPLE 14211	INDEX 498 SAMPLE 15855
STATE	MICHIGAN	MISSISSIPPI	MISSISSIPPI
COUNTY	WEXFORD	BOLIVAR	BOLIVAR
FIELD	CHERRY GROVE	GULF COAST AREA	GULF COAST AREA
LOCATION	NOT GIVEN	26, 30, & 36 IN.	26, 30 & 36 IN. LINES
OWNER	NORTHERN GAS CO.	TRUNKLINE GAS CO.	TRUNKLINE GAS CO.
SAMPLED	05/07/68	11/07/78	12/12/79
FORMATION	MISS-MICHIGAN STRAY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	305	240	240
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	810	900
FLOW, MCFD	NOT GIVEN	1049000	1500000
COMPONENT, MOLE PCT			
METHANE	78.5	96.9	97.2
ETHANE	9.2	1.9	1.6
PROPANE	3.4	0.2	0.3
N-BUTANE	1.1	0.1	0.1
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.1
NITROGEN	6.8	0.3	0.3
OXYGEN	0.1	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.7	0.4
HELIUM	0.24	TRACE	TRACE
HEATING VALUE	1086	1024	1030
SPECIFIC GRAVITY	0.582	0.576	0.574

	INDEX 499 SAMPLE 11920	INDEX 500 SAMPLE 14215	INDEX 501 SAMPLE 15859
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	BOLIVAR	CALHOUN	CALHOUN
FIELD	NOT GIVEN	GULF COAST AREA	LOUISIANA
LOCATION	26, 30 & 36 IN. LINES	2-30 IN. & 1-36 IN.	2-30 & 1-36 IN.
OWNER	TRUNKLINE GAS CO.	COLUMBIA GULF TRANS. CO.	COLUMBIA GULF TRANS. CO.
SAMPLED	06/04/69	11/08/78	12/13/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	240	250	200
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	900	1000	710
FLOW, MCFD	800000	1500000	1325000
COMPONENT, MOLE PCT			
METHANE	95.9	96.8	97.4
ETHANE	2.5	1.9	1.4
PROPANE	0.4	0.2	0.2
N-BUTANE	0.0	TRACE	0.1
ISOBUTANE	0.0	TRACE	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	0.6	0.2	0.2
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.8	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE	1027	1020	1023
SPECIFIC GRAVITY	0.581	0.574	0.569

	INDEX 502 SAMPLE 14212	INDEX 503 SAMPLE 15856	INDEX 504 SAMPLE 11919
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	COAHOMA	COAHOMA	DE SOTO
FIELD	GULF COAST AREA	GULF COAST AREA	NOT GIVEN
LOCATION	2-26 IN. & 1-30 IN.	2-26, 1-30 & 1-36 IN. LINES	2-26 IN. LINES
OWNER	TEXAS GAS TRANSMISSION CORP.	TEXAS GAS TRANSMISSION CORP.	TEXAS GAS TRANSMISSION CORP.
SAMPLED	11/07/74	12/12/79	06/04/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	240	240	250
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	804	850	800
FLOW, MCFD	1600000	1640000	1614000
COMPONENT, MOLE PCT			
METHANE	94.1	96.2	95.1
ETHANE	2.6	2.0	2.8
PROPANE	0.2	0.2	0.3
N-BUTANE	TRACE	0.1	0.0
ISOBUTANE	0.1	TRACE	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.2	0.5	0.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.7	0.9	1.0
HELIUM	0.01	TRACE	0.01
HEATING VALUE	1013	1024	1021
SPECIFIC GRAVITY	0.595	0.581	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 505 SAMPLE 14214	INDEX 506 SAMPLE 15858	INDEX 507 SAMPLE 14217
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	GRENADA	GRENADA	LOWNDES
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION	30 IN.	30 IN.	30 & 36 IN.
OWNER	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.
SAMPLED	11/07/74	12/13/79	11/08/74
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	565	510	875
FLOW, MCFD	560000	529900	1693000
COMPONENT, MOLE PCT			
METHANE	97.0	97.2	97.1
ETHANE	1.8	1.9	1.8
PROPANE	0.1	0.3	0.1
N-BUTANE	TRACE	0.0	0.0
ISOBUTANE	TRACE	0.0	0.0
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	0.5	0.1	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.7	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1017	1019	1020
SPECIFIC GRAVITY	0.573	0.573	0.571

	INDEX 508 SAMPLE 15861	INDEX 509 SAMPLE 14216	INDEX 510 SAMPLE 15860
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	LOWNDES	MONROE	MONROE
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION	1-30 & 1-36 IN.	3-36 IN. & 1-36 IN.	2-30 & 1-36 IN.
OWNER	TENNESSEE GAS PIPELINE CO.	TEXAS EASTERN TRANS. CORP.	TEXAS EASTERN TRANS. CORP.
SAMPLED	12/14/79	11/08/74	12/13/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	200	200	200
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	680	838	1000
FLOW, MCFD	636000	1500000	1850000
COMPONENT, MOLE PCT			
METHANE	97.6	96.4	97.0
ETHANE	1.5	2.1	1.6
PROPANE	0.1	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.4	0.4	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.6	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.5
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1016	1029	1031
SPECIFIC GRAVITY	0.568	0.578	0.578

	INDEX 511 SAMPLE 14213	INDEX 512 SAMPLE 15857	INDEX 513 SAMPLE 11924
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	PANOLA	PANOLA	PERRY
FIELD	GULF COAST AREA	TEXAS AREA	GULF COAST AREA
LOCATION	24, 28 & 2-26 IN.	1-26, 1-24 & 2-30 IN.	24 & 30 IN. LINES
OWNER	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.	FLORIDA GAS TRANSMISSION CO.
SAMPLED	11/07/74	12/12/79	06/09/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	250	250	210
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	693	694	972
FLOW, MCFD	1200000	1275000	660000
COMPONENT, MOLE PCT			
METHANE	95.8	95.6	94.9
ETHANE	2.7	2.2	3.3
PROPANE	0.3	0.5	0.7
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.1	0.1	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	TRACE	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	0.4	0.5	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.8	0.8
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1033	1033	1041
SPECIFIC GRAVITY	0.581	0.585	0.590

	INDEX 514 SAMPLE 14221	INDEX 515 SAMPLE 15866	INDEX 516 SAMPLE 14141
STATE	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY	PERRY	PERRY	RANKIN
FIELD	GULF COAST AREA	TEXAS, LA. & OFFSHORE	PINEY WOODS & THOMASVILLE
LOCATION	24 & 30 IN. LINES	1-24 IN. & 1-30 IN.	PLANT RESIDUE
OWNER	FLORIDA GAS TRANSMISSION CO.	FLORIDA GAS TRANSMISSION CO.	SHELL OIL CO.
SAMPLED	11/12/74	12/18/79	09/11/74
FORMATION	NOT GIVEN	NOT GIVEN	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE	210	210	210
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	920	780	40000
FLOW, MCFD	476000	745000	
COMPONENT, MOLE PCT			
METHANE	95.1	96.1	98.3
ETHANE	2.6	2.1	0.1
PROPANE	0.6	0.4	0.0
N-BUTANE	0.1	0.1	TRACE
ISOBUTANE	0.2	0.1	0.0
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	0.5	0.3	1.4
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	TRACE
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1036	1038	998
SPECIFIC GRAVITY	0.587	0.583	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 517 SAMPLE 14210	INDEX 518 SAMPLE 2168	INDEX 519 SAMPLE 17369
STATE	MISSISSIPPI	MONTANA	MONTANA
COUNTY	WASHINGTON	BIG HORN	BLAINE
FIELD	GULF COAST AREA	HARDIN	BATTLE CREEK
LOCATION	2-30 IN. & 1-36 IN. LINES	T1S, R33E	6 IN. INLET
OWNER	MICHIGAN WISCONSIN PIPELINE	BIG HORN OIL & GAS DEV. CO.	MONTANA POWER CO.
SAMPLED	11/06/74	09/22/30	08/01/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	210	515	395
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	850	115	410
FLOW, MCFD	1300000	NOT GIVEN	625
COMPONENT, MOLE PCT			
METHANE	97.5	97.1	95.8
ETHANE	2.1	0.0	0.3
PROPANE	0.1	---	TRACE
N-BUTANE	0.0	---	0.0
ISOBUTANE	0.0	---	0.0
N-PENTANE	0.0	---	0.0
ISOPENTANE	0.0	---	0.0
CYCLOPENTANE	0.0	---	0.0
HEXANES PLUS	0.0	---	0.0
NITROGEN	0.3	2.7	3.7
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.0	0.1	TRACE
HELIUM	TRACE	0.06	0.08
HEATING VALUE*	1028	984	976
SPECIFIC GRAVITY	0.567	0.567	0.570

	INDEX 520 SAMPLE 2172	INDEX 521 SAMPLE 17334	INDEX 522 SAMPLE 17370
STATE	MONTANA	MONTANA	MONTANA
COUNTY	BLAINE	BLAINE	CHOUTEAU
FIELD	BOWES	TIGER RIDGE	BULLWACKER,LEROY,SAWTOOTH
LOCATION	CHINOOK	6 IN. INLET	10 IN. MAINLINE
OWNER	MONTANA GAS CORP.	MONTANA POWER CO.	MONTANA POWER CO.
SAMPLED	09/17/30	06/22/84	08/01/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	395	500
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	55	370	450
FLOW, MCFD	NOT GIVEN	1100	4000
COMPONENT, MOLE PCT			
METHANE	94.1	96.3	94.5
ETHANE	0.0	0.3	0.3
PROPANE	---	TRACE	TRACE
N-BUTANE	---	0.0	0.0
ISOBUTANE	---	0.0	0.0
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	0.0	0.0
HEXANES PLUS	---	0.0	0.0
NITROGEN	5.6	3.2	5.1
OXYGEN	0.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.0
HELIUM	0.10	0.08	0.07
HEATING VALUE*	953	981	963
SPECIFIC GRAVITY	0.579	0.568	0.577

	INDEX 523 SAMPLE 17368	INDEX 524 SAMPLE 14463	INDEX 525 SAMPLE 17331
STATE	MONTANA	MONTANA	MONTANA
COUNTY	DAWSON	DAWSON	DAWSON
FIELD	BOWDOIN & FT. PECK	BOWDOIN SYSTEM	WILLISTON BASIN-MONT.,N. DAK
LOCATION	8 IN. BOWDOIN	8 IN. LINE	12 IN. WILLISTON BASIN INLET
OWNER	MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA UTILITIES CO.
SAMPLED	08/02/84	09/09/75	06/21/84
FORMATION	NOT GIVEN	CRET-BOWDOIN & PHILLIPS	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	450	350	180
FLOW, MCFD	18000	10000	50000
COMPONENT, MOLE PCT			
METHANE	92.0	93.3	74.9
ETHANE	0.2	0.2	15.6
PROPANE	TRACE	TRACE	2.4
N-BUTANE	0.0	0.0	0.2
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	TRACE
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	7.5	6.3	6.8
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.7
HELIUM	0.07	0.07	0.03
HEATING VALUE*	936	944	1111
SPECIFIC GRAVITY	0.586	0.582	0.693

	INDEX 526 SAMPLE 17330	INDEX 527 SAMPLE 9418	INDEX 528 SAMPLE 14462
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	FALLON	FALLON
FIELD	LITTLE KNIFE&NW NORTH DAKOTA	PLEVNA	TIOGA & BEAVER LODGE
LOCATION	16 IN. INLET	SEC. VARIOUS, T5N, R60E	16 IN. LINE
OWNER	MONTANA-DAKOTA UTILITIES CO.	FRANK A. WARNER	MONTANA-DAKOTA UTILITIES CO.
SAMPLED	06/20/84	06/22/64	09/09/75
FORMATION	NOT GIVEN	CRET-JUDITH RIVER	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	450	NOT GIVEN	350
FLOW, MCFD	75000	NOT GIVEN	6000
COMPONENT, MOLE PCT			
METHANE	72.1	94.6	82.6
ETHANE	13.5	0.2	10.1
PROPANE	1.2	0.1	1.5
N-BUTANE	0.1	0.0	TRACE
ISOBUTANE	0.1	0.0	TRACE
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	11.3	5.1	6.0
OXYGEN	1.1	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	TRACE
HELIUM	0.04	0.09	0.09
HEATING VALUE*	1094	964	1044
SPECIFIC GRAVITY	0.720	0.576	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 529 SAMPLE 14461	INDEX 530 SAMPLE 14465	INDEX 531 SAMPLE 14464
STATE	MONTANA	MONTANA	MONTANA
COUNTY	FALLON	GLACIER	GLACIER
FIELD	WYOMING, N & S MONTANA	CARWAY-ADEN & CUTBANK EXPORT	CUT BANK
LOCATION	12 IN. LINE	20 IN. DISCH.-MAIN LINE NO.1	20 IN. INLET-MAIN LINE NO. 1
OWNER	MONTANA-DAKOTA UTILITIES CO.	MONTANA POWER CO.	MONTANA POWER CO.
SAMPLED	09/09/75	09/11/75	09/11/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	500	500
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	300	559	212
FLOW,MCFD	20000	110000	14400
COMPONENT, MOLE PCT			
METHANE	94.4	92.6	88.2
ETHANE	1.1	2.4	5.0
PROPANE	0.2	0.7	1.4
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	1.6	2.9	2.6
OXYGEN	2.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	1.0	2.4
HELIUM	0.02	0.10	0.07
HEATING VALUE*	1020	1010	1030
SPECIFIC GRAVITY	0.581	0.600	0.632

	INDEX 532 SAMPLE 17338	INDEX 533 SAMPLE 17339	INDEX 534 SAMPLE 14466
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	GLACIER	GLACIER
FIELD	CUT BANK	S. ALBERTA & N. MONTANA	VARIOUS FIELDS
LOCATION	20 IN. INLET	16 IN. INLET	16 IN. INLET-MAIN LINE NO. 1
OWNER	MONTANA POWER CO.	MONTANA POWER CO.	MONTANA POWER CO.
SAMPLED	06/25/84	06/25/84	09/11/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	500	500	500
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	200	481	380
FLOW,MCFD	14000	29000	28100
COMPONENT, MOLE PCT			
METHANE	91.1	93.4	95.5
ETHANE	2.9	1.3	0.6
PROPANE	0.4	0.5	0.1
N-BUTANE	0.1	0.2	TRACE
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	3.9	4.3	3.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.5	TRACE	0.3
HELIUM	0.13	0.12	0.11
HEATING VALUE*	989	1002	984
SPECIFIC GRAVITY	0.605	0.593	0.575

	INDEX 535 SAMPLE 14467	INDEX 536 SAMPLE 2265	INDEX 537 SAMPLE 2180
STATE	MONTANA	MONTANA	MONTANA
COUNTY	GLACIER	LIBERTY	PHILLIPS
FIELD	WATERTON IN CANADA	IMPERIAL & WHITLASH	BOWDOIN
LOCATION	16 IN. INLET-MAIN LINE NO. 1	NOT GIVEN	T31N, R34E
OWNER	MONTANA POWER CO.	CITIES SERVICE GAS CO.	BOWDOIN UTILITIES CO.
SAMPLED	09/11/75	01/14/31	09/19/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	500	500	395
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	717	NOT GIVEN	200
FLOW,MCFD	67300	NOT GIVEN	1000
COMPONENT, MOLE PCT			
METHANE	91.9	96.9	96.2
ETHANE	4.5	1.5	0.6
PROPANE	1.4	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	1.5	0.7	3.5
OXYGEN	0.0	0.1	0.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.0	0.8	0.2
HELIUM	0.02	0.07	0.06
HEATING VALUE*	1068	1008	975
SPECIFIC GRAVITY	0.605	0.573	0.571

	INDEX 538 SAMPLE 2183	INDEX 539 SAMPLE 2196	INDEX 540 SAMPLE 17337
STATE	MONTANA	MONTANA	MONTANA
COUNTY	PHILLIPS	PONDERA	TOOLE
FIELD	BOWDOIN DOME AREA	PONDERA	KEVIN SUNBURST,LEROY&CANADA
LOCATION	T32N, R32E	SEC.8,9,10,15,16,17,T27N,R4W	6 IN. INLET
OWNER	BOWDOIN UTILITIES CO.	MIDWEST REFINING CO.	MONTANA POWER CO.
SAMPLED	09/29/30	10/10/30	06/25/84
FORMATION	NOT GIVEN	MISS-MADISON	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	500	500
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	220	NOT GIVEN	280
FLOW,MCFD	1000	NOT GIVEN	300
COMPONENT, MOLE PCT			
METHANE	93.8	65.6	91.6
ETHANE	0.0	31.0	1.1
PROPANE	---	---	0.5
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.1
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.1
NITROGEN	5.6	2.4	5.4
OXYGEN	0.1	0.1	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.4	0.9	0.5
HELIUM	0.07	0.25	0.18
HEATING VALUE*	950	1220	988
SPECIFIC GRAVITY	0.582	0.727	0.609

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 541 SAMPLE 17757	INDEX 542 SAMPLE 16009	INDEX 543 SAMPLE 16008
STATE	NEBRASKA	NEBRASKA	NEBRASKA
COUNTY	CHEYENNE	CHEYENNE	DEUEL
FIELD	WYOMING FIELDS	WYOMING-PINE BLUFF AREA	HUNTSMAN & CASPER AREA
LOCATION	10 IN. LINE	OUTLET	12 IN.
OWNER	KN ENERGY, INC.	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS
SAMPLED	07/16/85	07/14/80	07/14/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	540	540	540
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	538	535	895
FLOW,MCFD	22000	27000	100000
COMPONENT, MOLE PCT			
METHANE	89.6	89.4	89.7
ETHANE	6.9	6.3	6.0
PROPANE	0.7	1.1	1.0
N-BUTANE	0.0	0.3	0.3
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	1.2	0.9	1.1
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.5	1.4
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1048	1078	1069
SPECIFIC GRAVITY	0.615	0.629	0.625

	INDEX 544 SAMPLE 17755	INDEX 545 SAMPLE 12065	INDEX 546 SAMPLE 16966
STATE	NEBRASKA	NEW MEXICO	NEW MEXICO
COUNTY	DEUEL	CHAVES	CHAVES
FIELD	WYOMING & BIG SPGS. STORAGE	PANHANDLE & PERMIAN BASIN	PECOS SLOPE
LOCATION	12 IN. & 16 IN. INLET	COMPOSITE	RED BLUFF
OWNER	KN ENERGY, INC.	TRANSWESTERN PIPELINE CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	07/16/85	09/29/69	05/31/83
FORMATION	NOT GIVEN	NOT GIVEN	PERM-ABO
GEOLOGIC PROVINCE CODE	540	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	930	855	400
FLOW,MCFD	135000	700000	328
COMPONENT, MOLE PCT			
METHANE	81.3	90.4	84.6
ETHANE	6.6	4.7	4.7
PROPANE	0.7	1.2	1.8
N-BUTANE	0.1	0.3	0.7
ISOBUTANE	0.0	TRACE	0.2
N-PENTANE	0.1	TRACE	0.2
ISOPENTANE	0.0	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	7.7	1.6	6.1
OXYGEN	1.6	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.3
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.4	1.3	0.1
HELIUM	0.02	0.04	0.46
HEATING VALUE*	982	1050	1063
SPECIFIC GRAVITY	0.659	0.616	0.652

	INDEX 547 SAMPLE 17415	INDEX 548 SAMPLE 17416	INDEX 549 SAMPLE 17417
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	PECOS SLOPE	PECOS SLOPE	PECOS SLOPE
LOCATION	24 IN.	24 IN. PANHANDLE LATERAL	24 IN.
OWNER	TRANSWESTERN PIPELINE CO.	TRANSWESTERN PIPELINE CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	09/13/84	09/13/84	09/13/84
FORMATION	PERM-ABO	PERM-ABO	PERM-ABO
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	775	760	750
FLOW,MCFD	20000	16400	117000
COMPONENT, MOLE PCT			
METHANE	85.7	84.6	84.8
ETHANE	4.9	5.0	4.9
PROPANE	1.9	1.9	1.9
N-BUTANE	0.6	0.6	0.7
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.3	0.3
NITROGEN	5.2	6.0	6.2
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.34	0.45	0.46
HEATING VALUE*	1071	1066	1065
SPECIFIC GRAVITY	0.649	0.653	0.653

	INDEX 550 SAMPLE 17418	INDEX 551 SAMPLE 16123	INDEX 552 SAMPLE 12062
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	PECOS SLOPE	PERMIAN	PERMIAN BASIN
LOCATION	24 IN.	30 IN. OUTLET	NOT GIVEN
OWNER	TRANSWESTERN PIPELINE CO.	TRANSWESTERN PIPELINE CO.	EL PASO NATURAL GAS CO.
SAMPLED	09/14/84	10/23/80	09/29/69
FORMATION	PERM-ABO	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	750	1008	800
FLOW,MCFD	20000	700000	650000
COMPONENT, MOLE PCT			
METHANE	88.1	94.1	85.2
ETHANE	2.9	2.8	8.9
PROPANE	1.1	0.7	1.7
N-BUTANE	0.5	0.2	0.0
ISOBUTANE	0.2	TRACE	0.0
N-PENTANE	0.3	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.4	0.4	0.0
NITROGEN	6.4	1.0	3.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.6	0.4
HELIUM	0.58	0.04	0.05
HEATING VALUE*	1025	1057	1067
SPECIFIC GRAVITY	0.630	0.602	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 553 14476	INDEX SAMPLE 554 14483	INDEX SAMPLE 555 16113
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	CHAVES
FIELD	PERMIAN BASIN	PERMIAN BASIN	PERMIAN BASIN
LOCATION	30 IN.	30 IN. MAIN LINE	30 IN.
OWNER	EL PASO NATURAL GAS CO.	TRANSWESTERN PIPELINE CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/02/75	10/02/75	10/23/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	750	750	718
FLOW, MCFD	550000	638000	600000
COMPONENT, MOLE PCT			
METHANE	88.9	92.0	86.7
ETHANE	7.0	3.5	6.7
PROPANE	0.9	0.9	0.8
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.1	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	2.5	0.8	2.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.3	0.5
HELIUM	0.04	0.03	0.04
HEATING VALUE*	1056	1038	1051
SPECIFIC GRAVITY	0.615	0.615	0.617

	INDEX SAMPLE 556 12064	INDEX SAMPLE 557 12063	INDEX SAMPLE 558 1386
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	CHAVES	CHAVES	EDDY
FIELD	PERMIAN BASIN & S.E. N.MEX.	TEXAS PANHANDLE	ARTESIA
LOCATION	NOT GIVEN	NOT GIVEN	SEC. --, T18S, R27E
OWNER	TRANSWESTERN PIPELINE CO.	TRANSWESTERN PIPELINE CO.	PHILLIPS PETROLEUM CO.
SAMPLED	09/29/69	09/29/69	05/04/27
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	600	850	NOT GIVEN
FLOW, MCFD	540000	143000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.3	86.7	29.2
ETHANE	4.5	6.2	60.6
PROPANE	0.8	2.5	---
N-BUTANE	0.2	0.4	---
ISOBUTANE	0.0	0.2	---
N-PENTANE	0.1	0.2	---
ISOPENTANE	0.0	0.1	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	0.1	0.1	---
NITROGEN	1.1	2.6	8.9
OXYGEN	0.0	0.1	1.1
ARGON	0.0	0.0	---
HYDROGEN	TRACE	0.1	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	1.5	0.6	0.2
HELIUM	0.03	0.08	0.04
HEATING VALUE*	1042	1096	1382
SPECIFIC GRAVITY	0.611	0.646	0.899

	INDEX SAMPLE 559 1387	INDEX SAMPLE 560 2001	INDEX SAMPLE 561 2719
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	ARTESIA	ARTESIA	ARTESIA
LOCATION	SEC. --, T18S, R27E	T18S, R28E	SEC. 3 & 10, T17S, R28E
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	TIGNER, ETZ, & KEYES
SAMPLED	05/05/27	06/03/30	07/23/36
FORMATION	NOT GIVEN	NOT GIVEN	-STRAY
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	30	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	45.0	40.3	50.4
ETHANE	44.6	52.9	15.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.7	6.4	32.1
OXYGEN	1.4	0.3	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.2	1.3
HELIUM	0.03	0.01	0.07
HEATING VALUE*	1255	1356	792
SPECIFIC GRAVITY	0.822	0.847	0.775

	INDEX SAMPLE 562 1384	INDEX SAMPLE 563 1385	INDEX SAMPLE 564 2718
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	EDDY	EDDY	EDDY
FIELD	MALJAMAR	MALJAMAR	ROBINSON
LOCATION	SEC. 22NE, T17S, R31E	SEC. 22NE, T17S, R31E	SEC. 25, T16S, R31E
OWNER	SKELLY OIL CO.	SKELLY OIL CO.	HARRY LEONARD
SAMPLED	05/04/27	05/04/27	07/23/36
FORMATION	NOT GIVEN	NOT GIVEN	PERM-MALJAMAR
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	28.8	57.3	68.3
ETHANE	14.2	30.7	23.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	56.0	10.7	7.3
OXYGEN	0.8	0.8	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.5	0.9
HELIUM	0.09	0.09	0.09
HEATING VALUE*	546	1131	1106
SPECIFIC GRAVITY	0.862	0.760	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 565 SAMPLE 6941	INDEX 566 SAMPLE 2556	INDEX 567 SAMPLE 2720
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	GLADIOLA, BRONCO, BOUGH, ET	MOBBS	JAL
LOCATION	RESIDUE	RESIDUE FROM GASOLINE PLT.	6 IN.
OWNER	SINCLAIR OIL & GAS CO.	SHELL GASOLINE CO.	PECOS VALLEY GAS CO.
SAMPLED	02/04/59	10/99/32	07/23/36
FORMATION	NOT GIVEN	PERM-MOBBS	PERM-JAL
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.6	50.6	87.6
ETHANE	12.0	45.7	10.0
PROPANE	3.5	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	5.1	0.0	0.5
OXYGEN	TRACE	0.7	0.6
ARGON	TRACE	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.3	3.0	1.1
HELIUM	0.12	0.00	0.05
HEATING VALUE*	1135	1332	1069
SPECIFIC GRAVITY	0.589	0.814	0.620

	INDEX 568 SAMPLE 9220	INDEX 569 SAMPLE 8300	INDEX 570 SAMPLE 8301
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	MESA	NOT GIVEN	EUNICE PLANT INLET
LOCATION	SEC. 16 & 17, T16S, R32E	26 IN. OUTLET	EL PASO NATURAL GAS CO.
OWNER	SHELL OIL CO.	EL PASO NATURAL GAS CO.	11/29/61
SAMPLED	01/19/64	11/29/61	NOT GIVEN
FORMATION	PERM-QUEEN	NOT GIVEN	430
GEOLOGIC PROVINCE CODE	430	430	NOT GIVEN
DEPTH, FEET	NOT GIVEN	NOT GIVEN	530
PRESSURE, PSIG	500	815	140000
FLOW, MCFD	NOT GIVEN	380000	
COMPONENT, MOLE PCT			
METHANE	36.4	86.7	89.9
ETHANE	6.1	8.0	6.7
PROPANE	3.2	1.9	0.7
N-BUTANE	1.5	0.1	TRACE
ISOBUTANE	0.3	TRACE	TRACE
N-PENTANE	0.3	TRACE	TRACE
ISOPENTANE	0.6	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.0	TRACE
NITROGEN	50.9	2.4	2.1
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.10	0.03	0.02
HEATING VALUE*	679	1066	1049
SPECIFIC GRAVITY	0.882	0.624	0.602

	INDEX 571 SAMPLE 8302	INDEX 572 SAMPLE 8303	INDEX 573 SAMPLE 12066
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	LEA	LEA	LEA
FIELD	NOT GIVEN	NOT GIVEN	WEST TEXAS AREA
LOCATION	MONUMENT PLANT OUTLET	SUCTION LINE	NOT GIVEN
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	11/29/61	11/30/61	09/30/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	565	624	564
FLOW, MCFD	113000	648000	555000
COMPONENT, MOLE PCT			
METHANE	83.3	87.0	92.7
ETHANE	5.8	7.6	3.8
PROPANE	1.9	1.3	0.9
N-BUTANE	0.1	0.1	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.1	0.1	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	8.5	3.7	1.1
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.2	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.2	1.5
HELIUM	0.03	0.05	0.03
HEATING VALUE*	1009	1059	1031
SPECIFIC GRAVITY	0.641	0.626	0.601

	INDEX 574 SAMPLE 12067	INDEX 575 SAMPLE 14482	INDEX 576 SAMPLE 6634
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MCKINLEY	MCKINLEY
FIELD	FOUR CORNERS AREA	FOUR CORNERS AREA	NOT GIVEN
LOCATION	NOT GIVEN	18 & 20 IN.	24 IN. CHACO-BLANCO SUCTION
OWNER	SOUTHERN UNION GAS CO.	SOUTHERN UNION GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/02/69	10/01/75	06/--/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	375	300	NOT GIVEN
FLOW, MCFD	86400	150000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.2	92.0	89.9
ETHANE	8.9	6.1	6.9
PROPANE	1.5	0.9	2.0
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.1	0.2
N-PENTANE	0.0	TRACE	0.0
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	TRACE	0.0
NITROGEN	1.5	0.4	TRACE
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	0.8
HELIUM	0.05	0.03	0.10
HEATING VALUE*	1082	1058	1096
SPECIFIC GRAVITY	0.627	0.602	0.622

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 577 SAMPLE 6635	INDEX 578 SAMPLE 16109	INDEX 579 SAMPLE 12068
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MCKINLEY	MCKINLEY
FIELD	NOT GIVEN	O'KUTZ & JICARILLA	SAN JUAN BASIN
LOCATION	MAINLINE DISCHARGE	OUTLET 20 IN.	GALLUP-8 LINE
OWNER	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	06/--/58	10/24/60	10/03/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	600	838
FLOW, MCFD	NOT GIVEN	150000	300000
COMPONENT, MOLE PCT			
METHANE	90.1	94.9	86.1
ETHANE	6.6	3.6	7.9
PROPANE	1.9	0.4	2.5
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	0.2	TRACE	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	0.1	0.4	1.9
OXYGEN	0.1	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.5	0.9
HELIUM	0.10	0.03	0.04
HEATING VALUE*	1095	1044	1103
SPECIFIC GRAVITY	0.621	0.586	0.645

	INDEX 580 SAMPLE 12069	INDEX 581 SAMPLE 14474	INDEX 582 SAMPLE 16111
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	MCKINLEY	MCKINLEY
FIELD	SAN JUAN BASIN	SAN JUAN BASIN	SAN JUAN BASIN
LOCATION	GALLUP A LINE	34 IN. FROM CHACO	24 IN. GALLUP "8"
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/03/59	09/30/775	10/27/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	888	680	560
FLOW, MCFD	700000	845000	400000
COMPONENT, MOLE PCT			
METHANE	86.6	89.1	89.1
ETHANE	8.3	7.6	7.5
PROPANE	2.4	1.7	1.6
N-BUTANE	0.3	0.1	0.1
ISOBUTANE	0.3	0.1	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	1.3	0.5	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.9	1.6
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1099	1090	1085
SPECIFIC GRAVITY	0.636	0.623	0.622

	INDEX 583 SAMPLE 14475	INDEX 584 SAMPLE 8322	INDEX 585 SAMPLE 8327
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	MCKINLEY	SAN JUAN	SAN JUAN
FIELD	SAN JUAN RIVER PLANT	ANETH, BOUNDARY BUTTE, ET AL	BALLARD, LINDRITH & BLANCO
LOCATION	24 IN. GALLUP "8"	16 IN.	30 IN. INLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	09/30/775	12/04/61	12/05/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	756	775	257
FLOW, MCFD	198000	85400	202500
COMPONENT, MOLE PCT			
METHANE	88.4	77.3	85.1
ETHANE	7.5	15.6	7.7
PROPANE	2.0	1.8	3.2
N-BUTANE	0.2	0.1	0.8
ISOBUTANE	0.2	0.1	0.7
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	0.7	2.5	1.4
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	0.4
HELIUM	0.04	0.43	0.03
HEATING VALUE*	1099	1172	1158
SPECIFIC GRAVITY	0.631	0.687	0.669

	INDEX 586 SAMPLE 4701	INDEX 587 SAMPLE 8321	INDEX 588 SAMPLE 8539
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BARKER CREEK	BARKER DOME & ALKALI GULCH	BASIN DAKOTA, BALLARD & ETC.
LOCATION	NOT GIVEN	24 IN.	10 & 12 IN.
OWNER	SOUTHERN UNION GAS CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	03/09/49	12/04/61	04/15/62
FORMATION	NOT GIVEN	NOT GIVEN	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	825	425
FLOW, MCFD	NOT GIVEN	25100	30000
COMPONENT, MOLE PCT			
METHANE	95.3	86.5	85.9
ETHANE	1.4	0.7	7.4
PROPANE	0.5	0.6	3.3
N-BUTANE	0.1	0.1	0.8
ISOBUTANE	0.2	TRACE	0.7
N-PENTANE	0.0	TRACE	0.1
ISOPENTANE	0.0	0.1	0.3
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	0.1
NITROGEN	2.0	0.8	1.0
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	---	0.1	0.0
CARBON DIOXIDE	0.1	10.8	0.3
HELIUM	0.26	0.19	0.02
HEATING VALUE*	1013	913	1161
SPECIFIC GRAVITY	0.581	0.676	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 589 SAMPLE 17056	INDEX 590 SAMPLE 17149	INDEX 591 SAMPLE 17202
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BEAUTIFUL MOUNTAIN	BEAUTIFUL MOUNTAIN	BEAUTIFUL MOUNTAIN
LOCATION	INLET COMPOSITE	NOT GIVEN	INLET
OWNER	NAVAJO REFINED HELIUM CO. IN	NAVAJO REFINED HELIUM CO. IN	NAVAJO REFINED HELIUM CO. IN
SAMPLED	09/--/83	12/--/83	07/29/84
FORMATION	MISS---	MISS---	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	457	NOT GIVEN	665
FLOW, MCFD	1800	NOT GIVEN	2500
COMPONENT, MOLE PCT			
METHANE	2.3	1.8	2.0
ETHANE	0.2	0.2	0.2
PROPANE	0.1	0.1	0.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	TRACE	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	90.0	90.0	90.0
OXYGEN	0.0	0.0	0.0
ARGON	0.9	0.9	0.8
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	5.57	6.13	5.94
HEATING VALUE*	38	37	43
SPECIFIC GRAVITY	0.920	0.922	0.922

	INDEX 592 SAMPLE 17276	INDEX 593 SAMPLE 17363	INDEX 594 SAMPLE 17733
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BEAUTIFUL MOUNTAIN	BEAUTIFUL MOUNTAIN	BEAUTIFUL MOUNTAIN
LOCATION	INLET	INLET GAS TO PLANT	GAS WELL NO. 2-5
OWNER	NAVAJO REFINED HELIUM CO. IN	NAVAJO REFINED HELIUM CO. IN	NAVAJO REFINED HELIUM CO. IN
SAMPLED	04/18/84	07/23/84	07/01/85
FORMATION	MISS---	MISS---	MISS---
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	640	530	680
FLOW, MCFD	3000	2600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.9	1.9	2.0
ETHANE	0.2	0.2	0.2
PROPANE	0.1	0.1	0.2
N-BUTANE	0.1	0.1	0.2
ISOBUTANE	TRACE	TRACE	0.1
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	89.9	89.9	89.4
OXYGEN	TRACE	0.1	TRACE
ARGON	0.8	0.9	0.9
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.7
HELIUM	6.13	6.04	5.60
HEATING VALUE*	38	38	37
SPECIFIC GRAVITY	0.920	0.922	0.934

	INDEX 595 SAMPLE 17734	INDEX 596 SAMPLE 8328	INDEX 597 SAMPLE 8326
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BEAUTIFUL MOUNTAIN	BISTI	BLANCO
LOCATION	GAS WELL NO. 2-5	16 IN. INLET	24 IN
OWNER	NAVAJO REFINED HELIUM CO. IN	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	07/01/85	12/05/61	12/05/61
FORMATION	PERM-ORGAN ROCK	NOT GIVEN	CRET-DAKOTA
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	680	253	450
FLOW, MCFD	NOT GIVEN	39900	119400
COMPONENT, MOLE PCT			
METHANE	3.6	76.5	82.9
ETHANE	0.9	10.1	9.9
PROPANE	0.2	7.5	3.5
N-BUTANE	0.2	1.9	0.8
ISOBUTANE	TRACE	0.9	0.6
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	TRACE	0.4	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	90.2	1.4	0.9
OXYGEN	0.6	TRACE	0.0
ARGON	0.8	TRACE	0.0
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.6	0.8
HELIUM	4.12	0.13	0.10
HEATING VALUE*	70	1280	1178
SPECIFIC GRAVITY	0.929	0.748	0.681

	INDEX 598 SAMPLE 8329	INDEX 599 SAMPLE 8330	INDEX 600 SAMPLE 8536
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	BLANCO	CHA CHA	CRANDALL & LA PLATA
LOCATION	24 IN, COMPOSITE	4 IN.	12 IN.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	12/05/61	12/05/61	04/15/62
FORMATION	CRET-DAKOTA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	238	460
FLOW, MCFD	117000	11100	18000
COMPONENT, MOLE PCT			
METHANE	80.4	74.4	84.0
ETHANE	11.4	11.6	9.0
PROPANE	4.0	7.5	3.5
N-BUTANE	0.9	2.2	0.9
ISOBUTANE	0.7	0.9	0.6
N-PENTANE	0.1	0.3	0.2
ISOPENTANE	0.2	0.6	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	1.4	1.6	0.6
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.6
HELIUM	0.05	0.03	0.01
HEATING VALUE*	1203	1313	1180
SPECIFIC GRAVITY	0.699	0.771	0.677

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 601 8540	INDEX SAMPLE 602 8512	INDEX SAMPLE 603 8537
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	FULCHER-KUTZ	MORSESHOE	KUTZ CANYON
LOCATION	8 IN.	NOT GIVEN	6, 8 IN.
OWNER	SOUTHERN UNION GAS CO.	EL PASO NATURAL GAS CO.	SOUTHERN UNION GAS CO.
SAMPLED	04/15/62	04/12/62	04/15/62
FORMATION	NOT GIVEN	CRET-GALLUP	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	85	880	100
FLOW, MCFD	2500	NOT GIVEN	7500
COMPONENT, MOLE PCT			
METHANE	89.8	74.4	88.9
ETHANE	5.5	19.3	6.3
PROPANE	2.2	4.3	2.4
N-BUTANE	0.5	0.0	0.6
ISOBUTANE	0.4	0.0	0.5
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	0.6	1.5	0.5
OXYGEN	0.1	0.1	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.3	0.4
HELIUM	0.01	0.03	0.02
HEATING VALUE*	1114	1411	1131
SPECIFIC GRAVITY	0.633	0.703	0.642

	INDEX SAMPLE 604 8538	INDEX SAMPLE 605 8320	INDEX SAMPLE 606 1517
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	KUTZ CANYON	NOT GIVEN	RATTLESNAKE
LOCATION	6, 8 & 10 IN.	MORSESHOE GALLUP	SHIPROCK
OWNER	SOUTHERN UNION GAS CO.	EL PASO NATURAL GAS CO.	CONTINENTAL OIL CO.
SAMPLED	04/15/62	12/04/61	10/13/27
FORMATION	CRET-DAKOTA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	530	780	NOT GIVEN
FLOW, MCFD	27500	2000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.0	68.7	0.0
ETHANE	10.4	24.8	13.3
PROPANE	4.9	4.0	75.5
N-BUTANE	0.9	TRACE	---
ISOBUTANE	0.6	TRACE	---
N-PENTANE	0.1	0.9	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	0.6	0.1	10.3
OXYGEN	TRACE	0.1	0.8
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	1.0	0.3	0.1
HELIUM	0.06	0.99	0.00
HEATING VALUE*	1199	1298	2193
SPECIFIC GRAVITY	0.691	0.723	1.423

	INDEX SAMPLE 607 8780	INDEX SAMPLE 608 8781	INDEX SAMPLE 609 8782
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
LOCATION	PLANT INLET	PLANT INLET	PLANT INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	11/29/62	11/29/62	11/29/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	4000	4000	4000
FLOW, MCFD	700	700	700
COMPONENT, MOLE PCT			
METHANE	18.4	18.3	18.3
ETHANE	3.0	3.0	3.0
PROPANE	1.8	1.8	1.8
N-BUTANE	0.8	0.8	0.8
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	68.3	68.4	68.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	5.46	5.47	5.42
HEATING VALUE*	356	356	349
SPECIFIC GRAVITY	0.886	0.888	0.883

	INDEX SAMPLE 610 8783	INDEX SAMPLE 611 8784	INDEX SAMPLE 612 8785
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
LOCATION	PLANT INLET	PLANT INLET	PLANT INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	11/29/62	11/29/62	11/29/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	4000	4000	4000
FLOW, MCFD	700	700	700
COMPONENT, MOLE PCT			
METHANE	18.3	18.4	18.4
ETHANE	3.1	3.0	3.0
PROPANE	1.7	1.8	1.9
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.5	0.4	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	68.3	68.3	68.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.7	0.7	0.7
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	5.51	5.51	5.52
HEATING VALUE*	348	350	356
SPECIFIC GRAVITY	0.882	0.883	0.886

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 613 SAMPLE 8787	INDEX 614 SAMPLE 9843	INDEX 615 SAMPLE 11988
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TABLE MESA	TABLE MESA
LOCATION	PLANT INLET	PLANT INLET	NOT GIVEN
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	CONTINENTAL OIL CO.
SAMPLED	11/29/62	04/15/65	05/07/69
FORMATION	NOT GIVEN	PENN-	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	4000	NOT GIVEN	NOT GIVEN
FLOW, MCFD	700	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	18.1	15.6	11.4
ETHANE	3.0	2.5	2.6
PROPANE	1.9	1.4	1.7
N-BUTANE	0.8	0.5	0.8
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.2	TRACE	0.4
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	68.6	73.3	73.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.7	0.7	0.8
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.9
HELIUM	5.48	5.30	5.60
HEATING VALUE*	349	279	296
SPECIFIC GRAVITY	0.686	0.986	0.908

	INDEX 616 SAMPLE 11989	INDEX 617 SAMPLE 9668	INDEX 618 SAMPLE 8331
STATE	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	TABLE MESA	TOCITO DOME	TOTAH
LOCATION	NOT GIVEN	NOT GIVEN	4 IN.
OWNER	CONTINENTAL OIL CO.	PAN AMERICAN PETROLEUM CORP.	EL PASO NATURAL GAS CO.
SAMPLED	05/07/69	12/17/69	12/05/61
FORMATION	NOT GIVEN	PENN-D	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	580	580
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	100	460
FLOW, MCFD	NOT GIVEN	NOT GIVEN	2000
COMPONENT, MOLE PCT			
METHANE	13.3	70.3	73.3
ETHANE	2.5	17.7	13.2
PROPANE	1.9	6.4	7.6
N-BUTANE	0.9	1.1	1.9
ISOBUTANE	0.6	1.2	0.8
N-PENTANE	0.5	0.1	0.2
ISOPENTANE	0.0	0.1	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	79.1	1.4	1.6
OXYGEN	0.0	0.2	TRACE
ARGON	0.7	TRACE	0.0
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.3	0.5
HELIUM	0.53	0.02	0.06
HEATING VALUE*	320	1286	1306
SPECIFIC GRAVITY	0.916	0.766	0.765

	INDEX 619 SAMPLE 12503	INDEX 620 SAMPLE 366	INDEX 621 SAMPLE 14829
STATE	NEW MEXICO	NEW YORK	NEW YORK
COUNTY	SAN JUAN	CATTARAUGUS	STEUBEN
FIELD	UTE DOME	SHERIDAN E	THOMAS CORNERS
LOCATION	NOT GIVEN	NOT GIVEN	8 IN. AT CAMERON
OWNER	PAN AMERICAN PETROLEUM CORP.	HENRY L. DOHERTY	COLUMBIA GAS TRANS. CORP.
SAMPLED	11/03/70	06/23/20	10/26/76
FORMATION	PENN-PARADOX	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	580	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	400	660
FLOW, MCFD	NOT GIVEN	6000	3000
COMPONENT, MOLE PCT			
METHANE	72.9	81.2	93.0
ETHANE	0.5	14.8	5.6
PROPANE	0.2	---	0.6
N-BUTANE	TRACE	---	0.1
ISOBUTANE	0.1	---	TRACE
N-PENTANE	0.1	---	TRACE
ISOPENTANE	TRACE	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.1
NITROGEN	1.6	3.8	0.4
OXYGEN	0.0	0.2	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	TRACE	---	0.0
HYDROGEN SULFIDE	1.1	---	0.0
CARBON DIOXIDE	23.1	0.0	TRACE
HELIUM	0.21	0.10	0.03
HEATING VALUE*	772	1088	1067
SPECIFIC GRAVITY	0.802	0.645	0.593

	INDEX 622 SAMPLE 10566	INDEX 623 SAMPLE 17367	INDEX 624 SAMPLE 17329
STATE	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY	BURKE	MCKENZIE	STARK
FIELD	RIVAL	ALBERTA, CANADA	LITTLE KNIFE
LOCATION	RIVAL UNIT	#2 IN. INLET	8 IN. COMPOSITE
OWNER	PAN AMERICAN PETROLEUM CORP.	NORTHERN PLAINS NAT. GAS CO.	MONTANA-DAKOTA UTILITIES CO.
SAMPLED	05/09/66	08/01/84	06/20/84
FORMATION	MISS-RIVAL	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	395	395	395
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	800	530
FLOW, MCFD	NOT GIVEN	290000	40000
COMPONENT, MOLE PCT			
METHANE	68.0	95.7	79.4
ETHANE	15.1	2.3	16.3
PROPANE	6.7	0.1	1.8
N-BUTANE	2.4	0.0	0.2
ISOBUTANE	0.7	0.0	0.1
N-PENTANE	0.9	0.0	TRACE
ISOPENTANE	0.6	0.0	0.0
CYCLOPENTANE	0.3	0.0	TRACE
HEXANES PLUS	0.8	0.0	TRACE
NITROGEN	1.7	1.9	1.7
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.2	0.0	0.0
CARBON DIOXIDE	2.6	TRACE	0.5
HELIUM	0.02	0.05	0.03
HEATING VALUE*	1355	1013	1153
SPECIFIC GRAVITY	0.831	0.575	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 625 SAMPLE 10494	INDEX 626 SAMPLE 14832	INDEX 627 SAMPLE 14831
STATE	NORTH DAKOTA	OHIO	OHIO
COUNTY	WILLIAMS	FAIRFIELD	HOLMES
FIELD	CAPA	BUCKEYE LAKE AREA	HOLMES COUNTY GAS
LOCATION	NOT GIVEN	6 LINE-BTN. SUCTION	8 IN. DISCHARGE
OWNER	AMERADA PETROLEUM CORP.	COLUMBIA GAS TRANS. CORP.	COLUMBIA GAS TRANS. CORP.
SAMPLED	03/02/66	10/29/76	10/28/76
FORMATION	MISS-MADISON	NOT GIVEN	SILU-CLINTON
GEOLOGIC PROVINCE CODE	395	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	17	190
FLOW, MCFD	NOT GIVEN	1200	7000
COMPONENT, MOLE PCT			
METHANE	66.1	90.8	85.9
ETHANE	16.8	3.9	6.6
PROPANE	8.0	1.0	2.3
N-BUTANE	2.1	0.4	0.6
ISOBUTANE	1.1	0.2	0.3
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	TRACE	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.3	0.1
NITROGEN	2.0	2.6	5.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	1.1	0.0	0.0
CARBON DIOXIDE	2.0	0.4	0.1
HELIUM	1.02	0.08	0.14
HEATING VALUE*	1329	1064	1076
SPECIFIC GRAVITY	0.818	0.620	0.654

	INDEX 628 SAMPLE 14830	INDEX 629 SAMPLE 14833	INDEX 630 SAMPLE 10462
STATE	OHIO	OHIO	OHIO
COUNTY	MAHONING	MEIGS	MORROW
FIELD	TRUMBULL	GALLIA, MEIGS & WASHINGTON	JOHNSVILLE
LOCATION	10 IN. FW-341	10 IN. DISCHARGE	MT. GILEAD
OWNER	COLUMBIA GAS TRANS. CORP.	COLUMBIA GAS TRANS. CORP.	MCWOOD CORP.
SAMPLED	10/27/76	10/29/76	03/14/66
FORMATION	SILU-CLINTON	MISS-BEREA	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	170	180	NOT GIVEN
FLOW, MCFD	3000	4000	9000
COMPONENT, MOLE PCT			
METHANE	91.5	81.1	75.6
ETHANE	4.1	7.7	5.4
PROPANE	1.1	4.5	1.3
N-BUTANE	0.3	1.2	0.5
ISOBUTANE	0.1	0.4	0.5
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.6	4.3	15.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.3
HELIUM	0.09	0.18	0.61
HEATING VALUE*	1052	1156	953
SPECIFIC GRAVITY	0.606	0.691	0.684

