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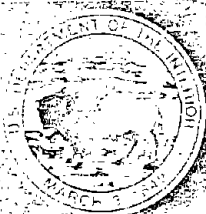
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Analyses of Natural Gases, 1986-90

By J. E. Hamak and Stella Sigler



UNITED STATES DEPARTMENT OF THE INTERIOR

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Information Circular 9301

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By J. E. Hamak and Stella Sigler

UNITED STATES DEPARTMENT OF THE INTERIOR
Manuel Lujan, Jr., Secretary

BUREAU OF MINES
T S Ary, Director

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ANALYSES OF NATURAL GASES, 1986-90

By J. E. Hamak¹ and Stella Sigler²

ABSTRACT

This publication contains analyses and related source data for 920 natural gas samples from 26 States and 2 foreign countries. All samples were obtained and analyzed as part of U.S. Bureau of Mines investigations of the occurrences of helium in natural gases of countries with free market economies. This survey has been conducted since 1917. The analyses published herein were made by mass spectrometer and chromatograph.

¹Petroleum engineer.

²Helium resources survey clerk.

Helium Field Operations, U.S. Bureau of Mines, Amarillo, TX.

INTRODUCTION

This Bureau of Mines publication contains analyses and related source data for 920 natural gas samples from 26 States and 2 foreign countries. All samples were obtained and analyzed as part of the Bureau's investigations of the occurrences of helium in natural gases of countries with free market economies. This survey has been conducted since 1917. The analyses published herein were made by mass spectrometer and chromatograph.

The results of these investigations are published annually to make the information available to the petroleum industry and the general public. Thirty-six publications have presented the results of 15,167 gas analyses made prior to 1990. The first three bulletins (1-3)³ contain analyses and related source data on 5,218 gas samples collected from 1917 through 1960; these bulletins have been supplemented annually by information circulars (4-17, 19-24, 26-30, 32-36) containing 10,171 analyses of samples collected since 1960.

In 1976, a compilation of the analyses made prior to 1975 was prepared by the Bureau of Mines and published by the National Technical Information Service of the U.S. Department of Commerce (18). This compilation contains 10,562 analyses of gas samples from gas and oil wells and natural gas pipelines in 37 States and 23 foreign countries. In 1982, a compilation of analyses made prior to 1981 was published (25).

The 1982 publication contains 12,554 analyses of gas samples from gas and oil wells and natural gas pipelines in 39 States and 24 foreign countries and includes the analyses from the 1976 publication. The latest of these compilations was published in 1987 and contains 14,242 analyses made prior to 1986. The samples were taken from wells or pipelines in 40 States and 24 foreign countries (31). The present compilation is intended as a supplement to the 1987 publication and contains all analyses published from 1986 through 1990.

In addition to being in the publications, all analyses and related information published through 1990 are available on a magnetic tape file. The tape is available for \$240 from the National Technical Information Service, Springfield, VA 22161, phone 800/553-NTIS (703/487-4650 in Virginia). Orders should refer to Bureau of Mines tape PB 91-507855.

The helium survey program is conducted by soliciting natural gas samples throughout the United States and other countries with free market economies. Without the assistance of the petroleum industry, State and Federal agencies, and many individuals engaged in oil and gas exploration and production, the helium survey in its present scope would not be possible.

GEOLOGIC PROVINCES OF THE UNITED STATES

The tables include geologic province codes so each sample source can be located within a specific geologic province as defined by the Committee on Statistics of Drilling of the American Association of Petroleum Geologists.⁴ These provinces, which are given in the following list and shown in figure 1, are delineated by political

boundaries for convenience and for accommodation of data processing equipment. Not all of the provinces shown are gas-producing areas, so many of the codes are not used in this publication. Since State or Federal ownership is not always known in offshore areas, only one code is used for each State. Owing to the lack of information on the location of wells in Alaska, only one code, 972, is used for all wells.

The following list and figure 1 are taken from the article cited in footnote 4.

³Italic numbers in parentheses refer to items in the list of previous publications at the end of this report.

⁴Meyer, R. F. Geologic Provinces Code Map for Computer Use. AAPG Bull., v. 54, No. 7, July 1970, pp. 1301-1305.

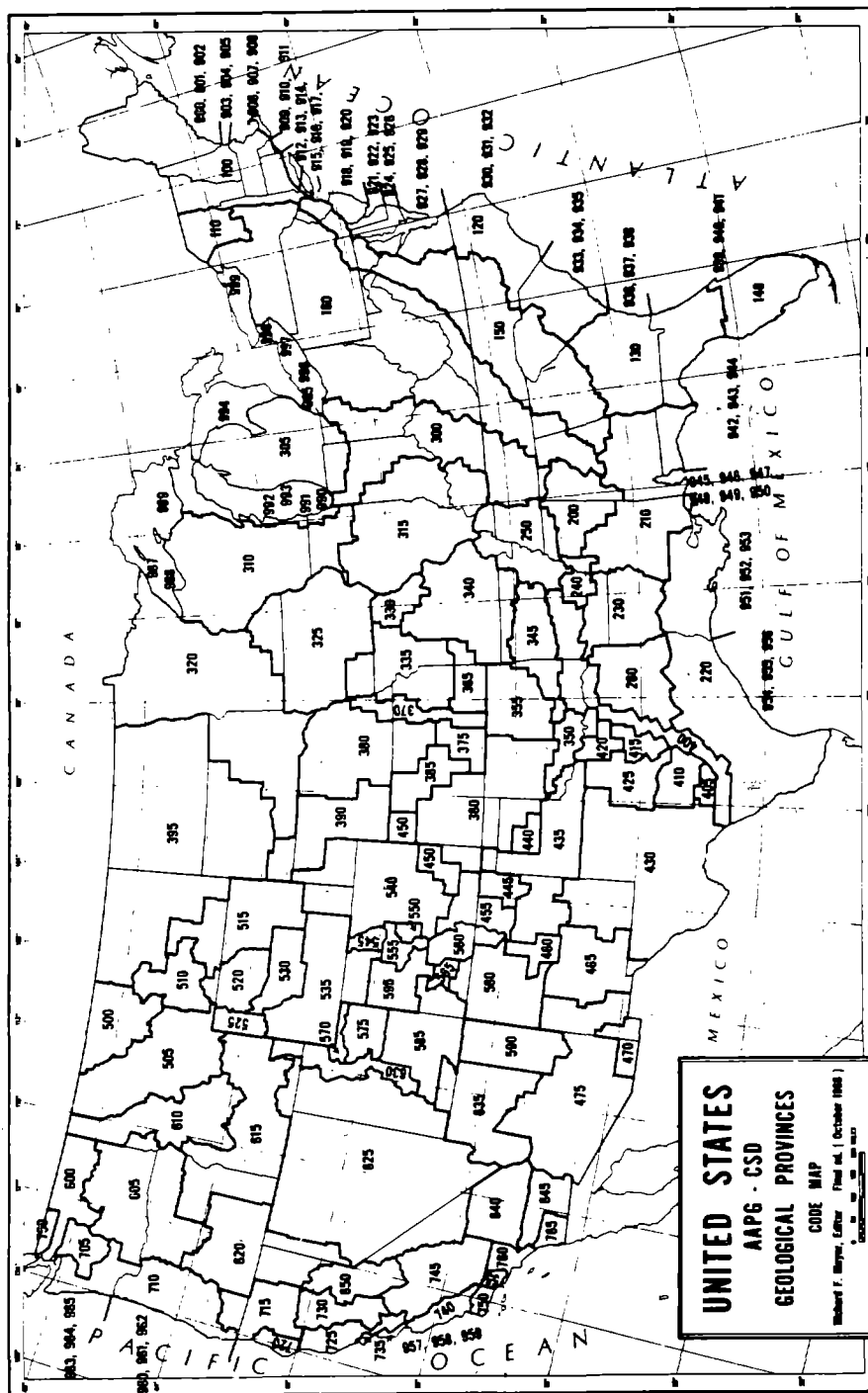


Figure 1—Geologic provinces of the United States.

Code	Province	Code	Province
100	New England Province	500	Sweetgrass Arch
110	Adirondack Uplift	505	Montana Folded Belt Province
120	Atlantic Coast Basin	510	Central Montana Uplift
130	South Georgia-North Florida Sedimentary Province	515	Powder River Basin
140	South Florida Province	520	Big Horn Basin
150	Piedmont-Blue Ridge Province	525	Yellowstone Province
160	Appalachian Basin	530	Wind River Basin
200	Warrior Basin	535	Green River Basin
210	Mid-Gulf Coast Basin	540	Denver Basin
220	Gulf Coast Basin	545	North Park Basin
230	Arkla Basin	550	South Park Basin
240	Desha Basin	555	Eagle Basin
250	Upper Mississippi Embayment	560	San Luis Basin
260	East Texas Basin	565	San Juan Mountain Province
		570	Uinta Uplift
		575	Uinta Basin
300	Cincinnati Arch	580	San Juan Basin
305	Michigan Basin	585	Paradox Basin
310	Wisconsin Arch	590	Black Mesa Basin
315	Illinois Basin	595	Piceance Basin
320	Sioux Uplift		
325	Iowa Shelf	600	Northern Cascade Range-Okanagan Province
330	Lincoln Anticline	605	Eastern Columbia Basin
335	Forest City Basin	610	Idaho Mountains Province
340	Ozark Uplift	615	Snake River Basin
345	Arkoma Basin	620	Southern Oregon Basin
350	South Oklahoma Folded Belt Province	625	Great Basin Province
355	Chautauqua Platform	630	Wasatch Uplift
360	Anadarko Basin	635	Plateau Sedimentary Province
365	Cherokee Basin	640	Mojave Basin
370	Nemaha Anticline	645	Salton Basin
375	Sedgwick Basin	650	Sierra Nevada Province
380	Salina Basin		
385	Central Kansas Uplift	700	Bellingham Basin
390	Chadron Arch	705	Puget Sound Province
395	Williston Basin	710	Western Columbia Basin
		715	Klamath Mountains Province
400	Ouachita Tectonic Belt Province	720	Eel River Basin
405	Kerr Basin	725	Northern Coast Range Province
410	Llano Uplift	730	Sacramento Basin
415	Strawn Basin	735	Santa Cruz Basin
420	Fort Worth Syncline	740	Coastal Basins
425	Bend Arch	745	San Joaquin Basin
430	Permian Basin	750	Santa Maria Basin
435	Palo Duro Basin	755	Ventura Basin
440	Amarillo Arch	760	Los Angeles Basin
445	Sierra Grande Uplift	765	Capistrano Basin
450	Las Animas Arch		
455	Las Vegas-Raton Basin	800	Heceta Island Area
460	Estancia Basin	805	Keku Islands Area
465	Orogrande Basin	810	Gulf of Alaska Basin
470	Pedregosa Basin	815	Copper River Basin
475	Basin-and-Range Province	820	Cook Inlet Basin

Code	Province	Code	Province
830	Kandik Province	935	South Carolina Atlantic offshore—Federal
835	Kobuk Province	936	Georgia Atlantic offshore—general
840	Koyukuk Province	937	Georgia Atlantic offshore—State
845	Bristol Bay Basin	938	Georgia Atlantic offshore—Federal
850	Bethel Basin	939	Florida Atlantic offshore—general
855	Norton Basin	940	Florida Atlantic offshore—State
860	Selawik Basin	941	Florida Atlantic offshore—Federal
863	Yukon Flats Basin	942	Florida Gulf of Mexico offshore—general
865	Lower Tanana Basin	943	Florida Gulf of Mexico offshore—State
867	Middle Tanana Basin	944	Florida Gulf of Mexico offshore—Federal
870	Upper Tanana Basin	945	Alabama Gulf of Mexico offshore—general
873	Galena Basin	946	Alabama Gulf of Mexico offshore—State
875	Innokko Basin	947	Alabama Gulf of Mexico offshore—Federal
877	Minchumina Basin	948	Mississippi Gulf of Mexico offshore—general
880	Holitna Basin	949	Mississippi Gulf of Mexico offshore—State
885	Arctic Foothills Province	950	Mississippi Gulf of Mexico offshore—Federal
890	Arctic Slope Basin	951	Louisiana Gulf of Mexico offshore—general
		952	Louisiana Gulf of Mexico offshore—State
900	Maine Atlantic offshore—general	953	Louisiana Gulf of Mexico offshore—Federal
901	Maine Atlantic offshore—State	954	Texas Gulf of Mexico offshore—general
902	Maine Atlantic offshore—Federal	955	Texas Gulf of Mexico offshore—State
903	New Hampshire Atlantic offshore—general	956	Texas Gulf of Mexico offshore—Federal
904	New Hampshire Atlantic offshore—State	957	California Pacific offshore—general
905	New Hampshire Atlantic offshore—Federal	958	California Pacific offshore—State
906	Massachusetts Atlantic offshore—general	959	California Pacific offshore—Federal
907	Massachusetts Atlantic offshore—State	960	Oregon Pacific offshore—general
908	Massachusetts Atlantic offshore—Federal	961	Oregon Pacific offshore—State
909	Rhode Island Atlantic offshore—general	962	Oregon Pacific offshore—Federal
910	Rhode Island Atlantic offshore—State	963	Washington Pacific offshore—general
911	Rhode Island Atlantic offshore—Federal	964	Washington Pacific offshore—State
912	Connecticut Atlantic offshore—general	965	Washington Pacific offshore—Federal
913	Connecticut Atlantic offshore—State	972	Alaska Arctic offshore—general
914	Connecticut Atlantic offshore—Federal	973	Alaska Arctic offshore—State
915	New York Atlantic offshore—general	974	Alaska Arctic offshore—Federal
916	New York Atlantic offshore—State	975	Alaska Bering Sea offshore—general
917	New York Atlantic offshore—Federal	976	Alaska Bering Sea offshore—State
918	New Jersey Atlantic offshore—general	977	Alaska Bering Sea offshore—Federal
919	New Jersey Atlantic offshore—State	978	Alaska Pacific offshore—general
920	New Jersey Atlantic offshore—Federal	979	Alaska Pacific offshore—State
921	Delaware Atlantic offshore—general	980	Alaska Pacific offshore—Federal
922	Delaware Atlantic offshore—State	987	Minnesota Lake Superior offshore
923	Delaware Atlantic offshore—Federal	988	Wisconsin Lake Superior offshore
924	Maryland Atlantic offshore—general	989	Michigan Lake Superior offshore
925	Maryland Atlantic offshore—State	990	Indiana Lake Michigan offshore
926	Maryland Atlantic offshore—Federal	991	Illinois Lake Michigan offshore
927	Virginia Atlantic offshore—general	992	Wisconsin Lake Michigan offshore
928	Virginia Atlantic offshore—State	993	Michigan Lake Michigan offshore
929	Virginia Atlantic offshore—Federal	994	Michigan Lake Huron offshore
930	North Carolina Atlantic offshore—general	995	Michigan Lake Erie offshore
931	North Carolina Atlantic offshore—State	996	Ohio Lake Erie offshore
932	North Carolina Atlantic offshore—Federal	997	Pennsylvania Lake Erie offshore
933	South Carolina Atlantic offshore—general	998	New York Lake Erie offshore
934	South Carolina Atlantic offshore—State	999	New York Lake Ontario offshore

TABLES

The following tables include the results of analyses and related source data from the gas samples, which are divided into two groups as follows:

Table 1. - Samples from gas and oil wells in the United States.

Table 2. - Samples from pipelines in the United States.

Table 3. - Samples from gas and oil wells in foreign countries.

The following list indicates the sources of the samples listed in the tables:

Source	Number of samples	Tables	Source	Number of samples	Tables
Alabama	17	1,2	North Dakota . .	7	1
Arkansas	100	1,2	Ohio	1	2
California	7	1,2	Oklahoma	183	1,2
Colorado	38	1,2	Pennsylvania . .	17	1,2
Idaho	2	1	South Dakota . .	1	1
Indiana	2	1	Tennessee	1	1
Kansas	59	1	Texas	230	1,2
Kentucky	7	1	Utah	12	1,2
Louisiana	40	1,2	Virginia	2	1
Maryland	1	1	West Virginia . .	34	1,2
Michigan	19	1	Wyoming	31	1
Mississippi	38	1,2			
Montana	9	1	Canada	5	3
New Mexico	46	1,2	Spain	1	3
New York	10	1			

All components of the analyses in the tables are reported to the nearest 0.1 pct, except helium, which is reported to the nearest 0.01 pct. The word "trace" is used to denote quantities of helium of less than 0.005 pct and quantities of other components of less than 0.05 pct.