	INDEX 631 SAMPLE 10475	INDEX 632 SAMPLE 10463	INDEX 633 SAMPLE 10478
STATE	OHIO	OHIO	OHIO
COUNTY	MORROW	MORROW	MORROW
FIELD	JOHNSVILLE	NOT GIVEN	NOT GIVEN
LOCATION	MT. GILEAD	MT. GILEAD	MT. GILEAD
OWNER	MCWOOD CORP.	MCWOOD CORP.	MCWOOD CORP.
SAMPLED	03/18/66	03/14/66	03/18/66
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	9000	9000
COMPONENT, MOLE PCT			
METHANE	75.5	75.2	74.8
ETHANE	5.3	15.6	16.5
PROPANE	1.5	1.0	1.3
N-BUTANE	0.6	TRACE	TRACE
ISOBUTANE	0.4	TRACE	TRACE
N-PENTANE	0.2	TRACE	TRACE
ISOPENTANE	0.2	TRACE	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	15.2	7.6	7.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.6
HELIUM	0.64	0.17	0.19
HEATING VALUE*	964	1076	1092
SPECIFIC GRAVITY	0.688	0.674	0.679

	INDEX 634 SAMPLE 16587	INDEX 635 SAMPLE 14842	INDEX 636 SAMPLE 10159
STATE	OHIO	OHIO	OHIO
COUNTY	TUSCARAWAS	TUSCARAWAS	WASHINGTON
FIELD	EASTERN OHIO	GUERNSEY	BARLOW
LOCATION	18 IN.	16 IN. SUCTION	BARLOW, OHIO
OWNER	EAST OHIO GAS CO.	EAST OHIO GAS CO.	RIVER GAS CO.
SAMPLED	07/21/82	10/28/76	09/16/65
FORMATION	NOT GIVEN	SILU-CLINTON	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	640	230	NOT GIVEN
FLOW, MCFD	950	50000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.8	86.7	82.0
ETHANE	6.2	5.9	9.7
PROPANE	2.1	1.7	4.0
N-BUTANE	0.6	0.5	0.8
ISOBUTANE	0.4	0.3	0.3
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	4.2	4.4	2.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.12	0.13	0.16
HEATING VALUE*	1042	1073	1163
SPECIFIC GRAVITY	0.648	0.639	0.678

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 637 SAMPLE 10160	INDEX 638 SAMPLE 10541	INDEX 639 SAMPLE 10537
STATE	OHIO	OHIO	OHIO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	BARLOW & WATERTOWN	BARLOW & WATERTOWN	BELPRE
LOCATION	GEPHART FARM	BARLOW	8 IN. RT 32
OWNER	RIVER GAS CO.	RIVER GAS CO.	RIVER GAS CO.
SAMPLED	09/16/65	04/19/66	04/15/66
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.6	81.4	87.7
ETHANE	4.7	9.9	5.4
PROPANE	1.9	4.2	2.9
N-BUTANE	0.7	1.0	0.5
ISOBUTANE	0.0	0.3	0.2
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	2.5	2.4	3.3
OXYGEN	0.0	0.0	0.2
ARGON	0.1	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.16	0.31
HEATING VALUE*	1065	1177	1074
SPECIFIC GRAVITY	0.618	0.695	0.632

	INDEX 640 SAMPLE 10535	INDEX 641 SAMPLE 10536	INDEX 642 SAMPLE 10539
STATE	OHIO	OHIO	OHIO
COUNTY	WASHINGTON	WASHINGTON	WASHINGTON
FIELD	LOWELL	LOWELL	LOWELL
LOCATION	NOT GIVEN	RF 305 LINE	4 IN. LINE
OWNER	RIVER GAS CO.	RIVER GAS CO.	RIVER GAS CO.
SAMPLED	04/18/66	04/18/66	04/21/66
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.5	76.5	77.4
ETHANE	11.7	11.9	11.4
PROPANE	6.2	6.2	5.9
N-BUTANE	1.5	1.6	1.5
ISOBUTANE	0.6	0.6	0.4
N-PENTANE	0.6	0.5	0.7
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	0.1	0.2	0.2
HEXANES PLUS	0.4	0.4	0.5
NITROGEN	2.1	1.8	1.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.0
HELIUM	0.11	0.10	0.12
HEATING VALUE*	1275	1281	1269
SPECIFIC GRAVITY	0.742	0.743	0.736

	INDEX 643 SAMPLE 15494	INDEX 644 SAMPLE 15500	INDEX 645 SAMPLE 16813
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	ANADARKO BASIN	ANADARKO BASIN	ANADARKO BASIN
LOCATION	A-24 IN. DISCHARGE	A-26 IN. DISCHARGE	A-24 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/13/78	11/13/78	03/14/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	450	790	335
FLOW, MCFD	75000	237000	55000
COMPONENT, MOLE PCT			
METHANE	84.1	88.8	84.9
ETHANE	6.2	5.2	5.6
PROPANE	1.9	2.0	1.6
N-BUTANE	0.4	0.6	0.5
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	6.4	2.0	6.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.24	0.13	0.23
HEATING VALUE*	1043	1103	1036
SPECIFIC GRAVITY	0.645	0.640	0.641

	INDEX 646 SAMPLE 16814	INDEX 647 SAMPLE 12862	INDEX 648 SAMPLE 13315
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	ANADARKO BASIN	CAMRICK GAS AREA	ELMWOOD-CAMP CREEK AREA
LOCATION	B-26 IN. DISCHARGE	NOT GIVEN	24 IN. A DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	EXXON CO., U.S.A.	NORTHERN NATURAL GAS CO.
SAMPLED	03/14/83	06/22/71	07/24/72
FORMATION	NOT GIVEN	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	670	690	460
FLOW, MCFD	90000	NOT GIVEN	96000
COMPONENT, MOLE PCT			
METHANE	87.5	78.5	85.5
ETHANE	6.0	8.4	6.1
PROPANE	2.7	7.0	3.0
N-BUTANE	0.9	2.0	0.7
ISOBUTANE	0.3	1.0	0.4
N-PENTANE	0.2	0.7	0.2
ISOPENTANE	0.4	0.3	0.1
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	0.6	1.0	3.3
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	0.4
HELIUM	0.06	0.04	0.15
HEATING VALUE*	1140	1300	1117
SPECIFIC GRAVITY	0.655	0.751	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 649 SAMPLE 13316	INDEX 650 SAMPLE 15499	INDEX 651 SAMPLE 16816
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	HIGH PRESS GATHERING SYSTEM	KERMIT	KERMIT, TX AREA
LOCATION	26 IN. B DISCHARGE	DE-30 IN. DISCHARGE	DE-30 IN. DISCH.
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/24/72	11/13/78	03/14/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	760	960	950
FLOW,MCFD	230000	336000.	175000
COMPONENT, MOLE PCT			
METHANE	88.0	91.7	83.7
ETHANE	5.6	3.2	3.6
PROPANE	2.4	0.7	0.9
N-BUTANE	0.5	0.1	0.2
ISOBUTANE	0.3	TRACE	0.1
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	2.2	3.1	8.2
OXYGEN	0.0	0.2	1.6
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.8	1.0
HELIUM	0.11	0.10	0.14
HEATING VALUE*	1095	1012	960
SPECIFIC GRAVITY	0.638	0.600	0.694

	INDEX 652 SAMPLE 13318	INDEX 653 SAMPLE 6711	INDEX 654 SAMPLE 6712
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	NOT GIVEN	PANHANDLE	PANHANDLE & W TEXAS
LOCATION	30 IN. DE DISCHARGE	24 IN. SKELLYTOWN AREA	30 IN. SUNRAY LINE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/24/72	07/17/58	07/17/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	890	300	850
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.5	80.4	85.2
ETHANE	4.8	8.2	6.5
PROPANE	1.1	3.1	1.0
N-BUTANE	0.1	0.2	0.3
ISOBUTANE	0.1	0.3	0.1
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	TRACE	0.0	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	4.2	7.3	7.1
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.1	0.1	0.2
HELIUM	0.04	0.30	0.39
HEATING VALUE*	1018	1064	1038
SPECIFIC GRAVITY	0.620	0.686	0.689

	INDEX 655 SAMPLE 15484	INDEX 656 SAMPLE 13319	INDEX 657 SAMPLE 16815
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	BEAVER	BEAVER
FIELD	PERMIAN BASIN	PERMIAN BASIN AREA	PERMIAN BASIN-WEST TX
LOCATION	"E" 30 IN. DISCHARGE	36 IN. KERMIT SUCTION	C-30 IN. DISCH.
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	11/13/78	07/24/72	03/14/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	830	720	655
FLOW,MCFD	508000	594000	425000
COMPONENT, MOLE PCT			
METHANE	88.7	95.4	91.7
ETHANE	4.7	1.4	3.4
PROPANE	1.1	0.4	0.8
N-BUTANE	0.2	0.1	0.2
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	4.4	0.4	2.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	2.2	1.9
HELIUM	0.17	0.02	0.13
HEATING VALUE*	1031	1009	1018
SPECIFIC GRAVITY	0.617	0.591	0.599

	INDEX 658 SAMPLE 13317	INDEX 659 SAMPLE 15426	INDEX 660 SAMPLE 15427
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	BEAVER	CIMARRON	CIMARRON
FIELD	RESIDUE FROM AMOCO PLANT	COMPOSITE	COMPOSITE
LOCATION	30 IN. C DISCHARGE	20 IN. DISCHARGE TO N	20 IN. DISCHARGE TO S
OWNER	NORTHERN NATURAL GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	07/24/72	10/17/78	10/17/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	800	700	400
FLOW,MCFD	598000	62000	18300
COMPONENT, MOLE PCT			
METHANE	84.8	77.2	75.1
ETHANE	6.8	6.9	6.4
PROPANE	2.1	2.4	2.4
N-BUTANE	0.4	0.3	0.4
ISOBUTANE	0.2	0.1	0.2
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	TRACE	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	4.8	12.3	14.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.4
HELIUM	0.06	0.10	0.11
HEATING VALUE*	1069	991	972
SPECIFIC GRAVITY	0.649	0.677	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 661 SAMPLE 13436	INDEX 662 SAMPLE 5479	INDEX 663 SAMPLE 5484
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES & PANHANDLE W	KEYES GAS AREA	KEYES GAS AREA
LOCATION	20 IN. DISCHARGE	6 IN. LINE	12 IN. LINE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	10/04/12	05/26/53	05/26/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	NOT GIVEN	NOT GIVEN
FLOW, MCFD	200000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.0	62.8	61.7
ETHANE	6.8	3.3	3.3
PROPANE	2.1	1.8	2.3
N-BUTANE	0.2	0.5	0.7
ISOBUTANE	0.1	0.3	0.3
N-PENTANE	0.1	0.3	0.3
ISOPENTANE	0.0	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.7	28.6	27.9
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.8
HELIUM	0.54	1.92	2.14
HEATING VALUE*	945	791	809
SPECIFIC GRAVITY	0.683	0.724	0.737

	INDEX 664 SAMPLE 5776	INDEX 665 SAMPLE 5781	INDEX 666 SAMPLE 6390
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
LOCATION	LINE F-3	F-3 INLET	MAIN LINE SAMPLE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	01/27/55	03/04/55	08/20/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	530	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.0	64.8	64.0
ETHANE	3.2	3.1	3.7
PROPANE	2.1	1.3	2.2
N-BUTANE	0.7	0.6	0.7
ISOBUTANE	0.3	0.5	0.4
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	24.2	25.8	25.9
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	1.1	0.6
HELIUM	2.03	2.13	1.95
HEATING VALUE*	837	835	836
SPECIFIC GRAVITY	0.716	0.719	0.730

	INDEX 667 SAMPLE 6439	INDEX 668 SAMPLE 6445	INDEX 669 SAMPLE 6624
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
LOCATION	NOT GIVEN	MAIN LINE METER STA.	6 IN. METER RUN
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	11/06/57	11/26/57	06/--/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	600	525	NOT GIVEN
FLOW, MCFD	50000	46000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.7	65.5	65.0
ETHANE	3.0	3.8	3.8
PROPANE	2.7	2.1	2.1
N-BUTANE	0.8	0.5	0.1
ISOBUTANE	0.0	0.6	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	25.2	24.8	24.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.7	0.6
HELIUM	2.10	2.10	1.90
HEATING VALUE*	862	846	853
SPECIFIC GRAVITY	0.730	0.719	0.728

	INDEX 670 SAMPLE 8923	INDEX 671 SAMPLE 8924	INDEX 672 SAMPLE 15428
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CIMARRON	CIMARRON
FIELD	KEYES GAS AREA	KEYES GAS AREA	KEYES GAS AREA
LOCATION	OUTLET	INLET	16 IN. INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	COLORADO INTERSTATE GAS CO.
SAMPLED	04/05/63	04/05/63	10/17/28
FORMATION	PENN-MORROW	PENN-MORROW	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	488	463	488
FLOW, MCFD	500000	550000	28000
COMPONENT, MOLE PCT			
METHANE	67.2	64.9	64.8
ETHANE	3.1	3.0	3.8
PROPANE	2.0	1.8	2.5
N-BUTANE	0.8	0.7	0.9
ISOBUTANE	0.3	0.5	0.5
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	25.7	25.7	26.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	TRACE
HELIUM	0.05	2.17	0.17
HEATING VALUE*	857	814	876
SPECIFIC GRAVITY	0.729	0.717	0.747

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 673 SAMPLE 17034	INDEX 674 SAMPLE 13307	INDEX 675 SAMPLE 15503
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CIMARRON	CREEK	CREEK
FIELD	KEYES GAS AREA	WESTERN OKLAHOMA	WESTERN OKLAHOMA
LOCATION	16 IN. INLET	24 IN. DISCHARGE	24 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	OKLAHOMA NATURAL GAS CO.	OKLAHOMA NATURAL GAS CO.
SAMPLED	08/29/63	07/29/72	11/20/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	470	1160	540
FLOW, MCFD	17000	63000	250000
COMPONENT, MOLE PCT			
METHANE	62.8	88.0	90.8
ETHANE	9.0	7.6	5.1
PROPANE	2.6	1.9	1.1
N-BUTANE	0.8	0.1	0.2
ISOBUTANE	0.4	0.1	0.1
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.4	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	25.7	1.7	2.0
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.0	TRACE
HYDROGEN	0.2	0.8	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.3	0.9
HELIUM	1.76	0.04	0.05
HEATING VALUE*	847	1093	1055
SPECIFIC GRAVITY	0.740	0.628	0.609

	INDEX 676 SAMPLE 16836	INDEX 677 SAMPLE 3906	INDEX 678 SAMPLE 1512
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	CREEK	GARVIN	GRADY
FIELD	WESTERN OKLAHOMA AREA	PAULS VALLEY	CHICKASHA
LOCATION	24 IN. DISCHARGE	SEC. 31, T4N, R1E	GUTHRIE LINE
OWNER	OKLAHOMA NATURAL GAS CO.	OTHA M. GRIMES	OKLAHOMA NATURAL GAS CO.
SAMPLED	03/21/83	06/13/44	10/11/27
FORMATION	NOT GIVEN	ORDO-BROMIDE & PENN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	350	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	NOT GIVEN	NOT GIVEN
FLOW, MCFD	400000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.6	38.7	83.5
ETHANE	5.8	59.7	11.3
PROPANE	1.0	---	---
N-BUTANE	0.2	---	---
ISOBUTANE	TRACE	---	---
N-PENTANE	TRACE	---	---
ISOPENTANE	TRACE	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	0.3	0.9	4.0
OXYGEN	0.0	0.5	1.1
ARGON	TRACE	---	---
HYDROGEN	0.2	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.6	0.7	0.2
HELIUM	0.04	0.02	0.05
HEATING VALUE*	1050	1462	1048
SPECIFIC GRAVITY	0.612	0.862	0.635

	INDEX 679 SAMPLE 8095	INDEX 680 SAMPLE 15672	INDEX 681 SAMPLE 17111
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	GRADY	KAY	KAY
FIELD	KNOX	CENTRAL OKLAHOMA	EDMOND, OKC & ENID OK AREA
LOCATION	SEC. 33, T3N, R5W	20 IN. OKLAHOMA CITY LINE	20 IN. OKC LINE
OWNER	BRITISH AMERICAN OIL PROD. C	CITIES SERVICE CO.	NORTHWEST CENTRAL PIPELINE C
SAMPLED	07/19/61	06/22/79	10/21/83
FORMATION	ORDO-BROMIDE	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	970	255	315
FLOW, MCFD	NOT GIVEN	180000	20000
COMPONENT, MOLE PCT			
METHANE	92.0	92.0	90.8
ETHANE	6.0	4.6	4.7
PROPANE	1.1	0.9	1.1
N-BUTANE	TRACE	0.2	0.3
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	0.1	1.6	2.4
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.3
HELIUM	0.02	0.04	0.06
HEATING VALUE*	1071	1057	1060
SPECIFIC GRAVITY	0.604	0.606	0.614

	INDEX 682 SAMPLE 13256	INDEX 683 SAMPLE 15674	INDEX 684 SAMPLE 17113
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	26 IN. GUYMON LINE	26 IN. GUYMON LINE	26 IN. GUYMON LINE
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE CO.	NORTHWEST CENTRAL PIPELINE C
SAMPLED	06/09/72	06/22/79	10/21/83
FORMATION	PERM-CHASE GROUP X	PERM-CHASE GROUP X	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	630	563	508
FLOW, MCFD	330000	234000	29000
COMPONENT, MOLE PCT			
METHANE	85.2	84.9	88.6
ETHANE	6.3	6.0	5.9
PROPANE	1.6	1.6	2.9
N-BUTANE	0.3	0.1	0.1
ISOBUTANE	0.3	TRACE	0.0
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	5.4	6.5	3.8
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.4
HELIUM	0.25	0.22	0.14
HEATING VALUE*	1017	1030	1034
SPECIFIC GRAVITY	0.630	0.639	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 685 SAMPLE 13622	INDEX 686 SAMPLE 13254	INDEX 687 SAMPLE 17112
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	KAY	KAY
FIELD	NOT GIVEN	PANHANDLE W	PANHANDLE W
LOCATION	20 IN. INLET	W PANHANDLE LINE	26 IN. TRANSWESTERN LINE
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	NORTHWEST CENTRAL PIPELINE C
SAMPLED	06/05/73	06/09/72	10/21/63
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY X	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	344	680	536
FLOW,MCFD	131000	145000	29000
COMPONENT, MOLE PCT			
METHANE	90.9	86.7	89.4
ETHANE	4.1	7.9	5.5
PROPANE	0.8	2.2	1.5
N-BUTANE	0.1	0.3	0.4
ISOBUTANE	0.1	0.2	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.6	1.6	1.7
OXYGEN	0.8	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.8	0.9
HELIUM	0.06	0.05	0.06
HEATING VALUE*	1058	1103	1081
SPECIFIC GRAVITY	0.605	0.641	0.623

	INDEX 688 SAMPLE 15673	INDEX 689 SAMPLE 1927	INDEX 690 SAMPLE 1928
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	KAY	LOGAN	LOGAN
FIELD	PANHANDLE, W & C OKLAHOMA	LOGAN	LOGAN
LOCATION	26 IN. FROM CANADIAN, TEXAS	SEC. 5, T18N, R4W	SEC. 5, T18N, R4W
OWNER	CITIES SERVICE CO.	W. S. COSDEN, INC.	W. S. COSDEN, INC.
SAMPLED	06/22/79	01/27/30	01/27/30
FORMATION	PENN-WICHITA-ALBANY	GRDD-WILCOX	GRDD-WILCOX
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	563	1300	1300
FLOW,MCFD	163000	2990	2990
COMPONENT, MOLE PCT			
METHANE	89.5	36.0	61.2
ETHANE	5.2	58.5	33.5
PROPANE	1.7	---	---
N-BUTANE	0.4	---	---
ISOBUTANE	0.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	2.5	5.3	5.0
OXYGEN	TRACE	0.0	0.2
ARGON	TRACE	---	---
HYDROGEN	TRACE	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.9	0.2	0.2
HELIUM	0.07	0.05	0.05
HEATING VALUE*	1078	1413	1220
SPECIFIC GRAVITY	0.626	0.868	0.745

	INDEX 691 SAMPLE 232	INDEX 692 SAMPLE 3310	INDEX 693 SAMPLE 325
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	NOWATA	OKFUSKEE	OKFUSKEE
FIELD	LUDOWICI-CELADON	MID-WEST AREA	MORGAN
LOCATION	SEC. 16, T28N, R16E	SEC. 34, T12N, R9E	NOT GIVEN
OWNER	LUDOWICI-CELADON TILE CO.	DAVON OIL CO.	EAGLE PICHER LEAD CO.
SAMPLED	04/30/20	04/24/42	06/03/20
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	30	NOT GIVEN	145
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.6	65.1	72.4
ETHANE	3.0	29.4	9.9
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.6	4.9	15.9
OXYGEN	0.7	0.3	1.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.09	0.16	0.06
HEATING VALUE*	1014	1188	911
SPECIFIC GRAVITY	0.575	0.722	0.680

	INDEX 694 SAMPLE 1203	INDEX 695 SAMPLE 15006	INDEX 696 SAMPLE 15007
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	OSAGE	OSAGE	OSAGE
FIELD	BURBANK	DOGA	DOGA
LOCATION	T27N, R5E	NOT GIVEN	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	CEJA CORP.	CEJA CORP.
SAMPLED	11/15/25	05/12/77	05/12/77
FORMATION	PENN-BURBANK	MISS-CHAT	MISS-CHAT
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	130	NOT GIVEN	NOT GIVEN
FLOW,MCFD	6000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	13.9	55.8	56.5
ETHANE	83.0	11.5	11.0
PROPANE	---	8.6	7.0
N-BUTANE	---	4.2	2.9
ISOBUTANE	---	1.4	0.9
N-PENTANE	---	1.4	0.8
ISOPENTANE	---	1.1	0.7
CYCLOPENTANE	---	0.2	0.2
HEXANES PLUS	---	0.8	0.4
NITROGEN	1.4	14.3	18.9
OXYGEN	1.1	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.0	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.7	0.4	0.3
HELIUM	0.07	0.32	0.28
HEATING VALUE*	1628	1339	1177
SPECIFIC GRAVITY	0.984	0.916	0.861

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 697 SAMPLE 1754	INDEX 698 SAMPLE 15260	INDEX 699 SAMPLE 15259
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	POTTAWATOMIE	ROGERS	ROGERS
FIELD	EARLSBORO	AMMONIA PLANT	NOT GIVEN
LOCATION	GASOLINE PLANT DISCHARGE	NOT GIVEN	OKLAHOMA NATURAL GAS CO.
OWNER	MOBIL OIL CORP.	AGRICO CHEMICAL CO.	AGRICO CHEMICAL CO.
SAMPLED	04/24/29	04/13/78	04/13/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	39.8	10.2	92.6
ETHANE	48.7	0.0	4.2
PROPANE	---	TRACE	0.8
N-BUTANE	---	0.0	0.2
ISOBUTANE	---	0.0	0.1
N-PENTANE	---	0.0	0.0
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	0.0	TRACE
HEXANES PLUS	---	0.0	TRACE
NITROGEN	10.6	20.4	1.5
OXYGEN	0.5	TRACE	0.1
ARGON	---	7.5	TRACE
HYDROGEN	---	61.6	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.3	TRACE	0.5
HELIUM	0.06	0.24	0.04
HEATING VALUE*	1276	303	1044
SPECIFIC GRAVITY	0.844	0.400	0.599

	INDEX 700 SAMPLE 1758	INDEX 701 SAMPLE 1759	INDEX 702 SAMPLE 1761
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	BOWLEGS	LITTLE RIVER	MAUD
LOCATION	LOW COMPRESSOR DISCHARGE	PLANT INLET	PLANT DISCHARGE
OWNER	SHELL OIL CO.	GYPSY OIL CO.	AMERADA HESS CORP.
SAMPLED	04/25/29	04/25/29	04/26/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	8500
COMPONENT, MOLE PCT			
METHANE	15.3	33.0	50.0
ETHANE	74.0	54.3	49.1
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	10.5	12.1	10.1
OXYGEN	0.2	0.3	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	TRACE	0.07	TRACE
HEATING VALUE*	1481	1307	1285
SPECIFIC GRAVITY	0.968	0.878	0.845

	INDEX 703 SAMPLE 1760	INDEX 704 SAMPLE 1763	INDEX 705 SAMPLE 1764
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	MISSION	SEARIGHT	SEARIGHT
LOCATION	PLANT INLET	PLANT DISCHARGE	PLANT DISCHARGE
OWNER	GYPSY OIL CO.	CARTER OIL CO.	GYPSY OIL CO.
SAMPLED	04/26/29	04/26/29	04/27/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	1974	11000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	46.2	16.5	30.3
ETHANE	44.8	78.3	41.6
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.6	4.0	27.4
OXYGEN	0.3	0.6	0.6
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.6	0.2
HELIUM	TRACE	TRACE	0.14
HEATING VALUE*	1271	1570	1052
SPECIFIC GRAVITY	0.816	0.968	0.879

	INDEX 706 SAMPLE 1766	INDEX 707 SAMPLE 3458	INDEX 708 SAMPLE 1757
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	SEARIGHT	SEARIGHT	SEMINOLE
LOCATION	PLANT INLET	SEC. 11, T9N, R6E	PLANT DISCHARGE
OWNER	CARTER OIL CO.	CARTER OIL CO.	UNION OIL CO. OF CALIF.
SAMPLED	04/27/29	05/26/82	04/24/29
FORMATION	NOT GIVEN	DEVO-HUNTON & ORDO-WILCOX	DEVO-HUNTON
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	47.7	93.8	9.3
ETHANE	39.3	0.0	86.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	11.1	5.2	3.4
OXYGEN	1.3	0.7	0.5
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.6	0.2	0.8
HELIUM	0.11	0.05	TRACE
HEATING VALUE*	1187	950	1635
SPECIFIC GRAVITY	0.808	0.581	1.005

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 709 1762	INDEX SAMPLE 710 1767	INDEX SAMPLE 711 1755
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	SEMINOLE	SEMINOLE
FIELD	SEMINOLE	SEMINOLE	ST. LOUIS
LOCATION	PLANT DISCHARGE	PLANT INLET	PLANT DISCHARGE
OWNER	GRISSO GASOLINE PLT.	CARTER OIL CO.	MOBIL OIL CORP.
SAMPLED	04/26/29	04/27/29	04/24/29
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	355	355
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	20000		
COMPONENT, MOLE PCT			
METHANE	35.4	43.5	51.7
ETHANE	55.2	45.1	38.3
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	8.6	9.9	8.6
OXYGEN	0.3	0.9	1.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.5	0.6	0.2
HELIUM	0.09	0.08	0.06
HEATING VALUE*	1348	1249	1210
SPECIFIC GRAVITY	0.870	0.829	0.788

	INDEX SAMPLE 712 1756	INDEX SAMPLE 713 5532	INDEX SAMPLE 714 5588
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	SEMINOLE	TEXAS	TEXAS
FIELD	ST. LOUIS	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	PLANT INLET	26 IN. OUTLET	12 IN. OUTLET
OWNER	MOBIL OIL CORP.	CITIES SERVICE OIL CO.	HUGOTON-PLAINS GAS & OIL CO.
SAMPLED	04/24/29	08/13/53	01/15/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	355	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	63.2	74.8	74.6
ETHANE	24.6	7.0	4.1
PROPANE	---	3.8	2.3
N-BUTANE	---	1.0	0.6
ISOBUTANE	---	0.8	0.2
N-PENTANE	---	0.3	0.2
ISOPENTANE	---	0.0	TRACE
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.2	0.1
NITROGEN	11.6	12.1	17.2
OXYGEN	0.3	TRACE	0.1
ARGON	---	0.1	0.1
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.3	0.0	0.0
HELIUM	0.07	0.37	0.56
HEATING VALUE*	1081	1052	929
SPECIFIC GRAVITY	0.729	0.709	0.687

	INDEX SAMPLE 715 5707	INDEX SAMPLE 716 5708	INDEX SAMPLE 717 5749
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	PLANT INLET	PLANT OUTLET	OKLAHOMA 24 IN. LINE
OWNER	DORCHESTER CORP.	DORCHESTER CORP.	HUGOTON-PLAINS GAS & OIL CO.
SAMPLED	10/14/54	10/14/54	01/07/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	232	680	NOT GIVEN
FLOW, MCFD	65000	50000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.0	78.0	75.8
ETHANE	5.9	6.3	5.8
PROPANE	3.5	1.8	2.2
N-BUTANE	0.9	0.3	0.9
ISOBUTANE	0.6	0.0	0.5
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	12.4	13.0	12.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.0
HELIUM	0.40	0.42	0.40
HEATING VALUE*	1030	960	1033
SPECIFIC GRAVITY	0.697	0.659	0.702

	INDEX SAMPLE 718 5750	INDEX SAMPLE 719 5752	INDEX SAMPLE 720 5753
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	OKLAHOMA 12 IN. LINE	SEC. 16, T6N, R19ECM	SEC. 15, T6N, R18ECM
OWNER	HUGOTON-PLAINS GAS & OIL CO.	HUGOTON-PLAINS GAS & OIL CO.	HUGOTON-PLAINS GAS & OIL CO.
SAMPLED	01/07/55	01/07/55	01/07/55
FORMATION	NOT GIVEN	PERM-CHASE GROUP X	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.2	75.1	75.3
ETHANE	4.6	2.5	3.8
PROPANE	2.3	0.9	1.8
N-BUTANE	0.7	0.2	0.5
ISOBUTANE	0.4	TRACE	0.2
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	15.7	20.3	17.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.50	0.70	0.60
HEATING VALUE*	959	840	915
SPECIFIC GRAVITY	0.688	0.661	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 721 6713	INDEX SAMPLE 722 6714	INDEX SAMPLE 723 6716
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	12 IN. LINE	8 IN. LINE	26 IN. LINE
OWNER	KANSAS-NEBRASKA NATURAL GAS	KANSAS-NEBRASKA NATURAL GAS	NATURAL GAS PIPELINE CO. OF
SAMPLED	07/17/58	07/17/58	07/17/58
FORMATION	PERM-CHASE GROUP X	PERM-CHASE GROUP X	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	780	780	670
FLOW, MCFD	30000	10000	50000
COMPONENT, MOLE PCT			
METHANE	86.6	74.8	71.8
ETHANE	5.1	5.3	6.1
PROPANE	3.3	2.9	5.4
N-BUTANE	2.5	0.8	1.0
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	2.1	14.6	15.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.1	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.3
HELIUM	0.20	0.30	0.50
HEATING VALUE*	1129	994	1014
SPECIFIC GRAVITY	0.657	0.700	0.724

	INDEX SAMPLE 724 6717	INDEX SAMPLE 725 6718	INDEX SAMPLE 726 6723
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	26 IN. LINE	26 IN. LINE	12 IN. LINE
OWNER	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF	HUGOTON-PLAINS GAS & OIL CO.
SAMPLED	07/17/58	07/17/58	07/16/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	260
FLOW, MCFD	50000	40000	13000
COMPONENT, MOLE PCT			
METHANE	68.6	76.0	77.9
ETHANE	5.0	6.4	4.6
PROPANE	3.4	3.5	2.1
N-BUTANE	1.1	1.0	0.7
ISOBUTANE	0.6	0.6	0.3
N-PENTANE	0.2	0.1	TRACE
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	18.7	11.5	13.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.1
HELIUM	0.60	0.40	0.50
HEATING VALUE*	975	1057	978
SPECIFIC GRAVITY	0.734	0.705	0.676

	INDEX SAMPLE 727 6724	INDEX SAMPLE 728 6909	INDEX SAMPLE 729 7348
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	12 & 24 IN. LINES	12 & 24 IN.	26 IN. DISCHARGE
OWNER	HUGOTON-PLAINS GAS & OIL CO.	REPUBLIC NATURAL GAS CO.	CITIES SERVICE OIL CO.
SAMPLED	07/16/58	12/17/58	01/22/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	260	NOT GIVEN	749
FLOW, MCFD	55000	NOT GIVEN	165000
COMPONENT, MOLE PCT			
METHANE	75.4	74.6	74.8
ETHANE	5.6	6.6	6.4
PROPANE	3.0	3.9	3.5
N-BUTANE	0.8	1.0	0.9
ISOBUTANE	0.4	0.5	0.5
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	13.7	11.8	12.7
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	0.5	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.0	0.1
HELIUM	0.40	0.30	0.40
HEATING VALUE*	1005	1057	1029
SPECIFIC GRAVITY	0.694	0.714	0.701

	INDEX SAMPLE 730 7349	INDEX SAMPLE 731 7351	INDEX SAMPLE 732 13230
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON	GUYMON-HUGOTON
LOCATION	20 IN. INLET	20 IN. INLET	NOT GIVEN
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.	CITIES SERVICE OIL CO.
SAMPLED	01/22/60	01/22/60	06/05/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP X
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	239	243	160
FLOW, MCFD	6000	85000	11000
COMPONENT, MOLE PCT			
METHANE	74.7	74.3	76.4
ETHANE	6.4	6.4	5.6
PROPANE	3.4	3.5	2.8
N-BUTANE	0.9	1.0	0.7
ISOBUTANE	0.4	0.5	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.2	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	12.9	13.0	13.1
OXYGEN	TRACE	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.40	0.40	0.43
HEATING VALUE*	1026	1031	1026
SPECIFIC GRAVITY	0.701	0.705	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 733 SAMPLE 15651	INDEX 734 SAMPLE 7350	INDEX 735 SAMPLE 17096
STATE	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY	TEXAS	TEXAS	TEXAS
FIELD	GUYMON-HUGOTON	GUYMON-HUGOTON GAS AREA	LIBERAL
LOCATION	26 IN. MAINLINE	20 & 22 IN. LOOP FROM THE S	26 IN. MAINLINE DISCHARGE
OWNER	CITIES SERVICE CO.	CITIES SERVICE GAS CO.	NORTHWEST CENTRAL PIPELINE C
SAMPLED	06/18/79	01/22/60	10/17/83
FORMATION	PERM-CHASE GROUP X	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	607	239	166
FLOW, MCFD	96000	30000	8000
COMPONENT, MOLE PCT			
METHANE	75.0	74.8	77.4
ETHANE	6.2	6.4	5.6
PROPANE	2.7	3.6	3.1
N-BUTANE	0.7	1.8	0.9
ISOBUTANE	0.4	0.6	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	14.0	12.4	11.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.45	0.35	0.33
HEATING VALUE*	1000	1051	1047
SPECIFIC GRAVITY	0.695	0.711	0.696

	INDEX 736 SAMPLE 6393	INDEX 737 SAMPLE 8084	INDEX 738 SAMPLE 14834
STATE	OKLAHOMA	OKLAHOMA	PENNSYLVANIA
COUNTY	TEXAS	WOODS	ARMSTRONG
FIELD	NOT GIVEN	NOT GIVEN	INDIANA, ARMSTRONG & CLARION
LOCATION	INLET	ALVA, OKLAHOMA	20 IN. DISCHARGE
OWNER	CITIES SERVICE OIL CO.	CITIES SERVICE GAS CO.	PEOPLES NATURAL GAS CO.
SAMPLED	08/20/57	07/19/61	10/25/76
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-BRADFORD
GEOLOGIC PROVINCE CODE	360	360	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	300	252
FLOW, MCFD	NOT GIVEN	100000	25000
COMPONENT, MOLE PCT			
METHANE	75.5	88.1	95.1
ETHANE	6.5	5.2	3.2
PROPANE	3.6	2.1	0.6
N-BUTANE	1.0	0.7	0.1
ISOBUTANE	0.6	0.4	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	11.8	2.6	0.7
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.9	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.35	0.10	0.08
HEATING VALUE*	1052	1104	1048
SPECIFIC GRAVITY	0.706	0.641	0.584

	INDEX 739 SAMPLE 14841	INDEX 740 SAMPLE 16591	INDEX 741 SAMPLE 10378
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	ARMSTRONG	ARMSTRONG	ELK
FIELD	SAGAMORE, COCHRAN MILLS, ETAL	WESTERN PENNSYLVANIA	ELK COUNTY
LOCATION	8 IN. DISCHARGE	12 IN.	8 IN. LINE J.
OWNER	EQUITABLE GAS CO.	PEOPLES NATURAL GAS CO.	PENNSYLVANIA GAS CO.
SAMPLED	10/25/76	07/22/82	01/27/66
FORMATION	NOT GIVEN	NOT GIVEN	PENN-KANE & DEVO-ELK
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	34	98	40
FLOW, MCFD	6000	15000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.0	94.9	84.5
ETHANE	4.0	3.2	9.7
PROPANE	0.8	0.6	1.2
N-BUTANE	0.2	0.2	0.9
ISOBUTANE	0.1	0.1	0.3
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	TRACE	TRACE	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.6	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.3	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.2
HELIUM	0.09	0.07	0.07
HEATING VALUE*	1064	1055	1181
SPECIFIC GRAVITY	0.593	0.586	0.669

	INDEX 742 SAMPLE 14827	INDEX 743 SAMPLE 14844	INDEX 744 SAMPLE 16592
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	GREENE	INDIANA	INDIANA
FIELD	WAYNESBURG	INDIANA & JEFFERSON COUNTIES	ROCHESTER MILLS
LOCATION	10 IN. AT METER STA.	8 IN. DISCHARGE	8 IN. DISCHARGE
OWNER	COLUMBIA GAS TRANS. CORP.	CONSOLIDATED GAS SUPPLY CORP	CONSOLIDATED GAS SUPPLY CORP
SAMPLED	10/22/76	10/28/76	07/22/82
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	15	675	840
FLOW, MCFD	9	17000	12000
COMPONENT, MOLE PCT			
METHANE	86.8	95.7	95.1
ETHANE	6.8	3.0	3.1
PROPANE	2.3	0.4	0.5
N-BUTANE	0.7	0.1	0.2
ISOBUTANE	0.4	0.1	TRACE
N-PENTANE	0.3	TRACE	0.1
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.9	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.3
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.14	0.07	0.07
HEATING VALUE*	1143	1045	1049
SPECIFIC GRAVITY	0.658	0.579	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 745 SAMPLE 10474	INDEX 746 SAMPLE 358	INDEX 747 SAMPLE 359
STATE	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY	MCKEAN	VENANGO	VENANGO
FIELD	LUDLOW	OIL CITY	OIL CITY
LOCATION	8 IN. LINE	PLANT INLET	PLANT INLET
OWNER	PENNSYLVANIA GAS CO.	UNITED NATURAL GAS CO.	UNITED NATURAL GAS CO.
SAMPLED	03/22/66	06/15/20	06/15/20
FORMATION	DEVO-COOPER & BALLTOWN	DEVO-SPEECHLEY	DEVO-SPEECHLEY
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	10	40	40
FLOW,MCFD	500	100000	100000
COMPONENT, MOLE PCT			
METHANE	67.4	66.0	66.8
ETHANE	14.6	28.3	25.6
PROPANE	7.4	---	---
N-BUTANE	2.8	---	---
ISOBUTANE	1.2	---	---
N-PENTANE	0.8	---	---
ISOPENTANE	0.9	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.7	---	---
NITROGEN	3.5	4.4	3.3
OXYGEN	0.1	1.1	1.1
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	1.4	0.1	0.1
HELIUM	0.10	0.13	0.11
HEATING VALUE*	1384	1176	1189
SPECIFIC GRAVITY	0.832	0.719	0.716

	INDEX 748 SAMPLE 1991	INDEX 749 SAMPLE 14460	INDEX 750 SAMPLE 17328
STATE	PENNSYLVANIA	SOUTH DAKOTA	SOUTH DAKOTA
COUNTY	VENANGO	BUTTE	BUTTE
FIELD	PEL GASOLINE PLANT	BELL CREEK, RECLUSE & UTE	RECLUSE & JOE CREEK
LOCATION	MCCALMONT-CRAWFORD LINE	NOT GIVEN	8 IN. INLET
OWNER	PEOPLES NATURAL GAS CO.	MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA UTILITIES CO.
SAMPLED	03/20/30	09/09/75	06/19/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	395	395
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	165	400	680
FLOW,MCFD	NOT GIVEN	15000	2500
COMPONENT, MOLE PCT			
METHANE	84.8	82.0	82.1
ETHANE	14.3	8.8	13.0
PROPANE	---	0.5	2.7
N-BUTANE	---	0.1	0.3
ISOBUTANE	---	TRACE	0.2
N-PENTANE	---	TRACE	TRACE
ISOPENTANE	---	0.0	0.0
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	TRACE	TRACE
NITROGEN	0.6	6.8	1.7
OXYGEN	0.2	1.0	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	0.0	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	0.7	TRACE
HELIUM	0.12	0.04	0.02
HEATING VALUE*	1105	1005	1151
SPECIFIC GRAVITY	0.631	0.646	0.660

	INDEX 751 SAMPLE 11918	INDEX 752 SAMPLE 11915	INDEX 753 SAMPLE 11916
STATE	TENNESSEE	TENNESSEE	TENNESSEE
COUNTY	MAYWOOD	MACON	MACON
FIELD	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION	2-30 IN. LINES	NO.100-30 IN. LINE	NO.200-30 IN. LINE
OWNER	MICHIGAN WISCONSIN PIPELINE	COLUMBIA GULF TRANS. CO.	COLUMBIA GULF TRANS. CO.
SAMPLED	06/04/69	06/05/69	06/05/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	250	300	300
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	840	700	700
FLOW,MCFD	800000	500000	720000
COMPONENT, MOLE PCT			
METHANE	94.4	96.1	96.2
ETHANE	3.4	2.3	2.6
PROPANE	0.7	0.2	0.3
N-BUTANE	0.1	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	0.5	0.5	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.9	0.3
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1051	1020	1029
SPECIFIC GRAVITY	0.592	0.579	0.576

	INDEX 754 SAMPLE 11917	INDEX 755 SAMPLE 11928	INDEX 756 SAMPLE 2279
STATE	TENNESSEE	TENNESSEE	TEXAS
COUNTY	SUMNER	WILSON	ANDERSON
FIELD	GULF COAST AREA	GULF COAST AREA	BOGGY CREEK
LOCATION	2-24, 26, 30 & 36 IN. LINES	3-30 IN. LINES	RESIDUE GAS
OWNER	TENNESSEE GAS PIPELINE CO.	TEXAS EASTERN TRANS. CORP.	HUMBLE OIL & REFINING CO.
SAMPLED	06/05/69	06/05/69	02/09/31
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	300	300	260
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	750	930	NOT GIVEN
FLOW,MCFD	24000000	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE	94.4	95.8	81.6
ETHANE	3.0	2.3	12.9
PROPANE	1.1	0.3	---
N-BUTANE	0.1	0.2	---
ISOBUTANE	0.1	0.0	---
N-PENTANE	0.1	0.0	---
ISOPENTANE	0.0	0.0	---
CYCLOPENTANE	TRACE	0.0	---
HEXANES PLUS	0.1	0.0	---
NITROGEN	0.6	0.7	3.6
OXYGEN	0.0	0.0	1.2
ARGON	0.0	0.0	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.5	0.7	0.7
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1055	1026	1058
SPECIFIC GRAVITY	0.595	0.582	0.647

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 757 SAMPLE 15176	INDEX 758 SAMPLE 8166	INDEX 759 SAMPLE 10891
STATE	TEXAS	TEXAS	TEXAS
COUNTY	BRAZORIA	BROWN	BROWN
FIELD	OYSTER CREEK	BROWNWOOD AREA	VARIOUS
LOCATION	NOT GIVEN	NOT GIVEN	PIPELINE
OWNER	HILLIARD OIL & GAS, INC.	LONE STAR GAS CO.	GULF GAS CO.
SAMPLED	12/27/77	08/12/51	02/28/67
FORMATION	OLIG-FRIO	NOT GIVEN	-COMMINGLED
GEOLOGIC PROVINCE CODE	220	425	425
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	20	NOT GIVEN
FLOW, MCFD	2030	1200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.7	77.3	69.9
ETHANE	2.3	8.1	10.6
PROPANE	0.7	3.6	5.1
N-BUTANE	0.2	1.0	1.3
ISOBUTANE	0.2	0.7	0.6
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.1	0.4	0.7
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	0.4	7.8	10.0
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.4	0.3
HELIUM	TRACE	0.27	0.22
HEATING VALUE*	1056	1114	1160
SPECIFIC GRAVITY	0.589	0.708	0.758

	INDEX 760 SAMPLE 7544	INDEX 761 SAMPLE 2846	INDEX 762 SAMPLE 5443
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	BOBBITT	PANHANDLE W	PANHANDLE W
LOCATION	INLET LINE	12 IN. LINE-NE OF WHITE DEER	NOT GIVEN
OWNER	TEXAS GULF PRODUCING CO.	NORTHERN NATURAL GAS CO.	PANOMA CORP.
SAMPLED	05/11/66	05/20/40	04/16/53
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	520	NOT GIVEN	153
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	59.6	69.5	80.5
ETHANE	0.9	19.0	6.0
PROPANE	0.5	---	3.4
N-BUTANE	0.1	---	1.1
ISOBUTANE	0.1	---	0.5
N-PENTANE	0.0	---	0.2
ISOPENTANE	TRACE	---	0.2
CYCLOPENTANE	TRACE	---	0.1
HEXANES PLUS	TRACE	---	0.2
NITROGEN	34.7	10.4	7.2
OXYGEN	0.2	0.4	TRACE
ARGON	0.1	---	TRACE
HYDROGEN	0.0	---	TRACE
HYDROGEN SULFIDE	0.0	---	TRACE
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	2.10	0.46	0.22
HEATING VALUE*	666	1045	1101
SPECIFIC GRAVITY	0.711	0.693	0.688

	INDEX 763 SAMPLE 5444	INDEX 764 SAMPLE 5445	INDEX 765 SAMPLE 5446
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	INLET	NOT GIVEN
OWNER	PANOMA CORP.	PANOMA CORP.	PANOMA CORP.
SAMPLED	04/16/53	04/16/53	04/16/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	102	169	290
FLOW, MCFD	35000	NOT GIVEN	90000
COMPONENT, MOLE PCT			
METHANE	80.7	76.6	79.6
ETHANE	6.2	5.2	5.9
PROPANE	3.7	3.9	3.9
N-BUTANE	1.3	1.1	1.1
ISOBUTANE	0.6	0.5	0.5
N-PENTANE	0.4	0.3	0.4
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	6.3	11.8	8.1
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	0.1
HELIUM	0.19	0.49	0.28
HEATING VALUE*	1133	1052	1098
SPECIFIC GRAVITY	0.696	0.704	0.695

	INDEX 766 SAMPLE 5538	INDEX 767 SAMPLE 6501	INDEX 768 SAMPLE 6746
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. OUTLET	NOT GIVEN	24 IN. DISCHARGE
OWNER	NORTHERN NATURAL GAS CO.	J. M. HUBER CORP.	NORTHERN NATURAL GAS CO.
SAMPLED	08/12/53	02/07/58	07/22/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	210
FLOW, MCFD	NOT GIVEN	NOT GIVEN	15000
COMPONENT, MOLE PCT			
METHANE	79.9	72.4	80.8
ETHANE	6.7	4.8	6.4
PROPANE	3.4	2.5	3.5
N-BUTANE	0.5	0.7	1.1
ISOBUTANE	0.2	0.4	0.7
N-PENTANE	0.1	0.1	0.3
ISOPENTANE	TRACE	0.2	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.3
NITROGEN	8.1	16.7	6.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.6	0.1
HELIUM	0.30	1.20	0.20
HEATING VALUE*	1039	948	1134
SPECIFIC GRAVITY	0.669	0.703	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 769 SAMPLE 6747	INDEX 770 SAMPLE 6748	INDEX 771 SAMPLE 6749
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. DISCHARGE	20 IN. DISCHARGE	8 IN. LINE
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.
SAMPLED	07/28/58	07/22/58	07/22/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	210	210	215
FLOW, MCFD	16000	19000	4000
COMPONENT, MOLE PCT			
METHANE	76.3	81.6	78.6
ETHANE	5.4	6.1	6.8
PROPANE	3.2	3.8	4.0
N-BUTANE	1.1	1.3	1.5
ISOBUTANE	1.6	0.7	0.8
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.4	0.5	0.5
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	12.0	5.5	6.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.56	0.20	0.30
HEATING VALUE*	1050	1141	1151
SPECIFIC GRAVITY	0.705	0.695	0.715

	INDEX 772 SAMPLE 6750	INDEX 773 SAMPLE 6751	INDEX 774 SAMPLE 7133
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	20 IN. LINE	24 IN. DISCHARGE	NOT GIVEN
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	J. M. HUBER CORP.
SAMPLED	07/22/58	07/22/58	06/29/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	215	425	NOT GIVEN
FLOW, MCFD	73000	145000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.3	80.9	77.1
ETHANE	9.8	8.3	6.4
PROPANE	4.0	3.2	4.7
N-BUTANE	0.2	0.2	1.3
ISOBUTANE	0.2	0.1	0.7
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.1	0.2	0.5
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.3
NITROGEN	5.8	6.7	8.8
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.20	0.20	0.30
HEATING VALUE*	1100	1070	1109
SPECIFIC GRAVITY	0.676	0.664	0.713

	INDEX 775 SAMPLE 7382	INDEX 776 SAMPLE 7950	INDEX 777 SAMPLE 7951
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. LINE	SEC. 40, BLK. 4, I&GN SUR.	8 IN.
OWNER	COLORADO INTERSTATE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	02/09/60	05/08/61	05/08/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	4000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.7	79.0	75.4
ETHANE	6.3	6.2	5.8
PROPANE	3.6	3.8	3.2
N-BUTANE	1.2	1.2	1.0
ISOBUTANE	0.5	0.7	0.6
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	10.0	7.9	12.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.48	0.30	0.80
HEATING VALUE*	1076	1109	1023
SPECIFIC GRAVITY	0.704	0.702	0.700

	INDEX 778 SAMPLE 7952	INDEX 779 SAMPLE 7953	INDEX 780 SAMPLE 8000
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	12 IN.	END OF LOOP 16 IN.	20 IN. MAINLINE
OWNER	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	05/08/61	05/08/61	06/01/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	147
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.8	77.5	79.1
ETHANE	6.3	6.1	6.3
PROPANE	3.5	3.3	3.5
N-BUTANE	1.2	1.1	1.2
ISOBUTANE	0.7	0.7	0.7
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.8	9.9	9.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.50	0.60	0.37
HEATING VALUE*	1081	1068	1101
SPECIFIC GRAVITY	0.708	0.698	0.697

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 781 SAMPLE 8001	INDEX 782 SAMPLE 8201	INDEX 783 SAMPLE 8202
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	26 IN. MAINLINE DRIP	NOT GIVEN	SEC. 72, BLK. 7, I&GN SUR.
OWNER	CITIES SERVICE GAS CO.	NORTHERN NATURAL GAS CO.	CONSOLIDATED GAS & EQUIP. CO
SAMPLED	06/01/61	09/22/61	09/22/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	147	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	75.7	61.9
ETHANE	6.1	5.1	5.6
PROPANE	3.5	2.9	4.1
N-BUTANE	1.1	1.1	1.3
ISOBUTANE	0.7	0.6	0.8
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.2	0.3	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.6	12.9	23.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.1	0.0
CARBON DIOXIDE	0.2	0.3	0.2
HELIUM	0.51	0.56	1.19
HEATING VALUE*	1083	1022	948
SPECIFIC GRAVITY	0.704	0.703	0.772

	INDEX 784 SAMPLE 8204	INDEX 785 SAMPLE 8206	INDEX 786 SAMPLE 8367
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	NATURAL GAS PIPELINE CO. OF	CONSOLIDATED GAS & EQUIP. CO	NORTHERN NATURAL GAS CO.
SAMPLED	09/22/61	09/22/61	01/17/62
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	62.5	59.7	75.9
ETHANE	3.9	8.0	4.9
PROPANE	2.0	6.7	3.1
N-BUTANE	0.7	2.2	1.1
ISOBUTANE	0.5	1.2	0.6
N-PENTANE	0.1	0.5	0.2
ISOPENTANE	0.2	0.5	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	28.3	19.4	13.0
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	TRACE
HELIUM	1.42	0.97	0.57
HEATING VALUE*	804	1098	1029
SPECIFIC GRAVITY	0.734	0.819	0.703

	INDEX 787 SAMPLE 8467	INDEX 788 SAMPLE 8472	INDEX 789 SAMPLE 8473
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	SEC. 63, BLK. 7, I&GN SUR.	SEC. 63, BLK. 7, I&GN SUR.	SEC. 72, BLK. 7, I&GN SUR.
OWNER	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO	CONSOLIDATED GAS & EQUIP. CO
SAMPLED	03/26/62	03/26/62	03/26/62
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.5	61.5	62.1
ETHANE	6.6	7.9	5.5
PROPANE	5.4	6.1	4.2
N-BUTANE	1.7	1.9	1.4
ISOBUTANE	0.9	1.2	0.7
N-PENTANE	0.4	0.5	0.4
ISOPENTANE	0.5	0.8	0.4
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.2	0.5	0.3
NITROGEN	24.3	18.6	23.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	1.23	0.92	1.17
HEATING VALUE*	991	1099	961
SPECIFIC GRAVITY	0.802	0.811	0.773

	INDEX 790 SAMPLE 8491	INDEX 791 SAMPLE 8492	INDEX 792 SAMPLE 8509
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	NORTHERN NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	DORCHESTER GAS PROD. CO.
SAMPLED	04/11/62	04/11/62	04/11/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.2	75.3	78.3
ETHANE	5.5	5.2	6.1
PROPANE	3.9	3.3	3.9
N-BUTANE	1.5	1.3	1.8
ISOBUTANE	0.7	0.5	0.8
N-PENTANE	0.3	0.2	0.6
ISOPENTANE	0.5	0.3	0.8
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.1	0.6
NITROGEN	12.5	13.1	6.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.44	0.59	0.22
HEATING VALUE*	1074	1026	1189
SPECIFIC GRAVITY	0.725	0.705	0.736

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 793 8511	INDEX SAMPLE 794 9232	INDEX SAMPLE 795 7949
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CARSON	CARSON	CARSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W/RED CAVE
LOCATION	BOBBITT & HAIDUK STAT.	INLET	16 IN. LINE
OWNER	DORCHESTER GAS PROD. CO.	NATURAL GAS PIPELINE CO. OF	CITIES SERVICE GAS CO.
SAMPLED	04/23/62	01/21/64	05/08/61
FORMATION	NOT GIVEN	NOT GIVEN	PERM-RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	223	185	NOT GIVEN
FLOW, MCFD	33700	6300	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	62.9	78.5
ETHANE	5.6	4.0	8.7
PROPANE	3.4	3.0	3.6
N-BUTANE	1.1	1.2	1.2
ISOBUTANE	0.7	0.3	0.7
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.4	0.5	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	10.1	25.9	5.6
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	0.43	1.40	0.60
HEATING VALUE*	1076	891	1148
SPECIFIC GRAVITY	0.703	0.754	0.703

	INDEX SAMPLE 796 8506	INDEX SAMPLE 797 12444	INDEX SAMPLE 798 8158
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CASTRO	CHEROKEE	COKE
FIELD	NOT GIVEN	TECULA	NOT GIVEN
LOCATION	DIMMITT TO DUMAS	NOT GIVEN	DISCHARGE GAS
OWNER	EL PASO NATURAL GAS CO.	ARCADIA REFINING CO.	LONE STAR GAS CO.
SAMPLED	11/30/61	10/14/70	08/11/61
FORMATION	NOT GIVEN	CRET-EAGLE FORD	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	268	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	339	NOT GIVEN	635
FLOW, MCFD	78000	NOT GIVEN	25000
COMPONENT, MOLE PCT			
METHANE	78.3	92.9	70.9
ETHANE	7.2	2.6	16.9
PROPANE	1.2	1.0	5.2
N-BUTANE	0.2	0.3	0.7
ISOBUTANE	0.0	0.2	0.4
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	TRACE	0.2	TRACE
NITROGEN	12.5	2.2	5.8
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	TRACE	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.5
HELIUM	0.03	0.03	0.10
HEATING VALUE*	969	1053	1201
SPECIFIC GRAVITY	0.661	0.606	0.735

	INDEX SAMPLE 799 7985	INDEX SAMPLE 800 12631	INDEX SAMPLE 801 8165
STATE	TEXAS	TEXAS	TEXAS
COUNTY	COLEMAN	COLEMAN	COLEMAN
FIELD	SANTA ANNA	SANTA ANNA	SANTA ANNA N
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	COLEMAN GAS CO.	LONE STAR PRODUCING CO.	LONE STAR GAS CO.
SAMPLED	05/23/61	01/14/71	08/12/61
FORMATION	PENN-MARBLE FALLS	PENN-MARBLE FALLS	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	310	125
FLOW, MCFD	NOT GIVEN	2500	450
COMPONENT, MOLE PCT			
METHANE	80.8	79.5	70.2
ETHANE	5.9	7.5	7.9
PROPANE	1.5	2.8	4.8
N-BUTANE	0.2	0.5	1.3
ISOBUTANE	0.3	0.9	1.0
N-PENTANE	TRACE	TRACE	0.1
ISOPENTANE	0.1	0.1	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	10.7	8.4	13.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.29	0.47
HEATING VALUE*	984	1056	1090
SPECIFIC GRAVITY	0.654	0.673	0.749

	INDEX SAMPLE 802 11119	INDEX SAMPLE 803 11120	INDEX SAMPLE 804 11008
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	CONCHO	CONCHO
FIELD	PAINT ROCK	PAINT ROCK	PAINT ROCK, SPECK & SPECK S
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	J-W OPERATING CO.	J-W OPERATING CO.	SUNRAY DX OIL CO.
SAMPLED	09/18/67	09/18/67	06/20/67
FORMATION	PENN-STRAWN	NOT GIVEN	PENN-STRAWN & CANYON
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	680	600	448
FLOW, MCFD	4000	2000	10400
COMPONENT, MOLE PCT			
METHANE	75.3	75.0	77.2
ETHANE	7.4	7.4	7.8
PROPANE	3.8	4.1	2.9
N-BUTANE	1.1	1.1	0.1
ISOBUTANE	0.5	0.6	0.2
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	TRACE
NITROGEN	10.3	10.2	10.7
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.6	0.5
HELIUM	0.35	0.34	0.36
HEATING VALUE*	1080	1068	1011
SPECIFIC GRAVITY	0.713	0.719	0.678

* CALCULATED-GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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	INDEX 805 SAMPLE 11121	INDEX 806 SAMPLE 11122	INDEX 807 SAMPLE 2054
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CONCHO	CONCHO	CRANE
FIELD	SPECK N	SPECK N	CRANE
LOCATION	NOT GIVEN	NOT GIVEN	RESIDUE GAS
OWNER	SUNRAY DX OIL CO.	SUNRAY DX OIL CO.	PHILLIPS PETROLEUM CO.
SAMPLED	09/18/67	09/19/67	06/17/30
FORMATION	PENN-STRAWN & CANYON	PENN-CANYON & STRAWN	NOT GIVEN
GEOLOGIC PROVINCE CODE	410	410	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	550	600	NOT GIVEN
FLOW, MCFD	4000	1100	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.9	69.0	42.7
ETHANE	7.8	10.0	44.1
PROPANE	4.5	6.8	---
N-BUTANE	1.3	2.3	---
ISOBUTANE	0.8	1.3	---
N-PENTANE	0.3	0.9	---
ISOPENTANE	0.3	0.4	---
CYCLOPENTANE	TRACE	0.2	---
HEXANES PLUS	0.3	0.6	---
NITROGEN	10.1	7.9	4.0
OXYGEN	TRACE	TRACE	0.3
ARGON	TRACE	TRACE	---
HYDROGEN	TRACE	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.4	0.4	8.9
HELIUM	0.31	0.22	0.00
HEATING VALUE*	1117	1270	1223
SPECIFIC GRAVITY	0.733	0.806	0.878

	INDEX 808 SAMPLE 8288	INDEX 809 SAMPLE 16116	INDEX 810 SAMPLE 14485
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CRANE	CRANE	CRANE
FIELD	PUCKETT & TERRELL	WEST TEXAS AREA	WEST TEXAS FIELDS
LOCATION	EL PASO, TEXAS	36 IN.	36 IN. LINE
OWNER	EL PASO NATURAL GAS CO.	VALERO TRANSMISSION CO.	COASTAL STATES GAS PROD. CO.
SAMPLED	12/28/61	10/21/80	10/07/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	780	925	875
FLOW, MCFD	104000	550000	410000
COMPONENT, MOLE PCT			
METHANE	87.2	96.4	95.7
ETHANE	1.5	1.5	1.6
PROPANE	0.6	0.2	0.2
N-BUTANE	0.1	0.1	TRACE
ISOBUTANE	TRACE	TRACE	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	1.6	0.8	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	8.8	1.0	1.7
HELIUM	0.03	0.02	0.02
HEATING VALUE*	933	1012	1003
SPECIFIC GRAVITY	0.663	0.583	0.582

	INDEX 811 SAMPLE 12773	INDEX 812 SAMPLE 12071	INDEX 813 SAMPLE 8150
STATE	TEXAS	TEXAS	TEXAS
COUNTY	CROCKETT	CULBERSON	EASTLAND
FIELD	OZONA	WEST TEXAS PERMIAN BASIN	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	ATLANTIC RICHFIELD CO.	EL PASO NATURAL GAS CO.	LONE STAR GAS CO.
SAMPLED	04/20/71	09/30/69	08/10/61
FORMATION	PENN-CANYON	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	425
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	830	350
FLOW, MCFD	4500	1048000	9000
COMPONENT, MOLE PCT			
METHANE	78.5	87.0	73.8
ETHANE	10.5	7.6	13.8
PROPANE	5.8	1.7	5.7
N-BUTANE	1.6	0.3	0.6
ISOBUTANE	0.6	0.0	0.6
N-PENTANE	0.3	0.0	TRACE
ISOPENTANE	0.5	0.0	0.1
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	1.5	3.4	5.6
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.0	0.4
HELIUM	0.04	0.03	0.10
HEATING VALUE*	1256	1072	1178
SPECIFIC GRAVITY	0.732	0.628	0.725

	INDEX 814 SAMPLE 8136	INDEX 815 SAMPLE 8291	INDEX 816 SAMPLE 8292
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EASTLAND	ECTOR	ECTOR
FIELD	SIPE SPRINGS	NOT GIVEN	NOT GIVEN
LOCATION	INLET	12 IN. INLET	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	08/09/61	11/29/61	11/29/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	410	NOT GIVEN	522
FLOW, MCFD	7000	11000	147000
COMPONENT, MOLE PCT			
METHANE	72.4	72.1	84.6
ETHANE	13.3	20.0	11.1
PROPANE	6.7	1.0	0.9
N-BUTANE	1.7	0.1	TRACE
ISOBUTANE	0.8	TRACE	TRACE
N-PENTANE	0.3	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	3.1	6.5	3.6
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.10	0.04	0.05
HEATING VALUE*	1266	1119	1074
SPECIFIC GRAVITY	0.761	0.692	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 817 SAMPLE 8293	INDEX 818 SAMPLE 2055	INDEX 819 SAMPLE 7172
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ECTOR	ECTOR	ECTOR
FIELD	NOT GIVEN	PENWELL	TXL
LOCATION	20 IN. LINE	SEC. 2, BLK. 39, UNIV. LAND	SEC. 17, BLK. 45, T&PRR SUR.
OWNER	EL PASO NATURAL GAS CO.	LANDRETH PRODUCTION CORP.	SHELL OIL CO.
SAMPLED	11/29/61	06/17/30	08/11/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	60000
FLOW, MCFD	900		
COMPONENT, MOLE PCT			
METHANE	83.9	36.2	78.5
ETHANE	10.8	56.8	13.3
PROPANE	2.0	---	3.2
N-BUTANE	0.1	---	TRACE
ISOBUTANE	TRACE	---	TRACE
N-PENTANE	TRACE	---	0.0
ISOPENTANE	0.1	---	0.2
CYCLOPENTANE	0.0	---	TRACE
HEXANES PLUS	0.0	---	0.6
NITROGEN	2.7	3.2	3.8
OXYGEN	0.0	0.5	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.2	3.3	0.8
HELIUM	0.05	0.00	0.05
HEATING VALUE	1103	1385	1127
SPECIFIC GRAVITY	0.643	0.884	0.680

	INDEX 820 SAMPLE 14477	INDEX 821 SAMPLE 16114	INDEX 822 SAMPLE 16115
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EL PASO	EL PASO	EL PASO
FIELD	PERMIAN BASIN	PERMIAN BASIN N	WAHA AREA S
LOCATION	A & B LINE 26 TO 30 IN.	A & B LINES	C LINE 30 IN.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/03/75	10/22/80	10/22/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	465	465	465
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	550	552	812
FLOW, MCFD	1150000	1179000	623000
COMPONENT, MOLE PCT			
METHANE	90.0	91.8	96.1
ETHANE	6.3	4.8	1.8
PROPANE	1.4	1.1	0.4
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.1	0.1	TRACE
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	TRACE	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	2.0	1.7	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	1.2
HELIUM	0.03	0.03	0.03
HEATING VALUE	1068	1060	1017
SPECIFIC GRAVITY	0.612	0.605	0.583

	INDEX 823 SAMPLE 12073	INDEX 824 SAMPLE 14478	INDEX 825 SAMPLE 8137
STATE	TEXAS	TEXAS	TEXAS
COUNTY	EL PASO	EL PASO	ERATH
FIELD	WEST TEXAS & NEW MEXICO	WEST TEXAS PERMIAN BASIN	SIPE SPRINGS
LOCATION	NOT GIVEN	C LINE 30 IN.	OUTLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	LONE STAR GAS CO.
SAMPLED	10/01/69	10/03/75	08/09/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	465	465	415
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	837	1040	410
FLOW, MCFD	1000000	564000	18000
COMPONENT, MOLE PCT			
METHANE	87.0	95.4	83.2
ETHANE	7.7	2.6	12.0
PROPANE	1.6	0.5	1.3
N-BUTANE	0.2	TRACE	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	3.2	0.9	2.8
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.5	0.2
HELIUM	0.03	0.02	0.10
HEATING VALUE	1077	1029	1103
SPECIFIC GRAVITY	0.629	0.582	0.644

	INDEX 826 SAMPLE 8135	INDEX 827 SAMPLE 8154	INDEX 828 SAMPLE 2445
STATE	TEXAS	TEXAS	TEXAS
COUNTY	ERATH	FISHER	FORT BEND
FIELD	X-RAY	ROUND TOP	THOMPSON
LOCATION	INLET	OUTLET	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	CONTINENTAL OIL CO.	CULLEN & WEST & GULF PROD.
SAMPLED	08/09/61	08/11/61	01/06/32
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	415	430	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	420	380	NOT GIVEN
FLOW, MCFD	11000	4000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.9	74.9	88.7
ETHANE	11.5	12.8	9.2
PROPANE	4.7	3.7	---
N-BUTANE	1.1	0.5	---
ISOBUTANE	0.7	0.2	---
N-PENTANE	0.2	TRACE	---
ISOPENTANE	0.3	0.1	---
CYCLOPENTANE	TRACE	TRACE	---
HEXANES PLUS	0.2	0.1	---
NITROGEN	2.1	7.2	1.3
OXYGEN	TRACE	TRACE	0.5
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.10	0.20	0.00
HEATING VALUE	1219	1117	1063
SPECIFIC GRAVITY	0.712	0.700	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 829 SAMPLE 8290	INDEX 830 SAMPLE 8289	INDEX 831 SAMPLE 6197
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GLASSCOCK	GLASSCOCK	GRAY
FIELD	NOT GIVEN	SPRABERRY	NOT GIVEN
LOCATION	14 IN. INLET	30 IN. LINE	20 IN. INLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	PHILLIPS PETROLEUM CO.
SAMPLED	11/29/61	11/28/61	12/99/56
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	830	750	NOT GIVEN
FLOW, MCFD	78000	92000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.2	82.6	76.9
ETHANE	11.9	10.3	5.9
PROPANE	1.3	1.5	9.3
N-BUTANE	0.1	0.1	1.7
ISOBUTANE	TRACE	TRACE	0.0
N-PENTANE	0.0	0.0	0.4
ISOPENTANE	TRACE	TRACE	0.4
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.2
NITROGEN	3.1	5.1	3.6
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.2	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.0
HELIUM	0.07	0.07	0.34
HEATING VALUE*	1093	1056	1098
SPECIFIC GRAVITY	0.645	0.641	0.710

	INDEX 832 SAMPLE 6198	INDEX 833 SAMPLE 6199	INDEX 834 SAMPLE 6201
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	20 IN. INLET	INLET	PIPELINE NO. 5
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	12/99/56	12/99/56	12/28/56
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.3	76.0	73.1
ETHANE	6.6	9.7	9.6
PROPANE	1.6	11.8	1.6
N-BUTANE	0.9	1.4	0.9
ISOBUTANE	0.7	0.3	1.0
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.7	0.7	0.7
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.2	0.0
NITROGEN	6.7	12.2	10.7
OXYGEN	0.0	0.0	0.0
ARGON	0.2	0.1	0.2
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.6	0.5
HELIUM	0.19	0.40	0.61
HEATING VALUE*	1071	1034	959
SPECIFIC GRAVITY	0.671	0.707	0.707

	INDEX 835 SAMPLE 6202	INDEX 836 SAMPLE 6203	INDEX 837 SAMPLE 8824
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	PIPELINE NO. 6	PIPELINE NO. 7	NOT GIVEN
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	TRANSWESTERN PIPELINE CO.
SAMPLED	12/28/56	01/02/57	01/14/63
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	20000
COMPONENT, MOLE PCT			
METHANE	79.8	84.9	75.0
ETHANE	6.0	5.7	8.7
PROPANE	1.9	1.4	5.8
N-BUTANE	1.1	1.1	0.7
ISOBUTANE	1.0	0.4	0.8
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	1.1	0.8	TRACE
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.1	0.0	TRACE
NITROGEN	7.7	5.0	7.7
OXYGEN	0.0	0.0	1.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.2	0.2	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.5	0.1
HELIUM	0.21	0.14	0.09
HEATING VALUE*	1100	1084	1121
SPECIFIC GRAVITY	0.701	0.660	0.718

	INDEX 838 SAMPLE 2513	INDEX 839 SAMPLE 2601	INDEX 840 SAMPLE 2602
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
LOCATION	INLET	INLET	OUTLET
OWNER	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.
SAMPLED	07/12/32	01/19/33	01/19/33
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	580
FLOW, MCFD	NOT GIVEN	22500	60000
COMPONENT, MOLE PCT			
METHANE	71.2	74.4	78.0
ETHANE	21.9	17.1	13.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	6.8	7.2	7.9
OXYGEN	0.1	0.7	0.4
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.24	0.29	0.36
HEATING VALUE*	1105	1060	1023
SPECIFIC GRAVITY	0.691	0.674	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 841 2637	INDEX SAMPLE 842 6814	INDEX SAMPLE 843 17095
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
LOCATION	INLET	PAMPA COMPOSITE SAMPLE NO. 1	20 IN. LINE
OWNER	TEXOMA NATURAL GAS CO.	PIONEER NATURAL GAS CO.	NORTHWEST CENTRAL PIPELINE C
SAMPLED	07/22/33	--/--/58	10/17/83
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	273
FLOW, MCFD	18000	NOT GIVEN	8500
COMPONENT, MOLE PCT			
METHANE	72.6	84.1	76.8
ETHANE	19.9	5.9	7.1
PROPANE	---	3.0	4.9
N-BUTANE	---	0.8	1.9
ISOBUTANE	---	0.6	0.8
N-PENTANE	---	0.2	0.4
ISOPENTANE	---	0.3	0.5
CYCLOPENTANE	---	0.1	0.1
HEXANES PLUS	---	0.2	0.2
NITROGEN	6.9	4.5	5.9
OXYGEN	0.3	0.1	0.0
ARGON	---	0.1	TRACE
HYDROGEN	---	TRACE	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.0
HELIUM	0.26	0.10	0.25
HEATING VALUE	1092	1118	1176
SPECIFIC GRAVITY	0.683	0.672	0.731

	INDEX SAMPLE 844 8348	INDEX SAMPLE 845 13229	INDEX SAMPLE 846 15650
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE E	PANHANDLE E & W	PANHANDLE E & W
LOCATION	20 IN.	NOT GIVEN	20 IN.
OWNER	EL PASO NATURAL GAS CO.	CITIES SERVICE GAS CO.	CITIES SERVICE CO.
SAMPLED	12/28/61	06/05/72	06/18/79
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	600	160	350
FLOW, MCFD	28000	82000	44000
COMPONENT, MOLE PCT			
METHANE	83.5	77.8	76.7
ETHANE	4.2	6.1	6.4
PROPANE	2.4	4.0	4.3
N-BUTANE	0.8	1.4	1.6
ISOBUTANE	0.6	0.8	0.7
N-PENTANE	0.0	0.4	0.4
ISOPENTANE	0.7	0.3	0.3
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	7.4	8.5	8.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	TRACE
HELIUM	0.27	0.40	0.43
HEATING VALUE	1060	1124	1116
SPECIFIC GRAVITY	0.663	0.713	0.713

	INDEX SAMPLE 847 5529	INDEX SAMPLE 848 6200	INDEX SAMPLE 849 6597
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	20 IN. OUTLET	PIPELINE NO. 4	SEC. 60, BLK. 3, H&GN SUR.
OWNER	CITIES SERVICE GAS CO.	PHILLIPS PETROLEUM CO.	WILCOX OIL CO.
SAMPLED	08/14/53	12/99/56	05/21/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	73.5	67.2
ETHANE	6.4	5.3	11.1
PROPANE	3.4	1.9	9.8
N-BUTANE	1.1	1.3	3.9
ISOBUTANE	0.5	0.7	1.9
N-PENTANE	0.3	0.8	0.8
ISOPENTANE	0.1	0.9	1.5
CYCLOPENTANE	0.1	0.0	0.2
HEXANES PLUS	0.2	0.0	0.7
NITROGEN	8.5	15.1	2.9
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.1	0.0
HYDROGEN	0.0	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.2
HELIUM	0.38	0.47	0.10
HEATING VALUE	1086	995	1463
SPECIFIC GRAVITY	0.693	0.714	0.868

	INDEX SAMPLE 850 6652	INDEX SAMPLE 851 6654	INDEX SAMPLE 852 6655
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	20 IN. LINE	SEC. 94, BLK. B-2, H&GN SUR.	20 IN. LINE
OWNER	CONSOLIDATED GAS UTILITIES	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/27/58	06/27/58	06/02/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	57	135	131
FLOW, MCFD	35000	20000	30000
COMPONENT, MOLE PCT			
METHANE	80.5	78.0	79.5
ETHANE	8.0	14.8	6.4
PROPANE	5.0	5.0	3.6
N-BUTANE	1.3	0.1	1.0
ISOBUTANE	0.7	0.1	0.6
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	TRACE	0.0	0.2
NITROGEN	3.9	5.2	8.0
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.0
HELIUM	0.10	0.20	0.20
HEATING VALUE	1169	1128	1098
SPECIFIC GRAVITY	0.696	0.688	0.693

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 853 SAMPLE 6656	INDEX 854 SAMPLE 6658	INDEX 855 SAMPLE 6659
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	20 IN. LINE	16 IN. LINE	16 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/27/58	06/27/58	06/27/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	131	147	140
FLOW, MCFD	45000	20000	15000
COMPONENT, MOLE PCT			
METHANE	74.1	70.9	75.8
ETHANE	6.9	4.8	5.8
PROPANE	4.6	3.4	3.5
N-BUTANE	1.5	1.0	0.9
ISOBUTANE	0.9	0.7	0.7
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	10.4	17.9	12.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.30	0.66	0.40
HEATING VALUE*	1124	991	1048
SPECIFIC GRAVITY	0.736	0.724	0.706

	INDEX 856 SAMPLE 6660	INDEX 857 SAMPLE 6743	INDEX 858 SAMPLE 6745
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	12 IN. LINE	W LINE	20 IN. DISCHARGE
OWNER	PHILLIPS PETROLEUM CO.	EL PASO NATURAL GAS CO.	CITIES SERVICE GAS CO.
SAMPLED	06/27/58	07/22/58	07/22/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	140	190	NOT GIVEN
FLOW, MCFD	15000	56000	115000
COMPONENT, MOLE PCT			
METHANE	82.1	79.9	79.3
ETHANE	6.4	4.5	6.2
PROPANE	3.1	2.3	3.3
N-BUTANE	0.8	0.8	1.1
ISOBUTANE	0.7	0.9	0.7
N-PENTANE	0.2	0.1	0.3
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	6.0	11.2	8.1
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.30	0.40
HEATING VALUE*	1108	1016	1092
SPECIFIC GRAVITY	0.680	0.677	0.692

	INDEX 859 SAMPLE 6904	INDEX 860 SAMPLE 6911	INDEX 861 SAMPLE 7347
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	S SYSTEM 10 IN. BLOCKGATE	S SYSTEM 10 IN. BLOCKGATE	SEC. 90, BLK. 3, I&GN SUR.
OWNER	CABOT CARBON CO.	CABOT CARBON CO.	CITIES SERVICE GAS CO.
SAMPLED	12/10/58	12/10/58	01/20/60
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	151
FLOW, MCFD	NOT GIVEN	NOT GIVEN	120100
COMPONENT, MOLE PCT			
METHANE	66.9	67.3	78.6
ETHANE	6.6	6.4	6.1
PROPANE	4.5	4.3	3.3
N-BUTANE	1.2	1.1	1.0
ISOBUTANE	0.7	0.9	0.5
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	18.5	18.6	9.0
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.50	0.50	0.40
HEATING VALUE*	1012	1006	1077
SPECIFIC GRAVITY	0.752	0.749	0.693

	INDEX 862 SAMPLE 8027	INDEX 863 SAMPLE 8028	INDEX 864 SAMPLE 8029
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	SEC. 3, ROCKWELL CO. SCHOOL	SEC. 17, BLK. B-2, H&GN SUR.	SEC. 17, BLK. B-2, H&GN SUR.
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/22/61	06/22/61	06/22/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	155	152	151
FLOW, MCFD	3050	5550	1600
COMPONENT, MOLE PCT			
METHANE	59.0	66.3	79.7
ETHANE	9.9	9.3	6.8
PROPANE	6.7	5.9	4.0
N-BUTANE	1.8	1.5	1.1
ISOBUTANE	1.3	1.1	0.8
N-PENTANE	0.4	0.3	0.2
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	19.7	14.7	6.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.90	0.30	0.20
HEATING VALUE*	1102	1119	1120
SPECIFIC GRAVITY	0.821	0.778	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 865 SAMPLE 8030	INDEX 866 SAMPLE 8031	INDEX 867 SAMPLE 8032
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	POINT NO. 4, 8 IN.	SEC. 108, BLK.B-2, H&GN SUR.	SEC. 168, BLK. B-2, H&GN SUR
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/22/61	06/22/61	06/22/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	138	137	138
FLOW,MCFD	3100	3800	1750
COMPONENT, MOLE PCT			
METHANE	65.3	66.4	70.5
ETHANE	5.8	5.9	5.2
PROPANE	4.2	4.3	3.7
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.8	0.8	0.8
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	21.6	20.1	17.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	TRACE
HELIUM	0.60	0.60	0.50
HEATING VALUE*	961	985	1003
SPECIFIC GRAVITY	0.752	0.750	0.731

	INDEX 868 SAMPLE 8033	INDEX 869 SAMPLE 8034	INDEX 870 SAMPLE 8035
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	SEC. 198, BLK. B-2, H&GN SUR	SEC. 199, BLK. B-2, H&GN SUR	SEC. 189, BLK. B-2, H&GN SUR
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/22/61	06/22/61	06/22/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	137	135	133
FLOW,MCFD	9080	10000	14000
COMPONENT, MOLE PCT			
METHANE	70.5	70.5	72.4
ETHANE	4.9	4.9	5.2
PROPANE	3.4	3.3	3.4
N-BUTANE	1.1	1.1	1.1
ISOBUTANE	0.7	0.7	0.7
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	18.0	18.0	15.9
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	0.70	0.60	0.60
HEATING VALUE*	986	971	998
SPECIFIC GRAVITY	0.730	0.723	0.717

	INDEX 871 SAMPLE 9237	INDEX 872 SAMPLE 6653	INDEX 873 SAMPLE 6204
STATE	TEXAS	TEXAS	TEXAS
COUNTY	GRAY	GRAY	GRAY
FIELD	PANHANDLE W	QUINDUNO	TAYLOR SE
LOCATION	GRAY CO. CHECK	SEC. 162, BLK. 3, H&GN SUR.	PIPELINE NO. 8
OWNER	NATURAL GAS PIPELINE CO. OF	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	01/27/64	06/27/58	12/28/56
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	155	110	NOT GIVEN
FLOW,MCFD	102700	15000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.6	78.0	81.0
ETHANE	7.1	8.8	6.2
PROPANE	3.6	4.8	1.6
N-BUTANE	1.4	1.4	0.0
ISOBUTANE	0.3	0.9	1.8
N-PENTANE	0.2	0.3	0.0
ISOPENTANE	0.5	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.3	0.3	0.0
NITROGEN	8.2	4.7	8.2
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.5
HELIUM	0.40	0.10	0.21
HEATING VALUE*	1113	1199	1047
SPECIFIC GRAVITY	0.709	0.725	0.671

	INDEX 874 SAMPLE 6974	INDEX 875 SAMPLE 8138	INDEX 876 SAMPLE 15421
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MALE	HAMILTON	HANSFORD
FIELD	ANTON-IRISH	ENERGY, POTTSVILLE & ETC.	CARTHAGE GAS AREA
LOCATION	NOT GIVEN	LINE K	24 IN. INLET
OWNER	PAN AMERICAN PETROLEUM CORP.	LONE STAR GAS CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	08/09/61	10/17/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	415	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	340	200
FLOW,MCFD	NOT GIVEN	1950	16900
COMPONENT, MOLE PCT			
METHANE	68.1	89.1	70.3
ETHANE	7.6	4.5	6.8
PROPANE	4.3	0.8	4.8
N-BUTANE	1.0	0.3	1.5
ISOBUTANE	0.0	0.4	0.7
N-PENTANE	TRACE	TRACE	0.4
ISOPENTANE	0.6	0.2	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	15.0	4.2	14.0
OXYGEN	TRACE	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	TRACE	0.0	0.0
CARBON DIOXIDE	3.1	0.1	0.1
HELIUM	0.20	0.20	0.62
HEATING VALUE*	997	1045	1081
SPECIFIC GRAVITY	0.753	0.622	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 877 SAMPLE 17052	INDEX 878 SAMPLE 17055	INDEX 879 SAMPLE 15424
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	CARTHAGE, TX & GUYMON-HUGOTON	CARTHAGE, TX & GUYMON-HUGOTON	COMPOSITE
LOCATION	M.O.&G.&RR. 24 IN. LINE	24 IN. PLT. OUTLET	20 IN. DISCHARGE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	09/09/83	09/09/83	10/17/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	208	200	350
FLOW, MCFD	96392	102404	80000
COMPONENT, MOLE PCT			
METHANE	70.4	79.6	84.1
ETHANE	6.8	6.7	5.6
PROPANE	4.3	2.0	1.3
N-BUTANE	1.4	0.2	0.0
ISOBUTANE	0.6	TRACE	0.0
N-PENTANE	0.2	TRACE	0.0
ISOPENTANE	0.6	0.1	0.0
CYCLOPENTANE	0.2	TRACE	0.0
HEXANES PLUS	0.3	TRACE	0.0
NITROGEN	14.3	10.8	8.6
OXYGEN	0.0	0.1	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.3	0.3	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.66	0.09	0.20
HEATING VALUE	1072	998	986
SPECIFIC GRAVITY	0.746	0.658	0.632

	INDEX 880 SAMPLE 15425	INDEX 881 SAMPLE 5696	INDEX 882 SAMPLE 5697
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	COMPOSITE	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	24 IN. DISCHARGE	LINE G	LINE H
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/17/78	10/12/54	10/12/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	200	220	220
FLOW, MCFD	155000	20000	15000
COMPONENT, MOLE PCT			
METHANE	84.7	74.9	68.7
ETHANE	4.8	5.9	5.9
PROPANE	1.3	3.2	3.7
N-BUTANE	0.0	0.8	1.0
ISOBUTANE	0.0	0.6	0.6
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.0	0.1	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	9.0	13.5	18.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.03	0.46	0.72
HEATING VALUE	978	1017	979
SPECIFIC GRAVITY	0.630	0.702	0.733

	INDEX 883 SAMPLE 5699	INDEX 884 SAMPLE 6266	INDEX 885 SAMPLE 6268
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	LINE J	24 IN. INLET	LINE M
OWNER	PHILLIPS PETROLEUM CO.	MICHIGAN WISCONSIN PIPELINE	PHILLIPS PETROLEUM CO.
SAMPLED	10/12/54	03/12/57	03/12/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	255	NOT GIVEN	NOT GIVEN
FLOW, MCFD	40000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.9	72.8	68.7
ETHANE	6.0	6.8	6.2
PROPANE	3.6	3.4	3.6
N-BUTANE	1.0	0.5	1.1
ISOBUTANE	0.6	0.3	0.6
N-PENTANE	0.3	0.0	0.2
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	15.6	15.3	18.3
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.58	0.70	0.67
HEATING VALUE	1013	979	980
SPECIFIC GRAVITY	0.725	0.699	0.731

	INDEX 886 SAMPLE 6269	INDEX 887 SAMPLE 6270	INDEX 888 SAMPLE 6271
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	LINE J	LINE L	LINE G
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	03/12/57	03/12/57	03/12/57
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.3	70.5	75.1
ETHANE	6.3	6.7	6.4
PROPANE	3.6	3.9	3.5
N-BUTANE	1.1	1.2	1.0
ISOBUTANE	0.5	0.6	0.4
N-PENTANE	0.2	0.3	0.2
ISOPENTANE	0.3	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.7	15.5	12.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.63	0.77	0.45
HEATING VALUE	1014	1028	1037
SPECIFIC GRAVITY	0.725	0.731	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 889 SAMPLE 6272	INDEX 890 SAMPLE 6273	INDEX 891 SAMPLE 6689
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	LINES A-F	LINE L-1	16 IN. INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	03/12/57	03/12/57	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	190
FLOW, MCFD	NOT GIVEN	NOT GIVEN	40000
COMPONENT, MOLE PCT			
METHANE	75.5	70.5	76.1
ETHANE	6.6	6.9	6.2
PROPANE	3.5	3.8	3.4
N-BUTANE	1.0	1.2	1.0
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.2	0.3	0.1
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	11.8	15.9	11.7
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.40	0.74	0.40
HEATING VALUE*	1059	1022	1050
SPECIFIC GRAVITY	0.710	0.732	0.704

	INDEX 892 SAMPLE 6690	INDEX 893 SAMPLE 6692	INDEX 894 SAMPLE 6694
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	PL. DISCHARGE	24 IN.	24 IN. G LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	07/03/58	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	200	380	210
FLOW, MCFD	355000	75000	31000
COMPONENT, MOLE PCT			
METHANE	73.1	75.5	75.5
ETHANE	6.4	6.4	6.1
PROPANE	3.6	3.4	3.4
N-BUTANE	0.6	1.0	1.0
ISOBUTANE	0.3	0.6	0.4
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.1	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	14.9	12.0	12.5
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.70	0.40	0.40
HEATING VALUE*	983	1048	1040
SPECIFIC GRAVITY	0.698	0.705	0.705

	INDEX 895 SAMPLE 6698	INDEX 896 SAMPLE 13742	INDEX 897 SAMPLE 13419
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS & OKLAHOMA
LOCATION	16 IN. H LINE	PLANT INLET	INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	10/03/73	10/04/72
FORMATION	NOT GIVEN	NOT GIVEN	PERM-CHASE GROUP
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	210	200	365
FLOW, MCFD	11000	NOT GIVEN	200000
COMPONENT, MOLE PCT			
METHANE	69.2	72.6	71.6
ETHANE	5.9	6.5	7.0
PROPANE	3.7	4.2	4.3
N-BUTANE	1.1	1.2	1.3
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.3	0.3	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	18.1	13.9	13.8
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.70	0.64	0.55
HEATING VALUE*	987	1048	1058
SPECIFIC GRAVITY	0.733	0.721	0.732

	INDEX 898 SAMPLE 15423	INDEX 899 SAMPLE 17033	INDEX 900 SAMPLE 12129
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	HUGOTON, TEXAS & OKLAHOMA	OK. & TX. PANHANDLE	PANHANDLE W
LOCATION	20 IN. INLET	20 IN. PLT. OUTLET	INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/17/78	08/29/83	12/03/69
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	350	348	NOT GIVEN
FLOW, MCFD	60000	32110	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.6	77.7	71.5
ETHANE	7.1	7.0	6.3
PROPANE	4.8	3.6	4.2
N-BUTANE	1.2	0.1	1.1
ISOBUTANE	0.5	0.1	0.6
N-PENTANE	0.3	0.0	0.4
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	TRACE	0.2
NITROGEN	7.5	10.7	14.7
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.3	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.27	0.38	0.71
HEATING VALUE*	1135	1018	1035
SPECIFIC GRAVITY	0.713	0.674	0.729

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 901 SAMPLE 15422	INDEX 902 SAMPLE 17075	INDEX 903 SAMPLE 17053
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HANSFORD	HANSFORD	HANSFORD
FIELD	TEX. DEEP & GUYMON HUGOTON	TEXAS & GUYMON HUGOTON	TEXAS & GUYMON-HUGOTON
LOCATION	24 IN. INLET	A+B+C D+E & F LINES	COMO, HAM & HOUGH LINES
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/17/78	09/27/83	09/09/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	200	120	210
FLOW, MCFD	42000	38000	34000
COMPONENT, MOLE PCT			
METHANE	82.6	74.1	80.0
ETHANE	8.1	9.7	8.2
PROPANE	4.7	5.9	5.4
N-BUTANE	1.2	1.3	1.7
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.1	0.5	0.7
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.6	11.8	2.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	TRACE	0.3	0.3
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.09	0.40	0.10
HEATING VALUE*	1091	1072	1133
SPECIFIC GRAVITY	0.693	0.720	0.720

	INDEX 904 SAMPLE 2071	INDEX 905 SAMPLE 2296	INDEX 906 SAMPLE 2378
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARRIS	HARTLEY	HARTLEY
FIELD	SUGARLAND	PANHANDLE W	PANHANDLE W
LOCATION	INLET	INLET	CHANNING, TEXAS
OWNER	HUMBLE OIL & REFINING CO.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
SAMPLED	06/19/30	02/06/31	08/28/31
FORMATION	OLIG-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1300	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	60	20
COMPONENT, MOLE PCT			
METHANE	77.6	69.1	58.5
ETHANE	21.1	11.3	18.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	0.5	17.5	21.3
OXYGEN	0.2	0.1	0.1
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.6	0.6	0.1
HELIUM	0.02	1.36	1.28
HEATING VALUE*	1164	902	928
SPECIFIC GRAVITY	0.668	0.683	0.731

	INDEX 907 SAMPLE 2597	INDEX 908 SAMPLE 2627	INDEX 909 SAMPLE 11854
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HARTLEY	HARTLEY	HARTLEY
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	PIPELINE SAMPLE	SEC. 6, BLK. 2, GEN SUR.
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	01/20/33	07/21/33	05/09/69
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	50	15	5000
COMPONENT, MOLE PCT			
METHANE	63.5	62.8	70.3
ETHANE	14.4	16.2	5.8
PROPANE	---	---	3.2
N-BUTANE	---	---	1.1
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.3
ISOPENTANE	---	---	0.3
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	20.9	18.8	16.4
OXYGEN	0.3	0.3	0.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.5	0.7	0.9
HELIUM	1.27	1.18	0.87
HEATING VALUE*	901	926	991
SPECIFIC GRAVITY	0.709	0.716	0.732

	INDEX 910 SAMPLE 6980	INDEX 911 SAMPLE 6931	INDEX 912 SAMPLE 2065
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HOCKLEY	HOCKLEY	HOWARD
FIELD	LEVELLAND	SLAUGHTER	CHALK
LOCATION	NOT GIVEN	NOT GIVEN	PLANT RESIDUE
OWNER	PAN AMERICAN PETROLEUM CORP.	PAN AMERICAN PETROLEUM CORP.	MAGNOLIA PETROLEUM CO.
SAMPLED	03/05/59	02/11/59	06/14/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.1	79.8	50.6
ETHANE	12.2	9.1	26.3
PROPANE	0.9	1.4	---
N-BUTANE	0.0	0.0	---
ISOBUTANE	0.0	0.0	---
N-PENTANE	TRACE	0.0	---
ISOPENTANE	TRACE	0.0	---
CYCLOPENTANE	0.0	0.0	---
HEXANES PLUS	TRACE	0.0	---
NITROGEN	16.4	9.6	21.7
OXYGEN	0.0	0.0	0.9
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	TRACE	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.10	0.05	0.05
HEATING VALUE*	952	1008	984
SPECIFIC GRAVITY	0.691	0.654	0.783

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 913 SAMPLE 16811	INDEX 914 SAMPLE 15485	INDEX 915 SAMPLE 5352
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	ANADARKO BASIN	BUFFALO WALLOW, ET AL.	HENDERSON TRUST CO.
LOCATION	30 IN. DISCHARGE	30 IN. DISCHARGE	PLANT RESIDUE
OWNER	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.
SAMPLED	03/14/83	11/13/78	12/11/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	646	485	NOT GIVEN
FLOW, MCFD	218000	140000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	93.8	97.1	76.7
ETHANE	2.7	0.9	6.7
PROPANE	0.6	0.1	4.6
N-BUTANE	0.2	0.1	1.0
ISOBUTANE	TRACE	0.0	0.6
N-PENTANE	TRACE	TRACE	0.2
ISOPENTANE	TRACE	0.0	0.8
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.2	1.1	9.4
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.2	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.5	0.3
HELIUM	0.06	0.03	0.40
HEATING VALUE*	1023	1011	1084
SPECIFIC GRAVITY	0.588	0.573	0.766

	INDEX 916 SAMPLE 10953	INDEX 917 SAMPLE 6527	INDEX 918 SAMPLE 1794
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	NOT GIVEN	PANHANDLE	PANHANDLE W
LOCATION	NOT GIVEN	STA. 900-3	RESIDUE GAS
OWNER	MAPCO PRODUCTION CO.	SHAMROCK OIL & GAS CORP.	PHILLIPS PETROLEUM CO.
SAMPLED	05/19/67	03/21/58	06/11/29
FORMATION	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	175	231	NOT GIVEN
FLOW, MCFD	106000	43957	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.9	72.6	69.4
ETHANE	6.6	8.7	19.9
PROPANE	3.9	5.6	---
N-BUTANE	1.1	2.0	---
ISOBUTANE	0.8	1.0	---
N-PENTANE	0.3	0.4	---
ISOPENTANE	0.4	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.2	0.3	---
NITROGEN	9.8	9.2	9.2
OXYGEN	0.0	TRACE	0.6
ARGON	TRACE	TRACE	---
HYDROGEN	0.1	0.0	---
HYDROGEN SULFIDE	0.0	TRACE	---
CARBON DIOXIDE	0.3	0.3	0.4
HELIUM	0.46	0.40	0.38
HEATING VALUE*	1097	1191	1060
SPECIFIC GRAVITY	0.716	0.759	0.696

	INDEX 919 SAMPLE 2456	INDEX 920 SAMPLE 2511	INDEX 921 SAMPLE 4381
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	NOT GIVEN	BORGER, TEXAS
OWNER	AMARILLO OIL CO.	AMARILLO NATURAL GAS CO.	J. M. HUBER CORP.
SAMPLED	01/29/32	07/12/32	01/13/48
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	70	55	NOT GIVEN
FLOW, MCFD	3500	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.8	66.3	70.6
ETHANE	17.6	22.8	20.7
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	7.5	10.1	7.8
OXYGEN	0.2	0.4	0.2
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.5	0.0	0.3
HELIUM	0.38	0.48	0.41
HEATING VALUE*	1063	1080	1086
SPECIFIC GRAVITY	0.677	0.709	0.691

	INDEX 922 SAMPLE 4382	INDEX 923 SAMPLE 4383	INDEX 924 SAMPLE 5185
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	BORGER, TEXAS	BORGER, TEXAS	FRITCH TEXAS
OWNER	J. M. HUBER CORP.	J. M. HUBER CORP.	NATURAL GAS PIPELINE CO. OF
SAMPLED	01/13/48	01/13/48	04/29/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	710
FLOW, MCFD	NOT GIVEN	NOT GIVEN	225000
COMPONENT, MOLE PCT			
METHANE	69.9	70.9	79.6
ETHANE	22.3	19.6	5.7
PROPANE	---	---	3.6
N-BUTANE	---	---	0.6
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.1
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.0
NITROGEN	7.0	8.6	9.3
OXYGEN	0.1	0.1	0.0
ARGON	---	---	0.0
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.37	0.53	0.44
HEATING VALUE*	1108	1069	1049
SPECIFIC GRAVITY	0.695	0.688	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 925 SAMPLE 5186	INDEX 926 SAMPLE 5534	INDEX 927 SAMPLE 5536
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	26 IN. LINE	INLET GAS
OWNER	WEST TEXAS GAS CO.	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.
SAMPLED	04/29/52	08/14/53	08/14/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	375	NOT GIVEN	NOT GIVEN
FLOW, MCFD	40000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	79.4	77.4	76.6
ETHANE	5.4	7.2	8.5
PROPANE	3.2	3.8	3.8
N-BUTANE	0.5	0.7	1.1
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.0	0.2	0.3
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	10.5	9.7	10.5
OXYGEN	0.1	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.53	0.42	0.49
HEATING VALUE	1015	1059	1065
SPECIFIC GRAVITY	0.670	0.690	0.702