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

	INDEX 1 SAMPLE 18360	INDEX 2 SAMPLE 19015	INDEX 3 SAMPLE 18237
STATE.....	ALABAMA	ALABAMA	ALABAMA
COUNTY.....	BALDWIN	CONECUH	FAYETTE
FIELD.....	GULF STATE PARK	NOT GIVEN	TANYARD CREEK
WELL NAME.....	GULF STATE PARK 12-10 NO. 1	PARAMOUNT-ATIC 7-13 NO. 1	U.S. STEEL 31-13 NO. 1
API.....			
LOCATION.....	SEC. 12, T9S, R4E	SEC. 7, T4N, R8E	SEC. 31, T14S, R10W
OWNER.....	HUGHES EASTERN CORP.	COX OIL & GAS, INC.	TXO PRODUCTION CORP.
COMPLETED.....	84/--/00	88/--/00	86/--/00
SAMPLED.....	87/04/28	90/09/00	86/10/20
FORMATION.....	MIOC-MEYER	JURA-SMACKOVER	MISS-CARTER
GEOLOGIC PROVINCE CODE...	210	210	200
DEPTH, FEET.....	1280	13162	2359
WELLHEAD PRESSURE, PSIG...	305	1785	NOT GIVEN
OPEN FLOW, MCFD.....	600	1244	1970
COMPONENT, MOLE PCT			
METHANE.....	93.1	78.5	95.7
ETHANE.....	0.0	7.4	1.9
PROPANE.....	TRACE	3.1	0.3
N-BUTANE.....	0.0	1.4	0.0
ISOBUTANE.....	0.0	0.5	0.1
N-PENTANE.....	0.0	0.3	0.0
ISOPENTANE.....	0.0	0.3	0.0
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.0	0.1	0.0
NITROGEN.....	5.8	8.0	1.5
OXYGEN.....	0.7	TRACE	0.1
ARGON.....	0.1	0.1	0.0
HYDROGEN.....	TRACE	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.3	0.1
HELIUM.....	0.01	0.03	0.10
HEATING VALUE*.....	944	1106	1015
SPECIFIC GRAVITY.....	0.585	0.703	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18276	INDEX SAMPLE 18853	INDEX SAMPLE 18458
STATE.....	ALABAMA	ALABAMA	ALABAMA
COUNTY.....	LAMAR	LAMAR	LAMAR
FIELD.....	CORINTH	FERNBANK	MOUNT CARMEL
WELL NAME.....	MCDONALD NO. 36-13	SUGGS NO. 16-10	HODO 31-15 NO. 1
API.....			
LOCATION.....	SEC. 36, T14S, R14W	SEC. 16, T17S, R15W	SEC. 31, T17S, R14W
OWNER.....	TERRA RESOURCES, INC.	PRUET PRODUCTION CO.	HOWELL PETROLEUM CORP.
COMPLETED.....	86/06/03	88/--/00	87/--/00
SAMPLED.....	86/11/25	89/09/12	87/07/25
FORMATION.....	MISS-CARTER	MISS-SANDERS	MISS-CARTER
GEOLOGIC PROVINCE CODE..	200	200	200
DEPTH, FEET.....	2674	4204	4375
WELLHEAD PRESSURE, PSIG..	697	1250	1260
OPEN FLOW, MCFD.....	9349	1395	670
COMPONENT, MOLE PCT			
METHANE.....	96.6	91.5	91.7
ETHANE.....	2.3	4.7	5.7
PROPANE.....	0.1	1.6	0.0
N-BUTANE.....	0.0	0.0	0.3
ISOBUTANE.....	0.1	0.7	0.0
N-PENTANE.....	0.0	0.0	0.4
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.2
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	0.7	1.4	0.8
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.1	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.0	0.6
HELIUM.....	0.05	0.11	0.06
HEATING VALUE*.....	1026	1076	1075
SPECIFIC GRAVITY.....	0.572	0.610	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

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

	INDEX SAMPLE 17953	INDEX SAMPLE 18944	INDEX SAMPLE 18945
STATE.....	ALABAMA	ALABAMA	ALABAMA
COUNTY.....	LAMAR	MARION	MARION
FIELD.....	YELLOW CREEK	WATTS CREEK	WATTS CREEK
WELL NAME.....	DAY NO. 1	JONES 33-1 NO. 1	JONES 33-1 NO. 1
API.....			
LOCATION.....	SEC. 16, T16S, R16W	SEC. 33, T10S, R15W	SEC. 33, T10S, R15W
OWNER.....	SOUTHLAND ROYALTY CO.	HAWKEYE OIL & GAS, INC.	HAWKEYE OIL & GAS, INC.
COMPLETED.....	84/09/26	88/--/00	88/--/00
SAMPLED.....	86/01/14	90/04/13	90/04/13
FORMATION.....	MISS-CARTER	CRET-LEWIS	MISS-CARTER
GEOLOGIC PROVINCE CODE...	200	200	200
DEPTH, FEET.....	4378	1602	824
WELLHEAD PRESSURE, PSIG...	1707	500	190
OPEN FLOW, MCFD.....	2110	250	250
COMPONENT, MOLE PCT			
METHANE.....	91.6	97.3	98.3
ETHANE.....	3.6	1.1	1.1
PROPANE.....	1.4	0.0	0.0
N-BUTANE.....	0.7	0.0	0.0
ISOBUTANE.....	0.2	0.0	0.0
N-PENTANE.....	0.4	0.0	0.0
ISOPENTANE.....	0.1	0.0	0.0
CYCLOPENTANE.....	0.2	0.0	0.0
HEXANES PLUS.....	0.4	0.0	0.0
NITROGEN.....	0.9	1.2	0.0
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.4	0.5
HELIUM.....	0.09	0.08	0.08
HEATING VALUE*.....	1109	1005	1015
SPECIFIC GRAVITY.....	0.629	0.568	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18591	INDEX SAMPLE 18838	INDEX SAMPLE 18978
STATE.....	ALABAMA	ALABAMA	ALABAMA
COUNTY.....	MOBILE	MOBILE	PICKENS
FIELD.....	MARY ANN	MARY ANN	BUNCOMB CREEK
WELL NAME.....	STATE LEASE "348" NO. 2	STATE LEASE	BLALOCK 33-13 NO. 1
API.....			
LOCATION.....	TRACT 77, MOBILE BAY	MOBILE BAY	SEC. 33, T18S, R15W
OWNER.....	MOBIL OIL CORP.	MOBIL EXP. & PROD. SOUTHEAST,	MERIDIAN OIL, INC.
COMPLETED.....	88/03/26	88/05/18	89/--/00
SAMPLED.....	88/05/04	89/08/11	90/01/08
FORMATION.....	JURA-NORPHLET	JURA-NORPHLET	MISS-CARTER
GEOLOGIC PROVINCE CODE.....	210	210	200
DEPTH, FEET.....	21450	21402	5636
WELLHEAD PRESSURE, PSIG.....	8100	7500	342
OPEN FLOW, MCFD.....	50000	26000	1268
COMPONENT, MOLE PCT			
METHANE.....	86.7	91.6	82.7
ETHANE.....	2.7	0.7	9.9
PROPANE.....	0.4	TRACE	4.0
N-BUTANE.....	0.0	0.0	1.5
ISOBUTANE.....	0.1	0.0	0.5
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.7	1.5	1.4
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	5.9	2.1	0.0
CARBON DIOXIDE.....	3.4	4.1	0.0
HELIUM.....	0.02	TRACE	0.10
HEATING VALUE*.....	978	954	1185
SPECIFIC GRAVITY.....	0.647	0.617	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 13 SAMPLE 18069	INDEX 14 SAMPLE 18947	INDEX 15 SAMPLE 18124
STATE.....	ALABAMA	ARKANSAS	ARKANSAS
COUNTY.....	TUSCALOOSA	COLUMBIA	CRAWFORD
FIELD.....	BROOKWOOD COAL	SPRING HILL	CECIL
WELL NAME.....	U.S. PIPE & FOUNDRY 21-11-2	M. D. HAYNES JR. HEIRS NO. 1	BURROUGH NO. 2
API.....			
LOCATION.....	SEC. 21, T20S, R7W	NOT GIVEN	SEC. 26, T10N, R29W
OWNER.....	BLACK WARRIOR METHANE CORP.	MARATHON OIL CO.	TXO PRODUCTION CORP.
COMPLETED.....	86/03/27	99/08/08	86/04/08
SAMPLED.....	86/04/16	90/04/17	86/06/11
FORMATION.....	PENN-MARY LEE & BLUE CREEK	JURA-HAYNESVILLE	PENN-FRIEBURG
GEOLOGIC PROVINCE CODE.....	200	230	345
DEPTH, FEET.....	2073	10670	3730
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	1944	1090
OPEN FLOW, MCFD.....	156	3500	6259
COMPONENT, MOLE PCT			
METHANE.....	98.4	85.3	98.1
ETHANE.....	0.0	5.8	1.1
PROPANE.....	0.0	3.2	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	3.2	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.2	0.6	0.4
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.2	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	1.9	TRACE
HELIUM.....	0.05	0.01	0.12
HEATING VALUE*.....	997	1157	1016
SPECIFIC GRAVITY.....	0.560	0.684	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18667	INDEX SAMPLE 18672	INDEX SAMPLE 18893
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	CRAWFORD	CRAWFORD	CRAWFORD
FIELD.....	HOLLIS LAKE	HOLLIS LAKE	HOLLIS LAKE
WELL NAME.....	BOHANNON NO. 1	STAR GRIEG NO. 2	BAILEY NO. 2-26
API.....			
LOCATION.....	SEC. 5, T8N, R31W	SEC. 13, T9N, R31W	SEC. 26, T9N, R31W
OWNER.....	KAISER-FRANCIS OIL CO.	TEXACO INC.	ANADARKO PETROLEUM CORP.
COMPLETED.....	88/06/03	88/03/29	88/12/04
SAMPLED.....	88/08/30	88/09/19	89/08/07
FORMATION.....	PENN-DUNN A & C	PENN-HALE U	PENN-CARPENTER
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	4911	5440	2316
WELLHEAD PRESSURE, PSIG..	973	510	230
OPEN FLOW, MCFD.....	7929	880	1057
COMPONENT, MOLE PCT			
METHANE.....	95.3	97.6	98.0
ETHANE.....	1.1	0.9	0.7
PROPANE.....	0.1	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	TRACE	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.1	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	2.3	0.6	0.9
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	TRACE	0.0
CARBON DIOXIDE.....	0.9	0.8	TRACE
HELIUM.....	0.08	0.06	0.08
HEATING VALUE*.....	993	1006	1014
SPECIFIC GRAVITY.....	0.582	0.570	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18934	INDEX SAMPLE 18588	INDEX SAMPLE 18589
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	CRAWFORD	CRAWFORD	CRAWFORD
FIELD.....	HOLLIS LAKE	KIBLER-WILLIAMS	KIBLER-WILLIAMS
WELL NAME.....	MORRIS NO. 2-36	BYARS NO. 3-15-T	BYARS NO. 3-15-C
API.....			
LOCATION.....	SEC. 36, T9N, R31W	SEC. 15, T9N, R30W	SEC. 15, T9N, R30W
OWNER.....	ANADARKO PETROLEUM CORP.	ESCO EXPLORATION, INC.	ESCO EXPLORATION, INC.
COMPLETED.....	88/03/21	87/12/06	87/12/06
SAMPLED.....	90/03/19	88/04/27	88/04/27
FORMATION.....	PENN-CASEY	PENN-CASEY	PENN-TACKETT
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	4253	5119	3370
WELLHEAD PRESSURE, PSIG..	660	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD.....	1760	1134	1172
COMPONENT, MOLE PCT			
METHANE.....	97.4	96.8	96.7
ETHANE.....	1.5	1.6	1.6
PROPANE.....	0.2	0.2	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	TRACE	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.3	0.4	0.6
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.8	0.7
HELIUM.....	0.09	0.07	0.07
HEATING VALUE*.....	1018	1016	1015
SPECIFIC GRAVITY.....	0.570	0.574	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18631	INDEX SAMPLE 17991	INDEX SAMPLE 18364
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	CRAWFORD	CRAWFORD	CRAWFORD
FIELD.....	KIBLER-WILLIAMS	LEE CREEK	SHIBLEY
WELL NAME.....	SHERER NO. 1	U.S. TRUST NO. 1	MECHLING "A" NO. 1-26
API.....			
LOCATION.....	SEC. 2, T9N, R30W	SEC. 15, T9N, R32W	SEC. 26, T9N, R31W
OWNER.....	REVERE CORP.	TXO PRODUCTION CORP.	ANADARKO PETROLEUM CORP.
COMPLETED.....	87/12/27	85/10/15	87/02/04
SAMPLED.....	88/07/07	86/02/12	87/05/04
FORMATION.....	PENN-CARPENTER	PENN-HALE M	PENN-ALMA
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	2595	2202	1390
WELLHEAD PRESSURE, PSIG..	106	855	75
OPEN FLOW, MCFD.....	1240	1279	1000
COMPONENT, MOLE PCT			
METHANE.....	97.5	95.2	95.2
ETHANE.....	0.9	1.4	0.9
PROPANE.....	0.1	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.5	2.7	2.9
OXYGEN.....	0.1	TRACE	0.7
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.2	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	0.1	TRACE
HELIUM.....	0.11	0.15	0.08
HEATING VALUE*.....	1007	993	985
SPECIFIC GRAVITY.....	0.570	0.572	0.575

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18976	INDEX SAMPLE 18073	INDEX SAMPLE 18086
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FAULKNER	FRANKLIN	FRANKLIN
FIELD.....	BARNEY	AETNA	AETNA
WELL NAME.....	SIMPSON NO. 1-9	HANTOOTH NO. 2	O'NEAL NO. 2T
API.....			
LOCATION.....	SEC. 9, T7N, R11W	SEC. 10, T8N, R27W	SEC. 8, T8N, R27W
OWNER.....	ARKLA EXPLORATION CO.	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.
COMPLETED.....	90/01/16	85/01/22	84/11/19
SAMPLED.....	90/06/06	86/04/15	86/04/21
FORMATION.....	PENN-HALE U	DEVO-PENTERS	PENN-ORR
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	4491	6794	6372
WELLHEAD PRESSURE, PSIG..	1297	2280	1250
OPEN FLOW, MCFD.....	1365	500	12592
COMPONENT, MOLE PCT			
METHANE.....	97.2	97.7	95.3
ETHANE.....	0.9	1.2	1.1
PROPANE.....	0.1	0.1	0.1
N-BUTANE.....	0.0	0.0	0.2
ISOBUTANE.....	TRACE	0.0	0.0
N-PENTANE.....	0.0	0.0	0.6
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.3
HEXANES PLUS.....	0.0	0.0	0.9
NITROGEN.....	1.1	0.2	0.0
OXYGEN.....	0.3	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	0.2	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.6	1.2
HELIUM.....	0.11	0.07	0.07
HEATING VALUE*.....	1005	1014	1078
SPECIFIC GRAVITY.....	0.568	0.567	0.613

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

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

	INDEX SAMPLE 18099	INDEX SAMPLE 18100	INDEX SAMPLE 18452
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	AETNA	AETNA	AETNA
WELL NAME.....	LAW A NO. 2-C	LAW A NO. 2-T	DAVID PILE NO. 3-T
API.....	SEC. 9, T8N, R27W	SEC. 9, T8N, R27W	SEC. 19, T8N, R27W
LOCATION.....	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.
OWNER.....	85/12/26	85/12/26	87/07/02
COMPLETED.....	86/05/01	86/05/01	87/09/30
SAMPLED.....	PENN-CASEY	PENN-HALE	PENN-ARECI & DUNN C
FORMATION.....	345	345	345
GEOLOGIC PROVINCE CODE..	3940	5600	6910
DEPTH, FEET.....	1111	1581	962
WELLHEAD PRESSURE, PSIG..	1268	13563	1700
OPEN FLOW, MCFD.....			
COMPONENT, MOLE PCT			
METHANE.....	97.0	97.2	98.0
ETHANE.....	1.2	1.2	1.1
PROPANE.....	0.2	0.1	0.3
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.1	TRACE	0.4
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.5	0.3	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.0	1.1	0.1
HELIUM.....	0.05	0.05	0.10
HEATING VALUE*.....	1011	1010	1021
SPECIFIC GRAVITY.....	0.570	0.570	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18495	INDEX SAMPLE 18931	INDEX SAMPLE 18762
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	AETNA	AETNA	ALTUS
WELL NAME.....	WIEDERKEHR-SWIFT NO. 1-32	ALSTON HEIRS NO. 2	ALLEN NO. 2-15-T
API.....			
LOCATION.....	SEC. 32, T9N, R26W	SEC. 23, T10N, R28W	SEC. 15, T9N, R26W
OWNER.....	SEECO, INC.	EXXON CO., U.S.A.	JMC EXPLORATION, INC.
COMPLETED.....	87/07/29	89/11/14	88/03/30
SAMPLED.....	87/12/04	90/03/13	89/02/10
FORMATION.....	PENN-JENKINS	PENN-ORR	PENN-CASEY
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	4878	3775	3770
WELLHEAD PRESSURE, PSIG...	438	1350	716
OPEN FLOW, MCFD.....	5477	8990	2027
COMPONENT, MOLE PCT			
METHANE.....	97.6	97.5	97.9
ETHANE.....	1.3	1.8	1.0
PROPANE.....	0.2	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	TRACE	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.2
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.3	0.4	0.5
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.1	0.3
HELIUM.....	0.05	0.07	0.12
HEATING VALUE*.....	1018	1024	1019
SPECIFIC GRAVITY.....	0.569	0.566	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 34 18932	INDEX SAMPLE 35 17933	INDEX SAMPLE 36 17937
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	ALTUS	CECIL	CECIL
WELL NAME.....	WESTERN COAL NO. 2	JOHNSON NO. 2-T	MCDONALD NO. 2
API.....			
LOCATION.....	SEC. 23, T9N, R26W	SEC. 20, T9N, R28 W	SEC. 35, T9N, R29W
OWNER.....	EXXON CO., U.S.A.	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.
COMPLETED.....	89/12/05	85/03/12	85/03/08
SAMPLED.....	90/03/13	85/12/17	85/12/17
FORMATION.....	PENN-FRIEBURG	PENN-SPIRO	PENN-HALE
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	3366	3622	4837
WELLHEAD PRESSURE, PSIG.....	1125	3600	1045
OPEN FLOW, MCFD.....	7100	1010	3200
COMPONENT, MOLE PCT			
METHANE.....	95.8	96.8	97.0
ETHANE.....	1.0	1.4	1.2
PROPANE.....	0.1	0.2	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	2.8	1.0	0.9
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.1	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.4	0.6
HELIUM.....	0.12	0.07	0.06
HEATING VALUE*.....	989	1011	1007
SPECIFIC GRAVITY.....	0.572	0.570	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18075	INDEX SAMPLE 18108	INDEX SAMPLE 18153
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	CECIL	CECIL	CECIL
WELL NAME.....	MORRIS NO. 3	EPPERSON FISHER NO. 2	STUBBLEFIELD NO. 3
API.....			
LOCATION.....	SEC. 24, T9N, R29W	SEC. 31, T10N, R28W	SEC. 36, T9N, R29W
OWNER.....	ARKOMA PRODUCTION CO.	TXO PRODUCTION CORP.	ARKOMA PRODUCTION CO.
COMPLETED.....	84/11/14	86/01/24	86/04/20
SAMPLED.....	86/04/15	86/05/14	86/07/03
FORMATION.....	PENN-MORRIS	PENN-TACKETT	PENN-MORRIS
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	2265	2134	2077
WELLHEAD PRESSURE, PSIG.....	535	850	256
OPEN FLOW, MCFD.....	7300	1586	12058
COMPONENT, MOLE PCT			
METHANE.....	98.3	99.0	98.1
ETHANE.....	0.7	0.2	1.1
PROPANE.....	TRACE	TRACE	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.5	0.4	0.4
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.2	0.2	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	TRACE	TRACE
HELIUM.....	0.07	0.10	0.10
HEATING VALUE*.....	1009	1007	1016
SPECIFIC GRAVITY.....	0.560	0.555	0.561

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18875	INDEX SAMPLE 18781	INDEX SAMPLE 18782
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	CECIL	JETHRO	JETHRO
WELL NAME.....	FEDERAL LAND BANK NO. 2	HALES NO. 4-C	HALES NO. 4-T
API.....			
LOCATION.....	SEC. 2, T8N, R28W	SEC. 24, T11N, R28W	SEC. 24, T11N, R28W
OWNER.....	ARKLA EXPLORATION CO.	SEECO, INC.	SEECO, INC.
COMPLETED.....	89/07/30	88/11/28	88/11/28
SAMPLED.....	89/10/24	89/04/10	89/04/10
FORMATION.....	PENN-ORR	PENN-PAUL BARTON-JENKINS	PENN-PAUL BARTON-JENKINS
GEOLOGIC PROVINCE CODE...	345	345	345
DEPTH, FEET.....	5142	1200	1200
WELLHEAD PRESSURE, PSIG...	NOT GIVEN	263	263
OPEN FLOW, MCFD.....	1770	1049	1049
COMPONENT, MOLE PCT			
METHANE.....	94.3	98.1	97.7
ETHANE.....	1.2	0.5	0.7
PROPANE.....	0.2	0.0	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	TRACE	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.2	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	3.6	0.8	0.9
OXYGEN.....	0.4	0.1	0.0
ARGON.....	0.1	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.2	0.2
HELIUM.....	0.08	0.09	0.10
HEATING VALUE*.....	982	1014	1012
SPECIFIC GRAVITY.....	0.581	0.567	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18903	INDEX SAMPLE 18087	INDEX SAMPLE 18127
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	JETHRO	OZARK	PETER PENDER
WELL NAME.....	ARMSTRONG NO. 1	WOFFORD NO. 31	TERRY NO. 2
API.....			
LOCATION.....	SEC. 35, T11N, R27W.	SEC. 31, T10N, R26W	SEC. 16, T8N, R28W
OWNER.....	SEECO, INC.	HAWKINS OIL & GAS, INC.	ARKOMA PRODUCTION CO.
COMPLETED.....	89/09/22	86/03/10	85/12/27
SAMPLED.....	90/01/17	86/04/22	86/06/13
FORMATION.....	PENN-CANNON	PENN-DUNN A & C	PENN-DUNN A
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	3636	3664	6058
WELLHEAD PRESSURE, PSIG..	842	551	795
OPEN FLOW, MCFD.....	7660	2869	1283
COMPONENT, MOLE PCT			
METHANE.....	95.5	97.0	97.4
ETHANE.....	1.3	1.1	1.1
PROPANE.....	0.2	0.1	0.2
N-BUTANE.....	0.0	0.1	0.0
ISOBUTANE.....	0.1	0.0	0.0
N-PENTANE.....	0.0	0.2	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.0	0.2	0.0
NITROGEN.....	2.2	0.5	0.3
OXYGEN.....	0.5	0.1	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	0.2	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.3	0.7
HELIUM.....	0.06	0.05	0.13
HEATING VALUE*.....	997	1031	1012
SPECIFIC GRAVITY.....	0.578	0.577	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18223	INDEX SAMPLE 18373	INDEX SAMPLE 18904
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	PETER PENDER	ROCK CREEK	ROCK CREEK
WELL NAME.....	DUNN NO. 2	FEDERAL NO. 1-2	WATALULA NO. 1-36-C
API.....			
LOCATION.....	SEC. 24, T8N, R28W	SEC. 2, T11N, R26W	SEC. 36, T11N, R27W
OWNER.....	ARKOMA PRODUCTION CO.	KANEK OPERATING CO., LTD.	WEISER-BROWN OIL CO.
COMPLETED.....	86/06/17	86/02/17	89/06/01
SAMPLED.....	86/09/26	87/05/27	90/01/11
FORMATION.....	PENN-MORRIS	PENN-BARTON R & HALE M	PENN-CASEY-HURST-DUNN A
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	3450	1992	2487
WELLHEAD PRESSURE, PSIG.....	701	677	NOT GIVEN
OPEN FLOW, MCFD.....	861	3237	74367
COMPONENT, MOLE PCT			
METHANE.....	97.9	96.3	97.1
ETHANE.....	1.4	1.7	1.1
PROPANE.....	0.1	0.4	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.2	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.3	1.1	0.5
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	0.1	1.0
HELIUM.....	0.08	0.11	0.09
HEATING VALUE*.....	1019	1024	1011
SPECIFIC GRAVITY.....	0.563	0.575	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18905	INDEX SAMPLE 18661	INDEX SAMPLE 18485
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	ROCK CREEK	SPADRA	URSULA
WELL NAME.....	WATALULA NO. 1-36-T	RAGON NO. 2	CARTWRIGHT "D" NO. 1-T
API.....			
LOCATION.....	SEC. 36, T11N, R27W	SEC. 33, T9N, R23W	SEC. 27, T8N, R29W
OWNER.....	WEISER-BROWN OIL CO.	ARKOMA PRODUCTION CO.	TXO PRODUCTION CORP.
COMPLETED.....	89/06/01	88/05/02	87/10/21
SAMPLED.....	90/01/11	88/08/17	87/10/24
FORMATION.....	PENN-CASEY-HURST-DUNN A	PENN-ARECI	PENN-HALE M
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	2487	4883	7452
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	120	NOT GIVEN
OPEN FLOW, MCFD.....	1605	1300	4000
COMPONENT, MOLE PCT			
METHANE.....	91.1	97.5	95.9
ETHANE.....	1.0	1.1	1.3
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	TRACE	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	5.3	0.5	0.4
OXYGEN.....	1.4	0.1	TRACE
ARGON.....	0.1	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	0.5	2.2
HELIUM.....	0.08	0.12	0.07
HEATING VALUE*.....	945	1016	999
SPECIFIC GRAVITY.....	0.600	0.570	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 52 18486	INDEX SAMPLE 53 18487	INDEX SAMPLE 54 18488
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	FRANKLIN
FIELD.....	URSULA	URSULA	URSULA
WELL NAME.....	CARTWRIGHT "D" NO. 1-C	MOORE "U" NO. 1-C	MOORE "U" NO. 1-T
API.....			
LOCATION.....	SEC. 27, T8N, R29W	SEC. 34, T8N, R29W	SEC. 34, T8N, R29W
OWNER.....	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED.....	87/10/21	87/10/21	87/10/21
SAMPLED.....	87/11/24	87/11/24	87/11/24
FORMATION.....	PENN-DUNN C	PENN-CARPENTER L	PENN-HALE M
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	6419	2995	2995
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD.....	1300	1835	1840
COMPONENT, MOLE PCT			
METHANE.....	85.2	94.9	96.6
ETHANE.....	0.9	1.2	1.2
PROPANE.....	0.2	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	TRACE	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	12.5	3.6	0.3
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.1	0.1	1.7
HELIUM.....	0.12	0.09	0.07
HEATING VALUE*.....	884	987	1004
SPECIFIC GRAVITY.....	0.623	0.577	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18118	INDEX SAMPLE 18698	INDEX SAMPLE 18794
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	JOHNSON
FIELD.....	WHITE OAK	WHITE OAK	BATSON
WELL NAME.....	SOSSAMON NO. 1-25	TAYLOR-JEFFERS NO. 1-T	KONDRICK NO. 1-16
API.....			
LOCATION.....	SEC. 25, T10N, R28W	SEC. 23, T10N, R27W	SEC. 16, T11N, R25W
OWNER.....	MUELLER, THOMAS C.	SEECO, INC.	IP PETROLEUM CO., INC.
COMPLETED.....	85/01/18	88/08/26	88/11/17
SAMPLED.....	86/04/08	88/11/30	89/04/21
FORMATION.....	PENN-DUNN C	PENN-HALE U	PENN-DUNN A & C/R BARTON
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	3352	3808	1443
WELLHEAD PRESSURE, PSIG.....	639	702	NOT GIVEN
OPEN FLOW, MCFD.....	880	1740	1120
COMPONENT, MOLE PCT			
METHANE.....	98.0	97.5	98.0
ETHANE.....	0.9	1.5	0.3
PROPANE.....	0.1	0.2	0.0
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	TRACE	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.4
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.6	0.3	0.8
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.2	0.0	0.3
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.4	0.1
HELIUM.....	0.09	0.05	0.12
HEATING VALUE*.....	1012	1021	1014
SPECIFIC GRAVITY.....	0.563	0.569	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18114	INDEX SAMPLE 18117	INDEX SAMPLE 18902
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	JOHNSON	JOHNSON	JOHNSON
FIELD.....	CLARKSVILLE	COAL HILL	COAL HILL
WELL NAME.....	WELLBORN NO. 1-28	HIGHFILL NO. 1-28	BOSEBEE NO. 1
API.....			
LOCATION.....	SEC. 28, T10N, R24W	SEC. 28, T10N, R25W	SEC. 31, T10N, R25W
OWNER.....	MUELLER, THOMAS C.	MUELLER, THOMAS C.	SEECO, INC.
COMPLETED.....	85/01/02	84/12/28	89/10/23
SAMPLED.....	86/04/09	86/04/07	90/01/17
FORMATION.....	PENN-CECIL & SPIRO	PENN-ATOKAN SANDS	PENN-HAMM
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	3959	3996	3548
WELLHEAD PRESSURE, PSIG..	432	629	NOT GIVEN
OPEN FLOW, MCFD.....	315	722	2529
COMPONENT, MOLE PCT			
METHANE.....	97.6	98.1	98.1
ETHANE.....	1.2	1.0	0.9
PROPANE.....	0.1	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.4	0.3	0.5
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.3	0.2
HELIUM.....	0.11	0.11	0.11
HEATING VALUE*.....	1013	1015	1016
SPECIFIC GRAVITY.....	0.565	0.564	0.564

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 61 18115	INDEX SAMPLE 62 18116	INDEX SAMPLE 63 18819
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	JOHNSON	JOHNSON	JOHNSON
FIELD.....	HUNT	HUNT	ROSS
WELL NAME.....	WITHROW NO. 1-21-C	WITHROW NO. 1-21-T	MINA SNOW NO. 3-11
API.....			
LOCATION.....	SEC. 21, T10N, R25W	SEC. 21, T10N, R25W	SEC. 11, T9N, R22W
OWNER.....	MUELLER, THOMAS C.	MUELLER, THOMAS C.	TEXACO INC.
COMPLETED.....	85/11/22	85/11/22	88/06/03
SAMPLED.....	86/04/13	86/04/13	89/07/11
FORMATION.....	PENN-DUNN	PENN-BRENTWOOD	PENN-DUNN C
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	3912	4378	4904
WELLHEAD PRESSURE, PSIG.....	1276	1742	870
OPEN FLOW, MCFD.....	990	148890	2589
COMPONENT, MOLE PCT			
METHANE.....	97.4	98.0	96.8
ETHANE.....	0.9	1.0	1.3
PROPANE.....	0.1	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.1	0.4	0.8
OXYGEN.....	TRACE	TRACE	0.1
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.2	0.8
HELIUM.....	0.11	0.08	0.08
HEATING VALVE*.....	1006	1014	1007
SPECIFIC GRAVITY.....	0.565	0.563	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18967	INDEX SAMPLE 19005	INDEX SAMPLE 18519
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	JOHNSON	JOHNSON	JOHNSON
FIELD.....	ROSS	ROSS	SCRANTON
WELL NAME.....	SPOOKY NO. 1-4	BIG DADDY NO. 1	THOMPSON NO. 3-26
API.....			
LOCATION.....	SEC. 4, T9N, R22W	SEC. 34, T10N, R22W	SEC. 26, T9N, R25W
OWNER.....	WEISER-BROWN OIL CO.	WEISER-BROWN OIL CO.	SEECO, INC.
COMPLETED.....	90/03/30	89/--/00	87/09/08
SAMPLED.....	90/05/00	90/07/26	88/02/17
FORMATION.....	PENN-BARTON A	PENN-BYNUM L	PENN-JENKINS
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	3542	2710	6000
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	NOT GIVEN	1205
OPEN FLOW, MCFD.....	NOT GIVEN	1254	3118
COMPONENT, MOLE PCT			
METHANE.....	75.8	93.7	97.1
ETHANE.....	2.3	0.6	0.7
PROPANE.....	0.0	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	TRACE	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	20.9	4.0	0.3
OXYGEN.....	0.0	1.3	TRACE
ARGON.....	0.2	0.1	0.0
HYDROGEN.....	0.3	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.1	1.4
HELIUM.....	0.09	0.13	0.17
HEATING VALUE*.....	811	962	1000
SPECIFIC GRAVITY.....	0.656	0.584	0.573