	INDEX 928 SAMPLE 5537	INDEX 929 SAMPLE 6664	INDEX 930 SAMPLE 6667
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. OUTLET	22 IN. LINE	16 IN. LINE
OWNER	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/14/53	06/19/58	06/19/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	160	160
FLOW, MCFD	NOT GIVEN	70000	70000
COMPONENT, MOLE PCT			
METHANE	78.4	76.7	80.7
ETHANE	6.3	6.0	6.3
PROPANE	3.6	3.3	1.9
N-BUTANE	0.6	1.1	0.2
ISOBUTANE	0.4	0.6	0.1
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.0	0.5	0.1
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	TRACE	0.2	0.0
NITROGEN	9.8	10.7	10.0
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.47	0.40	0.50
HEATING VALUE	1038	1063	994
SPECIFIC GRAVITY	0.678	0.703	0.652

	INDEX 931 SAMPLE 6668	INDEX 932 SAMPLE 6669	INDEX 933 SAMPLE 6670
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. LINE	12 IN. LINE	18 IN. LINE
OWNER	J. M. HUBER CORP.	J. M. HUBER CORP.	J. M. HUBER CORP.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	65	65	60
FLOW, MCFD	59000	6000	70000
COMPONENT, MOLE PCT			
METHANE	74.0	78.3	75.7
ETHANE	8.2	6.1	7.5
PROPANE	5.1	3.6	4.9
N-BUTANE	1.8	1.3	1.5
ISOBUTANE	1.0	0.8	0.7
N-PENTANE	0.4	0.5	0.1
ISOPENTANE	0.5	0.3	0.4
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	7.7	8.3	8.5
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.30	0.40	0.40
HEATING VALUE	1182	1103	1129
SPECIFIC GRAVITY	0.749	0.704	0.722

	INDEX 934 SAMPLE 6671	INDEX 935 SAMPLE 6677	INDEX 936 SAMPLE 6678
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	22 IN. LINE	24 IN. INLET	24 IN. LINE
OWNER	J. M. HUBER CORP.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	160	110	110
FLOW, MCFD	5500	5000	65000
COMPONENT, MOLE PCT			
METHANE	72.9	76.1	75.5
ETHANE	4.6	7.0	7.0
PROPANE	2.4	4.2	4.1
N-BUTANE	0.8	1.4	1.4
ISOBUTANE	0.3	0.8	0.8
N-PENTANE	TRACE	0.3	0.2
ISOPENTANE	0.4	0.4	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	TRACE	0.2	0.2
NITROGEN	16.7	8.7	9.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.3
HELIUM	1.10	0.40	0.40
HEATING VALUE	937	1123	1110
SPECIFIC GRAVITY	0.696	0.721	0.721

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 937 SAMPLE 6680	INDEX 938 SAMPLE 6681	INDEX 939 SAMPLE 6682
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	RESIDUE	22 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	95	90	85
FLOW, MCFD	70000	40000	50000
COMPONENT, MOLE PCT			
METHANE	81.0	78.2	78.9
ETHANE	6.2	8.3	6.7
PROPANE	2.0	3.9	3.5
N-BUTANE	0.3	0.1	1.1
ISOBUTANE	0.1	0.2	0.6
N-PENTANE	0.0	0.0	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	7.6	8.4	8.2
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.40	0.40	0.20
HEATING VALUE*	1005	1061	1103
SPECIFIC GRAVITY	0.657	0.679	0.699

	INDEX 940 SAMPLE 6683	INDEX 941 SAMPLE 6684	INDEX 942 SAMPLE 6685
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	10 IN. LINE	22 IN. LINE	24 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	90	105	105
FLOW, MCFD	10000	35000	45000
COMPONENT, MOLE PCT			
METHANE	77.2	80.6	73.9
ETHANE	6.1	6.6	8.7
PROPANE	3.8	3.1	5.5
N-BUTANE	1.5	0.5	1.6
ISOBUTANE	0.9	0.2	1.0
N-PENTANE	0.3	0.0	0.2
ISOPENTANE	0.4	0.2	0.5
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.5
NITROGEN	8.4	8.4	7.7
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.3
HELIUM	0.40	0.30	0.40
HEATING VALUE*	1120	1047	1184
SPECIFIC GRAVITY	0.718	0.667	0.749

	INDEX 943 SAMPLE 6686	INDEX 944 SAMPLE 7383	INDEX 945 SAMPLE 7385
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	16 IN. LINE	16 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	07/01/58	02/09/60	02/09/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	160	NOT GIVEN	NOT GIVEN
FLOW, MCFD	17000	19000	28000
COMPONENT, MOLE PCT			
METHANE	68.8	73.3	76.8
ETHANE	13.8	8.0	7.6
PROPANE	8.2	5.1	4.5
N-BUTANE	1.0	1.5	0.8
ISOBUTANE	0.8	0.5	0.4
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	TRACE	0.1	0.0
NITROGEN	6.8	10.3	9.2
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.20	0.50	0.41
HEATING VALUE*	1222	1108	1076
SPECIFIC GRAVITY	0.762	0.726	0.694

	INDEX 946 SAMPLE 7386	INDEX 947 SAMPLE 9234	INDEX 948 SAMPLE 9236
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	16 IN. LINE	RESIDUE FROM OUTLET	RESIDUE
OWNER	COLORADO INTERSTATE GAS CO.	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF
SAMPLED	02/09/60	01/27/64	01/27/64
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	150	150
FLOW, MCFD	74000	74300	59800
COMPONENT, MOLE PCT			
METHANE	72.8	78.2	80.9
ETHANE	6.2	7.6	5.8
PROPANE	3.6	2.9	2.1
N-BUTANE	1.2	0.4	0.1
ISOBUTANE	0.6	0.1	0.1
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.4	0.2	TRACE
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	13.1	10.4	9.2
OXYGEN	0.9	0.1	0.1
ARGON	0.1	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.47	0.40	0.50
HEATING VALUE*	1043	1016	1003
SPECIFIC GRAVITY	0.727	0.671	0.651

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 949 SAMPLE 13311	INDEX 950 SAMPLE 15495	INDEX 951 SAMPLE 16810
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. DISCHARGE	24 IN. DISCHARGE	24 IN. DISCHARGE
OWNER	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF
SAMPLED	07/24/72	11/13/78	03/14/83
FORMATION	PERM-WICHITA-ALBANY&RED CAVE	NOT GIVEN	PERM-WICHITA-ALBANY&RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	676	620	644
FLOW,MCFD	65800	120000	148000
COMPONENT, MOLE PCT			
METHANE	77.6	75.9	90.4
ETHANE	7.3	6.9	3.5
PROPANE	3.5	4.4	1.0
N-BUTANE	0.5	1.4	0.1
ISOBUTANE	0.4	0.8	0.1
N-PENTANE	0.1	0.4	0.0
ISOPENTANE	0.2	0.7	0.1
CYCLOPENTANE	TRACE	0.3	0.0
HEXANES PLUS	0.1	0.5	0.0
NITROGEN	9.8	7.9	3.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.7
HELIUM	0.46	0.36	0.17
HEATING VALUE*	1052	1165	1016
SPECIFIC GRAVITY	0.686	0.737	0.607

	INDEX 952 SAMPLE 6663	INDEX 953 SAMPLE 6665	INDEX 954 SAMPLE 7555
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	HUTCHINSON
FIELD	PANHANDLE W & QUINDUNO	PANHANDLE W & QUINDUNO	PANHANDLE W & QUINDUNO
LOCATION	24 IN. LINE	24 IN. LINE	24 IN. INLET
OWNER	COLORADO INTERSTATE GAS CO.	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF
SAMPLED	06/19/58	06/19/58	05/18/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	700	160	68
FLOW,MCFD	200000	60000	
COMPONENT, MOLE PCT			
METHANE	79.2	79.9	79.0
ETHANE	6.1	6.4	6.9
PROPANE	3.1	3.5	3.8
N-BUTANE	0.6	1.2	1.2
ISOBUTANE	0.4	0.7	0.7
N-PENTANE	0.0	0.1	0.3
ISOPENTANE	0.2	0.6	0.4
CYCLOPENTANE	0.0	0.1	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	9.7	6.9	6.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.40	0.30	0.30
HEATING VALUE*	1034	1123	1130
SPECIFIC GRAVITY	0.676	0.700	0.705

	INDEX 955 SAMPLE 7556	INDEX 956 SAMPLE 13312	INDEX 957 SAMPLE 14488
STATE	TEXAS	TEXAS	TEXAS
COUNTY	HUTCHINSON	HUTCHINSON	KIMBLE
FIELD	PANHANDLE W & QUINDUNO	PANHANDLE W, ET AL-	WEST TEXAS AREA
LOCATION	24 IN. COMPOSITE OUTLET	30 IN. DISCHARGE	36 IN.
OWNER	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF	OASIS PIPE LINE CO.
SAMPLED	05/18/60	07/24/72	10/08/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	410
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	620	676	740
FLOW,MCFD	232	95300	800000
COMPONENT, MOLE PCT			
METHANE	80.0	78.4	94.5
ETHANE	7.0	7.0	2.8
PROPANE	3.7	3.4	0.9
N-BUTANE	0.7	0.4	0.2
ISOBUTANE	0.6	0.4	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	7.4	9.3	0.7
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.7
HELIUM	0.30	0.43	0.03
HEATING VALUE*	1080	1043	1050
SPECIFIC GRAVITY	0.679	0.678	0.596

	INDEX 958 SAMPLE 16110	INDEX 959 SAMPLE 12070	INDEX 960 SAMPLE 14479
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LAMB	LAMB	LAMB
FIELD	PERMIAN BASIN	WEST TEXAS DELAWARE BASIN	WEST TEXAS DELAWARE BASIN
LOCATION	24 IN. OUTLET	NOT GIVEN	24 IN.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	10/20/80	09/29/69	10/09/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	435	435
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	725	730	610
FLOW,MCFD	130000	500000	500000
COMPONENT, MOLE PCT			
METHANE	88.0	84.5	85.6
ETHANE	5.4	7.6	7.1
PROPANE	0.8	1.4	1.0
N-BUTANE	0.2	0.1	0.1
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	TRACE	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	4.4	5.3	4.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.7	1.9
HELIUM	0.05	0.06	0.05
HEATING VALUE*	1025	1041	1027
SPECIFIC GRAVITY	0.625	0.640	0.636

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 961 SAMPLE 2020	INDEX 962 SAMPLE 16121	INDEX 963 SAMPLE 13947
STATE	TEXAS	TEXAS	TEXAS
COUNTY	LOVING	LYNN	MATAGORDA
FIELD	WHEAT	WEST TEXAS PERMIAN BASIN	BRAZOS BLK. 445(G)
LOCATION	PORTERVILLE, TX.	OUTLET	STATE TRACT 445-L
OWNER	LOCKHART & CO.	PIONEER PRODUCTION CORP.	MONSANTO CO.
SAMPLED	06/26/30	10/20/80	03/10/74
FORMATION	NOT GIVEN	NOT GIVEN	MIOC-6 SAND
GEOLOGIC PROVINCE CODE	430	430	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	450	2500
FLOW,MCFD	NOT GIVEN	70000	14000
COMPONENT, MOLE PCT			
METHANE	81.0	93.6	95.9
ETHANE	17.1	3.2	1.8
PROPANE	---	0.7	0.5
N-BUTANE	---	0.2	TRACE
ISOBUTANE	---	TRACE	0.2
N-PENTANE	---	0.1	0.0
ISOPENTANE	---	0.0	0.1
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.5	2.0	0.9
OXYGEN	0.3	0.0	TRACE
ARGON	---	TRACE	0.0
HYDROGEN	---	0.0	0.1
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.04	0.03	0.01
HEATING VALUE*	1127	1040	1033
SPECIFIC GRAVITY	0.648	0.594	0.581

	INDEX 964 SAMPLE 2066	INDEX 965 SAMPLE 798	INDEX 966 SAMPLE 15434
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MITCHELL	MONTAGUE	MOORE
FIELD	WESTBROOK	NOT GIVEN	COMPOSITE
LOCATION	SEC. 11, BLK. 28, T&P SUR.	8 MI. N. NOCONA	24 IN. INLET
OWNER	MAGNOLIA PETROLEUM CO.	TEXAS OIL CO.	PHILLIPS PETROLEUM CO.
SAMPLED	06/18/30	03/22/23	10/20/78
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	420	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	250	225
FLOW,MCFD	NOT GIVEN	NOT GIVEN	147000
COMPONENT, MOLE PCT			
METHANE	39.0	51.7	72.5
ETHANE	52.0	2.9	7.2
PROPANE	---	---	2.1
N-BUTANE	---	---	1.9
ISOBUTANE	---	---	0.8
N-PENTANE	---	---	0.4
ISOPENTANE	---	---	0.5
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	0.3
NITROGEN	6.3	44.1	10.4
OXYGEN	0.3	0.0	0.0
ARGON	---	---	TRACE
HYDROGEN	---	---	0.1
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	2.5	0.2	0.5
HELIUM	0.07	1.01	0.50
HEATING VALUE*	1327	576	1143
SPECIFIC GRAVITY	0.864	0.748	0.755

	INDEX 967 SAMPLE 15435	INDEX 968 SAMPLE 6526	INDEX 969 SAMPLE 6693
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	COMPOSITE	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	COMPRESSOR PLANT DISCHARGE	NOT GIVEN	SEC. 29, BLK. 2-T, T&NO SUR.
OWNER	EL PASO NATURAL GAS CO.	SHAMROCK OIL & GAS CORP.	PHILLIPS PETROLEUM CO.
SAMPLED	10/20/78	03/21/58	07/03/58
FORMATION	NOT GIVEN	PERM-CHASE GROUP	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	552	227	185
FLOW,MCFD	429600	97525	105000
COMPONENT, MOLE PCT			
METHANE	88.0	71.2	70.5
ETHANE	4.7	6.4	6.7
PROPANE	1.2	3.7	3.8
N-BUTANE	0.2	1.1	1.2
ISOBUTANE	0.1	0.6	0.7
N-PENTANE	TRACE	0.1	0.2
ISOPENTANE	0.0	0.3	0.4
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	5.2	15.5	15.3
OXYGEN	0.0	TRACE	TRACE
ARGON	TRACE	0.1	0.1
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.18	0.80	0.80
HEATING VALUE*	1022	1035	1037
SPECIFIC GRAVITY	0.619	0.726	0.737

	INDEX 970 SAMPLE 6964	INDEX 971 SAMPLE 6965	INDEX 972 SAMPLE 6966
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	INLET NO. D-3	TEXAS HUGOTON	D-3-29
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.6	72.3	70.6
ETHANE	6.6	6.6	6.7
PROPANE	4.3	4.1	4.1
N-BUTANE	1.4	1.2	1.3
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.4	0.2	0.3
NITROGEN	15.2	13.6	14.7
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.80	0.70	0.70
HEATING VALUE*	1059	1049	1050
SPECIFIC GRAVITY	0.750	0.725	0.739

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 973 SAMPLE 5507	INDEX 974 SAMPLE 6907	INDEX 975 SAMPLE 13413
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	16 IN. DISCHARGE	SHAMROCK INLET	HELIUM PLANT SUPPLY LINE
OWNER	KERR-MCGEE OIL IND., INC.	PANHANDLE EASTERN PIPELINE C	PHILLIPS PETROLEUM CO.
SAMPLED	07/02/53	01/99/59	10/05/72
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	200
FLOW, MCFD	NOT GIVEN	NOT GIVEN	300000
COMPONENT, MOLE PCT			
METHANE	73.4	77.0	72.6
ETHANE	7.0	8.1	7.3
PROPANE	3.4	3.4	4.7
N-BUTANE	0.4	0.2	1.5
ISOBUTANE	0.3	0.1	0.7
N-PENTANE	0.0	TRACE	0.4
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	15.5	10.0	11.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.4	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.79	0.40	0.54
HEATING VALUE*	971	1037	1097
SPECIFIC GRAVITY	0.696	0.679	0.733

	INDEX 976 SAMPLE 13428	INDEX 977 SAMPLE 13781	INDEX 978 SAMPLE 3589
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	NOT GIVEN	NOT GIVEN	PANHANDLE
LOCATION	30 IN. DISCHARGE	PLANT INLET	INLET
OWNER	EL PASO NATURAL GAS CO.	PHILLIPS PETROLEUM CO.	TEXOMA NATURAL GAS CO.
SAMPLED	10/05/72	10/26/73	07/30/42
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	550	NOT GIVEN	NOT GIVEN
FLOW, MCFD	550000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	81.2	74.1	69.3
ETHANE	7.6	6.9	18.8
PROPANE	1.7	4.5	---
N-BUTANE	0.0	1.3	---
ISOBUTANE	0.2	0.7	---
N-PENTANE	0.1	0.3	---
ISOPENTANE	0.0	0.3	---
CYCLOPENTANE	TRACE	0.1	---
HEXANES PLUS	TRACE	0.2	---
NITROGEN	8.8	11.0	10.6
OXYGEN	0.0	0.0	0.4
ARGON	TRACE	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.2	TRACE	0.4
HELIUM	0.04	0.52	0.49
HEATING VALUE*	1014	1098	1039
SPECIFIC GRAVITY	0.651	0.725	0.695

	INDEX 979 SAMPLE 3590	INDEX 980 SAMPLE 3592	INDEX 981 SAMPLE 6522
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
LOCATION	INLET	DISCHARGE	RESIDUE
OWNER	TEXOMA NATURAL GAS CO.	TEXOMA NATURAL GAS CO.	SHAMROCK OIL & GAS CORP.
SAMPLED	07/30/42	07/30/42	03/21/58
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	204
FLOW, MCFD	NOT GIVEN	NOT GIVEN	132242
COMPONENT, MOLE PCT			
METHANE	71.0	69.6	76.0
ETHANE	15.7	18.2	7.3
PROPANE	---	---	3.5
N-BUTANE	---	---	0.3
ISOBUTANE	---	---	0.0
N-PENTANE	---	---	0.0
ISOPENTANE	---	---	0.9
CYCLOPENTANE	---	---	0.1
HEXANES PLUS	---	---	TRACE
NITROGEN	8.2	11.2	10.9
OXYGEN	0.5	0.3	0.0
ARGON	---	---	0.1
HYDROGEN	---	---	0.3
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.3	0.3	TRACE
HELIUM	0.29	0.41	0.60
HEATING VALUE*	1072	1031	1045
SPECIFIC GRAVITY	0.690	0.694	0.691

	INDEX 982 SAMPLE 6523	INDEX 983 SAMPLE 6524	INDEX 984 SAMPLE 6525
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE	PANHANDLE	PANHANDLE
LOCATION	INLET	MASTER INLET	STA- 621 INLET
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
SAMPLED	03/21/58	03/21/58	03/21/58
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	217	231	218
FLOW, MCFD	53625	80757	78555
COMPONENT, MOLE PCT			
METHANE	75.4	75.0	75.3
ETHANE	6.6	7.4	6.9
PROPANE	3.6	4.5	4.1
N-BUTANE	1.2	1.4	1.5
ISOBUTANE	0.7	0.7	0.7
N-PENTANE	0.3	0.3	0.2
ISOPENTANE	0.2	0.4	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	10.5	9.2	10.0
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.1	TRACE
CARBON DIOXIDE	0.6	0.4	0.4
HELIUM	0.50	0.40	0.40
HEATING VALUE*	1075	1124	1105
SPECIFIC GRAVITY	0.715	0.730	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 985 SAMPLE 6530	INDEX 986 SAMPLE 1974	INDEX 987 SAMPLE 1975
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	INLET	OUTLET
OWNER	KERR-MCGEE OIL IND., INC.	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.
SAMPLED	03/21/58	02/06/30	02/06/30
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY X	PERM-WICHITA-ALBANY X
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	170	NOT GIVEN	NOT GIVEN
FLOW, MCFD	52000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.1	67.4	77.7
ETHANE	6.6	22.3	12.5
PROPANE	3.8	---	---
N-BUTANE	1.2	---	---
ISOBUTANE	0.7	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	0.1	---	---
HEXANES PLUS	0.1	---	---
NITROGEN	15.0	9.8	9.4
OXYGEN	TRACE	0.2	0.2
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.2	0.3	0.3
HELIUM	0.73	0.00	0.00
HEATING VALUE*	1027	1082	1011
SPECIFIC GRAVITY	0.728	0.709	0.660

	INDEX 988 SAMPLE 2847	INDEX 989 SAMPLE 2849	INDEX 990 SAMPLE 3591
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	FIELD LINE F-4	LINE F-4	INLET
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	TEXOMA NATURAL GAS CO.
SAMPLED	09/19/40	09/19/40	07/30/42
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	4065	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	18107	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.0	69.3	68.1
ETHANE	16.1	16.9	20.0
PROPANE	---	---	---
N-BUTANE	---	---	---
ISOBUTANE	---	---	---
N-PENTANE	---	---	---
ISOPENTANE	---	---	---
CYCLOPENTANE	---	---	---
HEXANES PLUS	---	---	---
NITROGEN	15.2	12.2	10.8
OXYGEN	0.5	0.4	0.3
ARGON	---	---	---
HYDROGEN	---	---	---
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.4	0.4
HELIUM	0.98	0.78	0.43
HEATING VALUE*	967	1005	1048
SPECIFIC GRAVITY	0.697	0.691	0.702

	INDEX 991 SAMPLE 3593	INDEX 992 SAMPLE 3813	INDEX 993 SAMPLE 4708
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	OUTLET	OUTLET
OWNER	TEXOMA NATURAL GAS CO.	CANADIAN RIVER GAS CO.	U.S. BUREAU OF MINES
SAMPLED	05/19/42	--/--/00	08/99/49
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.0	70.0	73.7
ETHANE	16.6	15.3	5.3
PROPANE	---	---	3.1
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.4
N-PENTANE	---	---	0.1
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	TRACE
HEXANES PLUS	---	---	0.2
NITROGEN	10.3	13.7	16.0
OXYGEN	0.4	0.4	TRACE
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.1	0.0
HELIUM	0.53	0.52	0.13
HEATING VALUE*	1027	983	984
SPECIFIC GRAVITY	0.681	0.688	0.707

	INDEX 994 SAMPLE 4709	INDEX 995 SAMPLE 5187	INDEX 996 SAMPLE 5189
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	DISCHARGE	W SIDE CANADIAN RIVER
OWNER	U.S. BUREAU OF MINES	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/99/49	04/25/52	04/25/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	375	175
FLOW, MCFD	NOT GIVEN	153000	45000
COMPONENT, MOLE PCT			
METHANE	72.0	75.1	77.4
ETHANE	5.2	5.5	5.8
PROPANE	3.1	2.9	3.6
N-BUTANE	0.9	0.6	0.9
ISOBUTANE	0.3	0.3	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.2	0.0	0.2
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.1
NITROGEN	16.4	14.6	10.2
OXYGEN	0.1	0.1	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.2	0.3
HELIUM	1.00	0.70	0.50
HEATING VALUE*	970	966	1054
SPECIFIC GRAVITY	0.711	0.686	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 997 SAMPLE 5190	INDEX 998 SAMPLE 5191	INDEX 999 SAMPLE 5192
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	DISCHARGE	NOT GIVEN
OWNER	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.	PANHANDLE EASTERN PIPELINE C
SAMPLED	04/29/52	04/29/52	04/29/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	680	NOT GIVEN	500
FLOW, MCFD	250000	NOT GIVEN	23000
COMPONENT, MOLE PCT			
METHANE	78.0	77.7	78.5
ETHANE	5.9	6.0	6.1
PROPANE	3.7	3.8	3.5
N-BUTANE	0.6	0.5	0.4
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.1	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	10.3	10.7	10.3
OXYGEN	0.1	0.1	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	---	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.4	0.2	0.2
HELIUM	0.53	0.52	0.47
HEATING VALUE*	1030	1028	1022
SPECIFIC GRAVITY	0.683	0.682	0.675

	INDEX 1000 SAMPLE 5193	INDEX 1001 SAMPLE 5210	INDEX 1002 SAMPLE 5211
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	PLANT INLET	DISCHARGE GAS
OWNER	EL PASO NATURAL GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	04/23/52	06/16/52	06/16/52
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	700	NOT GIVEN	NOT GIVEN
FLOW, MCFD	140000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.5	76.8	76.8
ETHANE	6.3	5.9	5.9
PROPANE	3.5	3.6	3.8
N-BUTANE	0.6	1.1	0.7
ISOBUTANE	0.4	0.2	0.5
N-PENTANE	0.0	0.3	0.0
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	TRACE	TRACE
NITROGEN	11.9	11.1	11.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.0	0.1	1.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.54	0.54	0.54
HEATING VALUE*	1017	1042	1023
SPECIFIC GRAVITY	0.687	0.696	0.700

	INDEX 1003 SAMPLE 5262	INDEX 1004 SAMPLE 5263	INDEX 1005 SAMPLE 5485
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET GAS	DISCHARGE GAS	NOT GIVEN
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	06/26/52	06/26/52	05/28/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.1	76.6	77.4
ETHANE	6.1	6.2	6.4
PROPANE	3.6	3.8	3.5
N-BUTANE	1.0	0.6	0.4
ISOBUTANE	0.6	0.7	0.3
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	0.3	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	11.2	11.3	11.0
OXYGEN	0.1	0.1	TRACE
ARGON	TRACE	0.0	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	---	---	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.53	0.55	0.52
HEATING VALUE*	1054	1029	1022
SPECIFIC GRAVITY	0.704	0.690	0.682

	INDEX 1006 SAMPLE 5503	INDEX 1007 SAMPLE 5505	INDEX 1008 SAMPLE 5530
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	22 IN. OUTLET	DISCHARGE	24 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	EL PASO NATURAL GAS CO.	PANHANDLE EASTERN PIPELINE C
SAMPLED	07/01/53	07/01/53	08/14/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.3	77.2	76.8
ETHANE	5.9	7.5	7.9
PROPANE	3.0	3.3	3.7
N-BUTANE	0.7	0.2	0.2
ISOBUTANE	0.3	0.0	0.2
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	15.3	11.2	10.3
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.0
HELIUM	0.71	0.49	0.48
HEATING VALUE*	973	1009	1035
SPECIFIC GRAVITY	0.698	0.673	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1009 SAMPLE 5543	INDEX 1010 SAMPLE 5544	INDEX 1011 SAMPLE 5548
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	22 & 24 IN. DISCHARGE	24 & 26 IN. DISCHARGE	22 IN. DISCHARGE
OWNER	PANHANDLE EASTERN PIPELINE C	PANHANDLE EASTERN PIPELINE C	COLORADO INTERSTATE GAS CO.
SAMPLED	08/14/53	08/13/53	09/03/53
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.7	77.9	77.1
ETHANE	6.9	7.1	6.3
PROPANE	3.7	3.8	3.7
N-BUTANE	0.6	0.5	0.3
ISOBUTANE	0.3	0.2	0.4
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	10.1	10.2	11.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.2	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.46	0.42	0.55
HEATING VALUE*	1037	1032	1019
SPECIFIC GRAVITY	0.679	0.678	0.681

	INDEX 1012 SAMPLE 5629	INDEX 1013 SAMPLE 5630	INDEX 1014 SAMPLE 5891
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	DISCHARGE	CHANNING FIELD
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	06/01/54	06/01/54	08/02/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	175	350	NOT GIVEN
FLOW, MCFD	100000	100000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.1	75.2	72.8
ETHANE	5.6	5.6	5.6
PROPANE	3.3	2.9	3.2
N-BUTANE	0.9	0.8	0.9
ISOBUTANE	0.4	0.3	0.5
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.6	TRACE	0.3
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	13.9	14.2	14.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.3
HELIUM	0.57	0.57	0.65
HEATING VALUE*	1023	979	1004
SPECIFIC GRAVITY	0.713	0.689	0.713

	INDEX 1015 SAMPLE 5892	INDEX 1016 SAMPLE 5893	INDEX 1017 SAMPLE 5894
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	CHANNING LINE F4	INLET
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/02/55	08/02/55	08/02/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.3	71.9	72.5
ETHANE	5.5	5.4	5.7
PROPANE	3.0	3.0	3.1
N-BUTANE	1.0	0.9	0.8
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.1	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	15.5	16.2	15.5
OXYGEN	0.0	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.4	0.2
HELIUM	0.23	0.95	0.77
HEATING VALUE*	993	979	987
SPECIFIC GRAVITY	0.711	0.713	0.708

	INDEX 1018 SAMPLE 5897	INDEX 1019 SAMPLE 5899	INDEX 1020 SAMPLE 5902
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	CHANNING AREA	INLET
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	U.S. BUREAU OF MINES
SAMPLED	08/02/55	08/02/55	08/05/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.7	74.0	72.1
ETHANE	5.7	6.3	5.2
PROPANE	3.1	3.6	3.0
N-BUTANE	0.9	1.1	0.9
ISOBUTANE	0.3	0.4	0.4
N-PENTANE	0.2	0.3	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	15.3	12.3	16.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.6	0.3
HELIUM	0.66	0.60	0.58
HEATING VALUE*	998	1047	972
SPECIFIC GRAVITY	0.709	0.717	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 1021 5903	INDEX SAMPLE 1022 5908	INDEX SAMPLE 1023 5909
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	DISCHARGE	INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	08/05/55	08/06/55	08/06/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.2	74.2	73.1
ETHANE	5.1	5.5	5.5
PROPANE	3.0	2.8	2.7
N-BUTANE	0.5	0.8	0.8
ISOBUTANE	0.4	0.4	0.4
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.3	0.1	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	16.1	15.4	15.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.1
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.19	0.20	0.96
HEATING VALUE*	981	990	971
SPECIFIC GRAVITY	0.707	0.706	0.699

	INDEX SAMPLE 1024 5910	INDEX SAMPLE 1025 5911	INDEX SAMPLE 1026 5997
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	INLET	INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	07/12/55	07/12/55	01/13/56
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.0	72.2	72.1
ETHANE	5.2	5.2	5.4
PROPANE	3.0	2.9	2.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.7	16.4	16.2
OXYGEN	0.0	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.23	0.87	1.00
HEATING VALUE*	987	966	978
SPECIFIC GRAVITY	0.707	0.707	0.712

	INDEX SAMPLE 1027 5998	INDEX SAMPLE 1028 6018	INDEX SAMPLE 1029 6019
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	DISCHARGE	INLET
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	01/13/56	02/04/56	02/04/56
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	73.5	73.5	72.4
ETHANE	5.4	5.3	5.2
PROPANE	2.9	2.8	2.9
N-BUTANE	0.9	0.9	0.9
ISOBUTANE	0.3	0.3	0.2
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.2	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	15.9	16.1	16.2
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.3
HELIUM	0.14	0.15	0.98
HEATING VALUE*	992	987	970
SPECIFIC GRAVITY	0.712	0.710	0.706

	INDEX SAMPLE 1030 6528	INDEX SAMPLE 1031 6638	INDEX SAMPLE 1032 6639
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	26 IN. LINE	24 IN. LINE
OWNER	SHAMROCK OIL & GAS CORP.	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF
SAMPLED	03/21/58	06/19/58	06/19/58
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	201	325	180
FLOW, MCFD	116859	90000	42000
COMPONENT, MOLE PCT			
METHANE	75.5	87.0	77.1
ETHANE	6.5	5.0	6.8
PROPANE	3.2	1.4	3.9
N-BUTANE	0.4	0.2	1.1
ISOBUTANE	0.3	0.1	0.6
N-PENTANE	TRACE	0.0	0.2
ISOPENTANE	0.1	0.1	0.5
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	13.2	1.8	6.7
OXYGEN	0.1	TRACE	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.2
HELIUM	0.60	0.10	0.40
HEATING VALUE*	997	1098	1108
SPECIFIC GRAVITY	0.689	0.632	0.710

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1033 SAMPLE 6641	INDEX 1034 SAMPLE 6642	INDEX 1035 SAMPLE 6672
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. LINE	26 IN. LINE	SEC. 198, BLK. 44, H&TC SUR.
OWNER	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF	PHILLIPS PETROLEUM CO.
SAMPLED	06/19/58	06/19/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	130	610	201
FLOW, MCFD	25000	175000	145000
COMPONENT, MOLE PCT			
METHANE	77.6	83.6	77.6
ETHANE	7.5	8.3	6.7
PROPANE	3.7	2.2	2.3
N-BUTANE	0.5	0.3	TRACE
ISOBUTANE	0.3	0.3	0.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.3	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	9.4	4.7	12.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.40	0.20	0.60
HEATING VALUE*	1062	1077	969
SPECIFIC GRAVITY	0.685	0.650	0.663

	INDEX 1036 SAMPLE 6673	INDEX 1037 SAMPLE 6674	INDEX 1038 SAMPLE 6675
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. LINE	24 IN. MAKEIG LINE	30 IN. INLET
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	112	112	112
FLOW, MCFD	30000	60000	85000
COMPONENT, MOLE PCT			
METHANE	74.4	72.5	74.0
ETHANE	6.5	6.6	6.7
PROPANE	3.5	4.0	3.8
N-BUTANE	0.9	1.2	1.4
ISOBUTANE	1.0	0.7	0.8
N-PENTANE	0.3	0.2	0.3
ISOPENTANE	0.0	0.3	0.6
CYCLOPENTANE	0.0	0.0	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	12.0	13.6	10.7
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.1	0.7
HELIUM	0.60	0.70	0.50
HEATING VALUE*	1043	1047	1100
SPECIFIC GRAVITY	0.711	0.724	0.735

	INDEX 1039 SAMPLE 6676	INDEX 1040 SAMPLE 6679	INDEX 1041 SAMPLE 6687
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	24 IN. INLET	24 IN. INLET	20 IN. DISCHARGE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/01/58	07/01/58	07/01/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	110	480
FLOW, MCFD	NOT GIVEN	65000	184000
COMPONENT, MOLE PCT			
METHANE	75.2	73.8	77.9
ETHANE	6.9	6.8	6.6
PROPANE	4.1	4.1	3.5
N-BUTANE	1.4	1.3	0.6
ISOBUTANE	0.7	0.7	0.3
N-PENTANE	0.3	0.3	0.0
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	10.1	11.5	10.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.50	0.60	0.50
HEATING VALUE*	1102	1083	1037
SPECIFIC GRAVITY	0.721	0.724	0.683

	INDEX 1042 SAMPLE 6756	INDEX 1043 SAMPLE 6757	INDEX 1044 SAMPLE 6759
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	SEC. 161, BLK. 44, H&TC SUR.	DISCHARGE	INLET
OWNER	EL PASO NATURAL GAS CO.	NORTHERN NATURAL GAS CO.	SHAMROCK OIL & GAS CORP.
SAMPLED	07/25/58	07/23/58	07/25/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	610	600	190
FLOW, MCFD	425000	125000	125000
COMPONENT, MOLE PCT			
METHANE	85.6	83.5	73.7
ETHANE	7.8	6.6	6.2
PROPANE	1.4	1.8	2.9
N-BUTANE	0.0	TRACE	0.4
ISOBUTANE	0.1	0.1	0.2
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	TRACE	TRACE	TRACE
NITROGEN	4.7	7.5	15.6
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.40	0.20	0.70
HEATING VALUE*	1051	1014	962
SPECIFIC GRAVITY	0.631	0.637	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1045 SAMPLE 6969	INDEX 1046 SAMPLE 7384	INDEX 1047 SAMPLE 7436
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	MOORE CO. SOUR GAS SYSTEM	20 IN. DISCHARGE	20 IN. DISCHARGE
OWNER	SINCLAIR OIL & GAS CO.	COLORADO INTERSTATE GAS CO.	SHAMROCK OIL & GAS CORP.
SAMPLED	02/12/59	02/09/60	03/16/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	82000	
COMPONENT, MOLE PCT			
METHANE	77.0	77.2	72.2
ETHANE	9.1	5.8	6.4
PROPANE	3.3	4.0	2.8
N-BUTANE	0.3	0.3	0.3
ISOBUTANE	0.1	0.1	0.1
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	9.8	10.7	16.8
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.4	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.40	0.54	0.80
HEATING VALUE*	1038	1031	946
SPECIFIC GRAVITY	0.676	0.683	0.695

	INDEX 1048 SAMPLE 7438	INDEX 1049 SAMPLE 7439	INDEX 1050 SAMPLE 7440
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	18 IN.	22 IN. INLET
OWNER	SHAMROCK OIL & GAS.CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
SAMPLED	03/16/60	03/16/60	03/16/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.2	76.7	74.5
ETHANE	7.6	8.1	7.1
PROPANE	2.5	2.9	4.1
N-BUTANE	0.1	0.1	1.9
ISOBUTANE	0.1	0.1	0.7
N-PENTANE	TRACE	TRACE	0.4
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	TRACE	TRACE	0.3
NITROGEN	11.0	10.4	10.9
OXYGEN	0.0	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.5	0.9	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.4
HELIUM	0.50	0.40	0.40
HEATING VALUE*	1000	1015	1108
SPECIFIC GRAVITY	0.666	0.668	0.731

	INDEX 1051 SAMPLE 7441	INDEX 1052 SAMPLE 7442	INDEX 1053 SAMPLE 7443
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	20 IN. DISCHARGE	20 IN. INLET	20 IN. DISCHARGE
OWNER	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.	SHAMROCK OIL & GAS CORP.
SAMPLED	03/16/60	03/16/60	03/16/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.8	72.2	75.0
ETHANE	7.2	9.3	7.6
PROPANE	4.3	6.0	4.6
N-BUTANE	1.5	1.9	1.4
ISOBUTANE	0.8	0.9	0.8
N-PENTANE	0.3	0.4	0.2
ISOPENTANE	0.4	0.4	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	9.8	8.0	9.1
OXYGEN	0.2	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.40	0.40	0.40
HEATING VALUE*	1120	1133	1129
SPECIFIC GRAVITY	0.731	0.756	0.729

	INDEX 1054 SAMPLE 7444	INDEX 1055 SAMPLE 7554	INDEX 1056 SAMPLE 7738
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	PLANT RESIDUE	SEC. 1, BLK. 1, ITERR SUR.	24 IN. LINE
OWNER	SHAMROCK OIL & GAS CORP.	NATURAL GAS PIPELINE CO. OF	NATURAL GAS PIPELINE CO. OF
SAMPLED	03/16/60	05/19/60	10/25/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	650	141
FLOW, MCFD	NOT GIVEN	135	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.5	79.5	74.8
ETHANE	8.3	6.9	7.7
PROPANE	2.7	3.5	3.6
N-BUTANE	0.1	0.6	0.8
ISOBUTANE	0.0	0.4	0.5
N-PENTANE	0.0	0.1	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	9.5	9.2	11.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	1.0	0.0	0.4
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.1
HELIUM	0.40	0.40	0.50
HEATING VALUE*	1023	1057	1052
SPECIFIC GRAVITY	0.664	0.680	0.701

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1057 SAMPLE 9233	INDEX 1058 SAMPLE 9235	INDEX 1059 SAMPLE 9305
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NOT GIVEN	NOT GIVEN	12 IN. F-45 LINE
OWNER	PUMPELLY-STAVA OPERATOR	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.
SAMPLED	01/29/64	01/29/64	04/24/64
FORMATION	NOT GIVEN	NOT GIVEN	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	160	150	176
FLOW, MCFD	85900	68700	179
COMPONENT, MOLE PCT			
METHANE	76.8	80.9	74.0
ETHANE	6.9	6.2	6.7
PROPANE	4.0	2.6	4.0
N-BUTANE	1.5	0.6	1.4
ISOBUTANE	0.5	0.2	0.8
N-PENTANE	0.4	0.1	0.5
ISOPENTANE	0.5	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	TRACE	0.3
NITROGEN	8.2	8.6	11.0
OXYGEN	0.1	TRACE	0.2
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.1	0.2
HELIUM	0.40	0.40	0.48
HEATING VALUE*	1130	1043	1101
SPECIFIC GRAVITY	0.721	0.663	0.732

	INDEX 1060 SAMPLE 9306	INDEX 1061 SAMPLE 9307	INDEX 1062 SAMPLE 9734
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	22 IN. LINE	12 IN. F-48 LINE	INLET FROM LINE F-2-12
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	04/24/64	04/24/64	02/17/65
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	140
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.7	76.8	75.2
ETHANE	6.6	6.9	6.4
PROPANE	3.9	3.7	4.0
N-BUTANE	1.3	1.2	1.4
ISOBUTANE	0.6	0.5	0.8
N-PENTANE	0.4	0.2	0.3
ISOPENTANE	0.4	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.3
NITROGEN	10.2	10.1	10.5
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.52	0.50	0.53
HEATING VALUE*	1095	1087	1099
SPECIFIC GRAVITY	0.716	0.710	0.724

	INDEX 1063 SAMPLE 9736	INDEX 1064 SAMPLE 11853	INDEX 1065 SAMPLE 12117
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET LINE F-1-22	INLET	INLET
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/17/65	05/09/69	11/24/69
FORMATION	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	180	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.2	71.5	73.2
ETHANE	6.5	6.5	6.6
PROPANE	3.7	3.6	4.5
N-BUTANE	1.2	1.2	1.2
ISOBUTANE	0.7	0.4	0.8
N-PENTANE	0.3	0.4	0.4
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	10.9	14.8	11.5
OXYGEN	TRACE	0.1	0.0
ARGON	0.1	0.1	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.6
HELIUM	0.60	0.79	0.59
HEATING VALUE*	1078	1024	1103
SPECIFIC GRAVITY	0.716	0.726	0.734

	INDEX 1066 SAMPLE 13310	INDEX 1067 SAMPLE 13433	INDEX 1068 SAMPLE 13437
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	30 IN. LINE	22 IN. PLATEAU DISCHARGE	20 IN. FOURWAY STA. DISCH.
OWNER	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	07/24/72	10/05/72	10/05/72
FORMATION	PERM-WICHITA-ALBANY	PERM-	PERM-
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	684	150	380
FLOW, MCFD	156900	12000	100000
COMPONENT, MOLE PCT			
METHANE	79.4	73.6	76.4
ETHANE	6.3	7.4	7.6
PROPANE	3.4	3.2	2.4
N-BUTANE	1.1	0.4	0.0
ISOBUTANE	0.6	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	8.2	14.3	12.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.2
HELIUM	0.34	0.82	0.68
HEATING VALUE*	1071	975	972
SPECIFIC GRAVITY	0.684	0.688	0.669

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1069 SAMPLE 13438	INDEX 1070 SAMPLE 15417	INDEX 1071 SAMPLE 15502
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	20 IN. DISCHARGE	22 IN. DISCHARGE	30 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	NATURAL GAS PIPELINE CO. OF
SAMPLED	10/05/72	10/16/78	11/13/78
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	780	400	650
FLOW, MCFD	125000	60000	150000
COMPONENT, MOLE PCT			
METHANE	77.1	72.5	79.5
ETHANE	7.6	7.6	6.2
PROPANE	2.3	4.8	2.9
N-BUTANE	0.0	1.5	0.7
ISOBUTANE	0.0	0.7	0.5
N-PENTANE	0.0	0.3	0.2
ISOPENTANE	0.0	0.4	0.2
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	0.1
NITROGEN	12.1	11.0	9.2
OXYGEN	0.1	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	0.64	0.65	0.48
HEATING VALUE*	977	1119	1048
SPECIFIC GRAVITY	0.665	0.738	0.677

	INDEX 1072 SAMPLE 16812	INDEX 1073 SAMPLE 17029	INDEX 1074 SAMPLE 17032
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	36 IN. DISCHARGE	20 IN. DISCHARGE	20 IN. INLET FROM WEST
OWNER	NATURAL GAS PIPELINE CO. OF	COLORADO INTERSTATE GAS CO.	DIAMOND SHAMROCK CORP.
SAMPLED	03/14/83	08/29/83	08/29/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	619	65	225
FLOW, MCFD	78000	12070	70000
COMPONENT, MOLE PCT			
METHANE	80.2	69.2	68.9
ETHANE	5.1	7.4	8.4
PROPANE	2.9	5.0	6.8
N-BUTANE	1.3	2.0	2.7
ISOBUTANE	0.5	0.7	1.0
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.5	1.0	0.9
CYCLOPENTANE	0.1	0.2	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	8.2	12.3	9.3
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.1	0.1
HYDROGEN	0.2	0.3	0.3
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.7
HELIUM	0.38	0.68	0.37
HEATING VALUE*	1084	1138	1207
SPECIFIC GRAVITY	0.689	0.773	0.790

	INDEX 1075 SAMPLE 5385	INDEX 1076 SAMPLE 5506	INDEX 1077 SAMPLE 7437
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	PANHANDLE W & HUGOTON, TEXAS	PANHANDLE W & HUGOTON, TEXAS	PANHANDLE W & HUGOTON, TEXAS
LOCATION	NOT GIVEN	16 IN. DISCHARGE	20 IN. INLET
OWNER	KERR-MCGEE CORP.	NORTHERN NATURAL GAS CO.	SHAMROCK OIL & GAS CORP.
SAMPLED	02/06/53	07/01/53	03/16/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.9	72.4	70.7
ETHANE	6.4	6.7	6.6
PROPANE	4.1	3.3	3.9
N-BUTANE	1.2	0.6	1.1
ISOBUTANE	0.4	0.2	0.6
N-PENTANE	0.3	0.1	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	TRACE	0.0	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	15.4	15.5	15.3
OXYGEN	TRACE	0.1	0.2
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	TRACE
HELIUM	0.73	0.70	0.70
HEATING VALUE*	1020	980	1028
SPECIFIC GRAVITY	0.727	0.702	0.731

	INDEX 1078 SAMPLE 17030	INDEX 1079 SAMPLE 17031	INDEX 1080 SAMPLE 17040
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	TEXAS HUGOTON (SHERMAN CO.)	TEXAS HUGOTON(OCHILTREE CO.)	TEXAS PANHANDLE AREA
LOCATION	22 IN. INLET FROM SHERMAN CO	24 IN. INLET FROM OCHILTREE	COMPOSITE
OWNER	DIAMOND SHAMROCK CORP.	DIAMOND SHAMROCK CORP.	PHILLIPS PETROLEUM CO.
SAMPLED	08/29/83	08/29/83	09/02/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	225	225	200
FLOW, MCFD	46000	133000	94000
COMPONENT, MOLE PCT			
METHANE	69.1	84.8	70.0
ETHANE	6.8	6.8	7.0
PROPANE	4.3	3.5	4.9
N-BUTANE	1.3	1.1	1.9
ISOBUTANE	0.5	0.4	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.5	0.6	0.8
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.9	1.1	13.2
OXYGEN	0.0	0.0	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.3	0.3	0.3
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	0.1
HELIUM	0.75	0.07	0.61
HEATING VALUE*	1034	1171	1113
SPECIFIC GRAVITY	0.741	0.680	0.759

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1081 SAMPLE 17041	INDEX 1082 SAMPLE 17042	INDEX 1083 SAMPLE 17043
STATE	TEXAS	TEXAS	TEXAS
COUNTY	MOORE	MOORE	MOORE
FIELD	TEXAS PANHANDLE AREA	WESTERN OKLAHOMA AREA	ZUBECK
LOCATION	14 IN INLET DUMAS HELIUM PLT	20 IN. INLET	18 IN. INLET
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	09/02/83	09/02/83	09/02/83
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	166	370	370
FLOW, MCFD	66300	241700	167000
COMPONENT, MOLE PCT			
METHANE	80.9	94.9	94.6
ETHANE	5.5	2.6	2.0
PROPANE	1.0	0.4	0.6
N-BUTANE	TRACE	0.1	0.2
ISOBUTANE	TRACE	0.0	0.1
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	TRACE	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	TRACE	0.1
NITROGEN	11.8	0.3	1.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.3	0.0	0.3
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	1.2	1.4
HELIUM	0.41	0.03	0.04
HEATING VALUE*	945	1027	1024
SPECIFIC GRAVITY	0.638	0.586	0.595

	INDEX 1084 SAMPLE 9594	INDEX 1085 SAMPLE 4355	INDEX 1086 SAMPLE 4358
STATE	TEXAS	TEXAS	TEXAS
COUNTY	NEWTON	NUECES	NUECES
FIELD	QUICKSAND CREEK	LUBY	LUBY
LOCATION	NOT GIVEN	INLET	OUTLET
OWNER	OIL RESERVES CORP.	STANOLIND OIL & GAS CO.	SEABOARD OIL CO.
SAMPLED	10/07/64	09/25/47	09/26/47
FORMATION	EOCE-WILCOX	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	220	220	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	950	NOT GIVEN	NOT GIVEN
FLOW, MCFD	12000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.2	61.5	84.3
ETHANE	8.2	36.9	15.2
PROPANE	2.8	---	---
N-BUTANE	0.7	---	---
ISOBUTANE	1.2	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.3	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	0.3	---	---
NITROGEN	0.9	0.6	0.2
OXYGEN	0.0	0.6	0.2
ARGON	TRACE	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	2.3	0.4	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1159	1284	1126
SPECIFIC GRAVITY	0.693	0.747	0.633

	INDEX 1087 SAMPLE 7750	INDEX 1088 SAMPLE 8127	INDEX 1089 SAMPLE 8134
STATE	TEXAS	TEXAS	TEXAS
COUNTY	OCHILTREE	PALO PINTO	PALO PINTO
FIELD	ANADARKO BASIN	BRAD AREA	DEATON
LOCATION	NOT GIVEN	NEAR BRAD, TEXAS	SE OF GORDON, TEXAS
OWNER	SHAMROCK OIL & GAS CORP.	LONE STAR GAS CO.	LONE STAR GAS CO.
SAMPLED	11/01/60	08/08/61	08/09/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	425	425
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	300	280
FLOW, MCFD	NOT GIVEN	4000	1200
COMPONENT, MOLE PCT			
METHANE	90.2	78.9	80.0
ETHANE	4.9	10.8	10.1
PROPANE	2.0	4.1	3.9
N-BUTANE	0.6	1.1	1.0
ISOBUTANE	0.5	0.7	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.0	0.3	0.3
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	0.7	3.2	3.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.3	0.3
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1104	1195	1181
SPECIFIC GRAVITY	0.631	0.708	0.700

	INDEX 1090 SAMPLE 8125	INDEX 1091 SAMPLE 8130	INDEX 1092 SAMPLE 8131
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	ECHOLS	NOT GIVEN	NOT GIVEN
LOCATION	NOT GIVEN	OUTLET	INLET
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
SAMPLED	08/08/61	08/08/61	08/08/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	330	280	240
FLOW, MCFD	4200	40000	40000
COMPONENT, MOLE PCT			
METHANE	79.1	77.7	73.5
ETHANE	9.9	11.5	11.3
PROPANE	4.0	3.2	4.9
N-BUTANE	1.1	0.1	0.9
ISOBUTANE	0.6	0.1	0.6
N-PENTANE	0.2	TRACE	0.1
ISOPENTANE	0.3	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.1
NITROGEN	4.2	6.1	7.0
OXYGEN	TRACE	0.6	0.8
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.10	0.10	0.10
HEATING VALUE*	1166	1087	1143
SPECIFIC GRAVITY	0.701	0.678	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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	INDEX 1093 SAMPLE 8132	INDEX 1094 SAMPLE 10887	INDEX 1095 SAMPLE 10888
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PALO PINTO	PALO PINTO	PALO PINTO
FIELD	NOT GIVEN	VARIOUS	VARIOUS
LOCATION	INLET LINE K	PIPELINE	NOT GIVEN
OWNER	LONE STAR GAS CO.	SOUTHWESTERN GAS PIPELINE, I	TEXAS PACIFIC OIL CO.
SAMPLED	08/08/61	02/27/67	02/99/67
FORMATION	NOT GIVEN	UNKN-COMMINGLED	PENN-STRAWN & MARBLE FALLS
GEOLOGIC PROVINCE CODE	425	425	425
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	290	600	600
FLOW, MCFD	2000	6000	3000
COMPONENT, MOLE PCT			
METHANE	70.8	78.4	79.2
ETHANE	12.9	9.3	5.6
PROPANE	6.1	4.3	4.0
N-BUTANE	0.9	1.2	1.1
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.2	0.9	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	TRACE
NITROGEN	7.5	5.1	4.6
OXYGEN	0.5	0.0	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.10	0.12	0.14
HEATING VALUE*	1172	1160	1162
SPECIFIC GRAVITY	0.745	0.706	0.694

	INDEX 1096 SAMPLE 8116	INDEX 1097 SAMPLE 8117	INDEX 1098 SAMPLE 8133
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PARKER	PARKER	PARKER
FIELD	BOONSVILLE	BOONSVILLE	BRAZOS E
LOCATION	INLET	OUTLET	J. B. BRANNON SUR.
OWNER	LONE STAR GAS CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
SAMPLED	08/07/61	08/07/61	08/09/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	420	420
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	390	390	260
FLOW, MCFD	145000	142700	4900
COMPONENT, MOLE PCT			
METHANE	82.7	87.0	77.7
ETHANE	11.6	9.0	12.4
PROPANE	3.2	2.5	5.0
N-BUTANE	0.8	0.4	1.1
ISOBUTANE	0.6	0.3	0.7
N-PENTANE	0.2	TRACE	0.2
ISOPENTANE	0.2	TRACE	0.3
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	TRACE	0.1
NITROGEN	0.6	0.9	2.1
OXYGEN	0.1	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.3
HELIUM	0.12	0.10	0.10
HEATING VALUE*	1203	1139	1226
SPECIFIC GRAVITY	0.681	0.640	0.716

	INDEX 1099 SAMPLE 16117	INDEX 1100 SAMPLE 12072	INDEX 1101 SAMPLE 14486
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	GOMEZ	GOMEZ & GRAY RANCH	GOMEZ & GRAY RANCH
LOCATION	30 IN.	NOT GIVEN	30 IN. LINE
OWNER	VALERO TRANSMISSION CO.	COASTAL STATES GAS PROD. CO.	COASTAL STATES GAS PROD. CO.
SAMPLED	10/21/80	10/01/69	10/07/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	700	908	1040
FLOW, MCFD	NOT GIVEN	235000	220000
COMPONENT, MOLE PCT			
METHANE	86.6	96.4	52.0
ETHANE	6.7	0.2	0.1
PROPANE	2.3	TRACE	TRACE
N-BUTANE	0.6	0.0	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	0.2	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.1	0.0	0.0
NITROGEN	1.8	0.3	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.2	3.0	47.2
HELIUM	0.08	0.02	0.03
HEATING VALUE*	1109	980	529
SPECIFIC GRAVITY	0.654	0.585	1.016

	INDEX 1102 SAMPLE 14487	INDEX 1103 SAMPLE 16122	INDEX 1104 SAMPLE 14484
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	PECOS
FIELD	GOMEZ & GRAY RANCH	WEST TEXAS	WEST TEXAS AREA
LOCATION	30 IN. AFTER PROCESSING	36 IN. OUTLET	36 IN. LINE
OWNER	COASTAL STATES GAS PROD. CO.	LONE STAR GAS CO.	LONE STAR GAS CO.
SAMPLED	10/07/75	10/21/80	10/06/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1010	700	760
FLOW, MCFD	97000	220000	260000
COMPONENT, MOLE PCT			
METHANE	96.3	95.5	96.6
ETHANE	0.1	2.0	1.4
PROPANE	TRACE	0.5	0.2
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.1	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.0	TRACE	0.0
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	0.0	0.1	TRACE
NITROGEN	0.9	1.1	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.6	0.7	0.7
HELIUM	0.06	0.02	0.02
HEATING VALUE*	977	1028	1016
SPECIFIC GRAVITY	0.584	0.587	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1105 SAMPLE 16118	INDEX 1106 SAMPLE 2041	INDEX 1107 SAMPLE 5635
STATE	TEXAS	TEXAS	TEXAS
COUNTY	PECOS	PECOS	POTTER
FIELD	WEST TEXAS GAS	YATES	BUSH DOME
LOCATION	OUTLET	NOT GIVEN	10 IN. PLANT RESIDUE
OWNER	OASIS PIPE LINE CO.	HUMBLE OIL & REFINING CO.	U.S. BUREAU OF MINES
SAMPLED	10/21/60	06/13/30	06/11/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	900	NOT GIVEN	NOT GIVEN
FLOW, MCFD	380000	22	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.5	75.2	68.6
ETHANE	1.3	17.9	3.8
PROPANE	0.2	---	1.9
N-BUTANE	0.1	---	0.6
ISOBUTANE	TRACE	---	0.3
N-PENTANE	TRACE	---	0.1
ISOPENTANE	TRACE	---	0.1
CYCLOPENTANE	TRACE	---	TRACE
HEXANES PLUS	0.1	---	0.1
NITROGEN	0.6	1.2	24.0
OXYGEN	0.0	0.2	TRACE
ARGON	TRACE	---	0.1
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	1.1	5.0	TRACE
HELIUM	0.02	0.01	0.13
HEATING VALUE	1015	1083	857
SPECIFIC GRAVITY	0.579	0.695	0.710

	INDEX 1108 SAMPLE 5636	INDEX 1109 SAMPLE 5661	INDEX 1110 SAMPLE 5662
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	BUSH DOME	BUSH DOME
LOCATION	6 IN. PLANT INLET	6 IN. PLANT INLET	10 IN. PLANT RESIDUE
OWNER	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
SAMPLED	06/11/54	08/02/54	08/02/54
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.0	65.7	68.3
ETHANE	3.6	3.8	4.0
PROPANE	1.9	1.8	1.6
N-BUTANE	0.6	0.5	0.6
ISOBUTANE	0.3	0.3	0.3
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	24.5	25.1	24.5
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.6	0.1
HELIUM	1.77	1.77	0.12
HEATING VALUE	835	816	848
SPECIFIC GRAVITY	0.715	0.709	0.712

	INDEX 1111 SAMPLE 5663	INDEX 1112 SAMPLE 2078	INDEX 1113 SAMPLE 2591
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	BUSH DOME	PANHANDLE W	PANHANDLE W
LOCATION	10 IN. PLANT RESIDUE	DISCHARGE	LINE TO AMARILLO
OWNER	U.S. BUREAU OF MINES	CANADIAN RIVER GAS CO.	AMARILLO OIL CO.
SAMPLED	08/02/54	06/27/30	01/19/33
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	180
FLOW, MCFD	NOT GIVEN	NOT GIVEN	10000
COMPONENT, MOLE PCT			
METHANE	68.4	69.0	65.6
ETHANE	4.0	18.5	19.8
PROPANE	1.8	---	---
N-BUTANE	0.5	---	---
ISOBUTANE	0.3	---	---
N-PENTANE	0.1	---	---
ISOPENTANE	0.1	---	---
CYCLOPENTANE	TRACE	---	---
HEXANES PLUS	TRACE	---	---
NITROGEN	24.4	11.4	12.8
OXYGEN	0.0	0.1	0.9
ARGON	0.1	---	---
HYDROGEN	0.0	---	---
HYDROGEN SULFIDE	0.0	---	---
CARBON DIOXIDE	0.1	0.5	0.3
HELIUM	0.12	0.47	0.62
HEATING VALUE	847	1030	1019
SPECIFIC GRAVITY	0.710	0.696	0.711

	INDEX 1114 SAMPLE 2523	INDEX 1115 SAMPLE 3272	INDEX 1116 SAMPLE 5188
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	S LINE	GATHERING LINE-BIV.A-25 & A2	NOT GIVEN
OWNER	CANADIAN RIVER GAS CO.	CANADIAN RIVER GAS CO.	AMARILLO OIL CO.
SAMPLED	2/14/41	09/29/42	04/25/52
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	400
FLOW, MCFD	NOT GIVEN	NOT GIVEN	26000
COMPONENT, MOLE PCT			
METHANE	65.3	65.2	75.9
ETHANE	17.8	19.0	6.0
PROPANE	---	---	3.3
N-BUTANE	---	---	0.8
ISOBUTANE	---	---	0.3
N-PENTANE	---	---	0.2
ISOPENTANE	---	---	0.2
CYCLOPENTANE	---	---	0.0
HEXANES PLUS	---	---	0.1
NITROGEN	15.0	14.5	12.1
OXYGEN	0.2	0.4	0.1
ARGON	---	---	0.1
HYDROGEN	---	---	0.0
HYDROGEN SULFIDE	---	---	---
CARBON DIOXIDE	0.7	0.1	0.2
HELIUM	0.99	0.77	0.66
HEATING VALUE	980	1001	1021
SPECIFIC GRAVITY	0.708	0.708	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1117 SAMPLE 5582	INDEX 1118 SAMPLE 5508	INDEX 1119 SAMPLE 5625
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	DISCHARGE	DISCHARGE	INLET
OWNER	AMARILLO OIL CO.	WEST TEXAS GAS CO.	AMARILLO OIL CO.
SAMPLED	07/01/53	07/01/53	06/01/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	175
FLOW, MCFD	NOT GIVEN	NOT GIVEN	40000
COMPONENT, MOLE PCT			
METHANE	75.6	78.3	77.6
ETHANE	6.6	6.7	6.2
PROPANE	3.2	TRACE	3.8
N-BUTANE	0.8	0.6	1.1
ISOBUTANE	0.3	0.9	0.6
N-PENTANE	0.1	0.0	0.2
ISOPENTANE	0.1	0.5	0.2
CYCLOPENTANE	0.0	TRACE	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	12.5	11.1	9.6
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.2
HELIUM	0.66	0.49	0.48
HEATING VALUE*	1013	1028	1075
SPECIFIC GRAVITY	0.691	0.670	0.697

	INDEX 1120 SAMPLE 5626	INDEX 1121 SAMPLE 5627	INDEX 1122 SAMPLE 5628
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	OUTLET	INLET	OUTLET
OWNER	AMARILLO OIL CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
SAMPLED	06/01/54	06/01/54	06/01/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	390	160	325
FLOW, MCFD	40000	45000	45000
COMPONENT, MOLE PCT			
METHANE	78.8	75.6	76.5
ETHANE	5.9	6.6	5.2
PROPANE	3.5	3.5	3.4
N-BUTANE	0.6	0.9	0.7
ISOBUTANE	0.4	0.6	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.1	0.0
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	TRACE	0.1	TRACE
NITROGEN	10.0	11.7	11.9
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.53	0.64	0.68
HEATING VALUE*	1033	1042	1016
SPECIFIC GRAVITY	0.678	0.701	0.686

	INDEX 1123 SAMPLE 5890	INDEX 1124 SAMPLE 5895	INDEX 1125 SAMPLE 5896
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	NO. F44-12	F-36 16 IN. LINE AT TRIWAY	10 IN. F-4 LOOP
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/02/55	08/02/55	08/02/55
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.4	72.1	71.8
ETHANE	5.5	5.6	5.4
PROPANE	3.2	3.0	3.0
N-BUTANE	1.0	0.9	1.0
ISOBUTANE	0.3	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	15.5	15.7	16.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.2	0.2	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.5	0.3
HELIUM	0.93	0.92	1.00
HEATING VALUE*	995	984	977
SPECIFIC GRAVITY	0.712	0.713	0.711

	INDEX 1126 SAMPLE 5898	INDEX 1127 SAMPLE 6758	INDEX 1128 SAMPLE 6761
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	8 IN. F-17 LINE	16 IN. N LINE	24 IN. DISCHARGE
OWNER	COLORADO INTERSTATE GAS CO.	AMARILLO OIL CO.	AMARILLO OIL CO.
SAMPLED	08/02/55	07/23/58	07/23/58
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	145	350
FLOW, MCFD	NOT GIVEN	NOT GIVEN	32000
COMPONENT, MOLE PCT			
METHANE	72.1	78.4	78.6
ETHANE	5.7	6.1	6.3
PROPANE	3.1	3.3	3.4
N-BUTANE	0.9	1.0	0.8
ISOBUTANE	0.4	0.6	0.5
N-PENTANE	0.1	0.2	0.0
ISOPENTANE	0.3	0.2	0.4
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.2	0.2	0.0
NITROGEN	15.7	9.2	9.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.2
HELIUM	0.95	0.40	0.50
HEATING VALUE*	987	1074	1051
SPECIFIC GRAVITY	0.711	0.694	0.684

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1129 SAMPLE 6762	INDEX 1130 SAMPLE 7340	INDEX 1131 SAMPLE 7387
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	16 IN. W LINE	24 IN. LINE	16 IN. INLET
OWNER	AMARILLO OIL CO.	PIONEER NATURAL GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	07/23/58	01/19/60	02/09/60
FORMATION	PERM-WICHITA-ALBANY	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	85	400	NOT GIVEN
FLOW,MCFD	NOT GIVEN	30000	72000
COMPONENT, MOLE PCT			
METHANE	77.4	78.7	75.1
ETHANE	6.1	5.9	6.7
PROPANE	3.3	2.8	3.5
N-BUTANE	1.1	0.5	1.1
ISOBUTANE	0.6	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.4	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	10.2	10.9	11.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.50	0.50	0.59
HEATING VALUE*	1063	1021	1061
SPECIFIC GRAVITY	0.698	0.673	0.709

	INDEX 1132 SAMPLE 7688	INDEX 1133 SAMPLE 7691	INDEX 1134 SAMPLE 7692
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	INLET	INLET
OWNER	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.
SAMPLED	09/26/60	09/27/60	09/30/60
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.8	77.4	77.3
ETHANE	6.4	6.2	6.5
PROPANE	3.5	3.7	3.7
N-BUTANE	1.2	1.3	1.3
ISOBUTANE	0.6	0.8	0.7
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	8.0	9.1	8.9
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.2
HELIUM	0.40	0.40	0.50
HEATING VALUE*	1100	1094	1098
SPECIFIC GRAVITY	0.699	0.707	0.706

	INDEX 1135 SAMPLE 7866	INDEX 1136 SAMPLE 7867	INDEX 1137 SAMPLE 8103
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	16 IN. INLET	INLET
OWNER	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.	PIONEER NATURAL GAS CO.
SAMPLED	02/23/61	02/23/61	08/09/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	77.1	78.5	77.9
ETHANE	6.5	6.7	6.8
PROPANE	3.5	3.4	3.4
N-BUTANE	1.1	1.0	0.9
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.2	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	10.0	8.7	9.5
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.50	0.40	0.40
HEATING VALUE*	1072	1080	1063
SPECIFIC GRAVITY	0.701	0.691	0.691

	INDEX 1138 SAMPLE 8186	INDEX 1139 SAMPLE 9304	INDEX 1140 SAMPLE 9309
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET	INLET	16 IN. INLET
OWNER	PIONEER NATURAL GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	08/05/61	04/24/64	04/24/64
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY&RED CAVE
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	176	170
FLOW,MCFD	NOT GIVEN	179	64
COMPONENT, MOLE PCT			
METHANE	78.8	75.4	75.6
ETHANE	7.0	6.9	7.0
PROPANE	3.1	3.8	3.7
N-BUTANE	0.9	1.3	1.2
ISOBUTANE	0.5	0.8	0.6
N-PENTANE	0.2	0.5	0.2
ISOPENTANE	0.2	0.1	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.3	0.2
NITROGEN	8.7	10.1	10.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.30	0.50	0.54
HEATING VALUE*	1082	1102	1083
SPECIFIC GRAVITY	0.692	0.721	0.712

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1141 SAMPLE 9735	INDEX 1142 SAMPLE 11849	INDEX 1143 SAMPLE 11850
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W
LOCATION	INLET P-29-16	SEC. 24, BLK. 2, EL&RR SUR.	SEC. 37, BLK. 018, EL&RR SUR
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.
SAMPLED	02/17/65	05/09/69	05/09/69
FORMATION	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	166	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.5	71.6	71.4
ETHANE	6.5	6.0	5.6
PROPANE	5.2	3.8	3.5
N-BUTANE	2.2	1.4	1.2
ISOBUTANE	0.9	0.4	0.5
N-PENTANE	0.3	0.5	0.5
ISOPENTANE	0.6	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.0
HEXANES PLUS	0.4	0.4	0.3
NITROGEN	10.7	14.3	15.6
OXYGEN	0.0	TRACE	0.1
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.4
HELIUM	0.57	0.78	0.88
HEATING VALUE*	1140	1051	1015
SPECIFIC GRAVITY	0.753	0.736	0.729

	INDEX 1144 SAMPLE 11851	INDEX 1145 SAMPLE 11852	INDEX 1146 SAMPLE 8584
STATE	TEXAS	TEXAS	TEXAS
COUNTY	POTTER	POTTER	POTTER
FIELD	PANHANDLE W	PANHANDLE W	PANHANDLE W/RED CAVE
LOCATION	SEC. 5, BLK. 018, D&P SUR.	SEC. 25, BLK. PMC, EL&RR SUR	COMPOSITE
OWNER	COLORADO INTERSTATE GAS CO.	COLORADO INTERSTATE GAS CO.	ANADARKO PRODUCTION CO.
SAMPLED	05/09/69	05/09/69	06/19/62
FORMATION	PERM-WICHITA-ALBANY&RED CAVE	PERM-WICHITA-ALBANY&RED CAVE	NOT GIVEN
GEOLOGIC PROVINCE CODE	440	440	440
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.2	71.6	76.0
ETHANE	6.6	6.4	7.3
PROPANE	3.8	3.6	3.7
N-BUTANE	1.3	1.0	0.5
ISOBUTANE	0.4	0.4	0.5
N-PENTANE	0.4	0.3	0.1
ISOPENTANE	0.2	0.3	0.2
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	14.3	14.9	10.2
OXYGEN	0.3	0.1	0.5
ARGON	0.1	0.1	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	0.78	0.82	0.33
HEATING VALUE*	1041	1020	1062
SPECIFIC GRAVITY	0.733	0.725	0.701

	INDEX 1147 SAMPLE 7422	INDEX 1148 SAMPLE 6640	INDEX 1149 SAMPLE 8160
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RANDALL	ROBERTS	RUNNELS
FIELD	PANHANDLE W	QUINDUNO	FORT CHADBOURNE
LOCATION	CANYON, TEXAS	12 IN. LINE	NOT GIVEN
OWNER	PIONEER NATURAL GAS CO.	NATURAL GAS PIPELINE CO. OF	LONE STAR GAS CO.
SAMPLED	12/09/59	06/19/58	08/12/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	435	360	425
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	325	NOT GIVEN	450
FLOW,MCFD	30000	20000	5300
COMPONENT, MOLE PCT			
METHANE	79.5	79.0	70.9
ETHANE	5.9	6.2	15.8
PROPANE	2.7	4.2	5.7
N-BUTANE	0.3	1.4	0.2
ISOBUTANE	0.3	0.8	0.3
N-PENTANE	TRACE	0.5	TRACE
ISOPENTANE	0.1	0.6	0.0
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.3	TRACE
NITROGEN	10.2	4.9	5.8
OXYGEN	TRACE	TRACE	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.50	0.10	0.08
HEATING VALUE*	1006	1184	1184
SPECIFIC GRAVITY	0.662	0.715	0.728

	INDEX 1150 SAMPLE 8159	INDEX 1151 SAMPLE 12545	INDEX 1152 SAMPLE 6935
STATE	TEXAS	TEXAS	TEXAS
COUNTY	RUNNELS	RUSK	SAN PATRICIO
FIELD	WINTERS SW	PONE	WHITE POINT E
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	LONE STAR GAS CO.	HUMBLE OIL & REFINING CO.	SINCLAIR OIL & GAS CO.
SAMPLED	08/12/61	11/10/70	02/02/59
FORMATION	NOT GIVEN	CRET-COMPOSITE	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	260	220
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	115	NOT GIVEN	37
FLOW,MCFD	3000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	72.5	85.2	90.1
ETHANE	10.2	3.9	6.2
PROPANE	4.9	1.9	2.6
N-BUTANE	1.3	0.7	TRACE
ISOBUTANE	0.7	0.9	TRACE
N-PENTANE	0.2	0.5	0.0
ISOPENTANE	0.3	0.0	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.2	0.4	TRACE
NITROGEN	9.3	2.2	0.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.2
HELIUM	0.25	0.03	0.01
HEATING VALUE*	1143	1114	1096
SPECIFIC GRAVITY	0.737	0.652	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1153 SAMPLE 6936	INDEX 1154 SAMPLE 12712	INDEX 1155 SAMPLE 8157
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SCHLEICHER	SCHLEICHER	SCURRY
FIELD	NOT GIVEN	PAGE	NOT GIVEN
LOCATION	NOT GIVEN	NOT GIVEN	DISCHARGE
OWNER	SINCLAIR OIL & GAS CO.	CITIES SERVICE OIL CO.	LONE STAR GAS CO.
SAMPLED	02/05/59	03/12/71	08/11/61
FORMATION	NOT GIVEN	PENN-STRAWN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	460
FLOW, MCFD	NOT GIVEN	NOT GIVEN	18700
COMPONENT, MOLE PCT			
METHANE	79.3	77.2	70.5
ETHANE	9.6	8.7	23.9
PROPANE	2.4	4.5	1.0
N-BUTANE	0.0	1.3	TRACE
ISOBUTANE	0.0	0.7	TRACE
N-PENTANE	0.0	0.2	TRACE
ISOPENTANE	0.0	0.5	0.1
CYCLOPENTANE	0.0	0.1	TRACE
HEXANES PLUS	0.0	0.3	TRACE
NITROGEN	8.2	5.7	4.2
OXYGEN	TRACE	0.0	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.7	0.1
HELIUM	0.20	0.12	0.05
HEATING VALUE*	1038	1171	1173
SPECIFIC GRAVITY	0.659	0.726	0.702

	INDEX 1156 SAMPLE 8153	INDEX 1157 SAMPLE 6529	INDEX 1158 SAMPLE 5384
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHACKELFORD	SHERMAN	SHERMAN
FIELD	WINDHAM	HUGOTON & PANHANDLE	HUGOTON, TEXAS
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	LONE STAR GAS CO.	KERR-MCGEE OIL IND., INC.	KERR-MCGEE CORP.
SAMPLED	08/10/61	03/21/58	02/06/53
FORMATION	NOT GIVEN	PERM-WICHITA-ALBANY	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	175	175	NOT GIVEN
FLOW, MCFD	700	7000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	64.6	70.6	70.6
ETHANE	10.9	6.5	6.3
PROPANE	8.3	4.0	4.1
N-BUTANE	2.7	1.3	1.2
ISOBUTANE	1.3	0.6	0.5
N-PENTANE	0.5	0.2	0.4
ISOPENTANE	0.6	0.3	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.1	0.1
NITROGEN	10.4	15.3	16.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.20	0.80	0.74
HEATING VALUE*	1266	1030	1016
SPECIFIC GRAVITY	0.827	0.733	0.734

	INDEX 1159 SAMPLE 5386	INDEX 1160 SAMPLE 5698	INDEX 1161 SAMPLE 5700
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	NOT GIVEN	LINE K	LINE L
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/06/53	10/12/54	10/12/54
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	255	255
FLOW, MCFD	NOT GIVEN	40000	160000
COMPONENT, MOLE PCT			
METHANE	70.4	74.1	70.9
ETHANE	6.4	6.1	6.3
PROPANE	4.1	3.1	4.1
N-BUTANE	1.1	0.7	1.1
ISOBUTANE	0.5	0.4	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	15.8	14.1	15.9
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.74	0.78	0.75
HEATING VALUE*	1014	995	1016
SPECIFIC GRAVITY	0.727	0.697	0.729

	INDEX 1162 SAMPLE 5701	INDEX 1163 SAMPLE 6267	INDEX 1164 SAMPLE 6688
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	LINE L-1	LINE K	8 IN. LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	10/12/54	03/12/57	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	255	NOT GIVEN	196
FLOW, MCFD	80000	NOT GIVEN	6200
COMPONENT, MOLE PCT			
METHANE	70.5	74.1	69.8
ETHANE	6.2	5.7	6.3
PROPANE	3.9	3.5	3.9
N-BUTANE	1.1	1.0	1.3
ISOBUTANE	0.6	0.5	0.6
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.1	0.3	0.5
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	16.1	12.8	16.2
OXYGEN	TRACE	0.0	TRACE
ARGON	0.1	TRACE	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.7	0.70	0.88
HEATING VALUE*	1014	1044	1021
SPECIFIC GRAVITY	0.731	0.711	0.736

* CALCULATED GROSS BTU PER CU.FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1165 SAMPLE 6691	INDEX 1166 SAMPLE 6695	INDEX 1167 SAMPLE 6696
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	24 IN. L LINE	24 IN. J-L LINE	26 IN. K LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	07/03/58	07/03/58
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	200	175	240
FLOW, MCFD	65000	51000	56000
COMPONENT, MOLE PCT			
METHANE	69.8	72.4	73.9
ETHANE	6.6	6.1	6.4
PROPANE	4.1	3.5	3.5
N-BUTANE	1.3	1.0	1.0
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.3	0.2	0.1
ISOPENTANE	0.3	0.2	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	15.6	14.7	13.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.80	1.00	0.70
HEATING VALUE*	1041	1015	1039
SPECIFIC GRAVITY	0.741	0.715	0.713

	INDEX 1168 SAMPLE 6697	INDEX 1169 SAMPLE 6699	INDEX 1170 SAMPLE 6942
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	24 IN. L LINE	24 IN. L-1 LINE	J-4
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	07/03/58	07/03/58	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	175	175	NOT GIVEN
FLOW, MCFD	112000	98000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.4	70.6	74.7
ETHANE	6.4	6.2	6.3
PROPANE	4.0	3.9	3.6
N-BUTANE	1.2	1.5	1.0
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.2	0.2	0.1
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	15.8	15.8	12.3
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.80	0.70	0.50
HEATING VALUE*	1026	1027	1048
SPECIFIC GRAVITY	0.734	0.734	0.710

	INDEX 1171 SAMPLE 6943	INDEX 1172 SAMPLE 6944	INDEX 1173 SAMPLE 6945
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	J-1 LINE	L-2 LINE	L-10 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.4	75.2	68.7
ETHANE	6.4	6.5	6.3
PROPANE	3.8	3.6	3.7
N-BUTANE	1.0	0.9	0.9
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	12.0	12.0	18.2
OXIGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.40	0.50	1.00
HEATING VALUE*	1046	1046	982
SPECIFIC GRAVITY	0.702	0.704	0.730

	INDEX 1174 SAMPLE 6946	INDEX 1175 SAMPLE 6947	INDEX 1176 SAMPLE 6948
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	L-11 LINE	K-1 LINE	K-6 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.2	75.6	71.8
ETHANE	6.6	6.9	6.6
PROPANE	4.1	3.6	3.8
N-BUTANE	1.2	1.0	1.1
ISOBUTANE	0.8	0.5	0.6
N-PENTANE	0.4	0.3	0.3
ISOPENTANE	0.1	0.2	0.2
CYCLOPENTANE	0.3	0.1	0.1
HEXANES PLUS	0.7	0.3	0.2
NITROGEN	14.8	10.9	14.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	0.1
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.70	0.60	0.80
HEATING VALUE*	1072	1074	1037
SPECIFIC GRAVITY	0.751	0.710	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1177 SAMPLE 6949	INDEX 1178 SAMPLE 6950	INDEX 1179 SAMPLE 6951
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	K-42 LINE	TEXAS HUGOTON	L-16 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.5	71.0	72.1
ETHANE	6.3	6.7	6.6
PROPANE	3.4	3.7	3.9
N-BUTANE	0.8	0.8	1.0
ISOBUTANE	0.5	0.5	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	17.8	15.9	14.5
OXYGEN	TRACE	0.0	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.90	0.80	0.70
HEATING VALUE*	967	1001	1019
SPECIFIC GRAVITY	0.718	0.719	0.715

	INDEX 1180 SAMPLE 6952	INDEX 1181 SAMPLE 6953	INDEX 1182 SAMPLE 6954
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	L LINE	O LINE	N LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.5	70.8	72.1
ETHANE	6.5	6.2	6.5
PROPANE	4.3	3.9	3.8
N-BUTANE	1.4	1.2	1.1
ISOBUTANE	0.7	0.6	0.6
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	15.8	15.6	14.2
OXYGEN	TRACE	0.1	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.80	0.70	0.80
HEATING VALUE*	1043	1022	1034
SPECIFIC GRAVITY	0.744	0.730	0.722

	INDEX 1183 SAMPLE 6955	INDEX 1184 SAMPLE 6956	INDEX 1185 SAMPLE 6957
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	M LINE	J-MAIN LINE	J-17 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	70.4	72.1	66.9
ETHANE	6.5	6.2	6.1
PROPANE	4.0	3.7	4.0
N-BUTANE	1.2	1.1	1.2
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.3	0.4	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	15.5	14.9	19.4
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.1	0.1
HELIUM	0.80	0.60	0.90
HEATING VALUE*	1025	1021	983
SPECIFIC GRAVITY	0.732	0.721	0.745

	INDEX 1186 SAMPLE 6958	INDEX 1187 SAMPLE 6959	INDEX 1188 SAMPLE 6960
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	J LINE	L-1-37 LINE	TEXAS HUGOTON
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.4	69.4	68.3
ETHANE	5.8	6.4	6.0
PROPANE	4.0	4.1	4.0
N-BUTANE	1.2	1.4	1.3
ISOBUTANE	0.6	0.8	0.7
N-PENTANE	0.2	0.3	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	20.2	15.9	17.8
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.1
HELIUM	0.90	0.80	0.80
HEATING VALUE*	977	1038	1010
SPECIFIC GRAVITY	0.749	0.744	0.745

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1189 SAMPLE 6961	INDEX 1190 SAMPLE 6962	INDEX 1191 SAMPLE 6963
STATE	TEXAS	TEXAS	TEXAS
COUNTY	SHERMAN	SHERMAN	SHERMAN
FIELD	HUGOTON, TEXAS	HUGOTON, TEXAS	HUGOTON, TEXAS
LOCATION	L-15 LINE	TEXAS HUGOTON	L-21 LINE
OWNER	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
SAMPLED	02/16/59	02/16/59	02/16/59
FORMATION	NOT GIVEN	NOT GIVEN	PENN-TONKAWA
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	69.8	66.1	68.4
ETHANE	6.4	6.4	6.6
PROPANE	4.3	5.3	4.3
N-BUTANE	1.4	3.0	1.5
ISOBUTANE	0.7	0.4	0.7
N-PENTANE	0.3	1.4	0.5
ISOPENTANE	0.4	1.0	0.1
CYCLOPENTANE	0.1	0.3	0.3
HEXANES PLUS	0.2	1.0	0.8
NITROGEN	15.5	19.9	15.7
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	0.1	0.1
HYDROGEN	TRACE	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	0.3
HELIUM	0.80	0.70	0.70
HEATING VALUE*	1048	1159	1076
SPECIFIC GRAVITY	0.744	0.808	0.766

	INDEX 1192 SAMPLE 8144	INDEX 1193 SAMPLE 8170	INDEX 1194 SAMPLE 2052
STATE	TEXAS	TEXAS	TEXAS
COUNTY	STEPHENS	SUTTON	UPTON
FIELD	MANNING-OCONNOR	MIERS	MCCAMEY
LOCATION	MANNING-OCONNOR FIELD	NOT GIVEN	NOT GIVEN
OWNER	LONE STAR GAS CO.	SHELL OIL CO.	HUMBLE OIL & REFINING CO.
SAMPLED	08/10/61	08/14/61	06/16/30
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	425	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	63	365	18
FLOW,MCFD	275	3400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	71.0	81.9	28.7
ETHANE	11.2	5.7	68.1
PROPANE	6.7	2.3	---
N-BUTANE	0.1	0.6	---
ISOBUTANE	1.1	0.4	---
N-PENTANE	0.5	TRACE	---
ISOPENTANE	0.6	0.2	---
CYCLOPENTANE	0.2	TRACE	---
HEXANES PLUS	0.5	0.1	---
NITROGEN	5.4	7.5	0.9
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.0	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	0.6	0.9	2.2
HELIUM	0.10	0.30	0.00
HEATING VALUE*	1282	1039	1511
SPECIFIC GRAVITY	0.790	0.565	0.917

	INDEX 1195 SAMPLE 12727	INDEX 1196 SAMPLE 5509	INDEX 1197 SAMPLE 5510
STATE	TEXAS	TEXAS	TEXAS
COUNTY	UPTON	WHEELER	WHEELER
FIELD	WILSHIRE	PANHANDLE E	PANHANDLE E
LOCATION	NOT GIVEN	18 IN. DISCHARGE	14 IN. DISCHARGE
OWNER	ATLANTIC RICHFIELD CO.	LONE STAR GAS CO.	CONSOLIDATED GAS CO.
SAMPLED	03/19/71	07/02/53	07/02/53
FORMATION	DEVO-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	75.5	82.0	80.2
ETHANE	13.8	5.8	7.5
PROPANE	5.6	4.1	3.7
N-BUTANE	1.4	1.8	1.0
ISOBUTANE	0.8	0.9	0.5
N-PENTANE	0.5	0.7	0.1
ISOPENTANE	0.0	0.4	0.1
CYCLOPENTANE	0.1	0.1	TRACE
HEXANES PLUS	0.3	0.5	0.1
NITROGEN	1.5	3.5	6.4
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.1	0.1
HELIUM	0.02	0.12	0.17
HEATING VALUE*	1272	1212	1107
SPECIFIC GRAVITY	0.743	0.716	0.684

	INDEX 1198 SAMPLE 6741	INDEX 1199 SAMPLE 6742	INDEX 1200 SAMPLE 7279
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WHEELER	WHEELER
FIELD	PANHANDLE E	PANHANDLE E	PANHANDLE E
LOCATION	16 IN. DISCHARGE	EAST LINE	2 TO 12 IN. LINES
OWNER	LONE STAR GAS CO.	EL PASO NATURAL GAS CO.	UNITED PRODUCING CO., INC.
SAMPLED	07/22/58	07/22/58	11/17/59
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	360	360
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	270	190	280
FLOW,MCFD	3000	56000	10500
COMPONENT, MOLE PCT			
METHANE	82.8	88.2	89.4
ETHANE	6.1	3.4	3.3
PROPANE	4.1	1.5	1.7
N-BUTANE	1.6	0.5	0.4
ISOBUTANE	1.0	0.3	0.3
N-PENTANE	0.8	0.1	0.1
ISOPENTANE	0.6	0.3	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.1
NITROGEN	2.8	5.3	3.9
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	TRACE	0.20	0.10
HEATING VALUE*	1209	1042	1058
SPECIFIC GRAVITY	2.800	0.631	0.627

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1201 SAMPLE 6744	INDEX 1202 SAMPLE 2023	INDEX 1203 SAMPLE 8294
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WHEELER	WINKLER	WINKLER
FIELD	PANHANDLE N	LLANO	NOT GIVEN
LOCATION	SEC. 9, BLK. A-8, H&GN SUR.	SEC. 1, BLK. C22, P.S.L.	16 IN. LINE
OWNER	CONSOLIDATED GAS UTILITIES	SHELL PETROLEUM CORP.	EL PASO NATURAL GAS CO.
SAMPLED	07/22/58	06/10/30	11/29/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	360	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	310	NOT GIVEN	NOT GIVEN
FLOW, MCFD	30000	68	73000
COMPONENT, MOLE PCT			
METHANE	80.7	51.4	82.6
ETHANE	8.0	44.0	12.5
PROPANE	4.8	---	0.8
N-BUTANE	1.3	---	0.1
ISOBUTANE	0.8	---	TRACE
N-PENTANE	0.1	---	TRACE
ISOPENTANE	0.2	---	0.0
CYCLOPENTANE	TRACE	---	0.0
HEXANES PLUS	0.1	---	0.0
NITROGEN	3.9	4.0	3.4
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	---	TRACE
HYDROGEN	0.0	---	0.1
HYDROGEN SULFIDE	0.0	---	TRACE
CARBON DIOXIDE	0.1	0.5	0.4
HELIUM	0.010	0.07	0.06
HEATING VALUE*	1174	1309	1085
SPECIFIC GRAVITY	0.701	0.793	0.693

	INDEX 1204 SAMPLE 8295	INDEX 1205 SAMPLE 8296	INDEX 1206 SAMPLE 8297
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WINKLER	WINKLER
FIELD	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	20 IN. LINE	24 IN. LINE	30 IN. LINE
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	11/29/61	11/29/61	11/29/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	430	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	436	NOT GIVEN
FLOW, MCFD	225000	144000	266000
COMPONENT, MOLE PCT			
METHANE	91.1	88.0	83.6
ETHANE	4.1	4.6	11.7
PROPANE	1.3	0.7	0.8
N-BUTANE	0.3	0.1	TRACE
ISOBUTANE	0.2	TRACE	TRACE
N-PENTANE	TRACE	TRACE	0.0
ISOPENTANE	0.2	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	1.7	1.2	3.6
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.1	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.8	5.2	TRACE
HELIUM	0.02	0.06	0.04
HEATING VALUE*	1061	996	1078
SPECIFIC GRAVITY	0.615	0.640	0.634

	INDEX 1207 SAMPLE 2026	INDEX 1208 SAMPLE 8280	INDEX 1209 SAMPLE 10892
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WINKLER	WISE	WISE
FIELD	O'BRIEN	NOT GIVEN	VARIOUS
LOCATION	SEC. 27, BLK. B-12, P.S.L.	NOT GIVEN	PIPELINE
OWNER	CONTINENTAL OIL CO.	CHEM GAS PRODUCTS PLANT, INC	SOUTHWESTERN GAS PIPELINE, I
SAMPLED	06/10/30	11/29/61	02/27/67
FORMATION	NOT GIVEN	PENN-BOONESVILLE BEND CONG.	UNKN-COMMINGLED
GEOLOGIC PROVINCE CODE	430	420	420
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	650	600
FLOW, MCFD	NOT GIVEN	150000	7000
COMPONENT, MOLE PCT			
METHANE	41.1	81.1	77.1
ETHANE	28.0	8.5	10.0
PROPANE	---	4.1	5.9
N-BUTANE	---	1.0	1.4
ISOBUTANE	---	0.6	0.5
N-PENTANE	---	0.2	0.2
ISOPENTANE	---	0.4	0.4
CYCLOPENTANE	---	TRACE	TRACE
HEXANES PLUS	---	0.1	0.1
NITROGEN	1.3	3.3	3.9
OXYGEN	0.4	0.2	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	TRACE	0.0
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	30.3	0.4	0.4
HELIUM	0.00	0.12	0.11
HEATING VALUE*	918	1165	1208
SPECIFIC GRAVITY	0.992	0.694	0.730

	INDEX 1210 SAMPLE 6775	INDEX 1211 SAMPLE 8305	INDEX 1212 SAMPLE 8304
STATE	TEXAS	TEXAS	TEXAS
COUNTY	WISE	YOAKUM	YOAKUM
FIELD	WISE & JACK	NOT GIVEN	SPRABERRY
LOCATION	20 IN. LINE	30 IN. DISCHARGE	24 IN. DISCHARGE TO DIMITT
OWNER	NATURAL GAS PIPELINE CO. OF	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	08/08/58	11/30/61	11/30/61
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	420	430	430
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	605	833	517
FLOW, MCFD	90000	625000	38000
COMPONENT, MOLE PCT			
METHANE	86.3	86.9	87.8
ETHANE	9.4	7.3	7.3
PROPANE	1.5	1.3	1.1
N-BUTANE	0.1	0.1	0.1
ISOBUTANE	0.1	TRACE	TRACE
N-PENTANE	0.1	TRACE	TRACE
ISOPENTANE	0.0	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	1.9	3.8	3.2
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.3
HELIUM	0.10	0.05	0.09
HEATING VALUE*	1093	1048	1052
SPECIFIC GRAVITY	0.632	0.622	0.618

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1213 SAMPLE 7853	INDEX 1214 SAMPLE 17760	INDEX 1215 SAMPLE 16003
STATE	UTAH	UTAH	UTAH
COUNTY	CARBON	CARBON	CARBON
FIELD	CLEAR CREEK	UINTA BASIN AREA	VERNAL & COLORADO
LOCATION	NOT GIVEN	20 IN. DISC.	20 IN.
OWNER	UTAH NATURAL GAS CO.	MOUNTAIN FUEL RESOURCES, INC	MOUNTAIN FUEL SUPPLY CO.
SAMPLED	02/09/61	07/10/85	07/09/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	575	575	575
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	600	421
FLOW, MCFD	NOT GIVEN	70000	64000
COMPONENT, MOLE PCT			
METHANE	97.4	89.2	89.5
ETHANE	0.1	6.6	6.3
PROPANE	0.1	1.8	1.3
N-BUTANE	TRACE	0.3	0.2
ISOBUTANE	TRACE	0.5	0.1
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.0	TRACE	0.1
CYCLOPENTANE	TRACE	0.3	TRACE
HEXANES PLUS	TRACE	0.5	0.1
NITROGEN	1.6	0.6	1.7
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.0	0.5
HELIUM	0.04	0.01	0.07
HEATING VALUE*	991	1139	1077
SPECIFIC GRAVITY	0.569	0.640	0.621

	INDEX 1216 SAMPLE 6968	INDEX 1217 SAMPLE 8318	INDEX 1218 SAMPLE 9621
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	ANETH	ANETH	LISBON
LOCATION	NOT GIVEN	20 IN. INLET	LISBON UNIT WELL NO. C-93
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	PURE OIL CO.
SAMPLED	02/11/59	12/04/61	10/26/64
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	977	2850
FLOW, MCFD	NOT GIVEN	65200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.0	78.7	37.7
ETHANE	19.3	15.1	10.8
PROPANE	8.7	3.3	8.9
N-BUTANE	1.7	TRACE	1.7
ISOBUTANE	0.9	TRACE	0.5
N-PENTANE	0.2	TRACE	0.5
ISOPENTANE	0.1	0.1	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	0.2
NITROGEN	0.6	2.4	10.9
OXYGEN	0.0	0.2	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	0.0	0.0	0.3
CARBON DIOXIDE	0.2	0.1	27.8
HELIUM	0.07	0.03	0.58
HEATING VALUE*	1366	1158	914
SPECIFIC GRAVITY	0.788	0.674	1.061

	INDEX 1219 SAMPLE 8319	INDEX 1220 SAMPLE 12074	INDEX 1221 SAMPLE 14480
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SAN JUAN
FIELD	NOT GIVEN	SAN JUAN BASIN	SAN JUAN BASIN
LOCATION	6 IN. OUTLET	NO. 2 DISCHARGE	26 IN.
OWNER	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	NORTHWEST PIPELINE CORP.
SAMPLED	12/04/61	10/06/69	09/30/75
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	585
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	924	647	640
FLOW, MCFD	2490	200000	185000
COMPONENT, MOLE PCT			
METHANE	66.3	91.3	90.5
ETHANE	4.6	4.7	6.3
PROPANE	2.4	1.0	1.5
N-BUTANE	0.7	0.0	TRACE
ISOBUTANE	0.4	0.0	0.1
N-PENTANE	0.1	0.0	TRACE
ISOPENTANE	0.2	0.0	TRACE
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	TRACE	0.0	TRACE
NITROGEN	19.0	0.7	0.3
OXYGEN	TRACE	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.1	0.1	0.0
HYDROGEN SULFIDE	TRACE	0.0	0.0
CARBON DIOXIDE	5.0	1.9	1.2
HELIUM	0.98	0.01	0.02
HEATING VALUE*	867	1043	1072
SPECIFIC GRAVITY	0.747	0.612	0.614

	INDEX 1222 SAMPLE 16119	INDEX 1223 SAMPLE 6849	INDEX 1224 SAMPLE 16004
STATE	UTAH	UTAH	UTAH
COUNTY	SAN JUAN	SAN JUAN	SUMMIT
FIELD	SAN JUAN BASIN	WHITE MESA	SW WYO., NW COLO., & NE UTAH
LOCATION	26 IN. OUTLET	NOT GIVEN	INLET
OWNER	NORTHWEST PIPELINE CORP.	CONTINENTAL OIL CO.	MOUNTAIN FUEL SUPPLY CO.
SAMPLED	10/27/80	11/99/59	07/10/80
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	585	585	570
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	750	NOT GIVEN	400
FLOW, MCFD	280000	NOT GIVEN	48000
COMPONENT, MOLE PCT			
METHANE	90.2	64.1	83.6
ETHANE	6.4	20.9	9.5
PROPANE	1.5	10.1	1.9
N-BUTANE	TRACE	2.2	0.3
ISOBUTANE	TRACE	1.2	0.1
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.0	0.7	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	TRACE	0.2	0.1
NITROGEN	0.4	0.3	4.1
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.3	0.1	0.3
HELIUM	0.01	TRACE	0.05
HEATING VALUE*	1067	1453	1094
SPECIFIC GRAVITY	0.614	0.838	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1225 SAMPLE 17763	INDEX 1226 SAMPLE 6832	INDEX 1227 SAMPLE 9980
STATE	UTAH	UTAH	VIRGINIA
COUNTY	SUMMIT	UINTAH	RUSSELL
FIELD	WY.- CO. & UT. (OVERTHRUST)	RED WASH	COMPOSITE VIRGINIA GAS
LOCATION	16 IN. DISC. TO OGDEN	COMPRESSOR INTAKE	12 IN. LINE
OWNER	MOUNTAIN FUEL RESOURCES, INC	STANDARD OIL CO. OF CALIF.	KENTUCKY WEST VIRGINIA GAS C
SAMPLED	07/10/65	10/16/58	07/09/65
FORMATION	NOT GIVEN	NOT GIVEN	DEVO-SHALE & MISS
GEOLOGIC PROVINCE CODE	570	575	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	400	NOT GIVEN	115
FLOW,MCFD	49700	NOT GIVEN	1734
COMPONENT, MOLE PCT			
METHANE	86.0	92.0	95.7
ETHANE	9.3	2.0	2.5
PROPANE	2.5	2.1	0.5
N-BUTANE	0.2	0.9	0.1
ISOBUTANE	0.2	0.6	0.1
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	TRACE	0.4	TRACE
CYCLOPENTANE	TRACE	0.2	TRACE
HEXANES PLUS	0.1	0.3	0.1
NITROGEN	2.4	0.3	0.7
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.0	TRACE
HELIUM	0.02	TRACE	0.07
HEATING VALUE*	1111	1121	1043
SPECIFIC GRAVITY	0.642	0.642	0.581