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

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

	INDEX SAMPLE 18167	INDEX SAMPLE 18352	INDEX SAMPLE 18663
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	JOHNSON	JOHNSON	JOHNSON
FIELD.....	SPADRA	SPADRA	SPADRA
WELL NAME.....	STRONG NO. 1-25C	CLARKSVILLE CITY PARK NO. 1	VOLA NO. 3-15
API.....			
LOCATION.....	SEC. 25, T9N, R24W	SEC. 6, T9N, R23W	SEC. 15, T9N, R23W
OWNER.....	REVERE CORP.	TXO PRODUCTION CORP.	CHEVRON U.S.A., INC.
COMPLETED.....	85/10/21	/	88/03/01
SAMPLED.....	86/07/24	/	88/08/25
FORMATION.....	PENN-DUNN C	PENN-HALE	PENN-ALLEN
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	5602	NOT GIVEN	6188
WELLHEAD PRESSURE, PSIG..	NOT GIVEN	2590	1177
OPEN FLOW, MCFD.....	1790	2000	5436
COMPONENT, MOLE PCT			
METHANE.....	83.4	86.5	96.2
ETHANE.....	1.0	1.1	1.3
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	TRACE	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	12.8	8.7	0.5
OXYGEN.....	2.1	2.3	0.1
ARGON.....	0.1	0.1	0.0
HYDROGEN.....	0.1	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	1.0	1.6
HELIUM.....	0.11	0.05	0.09
HEATING VALUE*.....	866	899	1004
SPECIFIC GRAVITY.....	0.626	0.619	0.581

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

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

	INDEX SAMPLE 18034	INDEX SAMPLE 18506	INDEX SAMPLE 18530
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	LOGAN	LOGAN	LOGAN
FIELD.....	AETNA	AETNA	BOONEVILLE
WELL NAME.....	HEMBREE NO. 2	FARM LANDS, INC. NO. 1	METCALF "A" NO. 2
API.....			
LOCATION.....	SEC. 20, T8N, R26W	SEC. 27, T8N, R26W	SEC. 1, T6N, R28W
OWNER.....	TXO PRODUCTION CORP.	SAMSON RESOURCES CO.	TXO PRODUCTION CORP.
COMPLETED.....	86/02/10	85/04/15	87/12/29
SAMPLED.....	86/03/22	87/12/01	88/03/07
FORMATION.....	PENN-TACKETT	PENN-CARPENTER U & L	PENN-BASHAM
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	4748	6300	4089
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	901	2255
OPEN FLOW, MCFD.....	3479	3445	1260
COMPONENT, MOLE PCT			
METHANE.....	97.6	97.1	95.5
ETHANE.....	1.1	1.1	1.6
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	TRACE	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.3	0.4	2.3
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.2	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	1.0	0.2
HELIUM.....	0.11	0.12	0.04
HEATING VALUE*.....	1012	1008	1005
SPECIFIC GRAVITY.....	0.567	0.573	0.577

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17941	INDEX SAMPLE 18064	INDEX SAMPLE 18143
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	LOGAN	LOGAN	LOGAN
FIELD.....	CAULKSVILLE	CHISMVILLE	CHISMVILLE
WELL NAME.....	EMMADEE NO. 1	JOHNSON NO. 1-30	MARION G. FOSTER NO. 1
API.....	SEC. 17, T7N, R27W	SEC. 30, T6N, R27W	SEC. 34, T6N, R28W
LOCATION.....	TXO PRODUCTION CORP.	HAWKINS OIL & GAS, INC.	EXXON CO., U.S.A.
OWNER.....	85/09/30	85/09/05	85/12/31
COMPLETED.....	--/--/00	--/--/00	86/07/00
SAMPLED.....	PENN-ALMA M	PENN-TURNER & BORUM U	PENN-NICHOLS & BORUM U
FORMATION.....	345	345	345
GEOLOGIC PROVINCE CODE.....	3563	4711	4717
DEPTH, FEET.....	NOT GIVEN	1278	NOT GIVEN
WELLHEAD PRESSURE, PSIG.....	1323	1507	2116
OPEN FLOW, MCFD.....			
COMPONENT, MOLE PCT			
METHANE.....	94.8	80.2	95.5
ETHANE.....	1.2	1.1	1.4
PROPANE.....	0.1	0.1	TRACE
N-BUTANE.....	0.0	0.0	0.1
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.0	0.0	0.1
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	TRACE
HEXANES PLUS.....	0.0	0.0	0.1
NITROGEN.....	3.5	17.8	1.2
OXYGEN.....	0.0	0.1	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.4	1.4
HELIUM.....	0.09	0.07	0.13
HEATING VALUE*.....	985	835	1005
SPECIFIC GRAVITY.....	0.577	0.637	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 76 SAMPLE 18954	INDEX 77 SAMPLE 18318	INDEX 78 SAMPLE 18319
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	LOGAN	LOGAN	LOGAN
FIELD.....	CHISMVILLE	FLETCHER CREEK	FLETCHER CREEK
WELL NAME.....	VIOLA C. BLATY NO. 1-16	ANDERSON "R" NO. 1	HARWELL "A" NO. 1
API.....			
LOCATION.....	SEC. 16, T7N, R26W	SEC. 24, T5N, R28W	SEC. 23, T5N, R28W
OWNER.....	MARALO, INC.	TKO PRODUCTION CORP.	TKO PRODUCTION CORP.
COMPLETED.....	90/01/11	86/01/09	85/08/07
SAMPLED.....	90/05/01	87/02/17	87/02/17
FORMATION.....	PENN-TACKETT	PENN-WISLEY "A" & ANDERSON	PENN-BASHAM
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	5955	4288	4775
WELLHEAD PRESSURE, PSIG..	2011	1780	16450
OPEN FLOW, MCFD.....	1729	1400	3300
COMPONENT, MOLE PCT			
METHANE.....	96.9	88.2	97.3
ETHANE.....	1.7	1.4	1.4
PROPANE.....	0.1	0.2	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.1	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.9	9.8	0.5
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.3	0.5
HELIUM.....	0.06	0.06	0.07
HEATING VALUE*.....	1014	927	1016
SPECIFIC GRAVITY.....	0.571	0.608	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18320	INDEX SAMPLE 18035	INDEX SAMPLE 18610
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	LOGAN	LOGAN	LOGAN
FIELD.....	FLETCHER CREEK	PARIS	PARIS
WELL NAME.....	FOSTER "F" NO. 1	PARKER "K" NO. 1-C	RIVER BOTTOM NO. 1-T
API.....			
LOCATION.....	SEC. 29, T5N, R28W	SEC. 19, T8N, R25W	SEC. 4, T8N, R25W
OWNER.....	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED.....	85/07/12	86/01/30	88/04/15
SAMPLED.....	87/02/17	86/03/26	88/06/08
FORMATION.....	PENN-BASHAM	PENN-ATOKAN SAND	PENN-CARPENTER L
GEOLOGIC PROVINCE CODE...	345	345	345
DEPTH, FEET.....	6436	3401	6533
WELLHEAD PRESSURE, PSIG...	1500	NOT GIVEN	1050
OPEN FLOW, MCFD.....	2950	1220	1320
COMPONENT, MOLE PCT			
METHANE.....	94.5	98.5	95.6
ETHANE.....	1.6	0.7	0.9
PROPANE.....	0.2	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	2.5	0.3	2.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.0	0.1	1.1
HELIUM.....	0.08	0.12	0.13
HEATING VALUE*.....	991	1014	989
SPECIFIC GRAVITY.....	0.583	0.560	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18004	INDEX SAMPLE 18400	INDEX SAMPLE 18854
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	LOGAN	LOGAN	LOGAN
FIELD.....	PRAIRIE VIEW	PRAIRIE VIEW	PRAIRIE VIEW
WELL NAME.....	HATCHER "A" NO. 1	SPICER NO. 1-21	SORY NO. 1
API.....			
LOCATION.....	SEC. 29, T8N, R24W	SEC. 21, T8N, R2W	SEC. 27, T8N, R27W
OWNER.....	TXO PRODUCTION CORP.	SANTA FE ENERGY CO.	TXO PRODUCTION CORP.
COMPLETED.....	85/05/31	85/10/09	89/06/05
SAMPLED.....	86/02/18	87/07/14	89/09/13
FORMATION.....	PENN-DUNN C & ORR	PENN-HALE	PENN-CARPENTER
GEOLOGIC PROVINCE CODE...	345	345	345
DEPTH, FEET.....	6713	7348	2377
WELLHEAD PRESSURE, PSIG...	NOT GIVEN	700	310
OPEN FLOW, MCFD.....	1700	300	1800
COMPONENT, MOLE PCT			
METHANE.....	89.2	92.2	94.2
ETHANE.....	0.7	1.1	0.8
PROPANE.....	0.1	0.2	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	TRACE	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	TRACE	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	8.3	1.1	4.7
OXYGEN.....	TRACE	0.1	0.1
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.3	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.0	4.8	0.0
HELIUM.....	0.35	0.10	0.0
HEATING VALUE*.....	920	961	971
SPECIFIC GRAVITY.....	0.600	0.613	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18001	INDEX SAMPLE 19004	INDEX SAMPLE 18303
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	LOGAN	POPE	POPE
FIELD.....	SCRANTON	DOVER	FURGERSON
WELL NAME.....	KERN "E" NO. 1	DOLLAR NO. 1	BLAIR-LAWS "A" NO. 4-1
API.....			
LOCATION.....	SEC. 11, T8N, R24W	SEC. 30, T9N, R19W	SEC. 4, T8N, R20W
OWNER.....	TXO PRODUCTION CORP.	REBEL EXPLORATION, INC.	KANEB OPERATING CO., LTD.
COMPLETED.....	85/08/29	88/02/16	84/03/01
SAMPLED.....	86/02/18	90/08/06	87/--/00
FORMATION.....	PENN-ALMA M	PENN-TACKETT	PENN-ATOKA
GEOLOGIC PROVINCE CODE...	345	345	345
DEPTH, FEET.....	3148	2120	6205
WELLHEAD PRESSURE, PSIG...	NOT GIVEN	255	1883
OPEN FLOW, MCFD.....	2050	200	3514
COMPONENT, MOLE PCT			
METHANE.....	97.7	99.0	96.9
ETHANE.....	0.7	0.1	1.1
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.7	0.5	0.6
OXYGEN.....	0.1	0.1	TRACE
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.3	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.1	0.9
HELIUM.....	0.13	0.09	0.12
HEATING VALUE*.....	1006	1008	1007
SPECIFIC GRAVITY.....	0.563	0.559	0.572

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

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

	INDEX SAMPLE 18798	INDEX SAMPLE 18799	INDEX SAMPLE 18325
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	POPE	POPE	POPE
FIELD.....	FURGERSON	FURGERSON	KNOXVILLE
WELL NAME.....	SINGLETON NO. 4-34-T	SINGLETON NO. 4-34-C	SMITH NO. 1-12
API.....			
LOCATION.....	SEC. 34, T9N, R20W	SEC. 34, T9N, R20W	SEC. 12, T8N, R21W
OWNER.....	MUELLER, THOMAS C.	MUELLER, THOMAS C.	CNG PRODUCING CO.
COMPLETED.....	88/11/20	88/11/20	85/05/00
SAMPLED.....	89/05/16	89/05/16	87/03/09
FORMATION.....	PENN-HALE L	PENN-HALE	PENN-DUNN A
GEOLOGIC PROVINCE CODE...	345	345	345
DEPTH, FEET.....	6332	6128	4340
WELLHEAD PRESSURE, PSIG...	1930	1940	668
OPEN FLOW, MCFD.....	2515	597	5000
COMPONENT, MOLE PCT			
METHANE.....	93.5	96.2	95.9
ETHANE.....	1.3	1.0	0.9
PROPANE.....	0.2	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.1	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.2	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	3.0	1.4	1.6
OXYGEN.....	0.8	0.2	0.2
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	0.9	1.1
HELIUM.....	0.06	0.05	0.23
HEATING VALUE*.....	986	995	991
SPECIFIC GRAVITY.....	0.593	0.575	0.578

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

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

	INDEX SAMPLE 91 18039	INDEX SAMPLE 92 18692	INDEX SAMPLE 93 18682
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	POPE	POPE	SEBASTIAN
FIELD.....	MORELAND	MORELAND	BONANZA
WELL NAME.....	NOWLIN NO. 24-2	CAMIE VIRDEN NO. 9-3	NEWTON "C" NO. 1
API.....			
LOCATION.....	SEC. 24, T8N, R20W	SEC. 9, T8N, R19W	SEC. 24, T6N, R32W
OWNER.....	ALEXANDER ENERGY CORP.	TEXACO INC.	TXO PRODUCTION CORP.
COMPLETED.....	85/10/04	88/05/28	88/08/03
SAMPLED.....	86/04/02	88/11/16	88/10/11
FORMATION.....	PENN-BRENTWOOD	PENN-BARTON	PENN-TURNER
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	7400	3180	6830
WELLHEAD PRESSURE, PSIG.....	2300	1200	1120
OPEN FLOW, MCFD.....	1349	680	1150
COMPONENT, MOLE PCT			
METHANE.....	83.8	97.8	87.2
ETHANE.....	0.6	1.0	1.3
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.1	0.0
NITROGEN.....	14.1	0.5	10.1
OXYGEN.....	0.0	0.0	0.1
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	TRACE	0.0
CARBON DIOXIDE.....	1.0	0.2	1.1
HELIUM.....	0.18	0.11	0.06
HEATING VALUE*.....	863	1019	912
SPECIFIC GRAVITY.....	0.624	0.568	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17938	INDEX SAMPLE 18074	INDEX SAMPLE 18498
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD.....	CECIL	CECIL	CECIL
WELL NAME.....	EUBANKS NO. 2	C. WRIGHT NO. 2-A	C. WRIGHT NO. 2-B
API.....			
LOCATION.....	SEC. 30, T9N, R29W	SEC. 36, T9N, R30W	SEC. 36, T9N, R30W
OWNER.....	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.	ARKOMA PRODUCTION CO.
COMPLETED.....	85/09/30	84/11/13	87/09/04
SAMPLED.....	85/12/17	86/04/15	87/12/10
FORMATION.....	PENN-HALE	PENN-HALE	PENN-CARPENTER
GEOLOGIC PROVINCE CODE..	345	345	345
DEPTH, FEET.....	4702	4782	1660
WELLHEAD PRESSURE, PSIG..	767	1180	150
OPEN FLOW, MCFD.....	5381	1652	1400
COMPONENT, MOLE PCT			
METHANE.....	97.2	97.0	98.2
ETHANE.....	1.5	1.4	1.1
PROPANE.....	0.1	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.3	0.4	0.4
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.4	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.9	TRACE
HELIUM.....	0.03	0.04	0.09
HEATING VALUE*.....	1015	1011	1018
SPECIFIC GRAVITY.....	0.565	0.572	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18271	INDEX SAMPLE 18033	INDEX SAMPLE 18428
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD.....	CHISHVILLE	GRAGG	GRAGG
WELL NAME.....	FT. CHAFFEE NO. 2	BELL "F" NO. 1	LYDA "B" NO. 2-C
API.....			
LOCATION.....	SEC. 13, T6N, R29W	SEC. 17, T6N, R30W	SEC. 22, T6N, R29W
OWNER.....	EXXON CO., U.S.A.	TXO PRODUCTION CORP.	HANNA OIL & GAS CO.
COMPLETED.....	86/05/19	85/11/15	87/05/23
SAMPLED.....	86/11/19	86/02/26	87/08/25
FORMATION.....	PENN-NICHOLS & TURNER	PENN-ALMA L & BASHAM	PENN-BORUM
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	3365	4019	5773
WELLHEAD PRESSURE, PSIG.....	919	895	NOT GIVEN
OPEN FLOW, MCFD.....	2581	1900	6997
COMPONENT, MOLE PCT			
METHANE.....	93.2	95.3	92.1
ETHANE.....	1.3	1.4	1.4
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	4.7	2.3	4.6
OXYGEN.....	0.2	TRACE	1.1
ARGON.....	0.1	TRACE	0.1
HYDROGEN.....	0.1	0.2	0.4
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.6	0.0
HELIUM.....	0.06	0.06	TRACE
HEATING VALUE*.....	970	994	0.07
SPECIFIC GRAVITY.....	0.586	0.576	0.587

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY *

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 100 18429	INDEX SAMPLE 101 18145	INDEX SAMPLE 102 18841
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	SEBASTIAN	SEBASTIAN	SEBASTIAN
FIELD.....	GRAGG	GREENWOOD	MASSARD
WELL NAME.....	LYDA "B" NO. 2-T	FEDERAL NO. 1-32-T	HENRY NO. 1
API.....			
LOCATION.....	SEC. 22, T6N, R29W	SEC. 32, T7N, R30W	SEC. 32, T8N, R32W
OWNER.....	HANNA OIL & GAS CO.	ARKOMA PRODUCTION CO.	SAMSON RESOURCES CO.
COMPLETED.....	87/05/23	86/04/30	86/01/27
SAMPLED.....	87/08/25	86/07/07	89/08/15
FORMATION.....	PENN-BORUM	PENN-ATOKAN SAND	PENN-ORR-BARTON R
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	5773	4522	5299
WELLHEAD PRESSURE, PSIG....	NOT GIVEN	700	829
OPEN FLOW, MCFD.....	6997	1819	3051
COMPONENT, MOLE PCT			
METHANE.....	92.0	97.5	94.8
ETHANE.....	1.4	1.1	1.1
PROPANE.....	0.2	0.1	0.3
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.0	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	2.5	0.9	1.4
OXYGEN.....	0.6	0.2	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.3	0.1	0.6
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.8	0.1	1.6
HELIUM.....	0.07	0.06	0.10
HEATING VALUE*.....	966	1010	992
SPECIFIC GRAVITY.....	0.604	0.566	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18938	INDEX SAMPLE 18876	INDEX SAMPLE 18820
STATE.....	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY.....	COLUSA	COLUSA	CONTRA COSTA
FIELD.....	GRIMES W	PRINCETON	DUTCH SLOUGH
WELL NAME.....	BALSDON NO. 10	LOPES UNIT NO. 1-23	NUNNALLY NO. 1
API.....			
LOCATION.....	SEC. 21, T14N, R1W	SEC. 23, T18N, R2W	SEC. 31, T2N, R3E
OWNER.....	TEXACO INC.	BAKER OIL & GAS CO.	ATLANTIC OIL CO.
COMPLETED.....	90/--/00	88/--/00	89/--/00
SAMPLED.....	90/03/20	89/10/00	89/07/14
FORMATION.....	CRET-FORBES	NOT GIVEN	CRET-MASSIVE 3RD
GEOLOGIC PROVINCE CODE.....	730	730	730
DEPTH, FEET.....	7177	3834	7898
WELLHEAD PRESSURE, PSIG.....	3665	1145	2520
OPEN FLOW, MCFT.....	1100	2300	950
COMPONENT, MOLE PCT			
METHANE.....	95.9	96.0	93.7
ETHANE.....	0.3	0.1	3.5
PROPANE.....	TRACE	TRACE	1.0
N-BUTANE.....	0.0	0.0	0.1
ISOBUTANE.....	0.0	0.0	0.4
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	3.6	3.6	0.6
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	0.1	TRACE
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	0.5
HELIUM.....	TRACE	0.01	TRACE
HEATING VALUE*.....	979	975	1059
SPECIFIC GRAVITY.....	0.572	0.572	0.599

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18884	INDEX SAMPLE 18831	INDEX SAMPLE 18499
STATE.....	CALIFORNIA	CALIFORNIA	CALIFORNIA
COUNTY.....	SAN JOAQUIN	SAN JOAQUIN	SOLANO
FIELD.....	BEAVER SLOUGH	STOCKTON	MAINE PRAIRIE
WELL NAME.....	GAMBLE NO. 1	STOCKTON NO. 1	ZANETTI NO. 1
API.....			
LOCATION.....	SEC. 30, T4N, R5E	SEC. 2, T1N, R16E	SEC. 23, T6N, R2E
OWNER.....	COASTAL OIL & GAS CORP.	CHEVRON U.S.A., INC.	AMERADA HESS CORP.
COMPLETED.....	88/--/00	89/06/00	87/08/25
SAMPLED.....	89/12/01	89/08/01	87/12/14
FORMATION.....	CRET-WINTERS SAND	CRET-PETERSON	PERM-MOKELUMNE
GEOLOGIC PROVINCE CODE...	730	730	730
DEPTH, FEET.....	8657	7856	5333
WELLHEAD PRESSURE, PSIG...	3650	2550	1600
OPEN FLOW, MCFD.....	10140	1550	1200
COMPONENT, MOLE PCT			
METHANE.....	95.0	89.4	94.2
ETHANE.....	0.5	0.2	3.0
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	TRACE	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.2	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	3.5	10.1	2.5
OXYGEN.....	0.4	TRACE	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.1	0.1
HELIUM.....	0.01	0.01	TRACE
HEATING VALUE*.....	983	914	1017
SPECIFIC GRAVITY.....	0.581	0.600	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 109 SAMPLE 18009	INDEX 110 SAMPLE 18587	INDEX 111 SAMPLE 18133
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	ADAMS	ADAMS	CHEYENNE
FIELD.....	HOFFMAN CREEK	KATIE	GOPHER
WELL NAME.....	MARIE HUNT NO. 1	UPRR-COMPTON NO. 34-27	S-S-M CARR NO. 1-6
API.....			
LOCATION.....	SEC. 17, T1S, R58W	SEC. 27, T2S, R63W	SEC. 6, T13S, R50W
OWNER.....	LIVINGSTON & COURDIN EXP. CO.	ORM EXPLORATION CO.	MUREIN DRILLING CO.
COMPLETED.....	85/06/15	87/03/20	84/05/15
SAMPLED.....	86/03/10	88/04/28	86/06/26
FORMATION.....	CRET-DAKOTA J	CRET-DAKOTA J	CRET-CODELL
GEOLOGIC PROVINCE CODE.....	540	540	450
DEPTH, FEET.....	6038	7582	1952
WELLHEAD PRESSURE, PSIG.....	990	340	315
OPEN FLOW, MCFD.....	545	1500	907
COMPONENT, MOLE PCT			
METHANE.....	73.8	69.7	94.9
ETHANE.....	10.2	15.2	0.8
PROPANE.....	6.4	8.4	0.5
N-BUTANE.....	2.2	1.8	0.2
ISOBUTANE.....	0.9	0.8	TRACE
N-PENTANE.....	1.3	0.4	0.1
ISOPENTANE.....	0.0	0.3	TRACE
CYCLOPENTANE.....	0.3	0.0	TRACE
HEXANES PLUS.....	0.7	0.0	0.1
NITROGEN.....	2.8	1.5	3.1
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.1	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.2	2.0	0.1
HELIUM.....	0.06	0.02	0.03
HEATING VALUE*.....	1304	1314	1005
SPECIFIC GRAVITY.....	0.786	0.792	0.585

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18953	INDEX SAMPLE 18469	INDEX SAMPLE 18785
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	GARFIELD	GARFIELD	JACKSON
FIELD.....	PARACHUTE	WILDCAT	CANADIAN RIVER
WELL NAME.....	DOE NO. 2-W-27	ARCO DEEP NO. 1-27	BLEVINS NO. A-10
API.....			
LOCATION.....	SEC. 27, T6S, R95W	SEC. 27, T6S, R97W	SEC. 11, T9N, R78W
OWNER.....	U.S. DEPARTMENT OF ENERGY	BARRETT ENERGY CORP.	GASCO, INC.
COMPLETED.....	89/10/00	87/08/15	88/11/12
SAMPLED.....	90/04/00	87/11/03	89/04/17
FORMATION.....	EOCE-WASATCH	CRET-CAMEO	CRET-LAKOTA
GEOLOGIC PROVINCE CODE.....	595	595	545
DEPTH, FEET.....	2804	8149	1700
WELLHEAD PRESSURE, PSIG.....	600	2600	265
OPEN FLOW, MCFD.....	850	1300	900
COMPONENT, MOLE PCT			
METHANE.....	96.2	87.1	97.7
ETHANE.....	2.4	3.0	0.0
PROPANE.....	0.7	0.4	0.1
N-BUTANE.....	0.0	0.2	0.0
ISOBUTANE.....	0.4	0.1	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.2	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.2	0.1	0.6
OXYGEN.....	0.0	TRACE	0.1
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	8.9	1.4
HELIUM.....	TRACE	TRACE	0.01
HEATING VALUE*.....	1050	964	995
SPECIFIC GRAVITY.....	0.581	0.669	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 115 SAMPLE 18220	INDEX 116 SAMPLE 18561	INDEX 117 SAMPLE 18215
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	KIOWA	KIOWA	KIOWA
FIELD.....	CHIVINGTON	NEE NOSHE	TROOPER
WELL NAME.....	FEDERAL LAND BANK NO. 10-12	STATE OF COLORADO NO. 1-28	WET FARMS NO. R14-3
API.....			
LOCATION.....	SEC. 12, T18S, R46W	SEC. 28, T19S, R47W	SEC. 14, T18S, R45W
OWNER.....	BHP PETROLEUM (AMERICAS), INC.	GIBSON, J. W.	CIMARRON OIL & GAS, INC.
COMPLETED.....	85/09/30	87/11/06	84/07/04
SAMPLED.....	86/09/20	88/03/23	86/08/20
FORMATION.....	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	450	450	450
DEPTH, FEET.....	4685	4751	4453
WELLHEAD PRESSURE, PSIG.....	1000	825	650
OPEN FLOW, MCFD.....	1200	3400	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	58.7	70.6	52.0
ETHANE.....	6.4	10.2	4.9
PROPANE.....	2.9	4.8	2.4
N-BUTANE.....	1.0	0.9	0.8
ISOBUTANE.....	0.4	0.6	0.1
N-PENTANE.....	0.5	0.2	0.4
ISOPENTANE.....	0.1	0.3	0.1
CYCLOPENTANE.....	0.1	0.0	TRACE
HEXANES PLUS.....	0.3	0.1	0.2
NITROGEN.....	27.4	11.3	36.6
OXYGEN.....	TRACE	0.2	0.0
ARGON.....	0.1	0.0	0.1
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.5	0.5
HELIUM.....	1.58	0.33	1.71
HEATING VALUE*.....	877	1101	739
SPECIFIC GRAVITY.....	0.769	0.739	0.780

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 118 18684	INDEX SAMPLE 119 18707	INDEX SAMPLE 120 18162
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	KIT CARSON	KIT CARSON	KIT CARSON
FIELD.....	LOOKOUT	LOOKOUT	SMOKY HILL
WELL NAME.....	KIRSCHNER CHAMPLIN HICKS	CHAMPLIN KIRSCHNER HICKS	WHEATON COLLEGE NO. 1
API.....			
LOCATION.....	SEC. 21, T11S, R44W	SEC. 21, T11S, R44W	SEC. 7, T11S, R45W
OWNER.....	NITROTEC ENGINEERING CO.	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.
COMPLETED.....	88/--/00	88/--/00	85/07/26
SAMPLED.....	88/11/01	88/12/10	86/07/16
FORMATION.....	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE..	540	540	540
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	5472
WELLHEAD PRESSURE, PSIG..	800	800	800
OPEN FLOW, MCFD.....	2000	NOT GIVEN	3000
COMPONENT, MOLE PCT			
METHANE.....	20.4	22.1	16.2
ETHANE.....	1.4	1.6	1.4
PROPANE.....	1.5	1.4	1.2
N-BUTANE.....	0.5	0.7	0.7
ISOBUTANE.....	0.8	0.4	TRACE
N-PENTANE.....	0.0	0.7	0.4
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.2	0.3	0.3
NITROGEN.....	70.0	67.6	74.1
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	0.2	0.2	0.3
HYDROGEN.....	0.0	0.0	0.5
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.6	0.3
HELIUM.....	4.36	4.20	4.32
HEATING VALUE*.....	328	374	286
SPECIFIC GRAVITY.....	0.880	0.884	0.893

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 121 SAMPLE 18763	INDEX 122 SAMPLE 18766	INDEX 123 SAMPLE 18433
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	KIT CARSON	KIT CARSON	LA PLATA
FIELD.....	SMOKY HILL	SMOKY HILL	IGNACIO-BLANCO
WELL NAME.....	WHEATON COLLEGE NO. 1	LOWE NO. B-1	FARNER NO. 1
API.....			
LOCATION.....	SEC. 7, T11S, R45W	SEC. 6, T11S, R45W	SEC. 15, T32N, R11W
OWNER.....	TXO PRODUCTION CORP.	TXO PRODUCTION CORP.	UNION TEXAS PETROLEUM CORP.
COMPLETED.....	--/89/00	89/--/00	84/01/14
SAMPLED.....	89/02/24	89/02/24	87/09/04
FORMATION.....	PENN-MORROW	PENN-MORROW	CRET-CLIFF HOUSE & MENEFFEE
GEOLOGIC PROVINCE CODE.....	540	540	580
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	4784
WELLHEAD PRESSURE, PSIG.....	580	770	900
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	1318
COMPONENT, MOLE PCT			
METHANE.....	14.0	16.3	83.0
ETHANE.....	1.3	1.5	9.2
PROPANE.....	1.0	1.0	3.9
N-BUTANE.....	0.5	0.4	1.1
ISOBUTANE.....	0.3	0.2	0.3
N-PENTANE.....	0.2	0.1	0.4
ISOPENTANE.....	0.2	0.2	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.1	0.1	0.1
NITROGEN.....	75.2	74.1	0.4
OXYGEN.....	2.1	1.0	0.0
ARGON.....	0.4	0.3	0.0
HYDROGEN.....	0.6	0.2	0.0
HYDROGEN SULFIDE**.....	TRACE	0.0	0.0
CARBON DIOXIDE.....	0.1	0.0	0.0
HELIUM.....	4.03	0.5	1.2
HEATING VALUE*.....	239	4.14	TRACE
SPECIFIC GRAVITY.....	0.898	257	1192
		0.890	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 124 SAMPLE 18563	INDEX 125 SAMPLE 18132	INDEX 126 SAMPLE 18249
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	LA PLATA	MESA	MESA
FIELD.....	IGNACIO-BLANCO	BRUSH CREEK	CAMP GULCH
WELL NAME.....	RED MESA NO. 3	GRIFFITH NO. 14-2	CAMP GULCH NO. 3-22-8-103
API.....			
LOCATION.....	SEC. 28, T33N, R11W	SEC. 14, T9S, R94W	SEC. 22, T8S, R103W
OWNER.....	MERIDIAN OIL, INC.	ROUNDUP RESOURCES, INC.	AMBRA OIL & GAS CO.
COMPLETED.....	81/10/14	85/06/07	84/02/03
SAMPLED.....	88/03/25	86/06/23	86/11/07
FORMATION.....	CRET-MESAVERDE	CRET-MESAVERDE	JURA-MORRISON
GEOLOGIC PROVINCE CODE...	580	595	595
DEPTH, FEET.....	4194	6061	3028
WELLHEAD PRESSURE, PSIG...	445	1825	1050
OPEN FLOW, MCFD.....	1334	302	385
COMPONENT, MOLE PCT			
METHANE.....	85.4	89.1	80.9
ETHANE.....	7.6	4.9	3.2
PROPANE.....	3.4	1.4	1.2
N-BUTANE.....	0.8	0.5	0.5
ISOBUTANE.....	0.6	0.2	TRACE
N-PENTANE.....	0.4	0.3	0.5
ISOPENTANE.....	0.2	0.2	0.4
CYCLOPENTANE.....	0.1	0.1	0.2
HEXANES PLUS.....	0.2	0.3	0.0
NITROGEN.....	0.3	0.6	12.1
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.1	2.3	0.3
HELIUM.....	TRACE	TRACE	0.41
HEATING VALUE*.....	1175	1091	971
SPECIFIC GRAVITY.....	0.677	0.648	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 127 SAMPLE 18024	INDEX 128 SAMPLE 18362	INDEX 129 SAMPLE 18066
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	MESA	MOFFAT	MOFFAT
FIELD.....	HUNTER	DANFORTH HILLS	MAUDLIN GULCH
WELL NAME.....	FEDERAL NO. 25-1-81	GOVT.-TRELEAVEN NO. 11	STATE AD NO. 1
API.....			
LOCATION.....	SEC. 25, T8S, R101W	SEC. 31, T5N, R95W	SEC. 36, T4N, R95W
OWNER.....	FEEB, WALTER S., JR.	TEXACO INC.	TEXACO INC.
COMPLETED.....	84/09/16	86/07/24	85/04/11
SAMPLED.....	86/03/18	87/04/29	86/04/11
FORMATION.....	CRET-MESAVERDE	PENN-MINTURN	PENN-MINTURN
GEOLOGIC PROVINCE CODE...	595	535	535
DEPTH, FEET.....	1497	9698	10426
WELLHEAD PRESSURE, PSIG...	290	2486	2325
OPEN FLOW, MCFD.....	344	1760	2700
COMPONENT, MOLE PCT			
METHANE.....	85.7	68.4	73.6
ETHANE.....	6.7	9.5	8.6
PROPANE.....	2.9	4.4	4.1
N-BUTANE.....	0.9	2.1	1.4
ISOBUTANE.....	0.4	0.0	0.9
N-PENTANE.....	0.4	0.4	0.6
ISOPENTANE.....	0.4	0.0	1.1
CYCLOPENTANE.....	0.2	0.0	0.7
HEXANES PLUS.....	0.6	0.0	1.6
NITROGEN.....	0.4	11.3	6.7
OXYGEN.....	0.1	0.1	TRACE
ARGON.....	TRACE	0.7	TRACE
HYDROGEN.....	0.2	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.3	2.6	0.1
HELIUM.....	0.01	0.25	0.15
HEATING VALUE*.....	1180	1066	1265
SPECIFIC GRAVITY.....	0.685	0.763	0.783