	INDEX 1228 SAMPLE 8373	INDEX 1229 SAMPLE 6915	INDEX 1230 SAMPLE 8412
STATE	WASHINGTON	WASHINGTON	WASHINGTON
COUNTY	SPOKANE	WHATCOM	WHATCOM
FIELD	COUR D' LANE	CANADIAN FIELDS	DAWSON CREEK AREA, CANADA
LOCATION	NOT GIVEN	26 IN. O. D.	NOT GIVEN
OWNER	EL PASO NATURAL GAS CO.	PACIFIC NORTHWEST PIPELINE	EL PASO NATURAL GAS CO.
SAMPLED	01/18/62	12/19/58	02/19/62
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	605	700	700
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	725	NOT GIVEN
FLOW,MCFD	NOT GIVEN	208381	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	87.4	90.5	91.8
ETHANE	7.3	4.2	4.8
PROPANE	2.3	0.8	1.3
N-BUTANE	0.6	0.2	0.2
ISOBUTANE	0.4	0.0	0.1
N-PENTANE	TRACE	0.0	TRACE
ISOPENTANE	0.2	0.0	0.1
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	TRACE	0.0	0.0
NITROGEN	1.7	3.2	1.2
OXYGEN	TRACE	0.8	TRACE
ARGON	0.0	TRACE	0.0
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.2
HELIUM	0.03	0.02	0.03
HEATING VALUE*	1109	1020	1064
SPECIFIC GRAVITY	0.639	0.607	0.605

	INDEX 1231 SAMPLE 14837	INDEX 1232 SAMPLE 14838	INDEX 1233 SAMPLE 16588
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	BRAXTON	BRAXTON	BRAXTON
FIELD	CENTRAL WEST VIRGINIA	CENTRAL WEST VIRGINIA	CENTRAL WEST VIRGINIA
LOCATION	12 IN. DISCHARGE	12 IN. PLANT INLET	12 IN. INLET
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
SAMPLED	10/27/76	10/21/76	07/21/82
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	44	48	45
FLOW,MCFD	14000	14000	6000
COMPONENT, MOLE PCT			
METHANE	83.8	84.7	86.5
ETHANE	9.4	8.9	8.2
PROPANE	3.5	3.2	2.7
N-BUTANE	0.9	0.8	0.6
ISOBUTANE	0.5	0.5	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.1	1.2	0.6
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	0.1
HELIUM	0.08	0.11	0.06
HEATING VALUE*	1192	1172	1151
SPECIFIC GRAVITY	0.679	0.667	0.649

	INDEX 1234 SAMPLE 16590	INDEX 1235 SAMPLE 14840	INDEX 1236 SAMPLE 14825
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	DODDRIDGE	DODDRIDGE	KANAWHA
FIELD	PENNSBORO & LEESON	RITCHIE & DODDRIDGE CO.	CENTRAL WEST VIRGINIA
LOCATION	12 IN. DISCH.	NOT GIVEN	12 IN. DISCHARGE
OWNER	EQUITABLE GAS CO.	EQUITABLE GAS CO.	COLUMBIA GAS TRANS. CORP.
SAMPLED	07/21/82	10/21/76	10/20/76
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	232	40	300
FLOW,MCFD	13440	12000	30000
COMPONENT, MOLE PCT			
METHANE	86.6	89.7	81.7
ETHANE	8.1	6.0	10.8
PROPANE	2.6	1.9	4.3
N-BUTANE	0.6	0.5	1.3
ISOBUTANE	0.4	0.3	0.7
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.2	0.1	0.4
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.3
NITROGEN	0.7	0.8	0.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.1	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.2	0.1
HELIUM	0.06	0.06	0.06
HEATING VALUE*	1155	1115	1235
SPECIFIC GRAVITY	0.655	0.631	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1237 SAMPLE 14843	INDEX 1238 SAMPLE 16690	INDEX 1239 SAMPLE 12
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	KANAWHA	KANAWHA	LEWIS
FIELD	CENTRAL WEST VIRGINIA	WEST VIRGINIA	KENNEDY STA.
LOCATION	12 IN. DISCHARGE	WB-26 IN. OUTLET	NOT GIVEN
OWNER	CONSOLIDATED GAS SUPPLY CORP	COLUMBIA GAS TRANS. CORP.	HOPE NATURAL GAS CO.
SAMPLED	10/20/76	10/12/82	05/13/19
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	250	50	56
FLOW,MCFD	3400	NOT GIVEN	43000
COMPONENT, MOLE PCT			
METHANE	83.2	81.8	72.2
ETHANE	9.9	10.0	25.8
PROPANE	3.7	4.1	---
N-BUTANE	1.0	1.2	---
ISOBUTANE	0.6	0.6	---
N-PENTANE	0.3	0.3	---
ISOPENTANE	0.2	0.4	---
CYCLOPENTANE	0.1	0.1	---
HEXANES PLUS	0.3	0.3	---
NITROGEN	0.7	0.9	0.6
OXYGEN	0.0	0.0	1.1
ARGON	0.0	TRACE	---
HYDROGEN	0.0	0.2	---
HYDROGEN SULFIDE	0.0	0.0	---
CARBON DIOXIDE	TRACE	0.1	0.3
HELIUM	0.04	0.05	TRACE
HEATING VALUE*	1211	1225	1154
SPECIFIC GRAVITY	0.686	0.699	0.694

	INDEX 1240 SAMPLE 14826	INDEX 1241 SAMPLE 14839	INDEX 1242 SAMPLE 16589
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	LEWIS	LEWIS	LEWIS
FIELD	LEWIS, UPSHUR & BARBOUR CO.	NOT GIVEN	UPSHUR & VANDALIA CO.
LOCATION	10 IN. DISCHARGE	12 IN. DISCHARGE	12 IN. DISCH.
OWNER	COLUMBIA GAS TRANS. CORP.	EQUITABLE GAS CO.	EQUITABLE GAS CO.
SAMPLED	10/21/76	10/21/76	07/19/82
FORMATION	DEVO-BENSON	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	180	240	269
FLOW,MCFD	5100	10000	10800
COMPONENT, MOLE PCT			
METHANE	89.4	86.9	89.6
ETHANE	6.9	7.9	6.5
PROPANE	1.8	2.6	1.8
N-BUTANE	0.4	0.6	0.4
ISOBUTANE	0.2	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.7	1.0	0.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.06	0.08	0.07
HEATING VALUE*	1119	1150	1118
SPECIFIC GRAVITY	0.629	0.652	0.627

	INDEX 1243 SAMPLE 17	INDEX 1244 SAMPLE 16750	INDEX 1245 SAMPLE 14824
STATE	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY	RITCHIE	SUMMERS	SUMMERS
FIELD	CRAIG STATION	KENTUCKY, VIRGINIA, & W. VIR	KENTUCKY,VIRGINIA&W.VIRGINIA
LOCATION	NOT GIVEN	20 IN. SUCTION	20 IN. SUCTION
OWNER	HOPE NATURAL GAS CO.	COLUMBIA GAS TRANS. CORP.	COLUMBIA GAS TRANS. CORP.
SAMPLED	05/13/19	01/10/83	10/20/76
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	160
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	63	NOT GIVEN	210
FLOW,MCFD	NOT GIVEN	NOT GIVEN	90000
COMPONENT, MOLE PCT			
METHANE	74.4	93.5	94.8
ETHANE	24.8	4.1	3.6
PROPANE	---	0.5	0.6
N-BUTANE	---	0.2	0.2
ISOBUTANE	---	TRACE	0.1
N-PENTANE	---	TRACE	0.0
ISOPENTANE	---	TRACE	0.1
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	0.0	0.8	0.6
OXYGEN	0.6	0.0	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.5	TRACE
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.3	0.1	TRACE
HELIUM	0.00	0.06	0.06
HEATING VALUE*	1198	1051	1055
SPECIFIC GRAVITY	0.684	0.588	0.587

	INDEX 1246 SAMPLE 16644	INDEX 1247 SAMPLE 14823	INDEX 1248 SAMPLE 17771
STATE	WEST VIRGINIA	WEST VIRGINIA	WYOMING
COUNTY	WAYNE	WAYNE	ALBANY
FIELD	KENTUCKY & W. VIR. FIELDS	KENTUCKY E. & WEST VIRGINIA	ELK BASIN & TABLE ROCK
LOCATION	LINE P & BM-74, 20 IN.	24 IN. INLET GAS	22 & 24 IN. MAIN LINE
OWNER	COLUMBIA GAS TRANS. CORP.	COLUMBIA GAS TRANS. CORP.	COLORADO INTERSTATE GAS CO.
SAMPLED	09/08/82	10/19/76	07/15/85
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	160	160	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	120	325	600
FLOW,MCFD	63	125000	205000
COMPONENT, MOLE PCT			
METHANE	93.6	79.9	88.6
ETHANE	3.7	12.4	6.0
PROPANE	0.6	4.7	0.8
N-BUTANE	0.3	1.0	0.2
ISOBUTANE	0.0	0.3	0.1
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.2	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	1.1	1.0	2.3
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.4	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	1.8
HELIUM	0.05	0.05	0.03
HEATING VALUE*	1046	1220	1046
SPECIFIC GRAVITY	0.588	0.697	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1249 SAMPLE 17769	INDEX 1250 SAMPLE 17340	INDEX 1251 SAMPLE 17341
STATE	WYOMING	WYOMING	WYOMING
COUNTY	ALBANY	BIG HORN	BIG HORN
FIELD	POWDER RIVER BASIN	WORLAND & RIVERTON	WORLAND & RIVERTON
LOCATION	16 IN. NORTH LINE	12 IN. INLET	2 IN. LINE AFTER SCRUBBER
OWNER	COLORADO INTERSTATE GAS CO.	MONTANA-DAKOTA UTILITIES CO.	MONTANA-DAKOTA UTILITIES CO.
SAMPLED	07/15/85	06/27/84	06/27/84
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	520	520
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	780	497	497
FLOW, MCFD	20000	18000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	78.9	93.9	93.8
ETHANE	13.2	3.7	3.7
PROPANE	3.3	0.5	0.4
N-BUTANE	0.6	0.1	0.1
ISOBUTANE	0.2	TRACE	0.1
N-PENTANE	0.1	0.1	TRACE
ISOPENTANE	0.1	TRACE	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	TRACE	TRACE
NITROGEN	1.1	0.4	0.5
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.3	1.4	1.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1162	1035	1034
SPECIFIC GRAVITY	0.698	0.594	0.595

	INDEX 1252 SAMPLE 3045	INDEX 1253 SAMPLE 17768	INDEX 1254 SAMPLE 3065
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	BUNKER HILL	ELK BASIN & SHOSHONE AREA	OIL SPRINGS
LOCATION	SEC. 32, T27N, R89W	WIND RIVER LATERAL, 12 & 16	SEC. 2&3, T23N, R79W
OWNER	OHIO OIL CO.	COLORADO INTERSTATE GAS CO.	OHIO OIL & CUNNINGHAM OIL CO
SAMPLED	12/09/41	07/15/85	12/26/41
FORMATION	CRET-SHANNON	NOT GIVEN	JURA-SUNDANCE
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	387	500	1100
FLOW, MCFD	2000	100000	2500
COMPONENT, MOLE PCT			
METHANE	95.5	92.3	97.9
ETHANE	4.3	4.7	0.1
PROPANE	---	0.8	---
N-BUTANE	---	0.2	---
ISOBUTANE	---	0.1	---
N-PENTANE	---	0.1	---
ISOPENTANE	---	TRACE	---
CYCLOPENTANE	---	0.1	---
HEXANES PLUS	---	0.3	---
NITROGEN	0.0	1.1	1.6
OXYGEN	0.0	0.0	0.2
ARGON	---	TRACE	---
HYDROGEN	---	0.1	---
HYDROGEN SULFIDE	---	0.0	---
CARBON DIOXIDE	0.2	0.1	0.2
HELIUM	0.03	0.01	0.03
HEATING VALUE*	1044	1074	994
SPECIFIC GRAVITY	0.578	0.606	0.565

	INDEX 1255 SAMPLE 9417	INDEX 1256 SAMPLE 17770	INDEX 1257 SAMPLE 6976
STATE	WYOMING	WYOMING	WYOMING
COUNTY	CARBON	CARBON	CARBON
FIELD	ROCK RIVER	TABLE ROCK & WAMSUTTER	WERTZ
LOCATION	PLANT INLET	WYOMING MAIN LINE, 22 & 24	NOT GIVEN
OWNER	MARATHON OIL CO.	COLORADO INTERSTATE GAS CO.	SINCLAIR OIL & GAS CO.
SAMPLED	06/29/64	07/15/85	02/17/59
FORMATION	CRET-MUDDY,DAKOTA,&LAKOTA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	100	600	NOT GIVEN
FLOW, MCFD	NOT GIVEN	127000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	66.1	87.6	37.5
ETHANE	12.4	6.7	5.9
PROPANE	11.4	0.9	5.2
N-BUTANE	3.0	0.2	2.5
ISOBUTANE	2.3	0.1	1.3
N-PENTANE	1.0	TRACE	0.8
ISOPENTANE	0.5	TRACE	0.5
CYCLOPENTANE	0.3	TRACE	0.1
HEXANES PLUS	0.7	0.1	0.7
NITROGEN	2.0	2.5	11.9
OXYGEN	0.0	0.0	TRACE
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	TRACE
CARBON DIOXIDE	0.5	1.8	32.9
HELIUM	0.01	0.03	0.40
HEATING VALUE*	1475	1046	844
SPECIFIC GRAVITY	0.873	0.631	1.105

	INDEX 1258 SAMPLE 9097	INDEX 1259 SAMPLE 9124	INDEX 1260 SAMPLE 9126
STATE	WYOMING	WYOMING	WYOMING
COUNTY	FREMONT	JOHNSON	JOHNSON
FIELD	HAPPY SPRINGS	SUSSEX	SUSSEX
LOCATION	SEC. 9, T28N, R93W	SEC. 23, T42N, R78W	SEC. 16, T42N, R78W
OWNER	SINCLAIR OIL & GAS CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
SAMPLED	09/99/63	10/12/63	10/12/63
FORMATION	NOT GIVEN	-MIXED SWEET GAS	CRET-SHANNON
GEOLOGIC PROVINCE CODE	530	515	515
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	68.6	66.6	71.5
ETHANE	6.9	10.8	11.4
PROPANE	9.6	12.6	9.4
N-BUTANE	3.9	4.4	3.5
ISOBUTANE	3.0	1.2	0.9
N-PENTANE	0.8	0.8	0.6
ISOPENTANE	1.5	1.0	0.9
CYCLOPENTANE	0.3	0.2	0.1
HEXANES PLUS	0.9	0.5	0.4
NITROGEN	4.4	1.7	1.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.3
HELIUM	0.04	0.02	0.00
HEATING VALUE*	1497	1494	1409
SPECIFIC GRAVITY	0.879	0.879	0.820

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1261 SAMPLE 9127	INDEX 1262 SAMPLE 9128	INDEX 1263 SAMPLE 9129
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SUSSEX	SUSSEX	SUSSEX
LOCATION	NWE O'LEARY BATT.	TEST SYSTEM	SEC. 35, T42N, R78W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
SAMPLED	10/13/63	10/21/63	12/31/63
FORMATION	NOT GIVEN	CRET-PARKMAN	CRET-SHANNON
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	76.3	73.1	55.3
ETHANE	12.1	7.6	19.6
PROPANE	6.0	9.1	15.4
N-BUTANE	1.8	4.0	4.7
ISOBUTANE	0.7	1.4	1.7
N-PENTANE	0.3	0.8	0.5
ISOPENTANE	0.6	1.1	1.6
CYCLOPENTANE	0.4	0.2	0.1
HEXANES PLUS	0.3	0.5	0.5
NITROGEN	1.5	1.1	0.3
OXYGEN	TRACE	TRACE	0.1
ARGON	0.0	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.7	0.3
HELIUM	0.03	0.01	0.01
HEATING VALUE*	1287	1417	1642
SPECIFIC GRAVITY	0.748	0.831	0.960

	INDEX 1264 SAMPLE 9130	INDEX 1265 SAMPLE 9131	INDEX 1266 SAMPLE 9132
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	JOHNSON
FIELD	SUSSEX	SUSSEX	SUSSEX
LOCATION	SEC. 17, T42N, R78W	SEC. 3, T41N, R78W	SEC. 26, T42N, R78W
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.
SAMPLED	12/31/63	10/--/63	10/--/63
FORMATION	CRET-LAKOTA	CRET-SHANNON	CRET-SUSSEX
GEOLOGIC PROVINCE CODE	515	515	515
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	60.4	74.3	61.6
ETHANE	16.2	12.3	15.1
PROPANE	12.3	6.7	14.1
N-BUTANE	4.4	2.4	4.4
ISOBUTANE	1.4	0.6	1.3
N-PENTANE	0.8	0.4	0.7
ISOPENTANE	0.9	0.9	1.2
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.5	0.4	0.5
NITROGEN	2.0	1.6	0.6
OXYGEN	0.0	0.0	0.1
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1519	1332	1563
SPECIFIC GRAVITY	0.909	0.775	0.914

	INDEX 1267 SAMPLE 9133	INDEX 1268 SAMPLE 9134	INDEX 1269 SAMPLE 17764
STATE	WYOMING	WYOMING	WYOMING
COUNTY	JOHNSON	JOHNSON	LINCOLN
FIELD	SUSSEX	SUSSEX	BIG PINEY & LA BARGE
LOCATION	SEC. 2, T41N, R78W	SEC. 11, T41N, R78W	30 IN. LINE
OWNER	CONTINENTAL OIL CO.	CONTINENTAL OIL CO.	NORTHWEST PIPELINE CORP.
SAMPLED	12/31/63	12/31/63	07/11/85
FORMATION	CRET-LAKOTA	CRET-FRONTIER 2ND	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	515	310
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	589
FLOW, MCFD	NOT GIVEN	NOT GIVEN	100000
COMPONENT, MOLE PCT			
METHANE	65.4	71.6	89.1
ETHANE	15.7	8.9	5.6
PROPANE	11.3	8.4	2.2
N-BUTANE	2.8	2.7	0.6
ISOBUTANE	1.3	1.1	0.4
N-PENTANE	0.4	0.5	0.1
ISOPENTANE	0.4	0.6	0.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.3	0.3
NITROGEN	1.7	4.8	0.8
OXYGEN	TRACE	0.5	0.0
ARGON	0.0	0.1	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	0.4	0.3
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1234	1297	1134
SPECIFIC GRAVITY	0.847	0.798	0.644

	INDEX 1270 SAMPLE 16001	INDEX 1271 SAMPLE 16002	INDEX 1272 SAMPLE 17765
STATE	WYOMING	WYOMING	WYOMING
COUNTY	LINCOLN	LINCOLN	LINCOLN
FIELD	BIG PINEY-LABARGE AREA	COLORADO, WYOMING, & UTAH	TOTAL SOUTH SYSTEM
LOCATION	30 IN.	26 IN.	22 IN. DISC.
OWNER	NORTHWEST PIPELINE CORP.	NORTHWEST PIPELINE CORP.	NORTHWEST PIPELINE CORP.
SAMPLED	07/10/80	07/10/80	07/11/85
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	700	600	636
FLOW, MCFD	161000	NOT GIVEN	62000
COMPONENT, MOLE PCT			
METHANE	90.7	91.5	85.5
ETHANE	5.5	5.7	8.5
PROPANE	2.0	0.8	0.8
N-BUTANE	0.4	0.1	0.0
ISOBUTANE	0.3	0.1	0.0
N-PENTANE	0.1	TRACE	0.0
ISOPENTANE	0.1	TRACE	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	TRACE	0.0
NITROGEN	0.6	0.8	4.9
OXYGEN	0.8	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.9	0.3
HELIUM	0.02	0.03	0.02
HEATING VALUE*	1106	1057	1039
SPECIFIC GRAVITY	0.623	0.605	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1273 SAMPLE 16005	INDEX 1274 SAMPLE 8998	INDEX 1275 SAMPLE 8995
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	BEAVER CREEK & GRIEVE N	BROOKS RANCH	BURKE RANCH
LOCATION	16 IN.	NOT GIVEN	NOT GIVEN
OWNER	NORTHERN UTILITIES, INC.	ATLANTIC REFINING CO.	ATLANTIC REFINING CO.
SAMPLED	07/11/80	05/31/63	05/31/63
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	200	NOT GIVEN	NOT GIVEN
FLOW, MCFD	10000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	89.5	60.0	46.4
ETHANE	7.4	13.7	14.6
PROPANE	0.3	14.1	21.8
N-BUTANE	TRACE	3.9	6.5
ISOBUTANE	0.0	1.6	2.8
N-PENTANE	TRACE	0.9	0.8
ISOPENTANE	TRACE	0.7	1.1
CYCLOPENTANE	TRACE	0.3	0.2
HEXANES PLUS	TRACE	0.8	0.5
NITROGEN	0.6	3.7	3.3
OXYGEN	0.0	TRACE	0.1
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.2	0.3	2.0
HELIUM	0.01	0.02	0.02
HEATING VALUE*	1047	1525	1725
SPECIFIC GRAVITY	0.618	0.921	1.073

	INDEX 1276 SAMPLE 16007	INDEX 1277 SAMPLE 16006	INDEX 1278 SAMPLE 17766
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NATRONA	NATRONA	NATRONA
FIELD	POWELL II & MCCULLOCK	W WYOMING TO CASPER	WIND RIVER BASIN
LOCATION	6 IN.	20 IN.	12 IN. PLANT INLET
OWNER	NORTHERN UTILITIES, INC.	KANSAS-NEBRASKA NATURAL GAS	KN ENERGY, INC.
SAMPLED	07/11/80	07/11/80	07/15/85
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	530	530	530
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	200	375	805
FLOW, MCFD	9000	40000	36300
COMPONENT, MOLE PCT			
METHANE	70.1	92.3	90.7
ETHANE	15.5	3.9	5.3
PROPANE	2.6	1.2	1.2
N-BUTANE	0.3	0.4	0.3
ISOBUTANE	0.1	0.2	0.2
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	7.7	0.4	0.6
OXYGEN	1.9	0.0	0.0
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.5	1.1	1.2
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1069	1078	1085
SPECIFIC GRAVITY	0.720	0.617	0.625

	INDEX 1279 SAMPLE 4514	INDEX 1280 SAMPLE 8335	INDEX 1281 SAMPLE 8337
STATE	WYOMING	WYOMING	WYOMING
COUNTY	NIOBRARA	SUBLETTE	SUBLETTE
FIELD	LANCE CREEK	BIG PINEY	HOSSBACK
LOCATION	SEC. 34, T36N, R65W	16 IN. OUTLET	BIG PINEY
OWNER	CONTINENTAL OIL CO.	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.
SAMPLED	05/06/48	12/08/61	12/08/61
FORMATION	PENN-	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	515	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	200	750
FLOW, MCFD	NOT GIVEN	70000	47000
COMPONENT, MOLE PCT			
METHANE	60.5	90.9	91.9
ETHANE	30.8	4.6	4.7
PROPANE	---	1.7	1.4
N-BUTANE	---	0.4	0.3
ISOBUTANE	---	0.6	0.2
N-PENTANE	---	0.1	TRACE
ISOPENTANE	---	0.2	0.3
CYCLOPENTANE	---	0.1	TRACE
HEXANES PLUS	---	0.1	TRACE
NITROGEN	7.8	1.1	0.9
OXYGEN	0.1	TRACE	0.0
ARGON	---	TRACE	TRACE
HYDROGEN	---	0.1	0.1
HYDROGEN SULFIDE	---	0.0	0.0
CARBON DIOXIDE	0.7	0.2	0.1
HELIUM	0.10	0.03	TRACE
HEATING VALUE*	1165	1103	1081
SPECIFIC GRAVITY	0.746	0.626	0.609

	INDEX 1282 SAMPLE 8336	INDEX 1283 SAMPLE 2106	INDEX 1284 SAMPLE 9570
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SUBLETTE	SWEETWATER	SWEETWATER
FIELD	TIP TOP	LOST SOLDIER	LOST SOLDIER
LOCATION	BIG PINEY	SEC. 3, T26N, R89W	SEC. 7, T26N, R89W
OWNER	EL PASO NATURAL GAS CO.	PRAIRIE OIL & GAS CO.	SINCLAIR OIL & GAS CO.
SAMPLED	12/08/61	09/09/30	09/21/64
FORMATION	NOT GIVEN	CRET-DAKOTA	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	750	5	NOT GIVEN
FLOW, MCFD	32000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.4	32.8	31.9
ETHANE	4.8	19.3	5.7
PROPANE	1.5	---	13.9
N-BUTANE	0.4	---	3.8
ISOBUTANE	0.2	---	TRACE
N-PENTANE	TRACE	---	1.5
ISOPENTANE	0.2	---	TRACE
CYCLOPENTANE	0.1	---	0.2
HEXANES PLUS	0.1	---	0.8
NITROGEN	1.0	40.7	12.3
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	---	TRACE
HYDROGEN	0.1	---	0.0
HYDROGEN SULFIDE	0.0	---	0.0
CARBON DIOXIDE	0.1	7.2	29.3
HELIUM	0.02	0.00	0.57
HEATING VALUE*	1089	678	1027
SPECIFIC GRAVITY	0.615	0.889	1.166

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 1285 SAMPLE 9053	INDEX 1286 SAMPLE 17767	INDEX 1287 SAMPLE 17759
STATE	WYOMING	WYOMING	WYOMING
COUNTY	SWEETWATER	SWEETWATER	UINTA
FIELD	PATRICK DRAW	WAMSUTTER	CARTER CREEK
LOCATION	NOT GIVEN	20 IN. LINE	CARTER CREEK 36 IN. LINE
OWNER	TEXACO INC. & U.P. RAILROAD	NORTHWEST CENTRAL PIPELINE C	MOUNTAIN FUEL RESOURCES, INC
SAMPLED	07/99/63	07/15/85	07/11/85
FORMATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE	535	535	535
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	710	813
FLOW, MCFD	NOT GIVEN	88000	90000
COMPONENT, MOLE PCT			
METHANE	83.9	84.8	86.0
ETHANE	7.8	8.5	8.2
PROPANE	3.3	3.2	2.7
N-BUTANE	1.2	0.6	0.7
ISOBUTANE	0.5	0.5	0.6
N-PENTANE	0.2	0.1	0.2
ISOPENTANE	0.5	0.1	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.3	TRACE	0.2
NITROGEN	0.3	0.4	1.0
OXYGEN	0.0	TRACE	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.8	1.5	0.0
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1182	1140	1167
SPECIFIC GRAVITY	0.693	0.664	0.662

	INDEX 1288 SAMPLE 17761
STATE	WYOMING
COUNTY	UINTA
FIELD	WHITNEY CANYON-CARTER CREEK
LOCATION	24 IN. LINE
OWNER	NATURAL GAS PIPELINE CO. OF
SAMPLED	07/11/85
FORMATION	NOT GIVEN
GEOLOGIC PROVINCE CODE	535
DEPTH, FEET	NOT GIVEN
PRESSURE, PSIG	850
FLOW, MCFD	150000
COMPONENT, MOLE PCT	
METHANE	89.3
ETHANE	8.3
PROPANE	1.3
N-BUTANE	0.0
ISOBUTANE	0.0
N-PENTANE	0.0
ISOPENTANE	0.0
CYCLOPENTANE	0.0
HEXANES PLUS	0.0
NITROGEN	1.0
OXYGEN	0.0
ARGON	TRACE
HYDROGEN	TRACE
HYDROGEN SULFIDE	0.0
CARBON DIOXIDE	TRACE
HELIUM	0.01
HEATING VALUE*	1087
SPECIFIC GRAVITY	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX / SAMPLE 1		INDEX / SAMPLE 2		INDEX / SAMPLE 3	
COUNTRY	ARGENTINA		ARGENTINA		ARGENTINA	
STATE OR PROVINCE	SALTA		SALTA		SALTA	
FIELD	CAMPO DURAN		CAMPO DURAN		CAMPO DURAN	
WELL NAME	CAMPO DURAN 26		CAMPO DURAN 6--		CAMP DURAN 15	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC	
COMPLETED	12/07/57		04/14/51		10/28/55	
SAMPLED	04/08/60		04/08/60		04/08/60	
FORMATION	CARB-TUPAMBI		CARB-TUPAMBI		CARB-TUPAMBI	
GEOLOGIC PROVINCE CODE	000		000		000	
DEPTH, FEET	12150		11303		11306	
WELLHEAD PRESSURE,PSIG	3325		3840		3881	
OPEN FLOW, MCFD	27181		29789		22592	
COMPONENT, MOLE PCT						
METHANE	85.7		85.0		87.2	
ETHANE	6.8		6.8		6.1	
PROPANE	3.2		3.3		2.0	
N-BUTANE	1.0		1.1		0.7	
ISOBUTANE	0.5		0.7		0.5	
N-PENTANE	0.3		0.4		0.1	
ISOPENTANE	0.3		0.4		0.3	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.4		0.1	
NITROGEN	0.8		0.9		2.0	
OXYGEN	0.0		0.0		TRACE	
ARGON	0.0		TRACE		TRACE	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.0		1.0		0.9	
HELIUM	0.03		0.03		0.03	
HEATING VALUE*	1163		1188		1107	
SPECIFIC GRAVITY	0.674		0.690		0.650	

	INDEX / SAMPLE 4		INDEX / SAMPLE 5		INDEX / SAMPLE 6	
COUNTRY	ARGENTINA		ARGENTINA		ARGENTINA	
STATE OR PROVINCE	SALTA		SALTA		SALTA	
FIELD	CAMPO DURAN		MADRE JONES		MADRE JONES	
WELL NAME	CAMPO DURAN 40		MADREJONES 23		MADREJONES 16	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC	
COMPLETED	03/29/60		01/29/60		11/27/59	
SAMPLED	04/08/60		04/08/60		04/08/60	
FORMATION	-TUPA CREEK		-TUAPMBI		CARB-TUPAMBI	
GEOLOGIC PROVINCE CODE	000		000		000	
DEPTH, FEET	11943		13049		12973	
WELLHEAD PRESSURE,PSIG	3527		3705		3869	
OPEN FLOW, MCFD	2922		37328		24615	
COMPONENT, MOLE PCT						
METHANE	82.8		87.7		85.8	
ETHANE	7.7		6.2		6.4	
PROPANE	4.0		2.1		2.7	
N-BUTANE	1.3		0.7		0.9	
ISOBUTANE	0.5		0.5		0.6	
N-PENTANE	0.3		0.1		0.2	
ISOPENTANE	0.3		0.3		0.3	
CYCLOPENTANE	TRACE		TRACE		TRACE	
HEXANES PLUS	0.2		0.1		0.2	
NITROGEN	1.1		2.1		1.1	
OXYGEN	0.0		0.0		TRACE	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.7		0.2		1.8	
HELIUM	0.03		TRACE		0.03	
HEATING VALUE*	1184		1117		1136	
SPECIFIC GRAVITY	0.701		0.645		0.673	

	INDEX / SAMPLE 7		INDEX / SAMPLE 8		INDEX / SAMPLE 9	
COUNTRY	ARGENTINA		ARGENTINA		ARGENTINA	
STATE OR PROVINCE	SALTA		SALTA		SANTA CRUZ	
FIELD	MADRE JONES		MADRE JONES		CANADON SECO	
WELL NAME	MADREJONES 17		MADREJONES 4		CS 40	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC	
COMPLETED	06/27/59		02/21/56		--/--/00	
SAMPLED	04/08/60		04/08/60		--/--/60	
FORMATION	CARB-TUPAMBI		CARB-TUPAMBI		-CHUBUTIANO	
GEOLOGIC PROVINCE CODE	000		000		000	
DEPTH, FEET	13074		13012		5246	
WELLHEAD PRESSURE,PSIG	3442		3819		855	
OPEN FLOW, MCFD	15221		27322		14	
COMPONENT, MOLE PCT						
METHANE	85.9		81.4		90.1	
ETHANE	6.4		7.5		5.5	
PROPANE	3.1		4.4		1.7	
N-BUTANE	0.9		1.6		0.5	
ISOBUTANE	0.5		0.7		0.9	
N-PENTANE	0.3		0.5		0.2	
ISOPENTANE	0.3		0.4		0.1	
CYCLOPENTANE	0.1		0.1		TRACE	
HEXANES PLUS	0.2		0.3		0.1	
NITROGEN	0.7		1.2		1.0	
OXYGEN	TRACE		TRACE		TRACE	
ARGON	TRACE		TRACE		0.0	
HYDROGEN	0.0		0.0		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	1.5		1.6		0.1	
HELIUM	0.03		0.03		0.20	
HEATING VALUE*	1152		1215		1104	
SPECIFIC GRAVITY	0.674		0.720		0.624	

	INDEX / SAMPLE 10		INDEX / SAMPLE 11		INDEX / SAMPLE 12	
COUNTRY	ARGENTINA		ARGENTINA		ARGENTINA	
STATE OR PROVINCE	SANTA CRUZ		SANTA CRUZ		SANTA CRUZ	
FIELD	CDON LEON		MESETA ESPINOZA		PICO TRUNCADO	
WELL NAME	CL 194		ME 374		PT 105	
LOCATION	NOT GIVEN		NOT GIVEN		NOT GIVEN	
OWNER	YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC		YACIMIENTOS PETROLIFERO FISC	
COMPLETED	--/--/00		--/--/00		--/--/00	
SAMPLED	02/14/61		--/--/60		--/--/60	
FORMATION	-CHUBUTIANO		-CHUBUTIANO		-CHUBUTIANO	
GEOLOGIC PROVINCE CODE	000		000		000	
DEPTH, FEET	4182		4698		3107	
WELLHEAD PRESSURE,PSIG	75		74		45	
OPEN FLOW, MCFD	159		177		18	
COMPONENT, MOLE PCT						
METHANE	96.5		89.6		86.4	
ETHANE	2.1		5.3		6.3	
PROPANE	0.3		1.8		2.6	
N-BUTANE	0.1		0.5		1.4	
ISOBUTANE	0.2		0.4		0.9	
N-PENTANE	TRACE		0.2		0.5	
ISOPENTANE	0.1		0.1		0.3	
CYCLOPENTANE	TRACE		0.1		TRACE	
HEXANES PLUS	0.1		0.2		0.2	
NITROGEN	0.4		1.2		1.3	
OXYGEN	0.0		TRACE		0.0	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	0.0		0.0		TRACE	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	TRACE		TRACE		0.2	
HELIUM	0.01		0.02		0.01	
HEATING VALUE*	1042		1106		1177	
SPECIFIC GRAVITY	0.577		0.633		0.675	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 13 SAMPLE 14223	INDEX 14 SAMPLE 10479	INDEX 15 SAMPLE 10924
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	NORTH TERRIRORY	NORTH TERRITORY	QUEENSLAND
FIELD	PALM VALLEY	MEREENIE	BONY CREEK
WELL NAME	PALM VALLEY NO. 2	EAST MEREENIE NO. 1	BONY CREEK NO. 4
LOCATION	LAT 24 00 03S LONG132 38 47E	NOT GIVEN	26-44-26S, 148-57-20E
OWNER	MAGELLAN PETROLEUM PARTY LTD	EXOIL N.T. PARTY, LTD.	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	02/02/70	08/04/64	11/18/63
SAMPLED	06/24/74	02/02/66	01/05/67
FORMATION	ORDO-PACOOTA	ORDO-PACOOTA	JURA-PRECIPICE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6557	3550	4330
WELLHEAD PRESSURE,PSIG	2446	1530	1740
OPEN FLOW, MCFD	69700	60500	3650
COMPONENT, MOLE PCT			
METHANE	87.9	68.3	82.2
ETHANE	7.8	8.9	5.5
PROPANE	1.2	3.6	1.8
N-BUTANE	0.2	1.2	0.1
ISOBUTANE	0.2	0.6	1.0
N-PENTANE	TRACE	0.8	TRACE
ISOPENTANE	TRACE	TRACE	0.5
CYCLOPENTANE	TRACE	0.2	0.1
HEXANES PLUS	0.1	0.9	0.2
NITROGEN	2.3	15.3	7.5
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.6
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.0	0.3
HELIUM	0.21	0.20	0.08
HEATING VALUE*	1084	1093	1054
SPECIFIC GRAVITY	0.626	0.765	0.663

	INDEX 16 SAMPLE 10925	INDEX 17 SAMPLE 10932	INDEX 18 SAMPLE 10933
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	BONY CREEK	BONY CREEK	BONY CREEK
WELL NAME	BONY CREEK NO. 6	BONY CREEK NO. 10	BONY CREEK NO. 5
LOCATION	26-44-00S, 148-58-10E	26-44-51S, 148-59-14E	26-45-43S, 148-59-13E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	12/14/63	05/29/64	11/28/63
SAMPLED	01/05/67	01/05/67	01/05/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4330	4320	4240
WELLHEAD PRESSURE,PSIG	1750	1740	1780
OPEN FLOW, MCFD	10600	3500	5300
COMPONENT, MOLE PCT			
METHANE	82.2	82.4	79.5
ETHANE	5.7	5.6	5.5
PROPANE	2.1	2.0	1.8
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	1.2	1.1	1.1
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.5	0.6	0.9
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.2	0.1	0.5
NITROGEN	7.5	7.4	10.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.5	0.5
HELIUM	0.09	0.08	0.08
HEATING VALUE*	1065	1062	1049
SPECIFIC GRAVITY	0.671	0.671	0.692

	INDEX 19 SAMPLE 10938	INDEX 20 SAMPLE 10939	INDEX 21 SAMPLE 10928
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	BONY CREEK	BONY CREEK	PICKANJINNIE
WELL NAME	BONY CREEK NO. 2	BONY CREEK NO. 13	PICKANJINNIE NO. 4
LOCATION	26-44-10S, 148-57-40E	26-43-34S, 148-56-29E	26-34-57S, 149-06-53E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	04/29/63	07/18/64	08/19/64
SAMPLED	01/05/67	01/05/67	01/06/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4224	4255	4057
WELLHEAD PRESSURE,PSIG	1725	1725	1630
OPEN FLOW, MCFD	NOT GIVEN	9200	4400
COMPONENT, MOLE PCT			
METHANE	79.4	79.6	92.8
ETHANE	5.6	6.3	1.1
PROPANE	1.9	3.1	0.3
N-BUTANE	0.1	0.8	0.1
ISOBUTANE	1.1	1.0	0.6
N-PENTANE	TRACE	0.1	0.0
ISOPENTANE	0.4	0.6	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	10.8	7.7	4.3
OXYGEN	0.0	TRACE	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.3	0.2
HELIUM	0.06	0.08	0.02
HEATING VALUE*	1020	1109	1018
SPECIFIC GRAVITY	0.685	0.701	0.610

	INDEX 22 SAMPLE 10929	INDEX 23 SAMPLE 10942	INDEX 24 SAMPLE 10943
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	PICKANJINNIE	PICKANJINNIE	PICKANJINNIE
WELL NAME	PICKANJINNIE NO. 6	PICKANJINNIE NO. 1	PICKANJINNIE NO. 8
LOCATION	26-35-17S, 149-08-54E	26-35-42S, 149-07-10E	26-36-50S, 149-11-33E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	09/22/64	08/04/60	10/23/64
SAMPLED	--/--/--	01/06/67	01/06/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	-SHOWGROUND
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4078	4009	4320
WELLHEAD PRESSURE,PSIG	1600	1620	1990
OPEN FLOW, MCFD	11800	6650	10800
COMPONENT, MOLE PCT			
METHANE	96.3	93.1	96.1
ETHANE	0.5	1.5	1.0
PROPANE	TRACE	0.4	0.0
N-BUTANE	TRACE	0.1	0.1
ISOBUTANE	0.1	0.5	0.1
N-PENTANE	0.0	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.1	0.1
NITROGEN	2.3	3.6	2.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.3	0.3
HELIUM	0.05	0.05	0.05
HEATING VALUE*	1007	1018	1011
SPECIFIC GRAVITY	0.576	0.605	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 25 SAMPLE 10940	INDEX 26 SAMPLE 10941	INDEX 27 SAMPLE 10926
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	PINE RIDGE	PINE RIDGE	RICHMOND
WELL NAME	PINE RIDGE NO. 1	PINE RIDGE NO. 6	RICHMOND NO. 7
LOCATION	26-29-35S, 149-01-02E	26-28-43S, 148-58-56E	26-41-54S, 148-52-43E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	01/25/65	06/27/65	12/16/63
SAMPLED	01/06/67	01/06/67	01/04/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	3414	3420	4076
WELLHEAD PRESSURE,PSIG	1310	1240	1650
OPEN FLOW, MCFD	5500	5500	11200
COMPONENT, MOLE PCT			
METHANE	95.2	92.9	83.8
ETHANE	2.0	3.1	5.6
PROPANE	0.1	0.3	2.5
N-BUTANE	0.1	0.1	0.5
ISOBUTANE	0.1	0.5	0.9
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.2	0.2	0.6
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	TRACE	0.1	0.2
NITROGEN	2.0	2.6	5.4
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.05	0.05	0.04
HEATING VALUE*	1018	1042	1101
SPECIFIC GRAVITY	0.582	0.600	0.670

	INDEX 28 SAMPLE 10927	INDEX 29 SAMPLE 10930	INDEX 30 SAMPLE 10931
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	RICHMOND	RICHMOND	RICHMOND
WELL NAME	RICHMOND NO. 11	RICHMOND NO. 18	APPLEGROVE NO. 1
LOCATION	26-41-44S, 148-51-12E	26-41-01S, 148-50-05E	26-40-55S, 148-51-06E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	01/05/64	04/23/64	10/28/63
SAMPLED	01/04/67	01/04/67	01/04/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4036	3935	3932
WELLHEAD PRESSURE,PSIG	1650	1680	1685
OPEN FLOW, MCFD	1200	7900	2330
COMPONENT, MOLE PCT			
METHANE	85.6	92.2	86.2
ETHANE	5.9	2.5	5.6
PROPANE	2.6	0.4	2.2
N-BUTANE	0.5	0.1	0.1
ISOBUTANE	1.1	0.0	0.9
N-PENTANE	TRACE	0.0	0.0
ISOPENTANE	0.5	0.0	0.4
CYCLOPENTANE	0.2	0.0	0.2
HEXANES PLUS	0.4	0.0	0.3
NITROGEN	2.9	3.7	3.6
OXYGEN	0.1	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.2	0.9	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.07	0.06
HEATING VALUE*	1142	995	1105
SPECIFIC GRAVITY	0.669	0.584	0.658

	INDEX 31 SAMPLE 10935	INDEX 32 SAMPLE 10936	INDEX 33 SAMPLE 10937
COUNTRY	AUSTRALIA	AUSTRALIA	AUSTRALIA
STATE OR PROVINCE	QUEENSLAND	QUEENSLAND	QUEENSLAND
FIELD	RICHMOND	RICHMOND	RICHMOND
WELL NAME	RICHMOND NO. 13	RICHMOND NO. 16	RICHMOND NO. 5
LOCATION	26-42-16S, 148-52-51E	26-41-13S, 148-51-35E	26-42-00S, 148-52-14E
OWNER	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS	ASSOC. AUSTRALIAN OIL FIELDS
COMPLETED	03/01/64	04/03/64	11/29/63
SAMPLED	01/04/67	01/12/67	01/12/67
FORMATION	JURA-PRECIPICE	JURA-PRECIPICE	JURA-PRECIPICE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4107	4018	4146
WELLHEAD PRESSURE,PSIG	1640	1655	1576
OPEN FLOW, MCFD	4400	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.0	87.1	84.3
ETHANE	5.6	5.6	6.1
PROPANE	2.8	2.2	2.8
N-BUTANE	0.7	0.3	0.7
ISOBUTANE	1.1	0.8	0.9
N-PENTANE	0.0	0.0	0.1
ISOPENTANE	1.0	0.6	0.6
CYCLOPENTANE	1.4	0.2	0.1
HEXANES PLUS	0.7	0.5	0.2
NITROGEN	3.1	2.7	4.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.5	0.2	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.2
HELIUM	0.04	0.04	0.05
HEATING VALUE*	1179	1126	1134
SPECIFIC GRAVITY	0.692	0.655	0.681

	INDEX 34 SAMPLE 12027	INDEX 35 SAMPLE 10788	INDEX 36 SAMPLE 10791
COUNTRY	AUSTRIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE		SANTA CRUZ	SANTA CRUZ
FIELD	MATZEN	COLPA	PALMAR
WELL NAME	SCHOENKIRCHEN TIEF 32	COLPA NO. 2	PALMAR NO. 5
LOCATION	SCHOENKIRCHEN N.O.	NOT GIVEN	NOT GIVEN
OWNER	MINERALOLWER WALTUNG AG	BOLIVIAN GULF OIL CO.	BOLIVIAN GULF OIL CO.
COMPLETED	07/18/69	03/20/66	01/05/65
SAMPLED	07/17/69	10/25/66	11/24/66
FORMATION	-KREIDE	-TARIJA L	-TAIGUATI
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	15858	8903	8670
WELLHEAD PRESSURE,PSIG	6120	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.2	84.4	88.8
ETHANE	0.8	6.7	3.4
PROPANE	0.2	4.0	2.9
N-BUTANE	0.1	1.4	0.9
ISOBUTANE	TRACE	0.8	0.2
N-PENTANE	TRACE	0.7	0.2
ISOPENTANE	0.1	TRACE	0.2
CYCLOPENTANE	TRACE	0.3	0.1
HEXANES PLUS	0.1	0.8	0.2
NITROGEN	1.2	0.5	0.9
OXYGEN	0.0	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.2	0.1
HYDROGEN SULFIDE**	0.1	0.0	0.0
CARBON DIOXIDE	12.1	0.1	TRACE
HELIUM	0.02	0.02	0.01
HEATING VALUE*	896	1236	1140
SPECIFIC GRAVITY	0.689	0.701	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 37 SAMPLE 10792	INDEX 38 SAMPLE 10793	INDEX 39 SAMPLE 16042
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	RIO GRANDE	RIO GRANDE	SANTA CRUZ
WELL NAME	RIO GRANDE NO. 12	RIO GRANDE NO. 12	NO. 4-B
LOCATION	NOT GIVEN	NOT GIVEN	ROBORE
OWNER	BOLIVIAN GULF OIL CO.	BOLIVIAN GULF OIL CO.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	10/31/63	11/01/63	01/26/77
SAMPLED	11/24/66	11/24/66	07/24/80
FORMATION	-TAIGUATI	-TAIGUATI	CARB-TUPAMBI
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	9199	8618	6477
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.4	89.0	82.4
ETHANE	5.3	4.8	7.3
PROPANE	3.4	2.0	4.6
N-BUTANE	1.2	1.0	1.6
ISOBUTANE	0.5	0.3	0.7
N-PENTANE	0.6	0.2	0.4
ISOPENTANE	0.5	0.3	0.4
CYCLOPENTANE	0.2	0.1	0.1
HEXANES PLUS	0.8	0.3	0.3
NITROGEN	1.9	1.5	2.2
OXYGEN	0.1	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	TRACE	0.1
HELIUM	0.01	0.01	0.02
HEATING VALUE*	1201	1136	1215
SPECIFIC GRAVITY	0.693	0.652	0.707