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18070	INDEX SAMPLE 18301	INDEX SAMPLE 18302
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	MOFFAT	MONTEZUMA	MONTEZUMA
FIELD.....	WEST SIDE CANAL	MCELMO	MCELMO
WELL NAME.....	SAND HILLS FEDERAL NO. 1-19	DEAN DUDLEY NO. 4	SCHMIDT NO. 3
API.....			
LOCATION.....	SEC. 19, T12N, R91W	SEC. 13, T36N, R18W	SEC. 24, T36N, R18W
OWNER.....	QUINTANA PETROLEUM CORP.	AMERIGAS, INC.	AMERIGAS, INC.
COMPLETED.....	84/12/23	87/--/00	87/--/00
SAMPLED.....	86/04/14	87/02/12	87/02/12
FORMATION.....	CRET-LEWIS A	TRIA-SHINARUMP	TRIA-SHINARUMP
GEOLOGIC PROVINCE CODE.....	535	585	585
DEPTH, FEET.....	4084	1725	1725
WELLHEAD PRESSURE, PSIG.....	1450	300	300
OPEN FLOW, MCFD.....	550	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	88.5	56.0	55.3
ETHANE.....	5.7	4.7	5.0
PROPANE.....	2.5	1.5	1.7
N-BUTANE.....	0.8	0.4	0.3
ISOBUTANE.....	0.4	0.7	0.6
N-PENTANE.....	0.4	0.0	0.1
ISOPENTANE.....	0.1	0.2	0.1
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.3	0.1	0.1
NITROGEN.....	0.8	34.8	34.9
OXYGEN.....	TRACE	TRACE	0.0
ARGON.....	TRACE	0.1	0.1
HYDROGEN.....	0.2	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.3	0.6
HELIUM.....	0.01	1.06	1.03
HEATING VALUE*.....	1145	741	738
SPECIFIC GRAVITY.....	0.649	0.758	0.762

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 133	INDEX SAMPLE 134	INDEX SAMPLE 135
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	MONTEZUMA	MONTEZUMA	RIO BLANCO
FIELD.....	MCELMO DOME UNIT	MCELMO DOME UNIT	CATHEDRAL
WELL NAME.....	DEAN DUDLEY NO. 3	SCHMIDT NO. 2	FEDERAL NO. 0-31-3-101-S
API.....			
LOCATION.....	SEC. 13, T36N, R28W	SEC. 24, T36N, R18W	SEC. 31, T3S, R101W
OWNER.....	AMERIGAS, INC.	AMERIGAS, INC.	FUEL RESOURCES DEVELOPMENT CO.
COMPLETED.....	87/--/00	87/--/00	86/09/27
SAMPLED.....	87/02/12	87/02/12	88/02/24
FORMATION.....	MISS-LEADVILLE	MISS-LEADVILLE	CRET-CASTLEGATE
GEOLOGIC PROVINCE CODE...	585	585	595
DEPTH, FEET.....	6700	6700	1732
WELLHEAD PRESSURE, PSIG...	900	900	NOT GIVEN
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	1400
COMPONENT, MOLE PCT			
METHANE.....	0.1	0.1	79.9
ETHANE.....	0.0	0.0	5.7
PROPANE.....	0.0	0.0	3.1
N-BUTANE.....	0.0	0.0	0.9
ISOBUTANE.....	0.1	0.1	0.5
N-PENTANE.....	0.0	0.0	0.3
ISOPENTANE.....	TRACE	0.0	0.2
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	2.0	1.9	8.3
OXYGEN.....	0.1	TRACE	0.1
ARGON.....	TRACE	TRACE	0.1
HYDROGEN.....	0.0	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	97.5	97.6	0.3
HELIUM.....	0.10	0.09	0.33
HEATING VALUE*.....	4	5	1070
SPECIFIC GRAVITY.....	1.514	1.513	0.686

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 136 SAMPLE 18363	INDEX 137 SAMPLE 18078	INDEX 138 SAMPLE 18214
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	RIO BLANCO	RIO BLANCO	SAN MIGUEL
FIELD.....	GREATER DOUGLAS CREEK ARCH	THUNDER/EVACUATION CREEK	NOT GIVEN
WELL NAME.....	FORK UNIT NO. 14-14-1-2	KIRBY - EIDSON NO. 32-86	COCKLEBUR DRAW UNIT NO. 1
API.....			
LOCATION.....	SEC. 14, T1S, R102W	SEC. 32, T4S, R102W	SEC. 21, T43N, R15W
OWNER.....	CHANDLER & ASSOCIATES, INC.	TENNECO OIL EXP. & PROD. CO.	EXXON CO., U.S.A.
COMPLETED.....	85/03/12	--/--/00	85/04/15
SAMPLED.....	87/05/04	86/04/16	86/09/00
FORMATION.....	CRET-MANCOS B	CRET-MANCOS	PENN-HERMOSA
GEOLOGIC PROVINCE CODE.....	595	595	585
DEPTH, FEET.....	2350	3296	9238
WELLHEAD PRESSURE, PSIG.....	214	595	1025
OPEN FLOW, MCFD.....	175	408	4480
COMPONENT, MOLE PCT			
METHANE.....	80.3	81.9	93.9
ETHANE.....	6.2	5.2	1.0
PROPANE.....	3.8	4.2	TRACE
N-BUTANE.....	1.1	1.3	0.1
ISOBUTANE.....	0.9	0.4	0.0
N-PENTANE.....	0.2	0.5	0.1
ISOPENTANE.....	0.3	0.1	0.0
CYCLOPENTANE.....	TRACE	TRACE	TRACE
HEXANES PLUS.....	0.2	0.1	0.1
NITROGEN.....	5.6	5.6	2.2
OXYGEN.....	1.0	TRACE	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	0.3	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	2.2
HELIUM.....	0.12	0.18	0.04
HEATING VALUE*.....	1124	1121	983
SPECIFIC GRAVITY.....	0.699	0.683	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 139 SAMPLE 18445	INDEX 140 SAMPLE 18063	INDEX 141 SAMPLE 18810
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	WELD	WELD	WELD
FIELD.....	ARISTOCRAT	GALETON	GEMINI
WELL NAME.....	GUN CLUB UPRR NO. 41-3	CHRISTENSEN NO. 1	LIND NO. 5
API.....			
LOCATION.....	SEC. 3, T3N, R65W	SEC. 34, T7N, R64W	SEC. 13, T7N, R59W
OWNER.....	BASIN EXPLORATION, INC.	SENTRY MINING CORP.	ENERGY MINERALS CORP.
COMPLETED.....	86/10/10	84/03/15	88/05/28
SAMPLED.....	87/09/24	86/04/09	89/06/22
FORMATION.....	CRET-CODELL & NIOBRARA	CRET-CODELL	CRET-DAKOTA D
GEOLOGIC PROVINCE CODE..	540	540	540
DEPTH, FEET.....	6783	7104	6647
WELLHEAD PRESSURE, PSIG..	3900	204	1090
OPEN FLOW, MCFD.....	1354	594	1396
COMPONENT, MOLE PCT			
METHANE.....	73.7	68.3	66.7
ETHANE.....	13.9	15.0	10.9
PROPANE.....	5.4	7.5	9.8
N-BUTANE.....	1.9	2.5	3.0
ISOBUTANE.....	0.7	0.6	3.2
N-PENTANE.....	0.6	0.5	0.0
ISOPENTANE.....	0.1	0.1	1.5
CYCLOPENTANE.....	0.1	TRACE	0.2
HEXANES PLUS.....	0.2	0.1	0.8
NITROGEN.....	0.3	0.1	2.7
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	0.3	0.0
HYDROGEN SULFIDE**.....	TRACE	0.0	0.0
CARBON DIOXIDE.....	3.1	5.0	1.3
HELIUM.....	TRACE	TRACE	0.04
HEATING VALUE*.....	1265	1292	1441
SPECIFIC GRAVITY.....	0.768	0.813	0.874

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 142 18615	INDEX SAMPLE 143 18817	INDEX SAMPLE 144 18857
STATE.....	COLORADO	COLORADO	COLORADO
COUNTY.....	WELD	WELD	WELD
FIELD.....	HAMBERT	SPRUCE	WATTENBERG
WELL NAME.....	SEGAL NO. 12-24C	JOHNSON NO. 1	OCOMA II C31-15
API.....			
LOCATION.....	SEC. 24, T4N, R66W	SEC. 10, T8N, R56W	SEC. 31, T14N, R64W
OWNER.....	MACHI-ROSS PETROLEUM CO.	ABRAXAS PETROLEUM, INC.	GERRITY, ROBERT, CO., THE
COMPLETED.....	87/11/23	86/03/07	88/02/05
SAMPLED.....	88/06/16	89/07/00	89/09/19
FORMATION.....	CRET-CODELL-NIOBRARA	CRET-DAKOTA J	CRET-CODELL-NIOBRARA
GEOLOGIC PROVINCE CODE.....	540	540	540
DEPTH, FEET.....	6930	5722	6790
WELLHEAD PRESSURE, PSIG.....	1500	1100	2850
OPEN FLOW, MCFD.....	100	2200	367
COMPONENT, MOLE PCT			
METHANE.....	75.9	77.0	76.2
ETHANE.....	11.6	9.8	13.7
PROPANE.....	5.5	4.2	5.5
N-BUTANE.....	0.0	1.4	1.7
ISOBUTANE.....	2.5	0.6	0.9
N-PENTANE.....	1.1	0.6	0.2
ISOPENTANE.....	0.0	0.2	0.5
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.3	0.1	0.0
NITROGEN.....	0.8	3.1	0.2
OXYGEN.....	0.1	0.1	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.2	2.8	1.0
HELIUM.....	0.01	0.07	TRACE
HEATING VALUE*.....	1265	1173	1283
SPECIFIC GRAVITY.....	0.758	0.734	0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19013	INDEX SAMPLE 146 18457	INDEX SAMPLE 147 18456
STATE.....	COLORADO	IDAHO	IDAHO
COUNTY.....	YUMA	CASSIA	FRANKLIN
FIELD.....	MILDRED	NOT GIVEN	NOT GIVEN
WELL NAME.....	KELLER CATTLE CO. NO. 11-14	BRIDGE SPRING	SQUAW HOT SPRINGS
API.....			
LOCATION.....	SEC. 14, T2S, R46W	T15S, R26E	T15S, R39E
OWNER.....	J-W OPERATING CO.	CRAFTS, MARK	CRAFTS, MARK
COMPLETED.....	89/07/27	87/--/00	87/--/00
SAMPLED.....	90/08/15	87/10/18	87/10/12
FORMATION.....	CRET-NIOBRARA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	540	625	625
DEPTH, FEET.....	2210	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG.....	482	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD.....	560	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	95.1	0.4	1.0
ETHANE.....	0.9	0.1	0.2
PROPANE.....	0.5	0.0	0.0
N-BUTANE.....	0.2	0.0	0.3
ISOBUTANE.....	0.0	TRACE	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.1	0.1	0.4
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	2.8	93.2	4.2
OXYGEN.....	0.0	0.1	0.2
ARGON.....	0.1	2.0	0.1
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	3.8	93.5
HELIUM.....	0.06	0.17	0.05
HEATING VALUE*.....	1005	11	42
SPECIFIC GRAVITY.....	0.584	0.995	1.499

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 148 18647	INDEX SAMPLE 149 18751	INDEX SAMPLE 150 18614
STATE.....	INDIANA	INDIANA	KANSAS
COUNTY.....	DUBOIS	MARSHALL	BARBER
FIELD.....	WILDCAT	BREMEN S	AETNA GAS AREA
WELL NAME.....	ZEHK NO. 1-P	BELLMAN ET AL. NO. 1-21	BAIER NO. 1
API.....			
LOCATION.....	SEC. 1, T1S, R4W	SEC 21, T34N, R3E	SEC. 31, T33S, R13W
OWNER.....	PAMNEE OIL CORP.	YOUNG OIL CO.	TKO PRODUCTION CORP.
COMPLETED.....	87/02/25	88/08/23	88/01/03
SAMPLED.....	88/06/20	89/02/14	88/06/13
FORMATION.....	DEVO-VERNON M	DEVO-TRAVERSE	MISS---
GEOLOGIC PROVINCE CODE.....	315	305	375
DEPTH, FEET.....	1600	278	4790
WELLHEAD PRESSURE, PSIG.....	710	69	1540
OPEN FLOW, MCFD.....	740	785	4400
COMPONENT, MOLE PCT			
METHANE.....	74.6	94.5	80.0
ETHANE.....	3.2	1.0	5.5
PROPANE.....	1.7	0.1	2.5
N-BUTANE.....	0.5	0.0	0.7
ISOBUTANE.....	0.3	TRACE	0.0
N-PENTANE.....	0.1	0.0	0.5
ISOPENTANE.....	0.2	0.1	0.3
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	17.7	3.2	4.1
OXYGEN.....	0.9	0.1	0.1
ARGON.....	0.0	0.1	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	1.0	6.1
HELIUM.....	0.28	TRACE	0.18
HEATING VALUE*.....	901	981	1034
SPECIFIC GRAVITY.....	0.688	0.585	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 151 SAMPLE 18354	INDEX 152 SAMPLE 18126	INDEX 153 SAMPLE 18390
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	BARBER	BARBER	BARBER
FIELD.....	AMBER HILLS EXT.	LAKE EXTENSION NW	MCGUIRE-GOEMANN EXT.
WELL NAME.....	PIKE NO. 1	MILLS FEED "A" NO. 1	SCRIPSICK NO. 2
API.....			
LOCATION.....	SEC. 9, T31S, R12W	SEC. 24, T31S, R14W	SEC. 18, T32S, R10W
OWNER.....	SOURCE PETROLEUM	TXO PRODUCTION CORP.	BRADEN-DEEM, INC.
COMPLETED.....	86/07/21	--/--/00	86/01/00
SAMPLED.....	87/04/22	--/--/00	87/06/27
FORMATION.....	PENN-MISS	PENN-DOUGLAS	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE...	375	375	375
DEPTH, FEET.....	4400	3772	4363
WELLHEAD PRESSURE, PSIG...	1537	NOT GIVEN	1200
OPEN FLOW, MCFD.....	750	1091	2519
COMPONENT, MOLE PCT			
METHANE.....	78.6	86.4	90.4
ETHANE.....	6.0	4.4	4.3
PROPANE.....	3.1	1.6	2.1
N-BUTANE.....	0.8	0.7	0.4
ISOBUTANE.....	0.4	0.1	0.6
N-PENTANE.....	0.2	0.4	0.0
ISOPENTANE.....	0.2	0.1	0.1
CYCLOPENTANE.....	0.1	0.2	0.0
HEXANES PLUS.....	0.1	0.3	0.0
NITROGEN.....	6.7	5.3	2.0
OXYGEN.....	TRACE	TRACE	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.1	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.1	0.1	0.1
HELIUM.....	0.50	0.23	0.10
HEATING VALUE*.....	1051	1068	1083
SPECIFIC GRAVITY.....	0.700	0.646	0.621

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 154 18858	INDEX SAMPLE 155 17932	INDEX SAMPLE 156 18184
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	BARBER	BARBER	CLARK
FIELD.....	MEDICINE RIVER SW	RHODES NE EXTENSION	ACRES W
WELL NAME.....	CLARKE NO. 1-6	COLTON NO. 2	STRIPLING NO. 2-20 A
API.....			
LOCATION.....	SEC. 6, T32S, R12W	SEC. 23, T32S, R11W	SEC. 20, T33S, R24W
OWNER.....	RINE EXPLORATION CO.	TXO PRODUCTION CORP.	MIDCO EXPLORATION, INC.
COMPLETED.....	86/07/10	85/05/09	85/05/31
SAMPLED.....	89/10/00	--/--/00	86/07/29
FORMATION.....	MISS---	PENN-TARKIO	MISS-CHESTER
GEOLOGIC PROVINCE CODE...	375	375	360
DEPTH, FEET.....	4252	2779	5412
WELLHEAD PRESSURE, PSIG...	NOT GIVEN	1070	1320
OPEN FLOW, MCFD.....	2200	1000	750
COMPONENT, MOLE PCT			
METHANE.....	74.5	78.1	82.5
ETHANE.....	7.1	3.0	5.8
PROPANE.....	3.1	1.4	3.2
N-BUTANE.....	0.6	0.5	1.3
ISOBUTANE.....	0.6	0.1	0.3
N-PENTANE.....	0.1	0.3	0.5
ISOPENTANE.....	0.3	0.0	0.5
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.2	0.4
NITROGEN.....	13.2	15.7	4.8
OXYGEN.....	0.0	0.1	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.2
HELIUM.....	0.31	0.42	0.17
HEATING VALUE*.....	1024	928	1144
SPECIFIC GRAVITY.....	0.703	0.670	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 157 SAMPLE 18186	INDEX 158 SAMPLE 18185	INDEX 159 SAMPLE 18518
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	CLARK	CLARK	CLARK
FIELD.....	ACRES W	BIG SAND CREEK	COLOR
WELL NAME.....	BAKER NO. 1	MC MILLION - IHDE "A" NO. 1	GARDINER 21 NO. 1
API.....			
LOCATION.....	SEC. 20, T33S, R24W	SEC. 8, T34S, R23W	SEC. 21, T34S, R24W
OWNER.....	MIDCO EXPLORATION, INC.	MIDCO EXPLORATION, INC.	COBRA OIL & GAS CORP.
COMPLETED.....	83/11/11	85/08/26	85/10/20
SAMPLED.....	86/07/29	86/07/29	88/02/05
FORMATION.....	MISS-CHESTER	MISS-CHESTER	MISS-CHESTER
GEOLOGIC PROVINCE CODE..	360	360	360
DEPTH, FEET.....	5408	5430	5526
WELLHEAD PRESSURE, PSIG..	1300	1050	1700
OPEN FLOW, MCFD.....	600	450	479
COMPONENT, MOLE PCT			
METHANE.....	82.9	81.0	87.3
ETHANE.....	5.9	6.0	5.4
PROPANE.....	3.2	3.4	2.9
N-BUTANE.....	1.3	1.4	0.6
ISOBUTANE.....	0.3	0.3	0.5
N-PENTANE.....	0.5	0.6	TRACE
ISOPENTANE.....	0.4	0.3	0.5
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.3	0.2	0.0
NITROGEN.....	4.5	6.2	2.5
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.2	0.2
HELIUM.....	0.17	0.23	0.13
HEATING VALUE*.....	1140	1126	1114
SPECIFIC GRAVITY.....	0.685	0.694	0.648

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18613	INDEX SAMPLE 18187	INDEX SAMPLE 18913
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	CLARK	CLARK	CLARK
FIELD.....	HARPER N	KEIGER CREEK EXT.	WILDCAT
WELL NAME.....	EDMONSTON NO. 4-3A	BETSCHART NO. 1	VAN BLARICUM "A" NO. 1
API.....			
LOCATION.....	SEC. 3, T33N, R22E	SEC. 35, T33S, R24W	SEC. 29, T32S, R22W
OWNER.....	QUINTANA PETROLEUM CORP.	MIDCO EXPLORATION, INC.	SOURCE PETROLEUM
COMPLETED.....	87/01/10	85/09/09	89/04/06
SAMPLED.....	88/06/08	86/07/29	90/02/07
FORMATION.....	PENN-MORROW	MISS-CHESTER	PENN-LANSING-KANSAS CITY
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	5264	5483	4494
WELLHEAD PRESSURE, PSIG.....	900	1300	1320
OPEN FLOW, MCFD.....	440	650	1050
COMPONENT, MOLE PCT			
METHANE.....	88.5	81.7	72.9
ETHANE.....	4.9	6.1	5.7
PROPANE.....	2.5	3.3	3.8
N-BUTANE.....	0.6	1.2	1.1
ISOBUTANE.....	0.5	0.3	0.6
N-PENTANE.....	0.1	0.4	0.3
ISOPENTANE.....	0.3	0.2	0.2
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.1	0.2	0.2
NITROGEN.....	2.4	5.9	14.7
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.2	0.1
HELIUM.....	0.12	0.19	0.26
HEATING VALUE*.....	1107	1113	1034
SPECIFIC GRAVITY.....	0.640	0.683	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 163	INDEX SAMPLE 164	INDEX SAMPLE 165
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	COMANCHE	COMANCHE	COMANCHE
FIELD.....	BEALS	NESCATUNGA S	NOT GIVEN
WELL NAME.....	HARPER NO. 1	KIMBLE NO. 1	BOOTH NO. 1
API.....			
LOCATION.....	SEC. 5, T34S, R17W	SEC. 35, T32S, R28W	SEC. 23, T32S, R17W
OWNER.....	AFG ENERGY, INC.	AMERICAN ENERGIES CORP.	MIDCO EXPLORATION, INC.
COMPLETED.....	85/04/05	84/07/06	84/09/30
SAMPLED.....	90/02/13	87/04/19	87/11/13
FORMATION.....	PERM-WABAUNSEE	ORDO-VIOLA	PENN-MISS
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	3354	5600	5124
WELLHEAD PRESSURE, PSIG.....	640	1620	NOT GIVEN
OPEN FLOW, MCFD.....	4750	1346	2464
COMPONENT, MOLE PCT			
METHANE.....	77.5	77.7	92.9
ETHANE.....	2.9	5.7	3.5
PROPANE.....	1.6	2.7	1.2
N-BUTANE.....	0.4	0.7	0.5
ISOBUTANE.....	0.6	0.3	0.0
N-PENTANE.....	0.0	0.2	0.1
ISOPENTANE.....	0.5	0.1	0.3
CYCLOPENTANE.....	0.0	TRACE	0.0
HEXANES PLUS.....	0.0	0.1	0.0
NITROGEN.....	15.8	11.3	1.2
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	TRACE	0.1	TRACE
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.3	0.1
HELIUM.....	0.47	0.50	0.08
HEATING VALUE*.....	935	1011	1071
SPECIFIC GRAVITY.....	0.675	0.680	0.606

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18023	INDEX SAMPLE 19050	INDEX SAMPLE 18204
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	EDWARDS	EDWARDS	FORD
FIELD.....	MCLEAN	WAYNE	STEEL
WELL NAME.....	STRAWN NO. 1-10	CROSS NO. 2-16	HAGER NO. 1
API.....			
LOCATION.....	SEC. 10, T25S, R18W	SEC. 16, T24S, R17W	SEC. 36, T27S, R23W
OWNER.....	ONEOK EXPLORATION CO.	HOLL, F. G. CO.	MITCHELL ENERGY CORP.
COMPLETED.....	85/11/22	89/10/02	85/02/19
SAMPLED.....	86/03/18	90/11/06	86/08/20
FORMATION.....	PENN-MARMATON	MISS-NOT GIVEN	PENN-& MISS
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	4400	4357	75050
WELLHEAD PRESSURE, PSIG..	530	NOT GIVEN	1380
OPEN FLOW, MCFD.....	1000	1250	3455
COMPONENT, MOLE PCT			
METHANE.....	84.0	86.1	71.8
ETHANE.....	3.7	3.8	3.3
PROPANE.....	1.4	1.7	1.7
N-BUTANE.....	0.5	0.9	0.9
ISOBUTANE.....	0.1	0.2	0.3
N-PENTANE.....	0.3	0.3	0.4
ISOPENTANE.....	0.1	0.1	0.2
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.3	0.2	0.3
NITROGEN.....	8.2	5.9	19.7
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.1	0.1
HYDROGEN.....	0.6	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.0	0.1
HELIUM.....	0.55	0.86	0.87
HEATING VALUE*.....	1012	1044	917
SPECIFIC GRAVITY.....	0.642	0.639	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 169	INDEX SAMPLE 170	INDEX SAMPLE 171
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	HARPER	HASKELL	KINGMAN
FIELD.....	SULLIVAN	VICTORY	SPIVEY-GRABS-BASIL
WELL NAME.....	KISER NO. 2	D. HOFFMAN NO. 1	CRUMBLY "B" NO. 2
API.....	SEC. 36, T32S, R9W	15-081-20433	SEC. 12, T30S, R17W
LOCATION.....	KBW OIL & GAS CO.	SEC. 5, T30S, R33W	PETROLEUM, INC.
OWNER.....	86/11/14	HELMERICH & PAYNE, INC.	89/01/19
COMPLETED.....	87/01/16	90/07/12	89/04/13
SAMPLED.....	PENN-WABAUNSEE	PENN-NARMATON-KANSAS CITY	MISS---
FORMATION.....	375	360	375
GEOLOGIC PROVINCE CODE.....		4658	4088
DEPTH, FEET.....	3050	500	645
WELLHEAD PRESSURE, PSIG.....	1150	1300	1300
OPEN FLOW, MCFD.....			
COMPONENT, MOLE PCT			
METHANE.....	79.7	82.4	76.6
ETHANE.....	3.4	4.7	8.2
PROPANE.....	2.8	2.0	3.3
N-BUTANE.....	0.9	0.5	1.4
ISOBUTANE.....	0.6	0.0	0.2
N-PENTANE.....	0.2	0.0	0.2
ISOPENTANE.....	0.2	0.1	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.3
NITROGEN.....	11.5	9.3	8.9
OXYGEN.....	0.3	0.6	0.1
ARGON.....	0.0	0.1	TRACE
HYDROGEN.....	0.1	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.0	0.2
HELIUM.....	0.31	0.32	0.38
HEATING VALUE*.....	1014	995	1092
SPECIFIC GRAVITY.....	0.682	0.649	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 172 18129	INDEX SAMPLE 173 18358	INDEX SAMPLE 174 18731
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	KIOWA	KIOWA	KIOWA
FIELD.....	DAYLIGHT	NICHOLS	WELLSFORD
WELL NAME.....	CHENOWETH NO. 1	HIEBISH NO. 2	ROSS "F" NO. 1
API.....			
LOCATION.....	SEC. 8, T28S, R16W	SEC. 27, T29S, R28W	SEC. 11, T28S, R16W
OWNER.....	TXO PRODUCTION CORP.	VINCENT OIL CORP.	TXO PRODUCTION CORP.
COMPLETED.....	86/--/00	85/05/15	85/08/01
SAMPLED.....	86/06/00	87/04/25	89/01/31
FORMATION.....	PENN-LANSING	PENN-MARATON	PENN-BERN LIME
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	4168	4800	3470
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	1050	340
OPEN FLOW, MCFD.....	1001	1250	40
COMPONENT, MOLE PCT			
METHANE.....	77.5	72.0	79.5
ETHANE.....	4.4	5.8	2.5
PROPANE.....	2.7	5.1	1.6
N-BUTANE.....	1.2	3.6	0.0
ISOBUTANE.....	0.3	0.0	0.7
N-PENTANE.....	0.6	1.2	0.4
ISOPENTANE.....	0.3	0.0	0.0
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.4	0.2	0.3
NITROGEN.....	11.7	6.6	14.0
OXYGEN.....	0.0	TRACE	0.1
ARGON.....	TRACE	1.0	0.0
HYDROGEN.....	TRACE	0.1	0.4
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	4.1	0.0
HELIUM.....	0.34	0.16	0.47
HEATING VALUE*.....	1047	1156	952
SPECIFIC GRAVITY.....	0.707	0.794	0.664

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18723	INDEX SAMPLE 18277	INDEX SAMPLE 18221
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	LEAVENWORTH	LEAVENWORTH	LEAVENWORTH
FIELD.....	AUFDEMBERGE	LAMBORN	LEAVENWORTH
WELL NAME.....	AUFDEMBERGE NO. 2	JONES ET AL NO. 1	JOHNSON NO. 1
API.....			
LOCATION.....	SEC. 28, T9S, R22E	SEC. 14, T9S, R22E	SEC. 14, T9S, R22E
OWNER.....	GRAYBOL-PATTON CO.	BERKY RESOURCES CORP.	BERKY RESOURCES CORP.
COMPLETED.....	88/06/16	86/06/25	85/03/15
SAMPLED.....	89/01/16	86/11/28	86/09/21
FORMATION.....	PENN-BURGESS	PENN-BURGESS	PENN-BURGESS
GEOLOGIC PROVINCE CODE...	335	335	335
DEPTH, FEET.....	1278	1196	1275
WELLHEAD PRESSURE, PSIG...	310	420	420
OPEN FLOW, MCFD.....	220	520	275
COMPONENT, MOLE PCT			
METHANE.....	87.6	96.2	95.7
ETHANE.....	0.0	0.0	0.0
PROPANE.....	0.1	0.2	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.1	0.2	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.1	TRACE	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	11.3	2.0	1.9
OXYGEN.....	TRACE	0.1	TRACE
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	1.1	1.9
HELIUM.....	0.50	0.11	0.11
HEATING VALUE*.....	897	987	978
SPECIFIC GRAVITY.....	0.606	0.578	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18222	INDEX SAMPLE 18206	INDEX SAMPLE 18327
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	LEAVENWORTH	LEAVENWORTH	HEADS
FIELD.....	LEAVENWORTH	POSSUM HOLLOW	HOCKETT SE
WELL NAME.....	OLBERDING NO. 1	CHARLES BROMELL NO. 2	HARRIS 34 NO. 1
API.....			
LOCATION.....	SEC. 9, T9S, R22E	SEC. 36, T8S, R21E	SEC. 34, T31S, R29W
OWNER.....	BERKY RESOURCES CORP.	LV GAS, INC.	COBRA OIL & GAS CORP.
COMPLETED.....	86/03/14	85/12/00	85/05/30
SAMPLED.....	86/09/16	86/08/24	87/03/11
FORMATION.....	PENN-BURGESS	PENN-BURGESS	MISS-CHESTER
GEOLOGIC PROVINCE CODE.....	335	335	360
DEPTH, FEET.....	1305	1400	5564
WELLHEAD PRESSURE, PSIG.....	420	435	1500
OPEN FLOW, MCFD.....	390	1890	10900
COMPONENT, MOLE PCT			
METHANE.....	95.4	94.2	84.1
ETHANE.....	0.0	0.1	0.8
PROPANE.....	0.2	0.2	0.1
N-BUTANE.....	0.0	0.3	0.0
ISOBUTANE.....	0.2	0.0	TRACE
N-PENTANE.....	0.0	0.2	0.0
ISOPENTANE.....	0.1	TRACE	0.0
CYCLOPENTANE.....	0.0	TRACE	0.0
HEXANES PLUS.....	0.0	0.1	0.0
NITROGEN.....	2.3	4.1	10.6
OXYGEN.....	TRACE	TRACE	2.7
ARGON.....	TRACE	TRACE	0.1
HYDROGEN.....	0.0	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.1
CARBON DIOXIDE.....	1.6	0.3	1.4
HELIUM.....	0.13	0.18	0.14
HEATING VALUE*.....	983	986	870
SPECIFIC GRAVITY.....	0.585	0.585	0.633