	INDEX 40 SAMPLE 16036	INDEX 41 SAMPLE 16037	INDEX 42 SAMPLE 16038
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	TITA	TITA	TITA
WELL NAME	TITA NO. 1-T	TITA NO. 12-T	TITA NO. 3-UN
LOCATION	ROBORE	ROBORE	ROBORE
OWNER	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	08/17/76	10/14/77	01/30/78
SAMPLED	07/24/80	07/24/80	07/24/80
FORMATION	CARB-TUPAMBI	CARB-TUPAMBI	CARB-TUPAMBI
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6592	5375	6423
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.4	70.0	81.6
ETHANE	7.1	6.2	7.1
PROPANE	4.3	9.1	4.2
N-BUTANE	1.4	1.5	1.3
ISOBUTANE	0.6	1.1	0.7
N-PENTANE	0.4	0.7	0.3
ISOPENTANE	0.4	0.8	0.3
CYCLOPENTANE	0.1	0.3	0.1
HEXANES PLUS	0.3	1.2	0.4
NITROGEN	1.9	11.5	3.6
OXYGEN	0.0	2.5	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.2
HELIUM	0.03	0.02	0.02
HEATING VALUE*	1204	1151	1180
SPECIFIC GRAVITY	0.695	0.793	0.703

	INDEX 43 SAMPLE 16039	INDEX 44 SAMPLE 16040	INDEX 45 SAMPLE 16041
COUNTRY	BOLIVIA	BOLIVIA	BOLIVIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	SANTA CRUZ
FIELD	TITA	TITA	TITA
WELL NAME	TITA NO. 13-T	TITA NO. 7-B	TITA NO. 6-M
LOCATION	ROBORE	ROBORE	ROBORE
OWNER	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.	OCCIDENTAL BOLIVIANA, INC.
COMPLETED	11/06/77	06/16/77	05/11/77
SAMPLED	07/24/80	07/24/80	07/24/80
FORMATION	CARB-TUPAMBI	CARB-TUPAMBI	CARB-TUPAMBI
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6454	6434	6342
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.8	81.9	82.8
ETHANE	7.2	7.5	7.4
PROPANE	4.2	4.6	4.5
N-BUTANE	1.3	1.4	1.4
ISOBUTANE	0.6	0.8	0.6
N-PENTANE	0.3	0.4	0.3
ISOPENTANE	0.3	0.3	0.3
CYCLOPENTANE	0.1	0.2	0.1
HEXANES PLUS	0.3	0.6	0.3
NITROGEN	1.9	2.2	2.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.02	0.01	0.01
HEATING VALUE*	1196	1226	1200
SPECIFIC GRAVITY	0.691	0.713	0.697

	INDEX 46 SAMPLE 16043	INDEX 47 SAMPLE 10790	INDEX 48 SAMPLE 8883
COUNTRY	BOLIVIA	BOLIVIA	CANADA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	ALBERTA
FIELD	TITA	WILDCAT	BLACK BUTTE
WELL NAME	TITA NO. S-8	PENA NO. 1	HOME CMG BLACK BUTTE
LOCATION	ROBORE	NOT GIVEN	L. S. 10-7, T1, R8
OWNER	OCCIDENTAL BOLIVIANA, INC.	BOLIVIAN GULF OIL CO.	CANADIAN MONTANA GAS CO.,LTD
COMPLETED	03/28/77	09/10/65	12/26/62
SAMPLED	07/24/80	11/24/66	02/09/63
FORMATION	CARB-TUPAMBI	DEVO-	-MANNVILLE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6498	11312	2679
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.5	90.2	91.8
ETHANE	8.4	3.7	2.3
PROPANE	5.4	2.1	1.0
N-BUTANE	1.6	0.7	0.4
ISOBUTANE	0.8	0.4	TRACE
N-PENTANE	0.4	0.4	TRACE
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.1	0.4	TRACE
HEXANES PLUS	0.3	1.0	TRACE
NITROGEN	2.2	0.5	3.9
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.2	TRACE
HELIUM	0.01	0.02	0.10
HEATING VALUE*	1236	1168	1019
SPECIFIC GRAVITY	0.728	0.664	0.603

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 49 SAMPLE 11025	INDEX 50 SAMPLE 11180	INDEX 51 SAMPLE 11183
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	CARBON	COUNTESS	COUNTESS
WELL NAME	CWNG 10-19-29-22	COUNTESS 6-16-21-16	DELHI-SOCONY COUNTESS NO. 1
LOCATION	LSD 10-19-29-22-W4M	LSD 6-16-21-16-W4M	LSD 7-8-21-16-W4M
OWNER	CANADIAN WESTERN NAT. GAS CO	CANADIAN DELHI OIL, LTD.	CANADIAN DELHI OIL, LTD.
COMPLETED	--/--/00	09/15/60	04/02/51
SAMPLED	07/04/67	06/20/67	06/20/67
FORMATION	-GLAUCONITE	CRET-COLORADO BASAL	CRET-BOW ISLAND
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4765	5170	2870
WELLHEAD PRESSURE,PSIG	1110	826	752
OPEN FLOW, MCFD	13700	9000	1890
COMPONENT, MOLE PCT			
METHANE	85.1	91.1	91.4
ETHANE	6.0	3.0	2.9
PROPANE	3.2	0.9	0.9
N-BUTANE	0.8	0.3	0.2
ISOBUTANE	0.9	0.2	0.2
N-PENTANE	0.2	0.1	0.1
ISOPENTANE	0.3	0.1	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	2.8	3.9	3.9
OXYGEN	0.4	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	TRACE
HELIUM	0.05	0.06	0.06
HEATING VALUE*	1146	1038	1029
SPECIFIC GRAVITY	0.671	0.611	0.606

	INDEX 52 SAMPLE 11692	INDEX 53 SAMPLE 11693	INDEX 54 SAMPLE 11694
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	CROSSFIELD	CROSSFIELD	CROSSFIELD
WELL NAME	CROSS 10-35-25-29	CPR CALGARY 11-1-26-29	MOBIL CPR CROSS 2-2-26-29
LOCATION	LSD 10-35-25-29 W4M	LSD 11-1-26-29 W4M	LSD 2-2-26-29W4M
OWNER	JEFFERSON LAKE PETROCHEMICAL	JEFFERSON LAKE PETROCHEMICAL	JEFFERSON LAKE PETROCHEMICAL
COMPLETED	10/21/66	05/06/60	07/15/62
SAMPLED	11/19/68	11/19/68	11/19/68
FORMATION	CRET-BLAIRMORE	DEVO-CROSSFIELD	MISS-ELKTON
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	7304	8625	7312
WELLHEAD PRESSURE,PSIG	1772	2105	1902
OPEN FLOW, MCFD	5300	51000	71000
COMPONENT, MOLE PCT			
METHANE	83.7	62.3	83.8
ETHANE	6.7	0.7	6.6
PROPANE	2.2	TRACE	2.1
N-BUTANE	0.6	0.0	0.6
ISOBUTANE	0.5	0.0	0.5
N-PENTANE	0.3	0.0	0.3
ISOPENTANE	0.1	0.0	0.1
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.3
NITROGEN	0.5	2.4	0.5
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.1	0.1	TRACE
HYDROGEN SULFIDE**	0.0	24.4	0.3
CARBON DIOXIDE	4.2	10.1	4.9
HELIUM	0.02	0.03	0.01
HEATING VALUE*	1090	800	1097
SPECIFIC GRAVITY	0.692	0.821	0.694

	INDEX 55 SAMPLE 10997	INDEX 56 SAMPLE 10998	INDEX 57 SAMPLE 10999
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	FERRIER	FERRIER	GILBY
WELL NAME	FERRIER NO. 8-28	FERRIER NO. 8-28	GILBY
LOCATION	LSD 8-28-39-8-W5M	LSD 8-28-39-8-W5M	LSD 10-1-41-3-W5M
OWNER	SINCLAIR CANADA OIL CO.	SINCLAIR CANADA OIL CO.	CANADIAN HOMESTEAD OILS LTD.
COMPLETED	12/01/55	12/01/55	10/09/59
SAMPLED	06/08/67	06/08/67	06/--/67
FORMATION	CRET-VIKING	CRET-CARDIUM	PENN-ROWE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	8250	7230	7013
WELLHEAD PRESSURE,PSIG	2110	1700	NOT GIVEN
OPEN FLOW, MCFD	1000	750	7250
COMPONENT, MOLE PCT			
METHANE	83.2	84.8	76.5
ETHANE	9.2	8.0	7.8
PROPANE	3.6	3.2	3.1
N-BUTANE	1.0	0.7	0.8
ISOBUTANE	0.3	0.3	0.5
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.3
NITROGEN	1.1	1.6	5.3
OXYGEN	0.1	0.2	1.2
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.8	0.6	4.0
HELIUM	0.02	0.01	0.02
HEATING VALUE*	1167	1137	1079
SPECIFIC GRAVITY	0.678	0.662	0.732

	INDEX 58 SAMPLE 11000	INDEX 59 SAMPLE 11001	INDEX 60 SAMPLE 8362
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	GILBY	GILBY	MARMATTAN
WELL NAME	GILBY	GILBY	MARMATTAN NO. 9-15
LOCATION	LSD 11-11-41-3-W5M	LSD 10-10-41-3-W5M	SEC. 15, T32, R4W5
OWNER	CANADIAN HOMESTEAD OILS LTD.	CANADIAN HOMESTEAD OILS LTD.	SHELL OIL CO.
COMPLETED	08/13/64	01/21/61	09/--/61
SAMPLED	06/--/67	06/--/67	11/--/61
FORMATION	JURA-A	UNKN-MANNVILLE A & JURA-D	DEVO-
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	7040	7190	NOT GIVEN
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	2664
OPEN FLOW, MCFD	5130	47000	98000
COMPONENT, MOLE PCT			
METHANE	81.0	77.6	77.9
ETHANE	8.1	7.8	6.5
PROPANE	3.8	3.0	3.1
N-BUTANE	0.8	0.9	TRACE
ISOBUTANE	0.4	1.1	0.0
N-PENTANE	0.1	0.5	0.0
ISOPENTANE	0.3	1.2	0.0
CYCLOPENTANE	TRACE	0.4	0.0
HEXANES PLUS	0.2	1.7	0.0
NITROGEN	1.5	2.1	5.1
OXYGEN	0.2	0.0	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	12.1
CARBON DIOXIDE	4.3	3.6	3.7
HELIUM	0.02	0.01	0.21
HEATING VALUE*	1112	1246	879
SPECIFIC GRAVITY	0.702	0.793	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 61 SAMPLE 10987	INDEX 62 SAMPLE 10989	INDEX 63 SAMPLE 14455
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	KEYSTONE	KEYSTONE	LANAWAY
WELL NAME	6-24-48-4	CS IMPERIAL KEYSTONE	LANAWAY NO 6-1
LOCATION	LSD 6-24-48-4-W5M	LSD 6-35-48-4-W5M	10-32-35-4 W5M
OWNER	CANADA-CITIES SERVICE	CANADA-CITIES SERVICE	AMOCO CANADA PET. CO.
COMPLETED	06/07/65	08/06/66	--/--/00
SAMPLED	05/30/67	05/30/67	06/05/75
FORMATION	CRET-BELLY RIVER	CRET-BLAIRMORE	CRET-
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	3130	5070	7996
WELLHEAD PRESSURE,PSIG	934	510	2959
OPEN FLOW, MCFD	8800	1260	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	95.6	86.2	79.2
ETHANE	1.3	6.3	11.1
PROPANE	1.1	3.1	4.9
N-BUTANE	0.1	0.7	0.8
ISOBUTANE	0.3	0.6	0.8
N-PENTANE	TRACE	0.1	0.1
ISOPENTANE	0.2	0.4	0.3
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	1.1	1.8	1.5
OXYGEN	0.1	0.1	0.1
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.9
HELIUM	0.02	0.04	0.01
HEATING VALUE*	1047	1146	1213
SPECIFIC GRAVITY	0.589	0.663	0.714

	INDEX 64 SAMPLE 8566	INDEX 65 SAMPLE 14456	INDEX 66 SAMPLE 10986
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	MINNEHIK-BUCK LAKE	NOT GIVEN	PADDLE RIVER
WELL NAME	HB MINIHIK 10-8-45-5	ROW KY NORTH NO. 1	PADDLE RIVER
LOCATION	SEC. 8, T45, R5W5M	7-14-33-20 W4M	LSD 6-1-57-9-W5M
OWNER	HUDSONS BAY OIL & GAS CO.	AMOCO CANADA PET. CO.	CANADA-CITIES SERVICE
COMPLETED	11/13/61	--/--/00	10/01/61
SAMPLED	05/12/62	07/24/75	05/29/67
FORMATION	MISS-PEKISKO	CRET-BASIL	JURA-
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	7090	4495	5351
WELLHEAD PRESSURE,PSIG	2430	1036	1470
OPEN FLOW, MCFD	23300	NOT GIVEN	23000
COMPONENT, MOLE PCT			
METHANE	84.8	86.4	84.4
ETHANE	6.5	6.4	7.8
PROPANE	2.8	3.3	3.1
N-BUTANE	0.8	0.7	0.9
ISOBUTANE	0.5	0.7	0.4
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.2	0.2	0.2
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.4	0.1	0.2
NITROGEN	0.5	1.9	0.8
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	TRACE	1.7
HELIUM	0.02	0.04	0.03
HEATING VALUE*	1150	1145	1150
SPECIFIC GRAVITY	0.688	0.658	0.677

	INDEX 67 SAMPLE 10990	INDEX 68 SAMPLE 11785	INDEX 69 SAMPLE 11786
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	PADDLE RIVER	PRINCESS	PRINCESS
WELL NAME	6-32-56-8	MURPHY PRINCESS 10-28	MURPHY PRINCESS NO. 6-34
LOCATION	LSD 6-32-56-8-W5M	LSD 10-28-19-10W4	LSD 6-34-19-13-W4
OWNER	CANADA-CITIES SERVICE	MURPHY OIL CO. LTD.	MURPHY OIL CO. LTD.
COMPLETED	09/05/62	--/--/00	--/--/00
SAMPLED	05/29/67	02/19/69	02/19/69
FORMATION	JURA-	CRET-WHITE SPECS 2ND	CRET-WHITE SPECS 2ND
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4942	2000	2000
WELLHEAD PRESSURE,PSIG	1470	975	975
OPEN FLOW, MCFD	18500	2000	200
COMPONENT, MOLE PCT			
METHANE	84.5	95.7	91.4
ETHANE	7.7	0.4	0.3
PROPANE	2.9	TRACE	0.1
N-BUTANE	0.8	0.0	0.0
ISOBUTANE	0.4	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.3	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	1.1	3.8	8.0
OXYGEN	TRACE	0.0	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.8	TRACE	TRACE
HELIUM	0.04	0.08	0.18
HEATING VALUE*	1145	1177	934
SPECIFIC GRAVITY	0.678	0.572	0.590

	INDEX 70 SAMPLE 14457	INDEX 71 SAMPLE 11279	INDEX 72 SAMPLE 11280
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	RICINUS	SAVANNA CREEK	SAVANNA CREEK
WELL NAME	RICINUS CARDIUM NO. 1	SAVANNAH CREEK NO. 3-A	SAVANNA CREEK NO. 1
LOCATION	15-12-36-9 W5M	5-32-14-4-W5M	12-20-14-4-W5M
OWNER	AMOCO CANADA PET. CO.	MUSKY OIL CANADA LTD.	MUSKY OIL CANADA LTD.
COMPLETED	--/--/00	08/06/57	02/23/55
SAMPLED	06/05/75	02/07/68	02/07/68
FORMATION	CRET-	MISS-LIVINGSTONE	MISS-LIVINGSTONE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	8566	8838	7040
WELLHEAD PRESSURE,PSIG	2400	1475	1475
OPEN FLOW, MCFD	17607	5289	1099
COMPONENT, MOLE PCT			
METHANE	81.6	88.9	84.4
ETHANE	8.7	1.0	0.9
PROPANE	4.1	TRACE	TRACE
N-BUTANE	0.9	0.0	0.0
ISOBUTANE	0.8	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.6	0.0	0.0
NITROGEN	1.4	0.3	5.2
OXYGEN	TRACE	0.2	0.0
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	9.1	9.1
CARBON DIOXIDE	0.8	0.4	0.3
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1216	917	929
SPECIFIC GRAVITY	0.709	0.623	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 73 SAMPLE 11018	INDEX 74 SAMPLE 11019	INDEX 75 SAMPLE 8287
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	SAVANNAH CREEK	SAVANNAH CREEK	SHELL WATERTON
WELL NAME	SAVANNAH CREEK NO 3a	SAVANNAH CREEK NO. 1	SHELL WATERTON NO. 19
LOCATION	LSD 5-32-19-4-W5M	LSD 12-20-19-4-W5M	SEC. 11, TWP. 4, R1, W5M
OWNER	MUSKY OIL CANADA LTD.	MUSKY OIL CANADA LTD.	SHELL OIL CO. OF CANADA,LTD.
COMPLETED	08/06/57	08/--/62	11/--/61
SAMPLED	06/27/67	06/27/67	11/20/61
FORMATION	MISS-	MISS-	MISS-
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	8285	6401	12099
WELLHEAD PRESSURE,PSIG	1200	1200	2775
OPEN FLOW, MCFD	20000	40000	20000
COMPONENT, MOLE PCT			
METHANE	96.5	88.6	65.5
ETHANE	0.9	0.9	4.2
PROPANE	0.1	0.1	0.7
N-BUTANE	0.0	0.0	0.3
ISOBUTANE	0.0	0.0	0.1
N-PENTANE	0.0	0.0	TRACE
ISOPENTANE	0.0	0.0	0.2
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	TRACE
NITROGEN	0.6	0.4	2.1
OXYGEN	0.1	0.1	0.5
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.2	TRACE	0.1
HYDROGEN SULFIDE**	7.1	9.1	17.4
CARBON DIOXIDE	0.5	0.5	8.8
HELIUM	0.01	0.01	0.02
HEATING VALUE*	982	976	891
SPECIFIC GRAVITY	0.612	0.625	0.799

	INDEX 76 SAMPLE 8410	INDEX 77 SAMPLE 8264	INDEX 78 SAMPLE 9187
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	SUNDRE	WAYNE	WILDCAT
WELL NAME	HB SUNDRE 14-14-34-5	HB CPOG WAYNE NO. 1	SINCLAIR MILLICENT NO. 10-5
LOCATION	SEC. 14-T34-R5-W5M	SEC. 31, T26, R19W4M	SEC. 5, T21, R13W
OWNER	HUDSONS BAY OIL & GAS CO.	HUDSONS BAY OIL & GAS, ET AL	SINCLAIR CANADA OIL CO.
COMPLETED	12/29/61	09/01/61	03/10/63
SAMPLED	02/15/62	10/31/61	10/--/63
FORMATION	MISS-ELKTON	CRET-BLAIRMORE BASAL	CRET-VIKING
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	8864	4748	2592
WELLHEAD PRESSURE,PSIG	1000	1000	935
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	1300
COMPONENT, MOLE PCT			
METHANE	87.7	86.3	92.2
ETHANE	6.0	6.6	2.8
PROPANE	1.6	2.8	1.3
N-BUTANE	0.3	0.7	0.3
ISOBUTANE	0.2	0.7	0.1
N-PENTANE	TRACE	0.2	TRACE
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	TRACE
NITROGEN	0.5	2.2	2.6
OXYGEN	0.1	TRACE	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.6
CARBON DIOXIDE	3.4	0.1	0.4
HELIUM	0.01	0.05	0.00
HEATING VALUE*	1068	1135	1040
SPECIFIC GRAVITY	0.650	0.657	0.605

	INDEX 79 SAMPLE 9188	INDEX 80 SAMPLE 11002	INDEX 81 SAMPLE 8675
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	WILDCAT	WILDCAT HILLS	WORSLEY
WELL NAME	SINCLAIR MILLICENT NO. 10-5	WILDCAT HILLS UNIT	WORSLEY NO. 14-19
LOCATION	SEC. 5, T21, R13W	10-6-27-W5M	SEC. 19, T87, R7W6M
OWNER	SINCLAIR CANADA OIL CO.	CANADIAN FINA OIL LTD.	SHELL OIL CO. OF CANADA, LTD
COMPLETED	03/10/63	10/17/66	09/07/59
SAMPLED	10/--/63	06/08/67	08/22/62
FORMATION	CRET-BLAIRMORE BASAL	MISS-TURNER VALLEY	DEVO-NOT GIVEN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	3336	10051	7300
WELLHEAD PRESSURE,PSIG	1466	2650	2753
OPEN FLOW, MCFD	8600	19000	130000
COMPONENT, MOLE PCT			
METHANE	92.1	87.0	85.6
ETHANE	1.9	3.3	3.9
PROPANE	0.5	0.8	2.0
N-BUTANE	0.1	0.2	0.6
ISOBUTANE	0.3	0.3	0.4
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	TRACE	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	3.8	1.3	6.0
OXYGEN	0.0	0.1	0.1
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.1
HYDROGEN SULFIDE**	0.0	0.5	0.0
CARBON DIOXIDE	0.9	6.2	0.5
HELIUM	0.10	0.01	0.50
HEATING VALUE*	1038	991	1044
SPECIFIC GRAVITY	0.606	0.660	0.647

	INDEX 82 SAMPLE 11068	INDEX 83 SAMPLE 11346	INDEX 84 SAMPLE 11348
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	BR COLUMBIA	BR COLUMBIA
FIELD	WORSLEY	PARKLAND	PARKLAND
WELL NAME	WORSLEY 10-22-87-7	PACIFIC IMPERIAL PARKLAND	PACIFIC IMPERIAL PARKLAND
LOCATION	LSD 10-22-87-7-W6M	6-29-81-15-W6	10-28-81-15
OWNER	SHELL CANADA LTD.	PACIFIC PETROLEUMS, INC.	PACIFIC PETROLEUMS, INC.
COMPLETED	--/--/--	10/20/56	01/18/63
SAMPLED	08/06/67	01/23/68	01/23/68
FORMATION	DEVO-	DEVO-WABAMUN	DEVO-WABAMUN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	7443	10893	10680
WELLHEAD PRESSURE,PSIG	1800	2504	2952
OPEN FLOW, MCFD	NOT GIVEN	25700	11000
COMPONENT, MOLE PCT			
METHANE	85.2	92.5	92.3
ETHANE	3.5	0.4	0.5
PROPANE	2.0	0.1	0.1
N-BUTANE	0.6	0.0	0.0
ISOBUTANE	0.3	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.1	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.3	0.0	0.0
NITROGEN	6.1	2.3	2.1
OXYGEN	0.1	0.2	0.1
ARGON	0.1	0.1	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.5	4.2	4.5
HELIUM	0.52	0.24	0.30
HEATING VALUE*	1056	947	947
SPECIFIC GRAVITY	0.657	0.609	0.609

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 85 SAMPLE 11349	INDEX 86 SAMPLE 13287	INDEX 87 SAMPLE 16924
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	BR COLUMBIA	NW TERRITORY	NW TERRITORY
FIELD	RIGEL	DRAKE POINT	WILDCAT
WELL NAME	IMPERIAL ET AL. RIGEL	DRAKE POINT F-16	DOME HUNT KENALODAK J-94
LOCATION	6-27-88-18-W6	MELVILLE ISLAND	BEAUFORT SEA
OWNER	IMPERIAL OIL LTD.	PANARCTIC OILS, LTD.	DOME PETROLEUM LTD.
COMPLETED	11/08/61	06/22/72	10/28/82
SAMPLED	01/23/68	06/22/72	10/28/82
FORMATION	CRET-DUNLEVY	JURA-	OLIG-KUGMALLIT
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	3400	NOT GIVEN	14731
WELLHEAD PRESSURE,PSIG	902	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	10800	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.3	97.4	91.3
ETHANE	6.3	0.7	1.7
PROPANE	2.2	TRACE	1.0
N-BUTANE	0.7	TRACE	0.9
ISOBUTANE	0.2	TRACE	0.7
N-PENTANE	0.2	TRACE	0.4
ISOPENTANE	0.1	TRACE	1.1
CYCLOPENTANE	TRACE	TRACE	0.3
HEXANES PLUS	0.1	TRACE	0.6
NITROGEN	1.1	1.6	0.9
OXYGEN	0.2	0.1	TRACE
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.2
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.1	1.2
HELIUM	TRACE	0.02	TRACE
HEATING VALUE*	1113	999	1142
SPECIFIC GRAVITY	0.640	0.565	0.658

	INDEX 88 SAMPLE 11105	INDEX 89 SAMPLE 11103	INDEX 90 SAMPLE 11102
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ONTARIO	ONTARIO	ONTARIO
FIELD	DOVER	GOBLES	NORFOLK
WELL NAME	AJAX NO. 4	PARIS PETROLEUM NO. 2	ROBERTS NO. 29
LOCATION	LOT 2, CONC. 4, DOVER E TWP.	LOT 18, CONC.1 BLENHEIM TWP.	LOT 9, CHARLOTTEVILLE TWP.
OWNER	UNION GAS CO. OF CANADA	RAYROCK MINES LTD.	CARL H. ROBERTS
COMPLETED	06/05/29	04/20/60	03/27/67
SAMPLED	09/05/67	09/08/67	09/06/67
FORMATION	ORDO-TRENTON	CAMB-	-THOROLD
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	2805	2868	1186
WELLHEAD PRESSURE,PSIG	1216	540	660
OPEN FLOW, MCFD	5000	1200	114
COMPONENT, MOLE PCT			
METHANE	89.6	81.9	83.0
ETHANE	4.6	6.7	5.9
PROPANE	1.4	3.1	1.7
N-BUTANE	0.4	0.8	0.9
ISOBUTANE	0.1	0.4	0.1
N-PENTANE	TRACE	0.2	0.1
ISOPENTANE	0.2	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.2	0.1
NITROGEN	3.1	6.2	8.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.1	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.1
HELIUM	0.14	0.21	0.36
HEATING VALUE*	1057	1094	1025
SPECIFIC GRAVITY	0.617	0.673	0.650

	INDEX 91 SAMPLE 11101	INDEX 92 SAMPLE 11104	INDEX 93 SAMPLE 11100
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ONTARIO	ONTARIO	ONTARIO
FIELD	TILBURY	WERSCHOYLE W	WILKES PORT
WELL NAME	UNION TILBURY NO. 323	SUBCO C. H. 1	IMPERIAL SOMBRA 14-14
LOCATION	LOT 168, STR TILBURY E TWP.	LOT 21, CONC.5, DEREHAM TWP.	LOT 14, CONC.14, SOMBRA TWP.
OWNER	UNION GAS CO. OF CANADA	SUBCO, LTD.	IMPERIAL OIL LTD.
COMPLETED	01/25/54	12/08/66	07/02/65
SAMPLED	09/05/67	09/06/67	09/05/67
FORMATION	-GUELPH-SALINA	-GUELPH	-GUELPH
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	1257	886	2075
WELLHEAD PRESSURE,PSIG	232	440	925
OPEN FLOW, MCFD	80	300	13000
COMPONENT, MOLE PCT			
METHANE	84.9	73.3	85.9
ETHANE	6.5	3.2	5.0
PROPANE	2.7	0.1	2.2
N-BUTANE	0.7	0.0	0.6
ISOBUTANE	0.4	0.0	0.9
N-PENTANE	0.1	0.0	0.1
ISOPENTANE	0.3	0.0	0.2
CYCLOPENTANE	TRACE	0.0	TRACE
HEXANES PLUS	0.1	0.0	0.1
NITROGEN	3.9	21.6	4.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.1	TRACE
HYDROGEN	0.3	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.6	0.1
HELIUM	0.10	1.26	0.16
HEATING VALUE*	1107	802	1085
SPECIFIC GRAVITY	0.656	0.663	0.650

	INDEX 94 SAMPLE 5979	INDEX 95 SAMPLE 5980	INDEX 96 SAMPLE 8962
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	SASKATCHEWAN	SASKATCHEWAN	SASKATCHEWAN
FIELD	MATTON	MATTON	KINDERSLEY
WELL NAME	MERTER NO. 1-10	MOELLER NO. 1-10	KEWANEE KINDERSLEY
LOCATION	SEC. 21, T15, R28W	SEC. 26, T14, R28W	SEC. 5, T30, R25W3M
OWNER	AMUREX OIL CO.	AMUREX OIL CO.	CANADIAN KEWANEE LTD.
COMPLETED	07/28/54	07/04/54	10/04/62
SAMPLED	12/31/55	12/05/55	05/09/63
FORMATION	-MEDICINE HAT	-MEDICINE HAT	-VICTORIA
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	1644	1629	838
WELLHEAD PRESSURE,PSIG	600	525	300
OPEN FLOW, MCFD	660	1130	8500
COMPONENT, MOLE PCT			
METHANE	95.5	95.3	94.8
ETHANE	0.3	0.2	0.0
PROPANE	0.3	0.2	0.0
N-BUTANE	0.0	TRACE	0.0
ISOBUTANE	0.0	TRACE	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.0
HEXANES PLUS	0.0	0.1	0.0
NITROGEN	3.8	3.9	4.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	0.3
HELIUM	0.10	0.10	0.04
HEATING VALUE*	981	979	960
SPECIFIC GRAVITY	0.574	0.576	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 97 SAMPLE 8963	INDEX 98 SAMPLE 8964	INDEX 99 SAMPLE 10643
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	SASKATCHEWAN	SASKATCHEWAN	SASKATCHEWAN
FIELD	KINDERSLEY	KINDERSLEY	WILDCAT
WELL NAME	KEWANEE KINDERSLEY	KEWANEE KINDERSLEY	WOOD MTN. 10-3
LOCATION	SEC. 29, T29, R25W3	SEC. 32, T29, R25W3	10-3-5-8 W3M
OWNER	CANADIAN KEWANEE LTD.	CANADIAN KEWANEE LTD.	INTERNATL. HELIUM CO., LTD.
COMPLETED	08/26/62	10/05/62	01/01/62
SAMPLED	05/09/63	05/09/63	06/24/66
FORMATION	-VICTORIA	-VICTORIA	CAMB-DEADWOOD
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	770	753	8390
WELLHEAD PRESSURE,PSIG	300	300	2653
OPEN FLOW, MCFD	92000	39500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	96.3	71.7	1.8
ETHANE	0.1	0.0	0.0
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	3.4	22.6	96.4
OXYGEN	0.0	5.0	TRACE
ARGON	TRACE	0.2	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.3
HELIUM	0.10	0.03	1.20
HEATING VALUE*	977	726	18
SPECIFIC GRAVITY	0.571	0.680	0.951

	INDEX 100 SAMPLE 10644	INDEX 101 SAMPLE 10645	INDEX 102 SAMPLE 10646
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	SASKATCHEWAN	SASKATCHEWAN	SASKATCHEWAN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	WOOD MTN.	WOOD MTN.	WOOD MTN. 10-3
LOCATION	12-10-5-8 W3M	NOT GIVEN	10-3-5-8 W3M
OWNER	INTERNATL. HELIUM CO., LTD.	INTERNATL. HELIUM CO., LTD.	INTERNATL. HELIUM CO., LTD.
COMPLETED	01/01/62	01/01/62	01/01/62
SAMPLED	06/24/66	06/24/66	06/24/66
FORMATION	CAMB-DEADWOOD	CAMB-DEADWOOD	CAMB-DEADWOOD
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	8418	8418	8390
WELLHEAD PRESSURE,PSIG	2653	2653	2653
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	1.7	1.7	1.8
ETHANE	0.2	0.1	0.1
PROPANE	0.0	0.0	0.0
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	95.6	98.0	96.5
OXYGEN	0.0	TRACE	0.1
ARGON	0.2	0.2	0.2
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.3	0.1
HELIUM	1.09	1.10	1.20
HEATING VALUE*	19	19	20
SPECIFIC GRAVITY	0.950	0.950	0.950

	INDEX 103 SAMPLE 14147	INDEX 104 SAMPLE 12022	INDEX 105 SAMPLE 7547
COUNTRY	ETHIOPIA	IRAN	IRAQ
STATE OR PROVINCE	NOT GIVEN	KHORASAN	NOT GIVEN
FIELD	NOT GIVEN	KRANGIRAN	BAI HASSAN
WELL NAME	HILALA NO. 1	KHANGIRAN NO. 2	NO. 2
LOCATION	NOT GIVEN	SARAKHS-NE.IRAN	NOT GIVEN
OWNER	TENNECO OIL CO.	NATIONAL IRANIAN GAS CO.	IRAQ PETROLEUM CO., LTD.
COMPLETED	--/--/10	09/13/69	09/10/48
SAMPLED	08/01/74	06/09/69	02/15/60
FORMATION	-GUMBORO	CRET-SHORIJEH	-EUPHRATES LIMESTONE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	10970	9680	2634
WELLHEAD PRESSURE,PSIG	NOT GIVEN	4500	950
OPEN FLOW, MCFD	NOT GIVEN	16000	230000
COMPONENT, MOLE PCT			
METHANE	79.0	94.9	84.2
ETHANE	6.8	1.2	9.4
PROPANE	1.7	0.4	3.3
N-BUTANE	0.3	0.2	0.9
ISOBUTANE	0.4	0.2	0.6
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.1	TRACE	0.4
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	10.2	2.0	0.3
OXYGEN	1.4	0.2	TRACE
ARGON	0.1	TRACE	0.0
HYDROGEN	0.0	0.1	0.1
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.4	0.2
HELIUM	0.09	0.01	0.10
HEATING VALUE*	994	1026	1193
SPECIFIC GRAVITY	0.675	0.592	0.675

	INDEX 106 SAMPLE 7548	INDEX 107 SAMPLE 7549	INDEX 108 SAMPLE 9240
COUNTRY	IRAQ	IRAQ	ITALY
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	EMILIA
FIELD	JAMBUR	KIRKUK	MINERBIO
WELL NAME	JAMBUR NO. 8	KIRKUK NO. 59	NO. 27
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	IRAQ PETROLEUM CO., LTD.	IRAQ PETROLEUM CO., LTD.	AGIP S.p.A.
COMPLETED	05/10/56	08/23/44	--/--/61
SAMPLED	02/15/60	02/15/60	10/10/63
FORMATION	-EUPHRATES-SERIKAGNI	-KIRKUK MAIN LIMESTONE	PLIO-MEDIO SUPERIORE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	5152	1004	4020
WELLHEAD PRESSURE,PSIG	2450	377	1675
OPEN FLOW, MCFD	48500	NOT GIVEN	21900
COMPONENT, MOLE PCT			
METHANE	86.3	83.8	99.3
ETHANE	8.4	10.5	0.1
PROPANE	3.0	2.3	0.1
N-BUTANE	0.9	0.6	0.0
ISOBUTANE	0.5	0.4	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.2	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.2	0.1	0.0
NITROGEN	0.2	0.0	0.4
OXYGEN	TRACE	TRACE	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.1	0.0
HYDROGEN SULFIDE**	0.0	TRACE	0.0
CARBON DIOXIDE	0.0	1.8	TRACE
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1177	1149	1010
SPECIFIC GRAVITY	0.660	0.669	0.557

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

	INDEX 109 SAMPLE 9239	INDEX 110 SAMPLE 9238	INDEX 111 SAMPLE 11384
COUNTRY	ITALY	ITALY	MEXICO
STATE OR PROVINCE	EMILIA	ROMAGNA	NOT GIVEN
FIELD	SPILAMBERTO	SARRIONCELLO	CHILAPILLA
WELL NAME	NO. 7	NO. 16	NO. 6-D
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	AGIP S.P.A.	AGIP S.P.A.	PETROLEOS MEXICANOS
COMPLETED	--/--/60	--/--/60	07/15/63
SAMPLED	10/10/63	09/10/63	02/23/68
FORMATION	MIOC-SUPERIORE	PLIO-MEDIO SUPERIORE	-AMATE SUPERIOR ARENA B2
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	2730	3645	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2020	1317	2595
OPEN FLOW, MCFD	7760	5350	5845
COMPONENT, MOLE PCT			
METHANE	96.8	99.0	86.2
ETHANE	1.0	0.1	9.1
PROPANE	0.5	0.1	2.7
N-BUTANE	0.2	0.0	1.2
ISOBUTANE	TRACE	0.0	1.0
N-PENTANE	TRACE	0.0	0.4
ISOPENTANE	0.2	0.0	0.7
CYCLOPENTANE	TRACE	0.0	0.4
HEXANES PLUS	TRACE	0.0	0.9
NITROGEN	0.8	0.7	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	TRACE	0.2
HELIUM	TRACE	0.01	TRACE
HEATING VALUE*	1052	1007	1235
SPECIFIC GRAVITY	0.576	0.558	0.700

	INDEX 112 SAMPLE 11341	INDEX 113 SAMPLE 11335	INDEX 114 SAMPLE 11381
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	NUEVO LEON	NUEVO LEON	TABASCO
FIELD	CULEBRA	PAMORANA	CHILAPILLA
WELL NAME	NO. 30	NO. 3	NO. 12-D
LOCATION	NOT GIVEN	NOT GIVEN	CUIDAD PEMEX
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
COMPLETED	09/10/58	09/25/64	01/07/63
SAMPLED	02/29/68	02/29/68	02/23/68
FORMATION	-LC-MS-12	-EY-S	-AMATE SUPERIOR ARENA A1
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4098	5300	NOT GIVEN
WELLHEAD PRESSURE,PSIG	2302	2619	2165
OPEN FLOW, MCFD	11250	32000	1851
COMPONENT, MOLE PCT			
METHANE	90.6	85.8	90.1
ETHANE	5.0	7.4	5.1
PROPANE	2.1	3.0	2.1
N-BUTANE	0.5	0.7	0.6
ISOBUTANE	0.6	0.7	0.7
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.1	0.3	0.3
CYCLOPENTANE	TRACE	0.1	0.2
HEXANES PLUS	0.3	0.3	0.5
NITROGEN	0.2	0.1	0.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	0.3	0.1
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1127	1177	1157
SPECIFIC GRAVITY	0.632	0.664	0.647

	INDEX 115 SAMPLE 11382	INDEX 116 SAMPLE 11383	INDEX 117 SAMPLE 11388
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TABASCO	TABASCO	TABASCO
FIELD	CHILAPILLA	CHILAPILLA	CINCO PRESIDENTES
WELL NAME	NO. 6	NO. 31	NO. 180-1
LOCATION	CUIDAD PEMEX	CUIDAD PEMEX	ZONA SUR
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
COMPLETED	06/01/58	07/08/64	10/09/64
SAMPLED	02/23/68	02/23/68	02/28/68
FORMATION	-AMATE SUPERIOR ARENA A2	-AMATE SUPERIOR ARENA B4	MIOC-ENCANTO
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	6642
WELLHEAD PRESSURE,PSIG	2077	2306	1846
OPEN FLOW, MCFD	3601	4705	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	80.0	90.6	79.9
ETHANE	5.0	5.0	10.6
PROPANE	1.9	1.8	4.8
N-BUTANE	0.9	0.6	1.2
ISOBUTANE	0.5	0.6	0.6
N-PENTANE	0.2	0.1	0.4
ISOPENTANE	0.4	0.2	0.2
CYCLOPENTANE	0.2	0.2	TRACE
HEXANES PLUS	0.4	0.6	0.2
NITROGEN	8.7	0.8	1.9
OXYGEN	0.9	0.0	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.0	0.3	0.1
HELIUM	TRACE	TRACE	0.05
HEATING VALUE*	1050	1146	1220
SPECIFIC GRAVITY	0.697	0.642	0.707

	INDEX 118 SAMPLE 11387	INDEX 119 SAMPLE 11379	INDEX 120 SAMPLE 11380
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TABASCO	TABASCO	TABASCO
FIELD	CINCO PRESIDINTES	JOSE COLOMO	JOSE COLOMO
WELL NAME	NO. 162-1	NO. 69	NO. 85
LOCATION	ZONA SUR	CUIDAD PEMEX	CUIDAD PEMEX
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
COMPLETED	07/06/64	05/09/57	09/10/56
SAMPLED	02/28/68	02/22/68	02/22/68
FORMATION	MIOC-ENCANTO	-AMATE SUPERIOR ARENA F	-AMATE SUPERIOR ARENA E
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	8384	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE,PSIG	852	2605	2436
OPEN FLOW, MCFD	NOT GIVEN	3306	6487
COMPONENT, MOLE PCT			
METHANE	82.0	87.1	76.7
ETHANE	9.2	5.8	8.0
PROPANE	3.6	2.8	5.6
N-BUTANE	0.9	1.0	2.9
ISOBUTANE	0.3	0.9	2.2
N-PENTANE	0.2	0.4	1.0
ISOPENTANE	0.2	0.7	1.5
CYCLOPENTANE	TRACE	0.3	0.4
HEXANES PLUS	0.1	0.7	1.3
NITROGEN	2.8	0.1	0.3
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.5	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.3	0.1
HELIUM	0.02	TRACE	TRACE
HEATING VALUE*	1155	1217	1426
SPECIFIC GRAVITY	0.672	0.688	0.817

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 121 SAMPLE 11385	INDEX 122 SAMPLE 11386	INDEX 123 SAMPLE 11343
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TABASCO	TABASCO	TAMAULIPAS
FIELD	JOSE COLOMO	JOSE COLOMO	18 DE MARZO
WELL NAME	NO. 91	NO. 6	NO. 10
LOCATION	CUIDAD PEMEX	CUIDAD PEMEX	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
COMPLETED	01/07/57	05/06/55	04/19/56
SAMPLED	02/22/58	02/22/68	02/28/68
FORMATION	-AMATE SUPERIOR ARENA A	-AMATE SUPERIOR ARENA D	-AM-2Y2A-8A
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	7016
WELLHEAD PRESSURE, PSIG	2528	2402	2670
OPEN FLOW, MCFD	7871	8342	28200
COMPONENT, MOLE PCT			
METHANE	87.8	89.5	94.9
ETHANE	6.3	5.3	2.1
PROPANE	2.3	2.0	0.3
N-BUTANE	0.9	0.5	0.1
ISOBUTANE	0.6	0.5	0.1
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.4	0.9	0.0
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	0.7	0.6	0.1
NITROGEN	0.9	0.4	1.7
OXYGEN	0.0	0.0	0.3
ARGON	TRACE	0.0	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.2	TRACE	0.2
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1185	1160	1023
SPECIFIC GRAVITY	0.669	0.650	0.585

	INDEX 124 SAMPLE 11344	INDEX 125 SAMPLE 11339	INDEX 126 SAMPLE 11336
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	TAMAULIPAS
FIELD	BRASIL	FRANCISCO CANO	LOMITAS
WELL NAME	NO. 7	NO. 36-T	NO. 111-C
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
COMPLETED	04/13/52	10/10/55	03/05/61
SAMPLED	02/28/68	03/03/68	02/29/68
FORMATION	-FS-8-1	-FM-12	-L-1, 8B-N
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6756	7190	4784
WELLHEAD PRESSURE, PSIG	2033	1980	1593
OPEN FLOW, MCFD	17200	20320	6200
COMPONENT, MOLE PCT			
METHANE	85.5	96.0	95.6
ETHANE	1.2	2.1	2.1
PROPANE	0.3	0.4	0.4
N-BUTANE	0.0	0.1	0.1
ISOBUTANE	0.0	0.2	0.1
N-PENTANE	0.0	0.2	0.2
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.2	0.2
NITROGEN	10.5	0.6	1.2
OXYGEN	2.3	0.1	0.0
ARGON	0.1	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	TRACE
HELIUM	0.01	0.002	0.01
HEATING VALUE*	895	1049	1096
SPECIFIC GRAVITY	0.620	0.586	0.587

	INDEX 127 SAMPLE 11342	INDEX 128 SAMPLE 11338	INDEX 129 SAMPLE 11340
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	TAMAULIPAS
FIELD	MONTERREY	REYNOSA	REYNOSA
WELL NAME	NO. 12	NO. 92-C	NO. 17
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
COMPLETED	07/16/62	08/26/58	06/22/60
SAMPLED	03/04/68	03/03/68	03/03/68
FORMATION	-FS-14	-FS-12	-FS-3
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6326	6061	5796
WELLHEAD PRESSURE, PSIG	2406	1758	1693
OPEN FLOW, MCFD	6200	18000	165000
COMPONENT, MOLE PCT			
METHANE	95.9	93.4	93.7
ETHANE	2.2	3.7	3.4
PROPANE	0.4	1.0	1.0
N-BUTANE	0.3	0.4	0.2
ISOBUTANE	0.1	0.3	0.2
N-PENTANE	0.1	0.1	0.2
ISOPENTANE	0.0	0.1	TRACE
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.3	0.3
NITROGEN	0.8	0.5	0.6
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	TRACE	TRACE
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1049	1090	1081
SPECIFIC GRAVITY	0.585	0.609	0.604

	INDEX 130 SAMPLE 11345	INDEX 131 SAMPLE 11337	INDEX 132 SAMPLE 10553
COUNTRY	MEXICO	MEXICO	NETHERLANDS
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	DE WIJK
FIELD	REYNOSA	TREVINO	DE WIJK
WELL NAME	NO. 172	NO. 414-TC	DE WIJK 11
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	ROYAL DUTCH PET. CO. & N.A.M
COMPLETED	06/31/63	01/29/62	11/28/60
SAMPLED	03/03/68	02/28/68	04/29/66
FORMATION	-FS-4	-FM-12	CRET-& TRIA
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	5981	7605	3393
WELLHEAD PRESSURE, PSIG	1882	2141	2043
OPEN FLOW, MCFD	33900	5800	6350
COMPONENT, MOLE PCT			
METHANE	93.3	96.7	90.0
ETHANE	3.7	1.6	2.9
PROPANE	0.8	0.2	0.9
N-BUTANE	0.8	0.1	0.2
ISOBUTANE	0.0	0.0	TRACE
N-PENTANE	0.0	0.2	0.1
ISOPENTANE	0.4	0.0	TRACE
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	0.6	0.9	5.6
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	0.0	0.0
HYDROGEN	0.0	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	TRACE
HELIUM	0.01	0.01	0.05
HEATING VALUE*	1087	1036	1008
SPECIFIC GRAVITY	0.608	0.579	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE.

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 133 SAMPLE 10643	INDEX 134 SAMPLE 10642	INDEX 135 SAMPLE 10637
COUNTRY	NETHERLANDS	NETHERLANDS	NETHERLANDS
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	DE LIER	DE LIER	PYNACKER
WELL NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	BLK. STAT. 1	BLK. STAT. 1	BLK. STAT. 1
OWNER	ROYAL DUTCH PET. CO. & N.A.M	ROYAL DUTCH PET. CO. & N.A.M	ROYAL DUTCH PET. CO. & N.A.M
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/01/66	05/01/66	05/01/66
FORMATION	UNKN-ALBIAN	UNKN-BARREMIAN	UNKN-VALANGINIAN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	4550	4900	5300
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.3	86.9	90.6
ETHANE	5.2	5.4	4.9
PROPANE	1.8	2.2	1.6
N-BUTANE	0.6	0.7	0.5
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.2	0.2	0.2
ISOPENTANE	0.1	0.1	0.1
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.2	0.2	0.2
NITROGEN	3.3	3.9	0.9
OXYGEN	0.4	0.3	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	0.1	0.4
HELIUM	0.02	0.03	0.04
HEATING VALUE*	1091	1121	1106
SPECIFIC GRAVITY	0.640	0.650	0.630

	INDEX 136 SAMPLE 10640	INDEX 137 SAMPLE 10638	INDEX 138 SAMPLE 10639
COUNTRY	NETHERLANDS	NETHERLANDS	NETHERLANDS
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	RIDDERKERK/YSSELMONDE	RIJSWIJK	WASSENAAR
WELL NAME	NOT GIVEN	NOT GIVEN	NOT GIVEN
LOCATION	BLK. STAT. 2	BLK. STAT. 1	LOOLAAN
OWNER	ROYAL DUTCH PET. CO. & N.A.M	ROYAL DUTCH PET. CO. & N.A.M	ROYAL DUTCH PET. CO. & N.A.M
COMPLETED	--/--/00	--/--/00	--/--/00
SAMPLED	05/01/66	05/01/66	05/01/66
FORMATION	UNKN-YSSELMONDE MAINSAND	UNKN-VALANGINIAN	UNKN-VALANGINIAN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	3009	4600	3800
WELLHEAD PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	94.8	93.0	96.2
ETHANE	1.6	3.4	1.3
PROPANE	0.1	1.3	0.1
N-BUTANE	0.0	0.6	0.0
ISOBUTANE	0.0	0.3	0.0
N-PENTANE	0.0	0.2	0.0
ISOPENTANE	0.0	0.4	0.0
CYCLOPENTANE	0.0	0.1	0.0
HEXANES PLUS	0.0	0.3	0.0
NITROGEN	1.5	1.1	0.6
OXYGEN	0.1	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	0.4	1.7
HELIUM	0.03	0.03	0.01
HEATING VALUE*	992	1102	1000
SPECIFIC GRAVITY	0.590	0.630	0.580

	INDEX 139 SAMPLE 10559	INDEX 140 SAMPLE 11725	INDEX 141 SAMPLE 11726
COUNTRY	NETHERLANDS	PAKISTAN	PAKISTAN
STATE OR PROVINCE	WANNEPERVEEN	WEST PAKISTAN	WEST PAKISTAN
FIELD	WANNEPERVEEN	MARI	MARI
WELL NAME	WANNEPERVEEN 1	MARI NO. 4	MARI NO. 5
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	ROYAL DUTCH PET. CO. & N.A.M	ESSO STANDARD EASTERN, INC.	ESSO STANDARD EASTERN, INC.
COMPLETED	07/08/51	12/21/65	01/16/66
SAMPLED	04/29/66	11/25/68	11/25/68
FORMATION	CRET-NOT GIVEN	-KIRTHER LIMESTONE L	-KIRTHER LIMESTONE L
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	5008	2310	2330
WELLHEAD PRESSURE,PSIG	1938	1050	975
OPEN FLOW, MCFD	6000	77220	22360
COMPONENT, MOLE PCT			
METHANE	89.3	76.5	71.2
ETHANE	5.0	0.3	0.2
PROPANE	0.6	TRACE	TRACE
N-BUTANE	0.2	0.0	0.0
ISOBUTANE	0.1	0.0	0.0
N-PENTANE	0.1	0.0	0.0
ISOPENTANE	TRACE	0.0	0.0
CYCLOPENTANE	TRACE	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	6.4	18.8	18.2
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	3.1	4.3	10.3
HELIUM	0.04	TRACE	TRACE
HEATING VALUE*	999	780	725
SPECIFIC GRAVITY	0.614	0.675	0.730

	INDEX 142 SAMPLE 11727	INDEX 143 SAMPLE 11728	INDEX 144 SAMPLE 11729
COUNTRY	PAKISTAN	PAKISTAN	PAKISTAN
STATE OR PROVINCE	WEST PAKISTAN	WEST PAKISTAN	WEST PAKISTAN
FIELD	MARI	MARI	MARI
WELL NAME	MARI NO. 6	MARI NO. 8	MARI NO. 9
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	ESSO STANDARD EASTERN, INC.	ESSO STANDARD EASTERN, INC.	ESSO STANDARD EASTERN, INC.
COMPLETED	02/12/66	03/11/66	03/26/66
SAMPLED	11/25/68	11/25/68	11/25/68
FORMATION	-KIRTHER LIMESTONE L	-KIRTHER LIMESTONE L	-KIRTHER LIMESTONE L
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	2340	2343	2360
WELLHEAD PRESSURE,PSIG	1050	990	1000
OPEN FLOW, MCFD	37970	34640	33360
COMPONENT, MOLE PCT			
METHANE	75.0	73.0	71.0
ETHANE	0.2	0.2	0.3
PROPANE	TRACE	TRACE	TRACE
N-BUTANE	0.0	0.0	0.0
ISOBUTANE	0.0	0.0	0.0
N-PENTANE	0.0	0.0	0.0
ISOPENTANE	0.0	0.0	0.0
CYCLOPENTANE	0.0	0.0	0.0
HEXANES PLUS	0.0	0.0	0.0
NITROGEN	22.5	18.6	17.5
OXYGEN	0.0	TRACE	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	2.7	8.0	11.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	764	743	725
SPECIFIC GRAVITY	0.672	0.709	0.736

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 145 SAMPLE 11561	INDEX 146 SAMPLE 7615	INDEX 147 SAMPLE 7616
COUNTRY	PERU	QATAR	QATAR
STATE OR PROVINCE	LIMA	NOT GIVEN	NOT GIVEN
FIELD	AGUAYTIA	DUKHAN	DUKHAN
WELL NAME	AGUAYTIA NO. 1	NO. DX. 54	NO. DX. 40
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	MOBIL OIL CO. DEL PERU	QATAR PETROLEUM CO., LTD.	QATAR PETROLEUM CO., LTD.
COMPLETED	--/--/62	07/10/56	05/25/54
SAMPLED	05/20/68	01/13/60	01/13/60
FORMATION	-CUSHABATAY	-C LIMESTONE AR4B ZONE	-ARAEJ
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	8300	5300	6815
WELLHEAD PRESSURE,PSIG	1000	1690	2660
OPEN FLOW, MCFD	15000	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	82.5	74.4	79.2
ETHANE	5.6	9.4	6.9
PROPANE	2.6	9.5	4.8
N-BUTANE	0.7	1.7	2.4
ISOBUTANE	0.5	TRACE	0.3
N-PENTANE	0.5	0.8	1.7
ISOPENTANE	0.0	0.3	0.8
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.6	0.8	1.2
NITROGEN	5.9	0.0	0.0
OXYGEN	0.0	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.1	0.7
HYDROGEN SULFIDE**	0.0	0.9	0.0
CARBON DIOXIDE	0.6	1.2	2.8
HELIUM	0.03	0.03	0.02
HEATING VALUE*	1125	1194	1296
SPECIFIC GRAVITY	0.686	0.784	0.774

	INDEX 148 SAMPLE 7617	INDEX 149 SAMPLE 7281	INDEX 150 SAMPLE 13935
COUNTRY	QATAR	SOUTH AFRICA	TAIWAN
STATE OR PROVINCE	NOT GIVEN	ORANGE FREE ST	HSING CHU
FIELD	DUKHAN	O.F.S. GOLDFIELDS	CHINGTSAOMU
WELL NAME	NO. DX. 56	A- O. NO. 1	CTH-1 (S)
LOCATION	NOT GIVEN	NOT GIVEN	LAT 24 46 50 LONG120 59 19
OWNER	QATAR PETROLEUM CO., LTD.	VIRGINIA ORANGE F. S. GOLD M	CHINESE PETROLEUM CORP.
COMPLETED	11/18/56	00/--/00	05/03/69
SAMPLED	02/14/60	11/12/59	02/19/74
FORMATION	-D LIMESTONE AR4B ZONE	UNKN-VENTERSDORP LAVA	MIOC-YUTENGPING
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	5997	643	5363
WELLHEAD PRESSURE,PSIG	2300	50	1890
OPEN FLOW, MCFD	NOT GIVEN	1	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	74.0	86.6	82.7
ETHANE	10.5	0.2	5.8
PROPANE	4.1	0.0	4.0
N-BUTANE	1.1	0.0	0.9
ISOBUTANE	0.2	0.0	1.1
N-PENTANE	0.2	0.0	0.1
ISOPENTANE	0.2	0.0	0.4
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	TRACE	0.0	0.1
NITROGEN	9.0	9.9	0.8
OXYGEN	TRACE	TRACE	0.0
ARGON	TRACE	0.4	0.0
HYDROGEN	0.2	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	4.3	TRACE	0.1
HELIUM	0.252	2.91	TRACE
HEATING VALUE*	1156	881	1231
SPECIFIC GRAVITY	0.715	0.588	0.690

	INDEX 151 SAMPLE 13936	INDEX 152 SAMPLE 13940	INDEX 153 SAMPLE 13937
COUNTRY	TAIWAN	TAIWAN	TAIWAN
STATE OR PROVINCE	HSING CHU	HSING CHU	MIAOLI
FIELD	CHINGTSAOMU	CHINGTSAOMU	CHINSHUI
WELL NAME	CTH-1 (L)	CTH-12	CS-66
LOCATION	LAT 24 46 50 LONG120 59 19	LAT 24 47 26 LONG120 59 46	LAT 24 34 43 LONG120 51 21
OWNER	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.
COMPLETED	05/03/69	04/18/70	09/23/61
SAMPLED	02/19/74	02/19/74	02/22/74
FORMATION	MIOC-KUANTAOSHAN	MIOC-TALU	MIOC-CHUHUANGKENG
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6396	12533	9768
WELLHEAD PRESSURE,PSIG	2220	3800	5100
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.6	83.0	88.2
ETHANE	7.5	7.7	4.0
PROPANE	2.8	2.8	1.2
N-BUTANE	0.5	0.5	0.2
ISOBUTANE	0.8	0.8	0.5
N-PENTANE	0.1	0.1	0.1
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	TRACE	TRACE	0.1
HEXANES PLUS	0.1	0.1	0.2
NITROGEN	0.8	0.7	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	0.4	4.1	5.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1150	1117	1047
SPECIFIC GRAVITY	0.656	0.694	0.662

	INDEX 154 SAMPLE 13938	INDEX 155 SAMPLE 13943	INDEX 156 SAMPLE 13944
COUNTRY	TAIWAN	TAIWAN	TAIWAN
STATE OR PROVINCE	MIAOLI	MIAOLI	MIAOLI
FIELD	CHINSHUI	CHINSHUI	CHINSHUI
WELL NAME	CS-72 (L)	CS-45	CS-74
LOCATION	LAT 24 34 31 LONG120 50 58	LAT 24 3 33 LONG120 52 8	LAT 24 35 22 LONG120 51 07
OWNER	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.
COMPLETED	08/20/69	11/27/60	09/11/69
SAMPLED	02/22/74	02/22/74	02/22/74
FORMATION	MIOC-NUSHAN	MIOC-TALU	MIOC-WUCHIMSHAN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	13530	7633	14793
WELLHEAD PRESSURE,PSIG	6000	1220	6950
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	83.0	89.9	82.0
ETHANE	5.2	4.3	2.1
PROPANE	1.0	1.3	0.5
N-BUTANE	0.1	0.2	0.1
ISOBUTANE	0.4	0.5	0.2
N-PENTANE	TRACE	TRACE	TRACE
ISOPENTANE	0.1	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	0.3	0.3	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	11.8	3.1	14.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	950	1059	901
SPECIFIC GRAVITY	0.708	0.636	0.722

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 157 SAMPLE 13941	INDEX 158 SAMPLE 13942	INDEX 159 SAMPLE 13939
COUNTRY	TAIWAN	TAIWAN	TAIWAN
STATE OR PROVINCE	MIAOLI	MIAOLI	MIAOLI
FIELD	CHUHUANGKENG	CHUHUANGKENG	PAISHATUN
WELL NAME	CHK-106	CHK-110 (S)	PST-5 (S)
LOCATION	LAT 24 28 05 LONG120 51 18	LAT 24 27 17 LONG120 50 43	LAT 24 37 13 LONG120 45 42
OWNER	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.
COMPLETED	04/29/62	04/14/72	12/18/71
SAMPLED	02/20/74	02/20/74	02/18/74
FORMATION	MIOC-HUSHAN	MIOC-WUCHIHSHAN	MIOC-TALU
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	9889	10368	10762
WELLHEAD PRESSURE,PSIG	3860	4250	3610
OPEN FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.5	55.6	89.5
ETHANE	2.0	1.8	4.9
PROPANE	0.5	0.5	1.6
N-BUTANE	0.1	0.1	0.3
ISOBUTANE	0.2	0.2	0.6
N-PENTANE	TRACE	0.0	0.1
ISOPENTANE	0.1	0.1	0.2
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	1.2	1.0	0.3
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	37.9	40.6	2.4
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	661	628	1084
SPECIFIC GRAVITY	0.948	0.977	0.641

	INDEX 160 SAMPLE 13945	INDEX 161 SAMPLE 13946	INDEX 162 SAMPLE 17575
COUNTRY	TAIWAN	TAIWAN	THAILAND
STATE OR PROVINCE	MIAOLI	MIAOLI	KHORAT PLATEAU
FIELD	TIEMCHENSHAN	TIEMCHENSHAN	NAM PHONG
WELL NAME	TCS-10	TCS-23(S)	NAM PHONG NO. 2
LOCATION	LAT 24 28 11 LONG120 40 33	LAT 24 26 40 LONG120 41 44	17TH N OF KHON KAEN NE THAI
OWNER	CHINESE PETROLEUM CORP.	CHINESE PETROLEUM CORP.	ESSO EXPLORATION
COMPLETED	12/18/65	02/09/69	--/--/82
SAMPLED	02/23/74	02/23/74	12/21/84
FORMATION	MIOC-TALU	MIOC-TALU	PERM-LIMESTONE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	9000	9161	10220
WELLHEAD PRESSURE,PSIG	2830	NOT GIVEN	800
OPEN FLOW, MCFD	NOT GIVEN		17000
COMPONENT, MOLE PCT			
METHANE	85.4	88.4	95.6
ETHANE	5.5	5.6	0.6
PROPANE	1.8	2.5	0.1
N-BUTANE	0.5	0.5	TRACE
ISOBUTANE	0.6	0.6	0.0
N-PENTANE	0.1	TRACE	0.1
ISOPENTANE	0.3	0.4	0.0
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	0.1	0.1	0.1
NITROGEN	3.1	0.4	1.9
OXYGEN	0.3	0.2	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	1.9	1.9	1.6
HELIUM	TRACE	TRACE	0.04
HEATING VALUE*	1070	1107	991
SPECIFIC GRAVITY	0.662	0.649	0.586

	INDEX 163 SAMPLE 14163	INDEX 164 SAMPLE 14164	INDEX 165 SAMPLE 14165
COUNTRY	THAILAND	THAILAND	THAILAND
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	NOT GIVEN
FIELD	WILDCAT	WILDCAT	WILDCAT
WELL NAME	UNION NO. 13-1	UNION NO. 13-1	UNION NO. 13-1
LOCATION	GULF OF THAILAND	GULF OF THAILAND	GULF OF THAILAND
OWNER	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.	UNION OIL CO. OF CALIF.
COMPLETED	--/--/06	--/--/03	--/--/02
SAMPLED	05/18/74	05/14/74	05/12/74
FORMATION	TERT-	TERT-	TERT-
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	5918	6892	7730
WELLHEAD PRESSURE,PSIG	1765	2076	2123
OPEN FLOW, MCFD	8080	9510	5900
COMPONENT, MOLE PCT			
METHANE	67.0	67.3	67.4
ETHANE	10.6	10.4	9.2
PROPANE	6.1	5.7	8.6
N-BUTANE	1.4	1.2	1.1
ISOBUTANE	1.6	1.4	1.1
N-PENTANE	0.3	0.2	0.2
ISOPENTANE	0.6	0.6	0.4
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.3	0.2	0.2
NITROGEN	0.6	0.9	1.1
OXYGEN	TRACE	0.1	TRACE
ARGON	TRACE	0.0	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	11.4	11.9	10.6
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1185	1152	1078
SPECIFIC GRAVITY	0.854	0.845	0.843

	INDEX 166 SAMPLE 14166	INDEX 167 SAMPLE 11150	INDEX 168 SAMPLE 11149
COUNTRY	THAILAND	UNITED KINGDOM	UNITED KINGDOM
STATE OR PROVINCE	NOT GIVEN	NORTH SEA	NORTH SEA
FIELD	WILDCAT	INDEFATIGABLE	LEMAN
WELL NAME	UNION NO. 13-1	49/18-3	49/27-4
LOCATION	GULF OF THAILAND	NOT GIVEN	NOT GIVEN
OWNER	UNION OIL CO. OF CALIF.	AMOCO U. K. PETROLEUM LTD.	AMOCO U. K. PETROLEUM LTD.
COMPLETED	--/--/04	08/29/67	05/25/67
SAMPLED	05/16/74	08/17/67	10/09/67
FORMATION	TERT-	PERM-ROTLIEGENDES	PERM-ROTLIEGENDES
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	6740	8824	6547
WELLHEAD PRESSURE,PSIG	2002	3391	2572
OPEN FLOW, MCFD	5500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	67.4	91.2	93.1
ETHANE	10.7	3.6	2.9
PROPANE	6.1	0.8	0.9
N-BUTANE	1.8	0.4	0.2
ISOBUTANE	1.5	0.0	0.0
N-PENTANE	0.2	0.0	0.0
ISOPENTANE	0.5	0.0	0.0
CYCLOPENTANE	0.1	0.0	0.0
HEXANES PLUS	0.2	0.0	0.0
NITROGEN	0.8	3.3	2.8
OXYGEN	0.1	0.0	0.4
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.0	TRACE
HYDROGEN SULFIDE**	0.0	0.0	0.0
CARBON DIOXIDE	11.2	0.5	0.1
HELIUM	TRACE	0.05	0.02
HEATING VALUE*	1171	1023	1012
SPECIFIC GRAVITY	0.845	0.604	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 159 SAMPLE 11143		INDEX 170 SAMPLE 10545		INDEX 171 SAMPLE 10548	
COUNTRY	UNITED KINGDOM		WEST GERMANY		WEST GERMANY	
STATE OR PROVINCE	NORTH SEA		NIEDERSACHSEN		NIEDERSACHSEN	
FIELD	WILDCAT		ANNAVEEN		APELDORN	
WELL NAME	ARPET 48-29-5		ANNAVEEN T2		APELDORN T1	
LOCATION	NOT GIVEN		MEBTISCHBLATT NR. 3308		MEBTISCHBLATT NR. 2310	
OWNER	ATLANTIC OIL PRODUCING CO.		MOBIL OIL AG-WINTERSHALL AG		MOBIL OIL AG-DEUTSCHE ERDOL	
COMPLETED	--/--/00		--/--/00		--/--/00	
SAMPLED	09/20/67		03/15/66		03/14/66	
FORMATION	PERM-ROTLIEGENDES		TRIA-BUNTSANDSTEIN		TRIA-BUNTSANDSTEIN	
GEOLOGIC PROVINCE CODE	000		000		000	
DEPTH, FEET	NOT GIVEN		2651		2350	
WELLHEAD PRESSURE,PSIG	NOT GIVEN		3778		280	
OPEN FLOW, MCFD	NOT GIVEN		NOT GIVEN		NOT GIVEN	
COMPONENT, MOLE PCT						
METHANE	94.7		54.0		25.5	
ETHANE	3.1		1.2		0.4	
PROPANE	0.7		0.4		0.1	
N-BUTANE	0.0		0.2		0.0	
ISOBUTANE	0.0		0.0		0.0	
N-PENTANE	0.0		0.6		0.0	
ISOPENTANE	0.0		1.0		0.0	
CYCLOPENTANE	0.0		0.0		0.0	
HEXANES PLUS	0.0		0.0		0.0	
NITROGEN	1.4		40.0		73.3	
OXYGEN	0.0		0.0		0.4	
ARGON	TRACE		TRACE		TRACE	
HYDROGEN	TRACE		0.3		0.0	
HYDROGEN SULFIDE**	0.0		0.0		0.0	
CARBON DIOXIDE	0.1		0.1		0.2	
HELIUM	0.03		0.10		0.12	
HEATING VALUE*	1033		626		268	
SPECIFIC GRAVITY	0.583		0.733		0.864	

	INDEX 172 SAMPLE 10546	
COUNTRY	WEST GERMANY	
STATE OR PROVINCE	NIEDERSACHSEN	
FIELD	FEHNDORF	
WELL NAME	FEHNDORF 2T	
LOCATION	MEBTISCHBLATT NR. 2309	
OWNER	MOBIL OIL AG-DEUTSCHE ERDOL	
COMPLETED	--/--/00	
SAMPLED	03/15/66	
FORMATION	-OBERKARBON-STEFAN	
GEOLOGIC PROVINCE CODE	000	
DEPTH, FEET	3494	
WELLHEAD PRESSURE,PSIG	372	
OPEN FLOW, MCFD	NOT GIVEN	
COMPONENT, MOLE PCT		
METHANE	75.4	
ETHANE	0.4	
PROPANE	0.0	
N-BUTANE	0.0	
ISOBUTANE	0.0	
N-PENTANE	0.0	
ISOPENTANE	0.0	
CYCLOPENTANE	0.0	
HEXANES PLUS	0.0	
NITROGEN	20.3	
OXYGEN	0.0	
ARGON	0.0	
HYDROGEN	0.0	
HYDROGEN SULFIDE**	0.0	
CARBON DIOXIDE	3.8	
HELIUM	0.12	
HEATING VALUE*	771	
SPECIFIC GRAVITY	0.677	

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
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TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 1 SAMPLE 12085	INDEX 2 SAMPLE 12086	INDEX 3 SAMPLE 12468
COUNTRY	ARGENTINA	ARGENTINA	AUSTRALIA
STATE OR PROVINCE	SANTA CRUZ	SANTA CRUZ	NOT GIVEN
FIELD	CERRO REDONDO	CERRO REDONDO	MARLIN
LOCATION	EL CONDOR BATTERY NO. 1	EL CONDOR BATTERY NO. 2	NOT GIVEN
OWNER	YACIMIENTOS PETROLIFERO FISC	YACIMIENTOS PETROLIFERO FISC	ESSO STANDARD OIL LTD.
SAMPLED	05/23/69	05/15/69	06/26/70
FORMATION	-STRINGMILL	-STRINGMILL	NOT GIVEN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	2560	6000	1250
FLOW, MCFD	16000	12000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	88.2	87.2	87.7
ETHANE	5.6	5.7	5.6
PROPANE	2.8	3.8	2.6
N-BUTANE	0.7	0.8	0.7
ISOBUTANE	0.6	0.6	0.6
N-PENTANE	0.2	0.2	0.4
ISOPENTANE	0.3	0.4	0.0
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.4	0.3
NITROGEN	1.4	1.5	0.9
OXYGEN	TRACE	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	1.6
HELIUM	0.02	0.02	0.02
HEATING VALUE*	1141	1155	1126
SPECIFIC GRAVITY	0.651	0.661	0.661

	INDEX 4 SAMPLE 16045	INDEX 5 SAMPLE 16044	INDEX 6 SAMPLE 12146
COUNTRY	AUSTRALIA	AUSTRALIA	BANGLADESH
STATE OR PROVINCE	VICTORIA	VICTORIA	EAST PAKISTAN
FIELD	BARRACOUTA	MARLIN	TITAS
LOCATION	BASS STRAIT	BASS STRAIT	SAMPLED AT SCRUBBER
OWNER	ESSO/BHP	ESSO/BHP	PAKISTAN SHELL OIL CO., LTD.
SAMPLED	04/06/80	03/06/80	11/18/69
FORMATION	EOCE-	EOCE-	NOT GIVEN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1510	1850	NOT GIVEN
FLOW, MCFD	260000	410000	4310
COMPONENT, MOLE PCT			
METHANE	85.7	80.7	96.5
ETHANE	5.9	7.3	1.8
PROPANE	3.0	4.9	0.4
N-BUTANE	0.6	1.4	0.1
ISOBUTANE	1.3	1.3	0.0
N-PENTANE	0.1	0.6	0.1
ISOPENTANE	0.5	0.8	TRACE
CYCLOPENTANE	0.3	0.2	TRACE
HEXANES PLUS	0.5	0.9	0.1
NITROGEN	1.6	0.5	0.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	TRACE
HYDROGEN	0.0	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.5	1.3	0.3
HELIUM	TRACE	TRACE	0.01
HEATING VALUE*	1178	1280	1033
SPECIFIC GRAVITY	0.683	0.747	0.579

	INDEX 7 SAMPLE 11026	INDEX 8 SAMPLE 11013	INDEX 9 SAMPLE 11012
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	CARBON	CARSON CREEK	CARSON CREEK N
LOCATION	29-22-W4M	62-12-W5M	62-12-W5M
OWNER	CANADIAN WESTERN NAT. GAS CO	MOBIL OIL CANADA, LTD.	MOBIL OIL CANADA, LTD.
SAMPLED	07/04/67	06/02/67	06/02/67
FORMATION	-GLAUCONITE	DEVO-BEAVERHILL LAKE	DEVO-BEAVERHILL LAKE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	1360	NOT GIVEN
PRESSURE, PSIG	1260	82525	500
FLOW, MCFD	5450		10620
COMPONENT, MOLE PCT			
METHANE	85.0	71.7	67.0
ETHANE	6.7	11.1	15.5
PROPANE	3.2	6.3	7.2
N-BUTANE	0.8	1.2	1.7
ISOBUTANE	0.9	0.5	1.0
N-PENTANE	0.2	0.2	0.3
ISOPENTANE	0.3	0.4	0.3
CYCLOPENTANE	0.1	0.1	0.1
HEXANES PLUS	0.2	0.2	0.1
NITROGEN	2.4	7.7	4.5
OXYGEN	TRACE	1.3	0.2
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.1	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.2	1.0	1.8
HELIUM	0.04	0.07	0.04
HEATING VALUE*	1157	1134	1269
SPECIFIC GRAVITY	0.674	0.745	0.796

	INDEX 10 SAMPLE 11208	INDEX 11 SAMPLE 10992	INDEX 12 SAMPLE 11209
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	CARSTAIRS	CESSFORD	ELKTON S
LOCATION	30-2-W5M	24-12-W4M	NOT GIVEN
OWNER	HOME OIL CO. LTD.	CANEX GAS LTD.	HOME OIL CO. LTD.
SAMPLED	10/27/67	06/06/67	10/27/67
FORMATION	MISS-ELKTON	CRET-COLORADO	MISS-ELKTON
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	850	720	900
FLOW, MCFD	170000	18000	5000
COMPONENT, MOLE PCT			
METHANE	81.7	89.8	85.6
ETHANE	7.2	2.8	6.8
PROPANE	2.2	1.0	1.8
N-BUTANE	0.7	0.4	0.5
ISOBUTANE	0.5	0.3	0.4
N-PENTANE	0.3	0.1	0.1
ISOPENTANE	0.2	0.2	0.3
CYCLOPENTANE	0.1	TRACE	0.1
HEXANES PLUS	0.2	0.1	0.2
NITROGEN	1.3	4.6	0.5
OXYGEN	0.1	0.4	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	0.1	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	5.5	TRACE	3.7
HELIUM	0.01	0.04	0.01
HEATING VALUE*	1090	1028	1097
SPECIFIC GRAVITY	0.706	0.617	0.673

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

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TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 13 SAMPLE 7213	INDEX 14 SAMPLE 11021	INDEX 15 SAMPLE 11038
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	ETZIKEM	FORT SASKATCHEWAN	MARMATTAN E
LOCATION	NOT GIVEN	54-21-W4M	32-4-W5M
OWNER	ASAMERA OIL CORP., LTD.	CANADIAN INDUSTRIAL GAS & OI	CANADIAN SUPERIOR OIL LTD.
SAMPLED	07/25/59	07/04/67	07/13/67
FORMATION	CRET-L	CRET-VIKING	MISS-TURNER VALLEY
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	450	NOT GIVEN
FLOW, MCFD	NOT GIVEN	16000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	91.1	92.3	81.3
ETHANE	0.1	2.2	8.7
PROPANE	0.3	0.6	3.1
N-BUTANE	0.0	0.3	0.8
ISOBUTANE	0.0	0.0	0.6
N-PENTANE	0.0	0.0	0.3
ISOPENTANE	0.0	0.0	0.1
CYCLOPENTANE	0.0	0.0	TRACE
HEXANES PLUS	0.0	0.0	0.2
NITROGEN	8.2	4.3	1.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	0.0	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.0	0.1	3.7
HELIUM	0.30	0.09	0.01
HEATING VALUE*	932	1000	1134
SPECIFIC GRAVITY	0.590	0.594	0.702

	INDEX 16 SAMPLE 11040	INDEX 17 SAMPLE 11039	INDEX 18 SAMPLE 10988
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	MARMATTAN ELKTON	MARMATTAN LEDUC	KEYSTONE
LOCATION	32-4-W5M	32-4-W5M	48-4-W5M
OWNER	CANADIAN SUPERIOR OIL LTD.	CANADIAN SUPERIOR OIL LTD.	CANADA-CITIES SERVICE
SAMPLED	07/13/67	07/17/67	05/30/67
FORMATION	NOT GIVEN	-MARMATTAN LEDUC	CRET-CARDIUM
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	1230	22
FLOW, MCFD	NOT GIVEN	NOT GIVEN	4700
COMPONENT, MOLE PCT			
METHANE	81.5	47.1	86.2
ETHANE	7.4	1.5	4.5
PROPANE	2.6	0.0	4.3
N-BUTANE	0.9	0.0	1.5
ISOBUTANE	0.6	0.0	0.7
N-PENTANE	0.2	0.0	0.2
ISOPENTANE	0.3	0.0	0.5
CYCLOPENTANE	0.1	0.0	0.1
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.9	1.4	1.4
OXYGEN	0.1	0.6	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	TRACE
HYDROGEN SULFIDE	0.3	45.4	0.0
CARBON DIOXIDE	4.9	4.0	0.3
HELIUM	0.01	0.05	0.02
HEATING VALUE*	1114	795	1164
SPECIFIC GRAVITY	0.710	0.898	0.682

	INDEX 19 SAMPLE 11182	INDEX 20 SAMPLE 11023	INDEX 21 SAMPLE 10995
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	MINNEHIK-BUCK LAKE	MORINVILLE	NOT GIVEN
LOCATION	46-6-W5M	55-25-W4M	NOT GIVEN
OWNER	CANADIAN DELHI OIL, LTD.	CANADIAN INDUSTRIAL GAS & OI	PACIFIC PETROLEUMS, INC.
SAMPLED	06/07/67	07/04/67	06/07/67
FORMATION	MISS-PEKISKO	-BASAL	NOT GIVEN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	425	550
FLOW, MCFD	65000	3000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	85.4	86.0	89.4
ETHANE	6.8	3.8	4.3
PROPANE	2.4	2.0	1.3
N-BUTANE	0.7	0.5	0.7
ISOBUTANE	0.5	0.3	0.0
N-PENTANE	0.2	0.1	0.0
ISOPENTANE	0.2	0.1	0.0
CYCLOPENTANE	TRACE	TRACE	0.0
HEXANES PLUS	0.1	0.1	0.0
NITROGEN	1.0	2.4	3.1
OXYGEN	TRACE	TRACE	0.1
ARGON	TRACE	TRACE	0.1
HYDROGEN	0.1	TRACE	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	2.6	2.5	0.4
HELIUM	0.01	0.06	0.06
HEATING VALUE*	1112	1068	1051
SPECIFIC GRAVITY	0.669	0.655	0.621

	INDEX 22 SAMPLE 10996	INDEX 23 SAMPLE 11252	INDEX 24 SAMPLE 11197
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	OKOTOKS	OLDS	RETLAW
LOCATION	21-28-W4M	NOT GIVEN	NOT GIVEN
OWNER	TEXAS GULF SULPHUR CO., LTD.	AMERADA PETROLEUM CORP.	HOME OIL CO. LTD.
SAMPLED	06/07/67	12/29/67	10/24/67
FORMATION	NOT GIVEN	DEVO-CROSSFIELD	-GLAUCONITE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	460	NOT GIVEN	700
FLOW, MCFD	13500	52000	1500
COMPONENT, MOLE PCT			
METHANE	94.5	74.7	79.9
ETHANE	0.8	5.9	6.6
PROPANE	0.1	2.0	1.9
N-BUTANE	0.2	0.8	0.5
ISOBUTANE	TRACE	0.5	0.3
N-PENTANE	0.1	0.3	0.1
ISOPENTANE	TRACE	0.3	0.2
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.3	0.2
NITROGEN	3.9	3.6	4.8
OXYGEN	0.1	0.0	0.1
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	6.3	0.0
CARBON DIOXIDE	TRACE	5.3	5.1
HELIUM	0.04	0.04	0.16
HEATING VALUE*	987	1037	1027
SPECIFIC GRAVITY	0.580	0.747	0.698

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 25 SAMPLE 11198	INDEX 26 SAMPLE 11003	INDEX 27 SAMPLE 10993
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	RETLAW	SAMSON	SEDALIA
LOCATION	NOT GIVEN	NOT GIVEN	31-5-W4M
OWNER	HOME OIL CO. LTD.	CANADIAN FINA OIL LTD.	CANEX GAS LTD.
SAMPLED	10/24/67	05/29/67	06/08/67
FORMATION	CRET-BOW ISLAND	-BASAL	CRET-VIKING
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	700	500	670
FLOW, MCFD	1000	1300	3800
COMPONENT, MOLE PCT			
METHANE	91.5	79.8	93.8
ETHANE	1.0	7.9	1.2
PROPANE	0.3	3.5	0.8
N-BUTANE	0.3	0.6	0.4
ISOBUTANE	0.0	0.4	0.1
N-PENTANE	0.0	0.1	TRACE
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	0.0	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.1
NITROGEN	6.5	4.6	3.2
OXYGEN	0.0	0.1	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.4	2.5	TRACE
HELIUM	0.21	0.05	0.05
HEATING VALUE*	1023	1097	1027
SPECIFIC GRAVITY	0.594	0.698	0.597

	INDEX 28 SAMPLE 11022	INDEX 29 SAMPLE 11024	INDEX 30 SAMPLE 11020
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	ALBERTA
FIELD	ST. ALBERT BIG LAKE	WESTLOCK	WIMBORNE
LOCATION	NOT GIVEN	60-1-W5M	36-26-W4M
OWNER	CANADIAN INDUSTRIAL GAS & OI	CANADIAN INDUSTRIAL GAS & OI	MOBIL OIL CANADA, LTD.
SAMPLED	07/04/67	07/04/67	07/09/67
FORMATION	-DISTRACOD	CRET-VIKING	-D-3
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	500	700	850
FLOW, MCFD	15000	30000	23000
COMPONENT, MOLE PCT			
METHANE	58.7	92.5	79.8
ETHANE	4.9	3.1	4.6
PROPANE	0.0	1.3	2.5
N-BUTANE	0.0	0.1	1.2
ISOBUTANE	0.0	0.2	0.6
N-PENTANE	0.0	TRACE	0.2
ISOPENTANE	28.1	0.2	0.4
CYCLOPENTANE	0.2	TRACE	0.1
HEXANES PLUS	0.0	0.1	0.2
NITROGEN	6.0	2.0	10.1
OXYGEN	0.0	0.0	TRACE
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	TRACE
CARBON DIOXIDE	2.0	0.1	0.2
HELIUM	0.04	0.06	0.12
HEATING VALUE*	1886	1057	1056
SPECIFIC GRAVITY	1.170	0.605	0.691

	INDEX 31 SAMPLE 10994	INDEX 32 SAMPLE 11028	INDEX 33 SAMPLE 11332
COUNTRY	CANADA	CANADA	CANADA
STATE OR PROVINCE	ALBERTA	ALBERTA	BR COLUMBIA
FIELD	WOOD RIVER	WORSLEY	ALL IN B.C.EXCEPT FT. NELSON
LOCATION	NOT GIVEN	87-7-W6M	NOT GIVEN
OWNER	CANEX GAS LTD.	SHELL CANADA LTD.	WEST COAST TRANSMISSION
SAMPLED	06/08/67	07/05/67	01/26/68
FORMATION	-QUARTZ BASAL	DEVO-	NOT GIVEN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	800	650	NOT GIVEN
FLOW, MCFD	4500	16000	438000
COMPONENT, MOLE PCT			
METHANE	79.6	85.5	86.1
ETHANE	8.0	3.9	6.3
PROPANE	2.7	2.0	2.2
N-BUTANE	0.6	0.5	0.7
ISOBUTANE	0.4	0.4	0.3
N-PENTANE	0.1	0.2	0.2
ISOPENTANE	0.2	0.2	0.1
CYCLOPENTANE	TRACE	0.1	TRACE
HEXANES PLUS	0.1	0.2	0.2
NITROGEN	3.8	6.0	0.6
OXYGEN	0.7	TRACE	0.0
ARGON	TRACE	0.1	TRACE
HYDROGEN	0.1	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	3.8	0.5	1.4
HELIUM	0.02	0.55	0.02
HEATING VALUE*	1072	1049	1118
SPECIFIC GRAVITY	0.698	0.651	0.649

	INDEX 34 SAMPLE 10706	INDEX 35 SAMPLE 10707	INDEX 36 SAMPLE 10709
COUNTRY	COLOMBIA	COLOMBIA	COLOMBIA
STATE OR PROVINCE	SANTANDER	SANTANDER	SANTANDER
FIELD	PAYOA	PAYOA	PAYOA
LOCATION	SANTANDER	SANTANDER	SANTANDER
OWNER	COLOMBIA CITIES SERVICE	COLOMBIA CITIES SERVICE	COLOMBIA CITIES SERVICE
SAMPLED	--/--/66	--/--/66	--/--/66
FORMATION	-LA PAZ	-LA PAZ	-LA PAZ
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	84.5	84.4	84.3
ETHANE	7.3	7.3	7.2
PROPANE	4.5	4.4	4.3
N-BUTANE	1.3	1.3	1.4
ISOBUTANE	1.3	1.1	0.9
N-PENTANE	0.2	0.9	0.6
ISOPENTANE	0.3	0.3	0.2
CYCLOPENTANE	0.2	0.1	0.2
HEXANES PLUS	0.3	0.3	0.4
NITROGEN	0.2	0.3	0.4
OXYGEN	0.0	0.0	0.0
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	TRACE	0.1	0.1
HELIUM	TRACE	TRACE	TRACE
HEATING VALUE*	1236	1230	1235
SPECIFIC GRAVITY	0.700	0.700	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 37 SAMPLE 13302	INDEX 38 SAMPLE 13301	INDEX 39 SAMPLE 13303
COUNTRY	INDONESIA	INDONESIA	INDONESIA
STATE OR PROVINCE	JAVA SEA	JAVA SEA	JAVA SEA
FIELD	ARDJUNA	ARDJUNA E	ARDJUNA E
LOCATION	NOT GIVEN	SEPARATOR	E WELLS FLOW STAT.
OWNER	ATLANTIC RICHFIELD IND..INC.	ATLANTIC RICHFIELD IND..INC.	ATLANTIC RICHFIELD IND..INC.
SAMPLED	07/12/72	07/12/72	07/12/72
FORMATION	MIOC-TJIBULAKAN	MIOC-TJIBULAKAN	MIOC-TJIBULAKAN
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW,MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	58.1	62.6	50.7
ETHANE	10.6	19.4	11.8
PROPANE	15.3	10.9	22.4
N-BUTANE	3.8	3.1	4.6
ISOBUTANE	3.9	3.4	6.0
N-PENTANE	1.0	0.5	2.1
ISOPENTANE	0.1	1.0	0.0
CYCLOPENTANE	0.1	0.1	0.3
HEXANES PLUS	0.5	0.4	1.0
NITROGEN	1.2	1.1	0.7
OXYGEN	TRACE	TRACE	TRACE
ARGON	0.0	0.0	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	1.3	1.5	0.4
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1599	1540	1815
SPECIFIC GRAVITY	0.959	0.923	1.075

	INDEX 40 SAMPLE 13304	INDEX 41 SAMPLE 11114	INDEX 42 SAMPLE 11112
COUNTRY	INDONESIA	MEXICO	MEXICO
STATE OR PROVINCE	JAVA SEA	NUEVO LEON	NUEVO LEON
FIELD	ARDJUNA E	CAMPO COMITAS	CAMPO CULEBRA
LOCATION	E FLOW STAT. SEPARATOR	NOT GIVEN	NOT GIVEN
OWNER	ATLANTIC RICHFIELD IND..INC.	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
SAMPLED	07/12/72	09/13/67	09/13/67
FORMATION	MIOC-TJIBULAKAN	-JM-1,2,4,5,10	-VARIOUS
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	1180	876
FLOW,MCFD	NOT GIVEN	50	17000
COMPONENT, MOLE PCT			
METHANE	50.4	86.8	89.0
ETHANE	11.9	6.7	5.1
PROPANE	22.0	3.1	2.1
N-BUTANE	5.1	0.8	0.5
ISOBUTANE	7.2	1.0	0.6
N-PENTANE	1.2	0.2	0.1
ISOPENTANE	0.5	0.2	0.4
CYCLOPENTANE	0.3	0.1	TRACE
HEXANES PLUS	1.0	0.3	0.1
NITROGEN	0.6	0.6	1.1
OXYGEN	TRACE	0.0	0.2
ARGON	0.0	TRACE	TRACE
HYDROGEN	0.0	TRACE	0.2
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	0.2	0.7
HELIUM	0.01	TRACE	TRACE
HEATING VALUE*	1794	1177	1112
SPECIFIC GRAVITY	1.072	0.667	0.642

	INDEX 43 SAMPLE 11111	INDEX 44 SAMPLE 11118	INDEX 45 SAMPLE 11109
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	NUEVO LEON	TAMAULIPAS	TAMAULIPAS
FIELD	CAMPO PAMORANA	CAMPO 18 DE MARZO	CAMPO BRASIL
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
SAMPLED	09/13/67	09/10/67	09/10/67
FORMATION	-EY-6,9,10	-AM-1,AM-2,Y2A,AM-3,Y4	-VARIOUS
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	NOT GIVEN	1100	NOT GIVEN
FLOW,MCFD	NOT GIVEN	29500	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	86.9	95.9	93.6
ETHANE	6.9	2.3	1.7
PROPANE	2.7	0.4	0.3
N-BUTANE	0.7	0.1	0.1
ISOBUTANE	0.6	0.0	0.1
N-PENTANE	0.2	0.0	TRACE
ISOPENTANE	0.4	0.0	0.0
CYCLOPENTANE	0.1	0.0	TRACE
HEXANES PLUS	0.2	0.0	0.2
NITROGEN	0.7	0.9	3.5
OXYGEN	0.0	0.0	0.0
ARGON	0.0	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.6	0.3	0.2
HELIUM	TRACE	0.01	0.01
HEATING VALUE*	1157	1026	1003
SPECIFIC GRAVITY	0.662	0.577	0.593

	INDEX 46 SAMPLE 11115	INDEX 47 SAMPLE 11117	INDEX 48 SAMPLE 11110
COUNTRY	MEXICO	MEXICO	MEXICO
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	TAMAULIPAS
FIELD	CAMPO FCO. CANO.	CAMPO LOMITAS	CAMPO MONTERREY
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS
SAMPLED	09/11/67	09/03/67	09/11/67
FORMATION	-A-1,2,3FS-4,5FM-5,7,11	-L-1,2,3,5,6,9,12,13,14	-FS-12,14,16A,20,21,FM-2
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE,PSIG	1100	1140	1100
FLOW,MCFD	24600	6650	600
COMPONENT, MOLE PCT			
METHANE	95.9	91.4	92.5
ETHANE	2.3	4.0	4.4
PROPANE	0.3	1.6	1.3
N-BUTANE	0.2	0.5	0.4
ISOBUTANE	TRACE	0.7	0.4
N-PENTANE	0.1	0.2	0.1
ISOPENTANE	0.0	0.2	0.2
CYCLOPENTANE	TRACE	0.1	0.1
HEXANES PLUS	0.2	0.4	0.2
NITROGEN	0.6	0.9	0.4
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	TRACE	TRACE
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.3	0.2	0.1
HELIUM	0.01	0.01	0.01
HEATING VALUE*	1042	1121	1103
SPECIFIC GRAVITY	0.583	0.634	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 4. - SAMPLES FROM PIPELINES IN FOREIGN COUNTRIES

	INDEX 49 SAMPLE 11113	INDEX 50 SAMPLE 11116	INDEX 51 SAMPLE 13954
COUNTRY	MEXICO	MEXICO	NETHERLANDS
STATE OR PROVINCE	TAMAULIPAS	TAMAULIPAS	NOT GIVEN
FIELD	CAMPO REYNOSA	CAMPO TREVINO	BERGEMEER
LOCATION	NOT GIVEN	NOT GIVEN	NOT GIVEN
OWNER	PETROLEOS MEXICANOS	PETROLEOS MEXICANOS	AMOCO NETHERLANDS PET. CO.
SAMPLED	09/08/67	09/10/67	02/28/74
FORMATION	-FS-2,3,4,5,6,7,8,9,11	-FS-4,FM-1,2,3,5,7,11,12	PERM-ROTLIEGENDES
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	1100	1150	2700
FLOW, MCFD	125100	50200	100000
COMPONENT, MOLE PCT			
METHANE	92.7	96.3	94.5
ETHANE	3.7	1.8	3.0
PROPANE	1.2	0.3	0.5
N-BUTANE	0.3	TRACE	0.1
ISOBUTANE	0.4	0.2	0.1
N-PENTANE	0.2	0.2	TRACE
ISOPENTANE	0.1	0.0	TRACE
CYCLOPENTANE	0.1	TRACE	TRACE
HEXANES PLUS	0.3	0.2	0.1
NITROGEN	0.9	0.9	1.0
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	0.0
HYDROGEN	0.0	0.0	0.0
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.1	0.1	0.6
HELIUM	0.01	0.01	0.03
HEATING VALUE*	1092	1041	1036
SPECIFIC GRAVITY	0.615	0.583	0.589

	INDEX 52 SAMPLE 13955	INDEX 53 SAMPLE 14010	INDEX 54 SAMPLE 12084
COUNTRY	NETHERLANDS	NORWAY	PAKISTAN
STATE OR PROVINCE	NOT GIVEN	NORTH SEA	WEST PAKISTAN
FIELD	GROET	EKOFISK	CALHOUN DIST.
LOCATION	GROET	PHILLIPS GRP NORWAY EKOFISK	STOI PLANT INLET
OWNER	AMOCO NETHERLANDS PET. CO.	PHILLIPS PETROLEUM CO.	PAKISTAN PETROLEUM, LTD.
SAMPLED	02/28/74	02/17/74	08/19/69
FORMATION	PERM-ROTLIEGENDES	PALE-DANIAN	-SUI MAIN LIMESTONE
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	2800	500	1765
FLOW, MCFD	60000	65000	160000
COMPONENT, MOLE PCT			
METHANE	92.3	83.2	88.8
ETHANE	2.9	8.9	0.8
PROPANE	0.5	3.7	0.2
N-BUTANE	0.1	1.0	0.1
ISOBUTANE	0.1	0.5	0.0
N-PENTANE	TRACE	0.3	TRACE
ISOPENTANE	TRACE	0.2	0.1
CYCLOPENTANE	TRACE	TRACE	TRACE
HEXANES PLUS	TRACE	0.1	0.1
NITROGEN	3.1	0.5	4.1
OXYGEN	0.0	0.0	0.0
ARGON	TRACE	TRACE	TRACE
HYDROGEN	TRACE	0.0	0.1
HYDROGEN SULFIDE	0.0	0.0	0.0
CARBON DIOXIDE	0.9	1.6	5.6
HELIUM	0.08	TRACE	0.01
HEATING VALUE*	1007	1175	932
SPECIFIC GRAVITY	0.598	0.688	0.637

	INDEX 55 SAMPLE 11930	INDEX 56 SAMPLE 11929	INDEX 57 SAMPLE 16975
COUNTRY	SAUDI ARABIA	SAUDI ARABIA	THAILAND
STATE OR PROVINCE	NOT GIVEN	NOT GIVEN	PHITSANULOK BSN
FIELD	SHEDGUM GOSP NO. 1	UTHMANIYAH GOSP NO. 3	SIRIKIT
LOCATION	MPPT 0-11	MPPT 0-1	LAN KRABU FLOW STA.
OWNER	PETROMIN	PETROMIN	THAI SHELL EXPL. & PROD. CO.
SAMPLED	04/28/69	04/28/69	05/18/83
FORMATION	NOT GIVEN	NOT GIVEN	UNKN-LAN-KRABU
GEOLOGIC PROVINCE CODE	000	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE	55.6	56.9	45.0
ETHANE	16.9	16.9	23.8
PROPANE	9.6	9.6	17.9
N-BUTANE	2.5	2.4	4.7
ISOBUTANE	0.8	0.9	3.2
N-PENTANE	0.7	0.8	0.6
ISOPENTANE	0.9	0.1	2.3
CYCLOPENTANE	0.1	0.1	0.2
HEXANES PLUS	0.4	0.4	0.6
NITROGEN	2.5	2.2	0.6
OXYGEN	TRACE	0.1	0.1
ARGON	0.0	0.0	TRACE
HYDROGEN	0.1	TRACE	0.2
HYDROGEN SULFIDE	0.3	1.0	0.0
CARBON DIOXIDE	10.2	8.5	0.8
HELIUM	0.01	0.01	TRACE
HEATING VALUE*	1309	1309	1774
SPECIFIC GRAVITY	0.929	0.912	1.056

	INDEX 58 SAMPLE 16976	INDEX 59 SAMPLE 13305
COUNTRY	THAILAND	UNITED KINGDOM
STATE OR PROVINCE	PHITSANULOK BSN	NORTH SEA
FIELD	SIRIKIT	SOLE W
LOCATION	LAN KRABU FLOW STA.	NOT GIVEN
OWNER	THAI SHELL EXPL. & PROD. CO.	BRITISH PETROLEUM OIL CO. LT
SAMPLED	05/18/83	07/20/72
FORMATION	UNKN-LAN-KRABU	PERM-ROTLEIGENDES
GEOLOGIC PROVINCE CODE	000	000
DEPTH, FEET	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG	NOT GIVEN	1000
FLOW, MCFD	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT		
METHANE	58.4	93.9
ETHANE	15.8	3.3
PROPANE	12.9	0.6
N-BUTANE	3.8	0.1
ISOBUTANE	2.7	0.2
N-PENTANE	0.6	TRACE
ISOPENTANE	1.9	TRACE
CYCLOPENTANE	0.3	TRACE
HEXANES PLUS	0.6	0.1
NITROGEN	1.1	1.2
OXYGEN	0.2	0.0
ARGON	TRACE	0.0
HYDROGEN	0.2	0.0
HYDROGEN SULFIDE	0.0	0.0
CARBON DIOXIDE	1.6	0.5
HELIUM	TRACE	0.03
HEATING VALUE*	1578	1041
SPECIFIC GRAVITY	0.950	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY
** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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