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 181 18866	INDEX SAMPLE 182 18651	INDEX SAMPLE 183 18868
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	MEADE	MORTON	MORTON
FIELD.....	MCKINNEY	BEAUCHAMP SW	KINSLER E
WELL NAME.....	BOBBIE NO. 1-8	ORMISTON NO. 2-9	YEAGER "B" NO. 3
API.....			
LOCATION.....	SEC. 8, T35S, R26W	SEC. 9, T31S, R41W	SEC. 5, T32S, R39W
OWNER.....	ZINKE & TRUMBO, LTD.	MIDWESTERN EXPLORATION CO.	OXY U.S.A., INC.
COMPLETED.....	87/08/22	87/--/00	89/08/24
SAMPLED.....	89/10/20	88/07/29	89/10/26
FORMATION.....	PENN-MORROW/MISS-CHESTER	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	6080	5330	5830
WELLHEAD PRESSURE, PSIG...	835	NOT GIVEN	1341
OPEN FLOW, MCFT.....	1877	5500	2100
COMPONENT, MOLE PCT			
METHANE.....	90.4	81.0	86.9
ETHANE.....	4.4	3.4	4.4
PROPANE.....	1.9	2.0	2.3
N-BUTANE.....	0.4	0.8	0.7
ISOBUTANE.....	0.5	0.6	0.3
N-PENTANE.....	0.0	0.6	0.3
ISOPENTANE.....	0.1	0.0	0.1
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.6	0.5	0.5
NITROGEN.....	1.3	9.8	3.8
OXYGEN.....	0.1	TRACE	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.2	0.2
HELIUM.....	0.09	0.94	0.33
HEATING VALUE*.....	1106	1039	1099
SPECIFIC GRAVITY.....	0.632	0.679	0.653

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 184 18690	INDEX SAMPLE 185 18952	INDEX SAMPLE 186 18424
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	MORTON	MORTON	MORTON
FIELD.....	NOT GIVEN	STIRRUP	WINTER N
WELL NAME.....	BREEDING NO. 1-22	BLUCHER NO. A-2	SANTA FE NO. 2-14
API.....		15-129-20883	
LOCATION.....	SEC. 17, T33S, R42W	SEC. 34, T32S, R40W	SEC. 14, T33S, R43W
OWNER.....	WOLVERINE EXPLORATION CO.	ANADARKO PETROLEUM CORP.	SANTA FE ENERGY CO.
COMPLETED.....	88/07/28	87/09/08	85/07/10
SAMPLED.....	88/11/15	90/04/24	87/08/00
FORMATION.....	PENN-MORROW	PENN-MORROW U	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	4898	5330	4582
WELLHEAD PRESSURE, PSIG.....	924	1398	379
OPEN FLOW, MCFD.....	2681	6422	2017
COMPONENT, MOLE PCT			
METHANE.....	88.0	96.0	70.7
ETHANE.....	3.4	1.3	8.6
PROPANE.....	1.6	0.2	6.6
N-BUTANE.....	0.6	0.0	1.4
ISOBUTANE.....	TRACE	0.4	0.7
N-PENTANE.....	0.5	0.0	0.1
ISOPENTANE.....	0.0	0.0	0.5
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.2	0.0	0.0
NITROGEN.....	4.8	1.6	10.6
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	TRACE	0.3
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.4	0.3
HELIUM.....	0.62	0.20	0.14
HEATING VALUE*.....	1050	1012	1139
SPECIFIC GRAVITY.....	0.631	0.577	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 187 18664	INDEX SAMPLE 188 17978	INDEX SAMPLE 189 17979
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	PAWNEE	PRATT	PRATT
FIELD.....	MASSEY	BRANT E	BRANT E
WELL NAME.....	PENKA NO. 3-35	SWICK NO. 1-25	ALBRITTEN NO. 1-36
API.....			
LOCATION.....	SEC. 35, T23S, R17W	SEC. 25, T28S, R11W	SEC. 36, T28S, R11W
OWNER.....	HOLL, F. G. CO.	KIMBARK OIL & GAS CO.	KIMBARK OIL & GAS CO.
COMPLETED.....	88/06/08	99/99/99	84/05/20
SAMPLED.....	88/08/26	86/01/31	86/01/31
FORMATION.....	PENN-CHEROKEE	PERM-INDIAN CAVE	PERM-INDIAN CAVE
GEOLOGIC PROVINCE CODE.....	385	385	385
DEPTH, FEET.....	4244	2614	2650
WELLHEAD PRESSURE, PSIG.....	1000	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD.....	7445	1200	1225
COMPONENT, MOLE PCT			
METHANE.....	85.7	78.6	79.6
ETHANE.....	3.5	4.5	4.5
PROPANE.....	1.3	2.3	2.2
N-BUTANE.....	0.4	0.7	0.8
ISOBUTANE.....	0.1	0.6	0.1
N-PENTANE.....	0.2	0.1	0.4
ISOPENTANE.....	0.2	TRACE	TRACE
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.2	0.2
NITROGEN.....	7.6	12.3	11.5
OXYGEN.....	0.0	0.2	TRACE
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	0.1
HELIUM.....	0.76	0.35	0.35
HEATING VALUE*.....	999	999	1006
SPECIFIC GRAVITY.....	0.630	0.680	0.673

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

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

	INDEX SAMPLE 190 18238	INDEX SAMPLE 191 18773	INDEX SAMPLE 192 18288
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	PRATT	RENO	RICE
FIELD.....	MCAREN	NOT GIVEN	CHASE-SILICA
WELL NAME.....	KELL NO. 2	MELVIN MINOR NO. 3	COLDWATER "C" NO. 1
API.....			
LOCATION.....	SEC. 26, T26S, R15W	SEC. 33, T25S, R8W	SEC. 17, T20S, R9W
OWNER.....	ZENITH DRILLING CORP.	RAMCO ENERGY CORP.	HIEBERT & WEDEL OIL PROP.
COMPLETED.....	85/10/00	88/09/16	86/07/15
SAMPLED.....	86/10/31	89/03/31	87/01/13
FORMATION.....	MISS-KINDERHOOK	MISS---	PENN-TARKIO
GEOLOGIC PROVINCE CODE.....	385	375	385
DEPTH, FEET.....	4368	3816	2236
WELLHEAD PRESSURE, PSIG.....	922	1136	675
OPEN FLOW, MCFD.....	5600	610	710
COMPONENT, MOLE PCT			
METHANE.....	82.4	80.5	64.0
ETHANE.....	4.4	6.5	2.1
PROPANE.....	2.1	2.5	1.9
N-BUTANE.....	0.6	0.8	0.6
ISOBUTANE.....	0.5	0.4	0.8
N-PENTANE.....	0.5	0.2	0.3
ISOPENTANE.....	0.0	0.2	0.0
CYCLOPENTANE.....	0.4	TRACE	TRACE
HEXANES PLUS.....	0.8	0.1	0.2
NITROGEN.....	7.0	7.8	29.1
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	TRACE	TRACE	0.1
HYDROGEN.....	0.1	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	TRACE
HELIUM.....	0.96	0.70	0.84
HEATING VALUE*.....	1083	1065	805
SPECIFIC GRAVITY.....	0.675	0.673	0.734

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18928	INDEX SAMPLE 18958	INDEX SAMPLE 18803
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	SEWARD	SEWARD	SEWARD
FIELD.....	ANGHAN	HITCH	KNEELAND SW
WELL NAME.....	MORGAN NO. H-1	HITCH NO. 1-25	ADAMS RANCH NO. 1-26
API.....			
LOCATION.....	SEC. 5, T32S, R33W	SEC. 25, T32S, R34W	SEC. 26, T34S, R31W
OWNER.....	ANADARKO PETROLEUM CORP.	VINTAGE PETROLEUM, INC.	VINTAGE PETROLEUM, INC.
COMPLETED.....	87/12/19	88/04/00	85/01/31
SAMPLED.....	90/03/07	90/05/09	89/05/26
FORMATION.....	MISS-CHESTER	PENN-MORROW U	PENN-MORROW L
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	5559	5900	5707
WELLHEAD PRESSURE, PSIG...	988	NOT GIVEN	400
OPEN FLOW, MCFD.....	2100	NOT GIVEN	2818
COMPONENT, MOLE PCT			
METHANE.....	88.2	78.5	86.6
ETHANE.....	4.8	5.2	5.0
PROPANE.....	2.0	4.1	2.6
N-BUTANE.....	0.7	0.0	0.5
ISOBUTANE.....	0.4	1.5	0.9
N-PENTANE.....	0.4	0.0	0.0
ISOPENTANE.....	0.2	0.0	1.2
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.7	0.0	0.0
NITROGEN.....	2.0	10.5	2.6
OXYGEN.....	0.0	0.0	0.2
ARGON.....	TRACE	0.1	0.1
HYDROGEN.....	TRACE	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	0.1
HELIUM.....	0.26	0.14	0.12
HEATING VALUE*.....	1133	1042	1135
SPECIFIC GRAVITY.....	0.655	0.687	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 196 18440	INDEX SAMPLE 197 18750	INDEX SAMPLE 198 17977
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	SEWARD	SEWARD	STAFFORD
FIELD.....	NOT GIVEN	WIDE AWAKE	HEARN
WELL NAME.....	COVEL TRUST NO. 1-24	POWELL NO. D-2	DORAN NO. 1
API.....			
LOCATION.....	SEC. 24, T31S, R32W	SEC. 17, T35S, R34W	SEC. 2, T24S, R15W
OWNER.....	ENSIGN OPERATING CO.	ANADARKO PETROLEUM CORP.	DARRAH, JOHN J., JR.
COMPLETED.....	87/02/24	85/11/15	85/11/13
SAMPLED.....	87/09/09	89/02/10	86/02/01
FORMATION.....	PENN-MORROW	MISS-ST. LOUIS	ORDO-VIOLA
GEOLOGIC PROVINCE CODE...	360	360	385
DEPTH, FEET.....	5475	6560	4178
WELLHEAD PRESSURE, PSIG...	1219	NOT GIVEN	1200
OPEN FLOW, MCFD.....	1503	4730	3400
COMPONENT, MOLE PCT			
METHANE.....	72.3	70.9	87.3
ETHANE.....	5.2	11.7	3.8
PROPANE.....	2.6	6.4	1.5
N-BUTANE.....	0.9	1.8	0.6
ISOBUTANE.....	0.1	1.0	0.1
N-PENTANE.....	0.4	0.4	0.3
ISOPENTANE.....	0.1	0.2	0.1
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.2	0.1	0.3
NITROGEN.....	15.2	7.1	4.9
OXYGEN.....	2.4	TRACE	TRACE
ARGON.....	0.1	TRACE	TRACE
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.2	0.3
HELIUM.....	0.12	0.10	0.72
HEATING VALUE*.....	962	1221	1052
SPECIFIC GRAVITY.....	0.715	0.766	0.636

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

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

	INDEX SAMPLE 199 19010	INDEX SAMPLE 200 18872	INDEX SAMPLE 201 18874
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	STAFFORD	STEVENS	STEVENS
FIELD.....	SHEPHERD	CAVE W	DEMUTH
WELL NAME.....	SHEPHERD NO. 2	JUANITA F. PHILLIPS NO. 5	DEMUTH "B" NO. 2
API.....			
LOCATION.....	SEC. 16, T22S, R11W	SEC. 17, T31S, R35W	SEC. 22, T33S, R39W
OWNER.....	KANSAS PETROLEUM, INC.	MOBIL OIL CORP.	ANADARKO PETROLEUM CORP.
COMPLETED.....	86/08/18	89/03/25	87/06/08
SAMPLED.....	90/08/20	89/10/26	89/11/01
FORMATION.....	CAMO-CONGLOMERATE	PENN-MORROW	PENN-KEYES
GEOLOGIC PROVINCE CODE.....	385	360	360
DEPTH, FEET.....	3460	55951	6098
WELLHEAD PRESSURE, PSIG.....	1050	1247	1290
OPEN FLOW, MCFD.....	1500	29779	318
COMPONENT, MOLE PCT			
METHANE.....	56.6	73.0	92.3
ETHANE.....	8.8	6.3	2.5
PROPANE.....	5.2	5.5	1.0
N-BUTANE.....	1.9	0.0	0.0
ISOBUTANE.....	0.5	2.0	0.5
N-PENTANE.....	0.3	0.8	0.0
ISOPENTANE.....	0.4	0.0	0.0
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.1	0.7	0.0
NITROGEN.....	25.0	11.3	2.8
OXYGEN.....	0.1	0.1	0.5
ARGON.....	0.2	0.0	0.1
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.0	0.0	0.2
HELIUM.....	1.03	0.27	0.14
HEATING VALUE*.....	979	1132	1021
SPECIFIC GRAVITY.....	0.802	0.749	0.601

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18973	INDEX SAMPLE 18920	INDEX SAMPLE 18065
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	STEVENS	STEVENS	STEVENS
FIELD.....	FETERITA	MIDSTREAM	SKI SE
WELL NAME.....	KELLY NO. D-1	RHINEHART NO. B-2	CLODFELTER "A" NO. 2
API.....	15-189-21103		
LOCATION.....	SEC. 22, T34S, R39W	SEC. 27, T32S, R39W	SEC. 14, T34S, R35W
OWNER.....	ANADARKO PETROLEUM CORP.	ANADARKO PETROLEUM CORP.	CITIES SERVICE OIL & GAS CORP.
COMPLETED.....	87/10/19	87/07/21	84/10/09
SAMPLED.....	90/06/06	90/02/15	86/04/09
FORMATION.....	PENN-MORROW U	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	5976	5931	6144
WELLHEAD PRESSURE, PSIG.....	1025	1095	1530
OPEN FLOW, MCFD.....	1228	200	3655
COMPONENT, MOLE PCT			
METHANE.....	78.0	86.9	79.9
ETHANE.....	7.2	4.2	0.3
PROPANE.....	4.3	1.9	0.1
N-BUTANE.....	1.2	0.4	0.0
ISOBUTANE.....	0.6	0.3	0.0
N-PENTANE.....	0.7	0.0	0.0
ISOPENTANE.....	0.0	0.3	0.0
CYCLOPENTANE.....	TRACE	0.0	0.0
HEXANES PLUS.....	0.4	0.0	0.0
NITROGEN.....	6.8	4.9	18.7
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	TRACE	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.2
CARBON DIOXIDE.....	0.5	0.3	0.0
HELIUM.....	0.17	0.73	TRACE
HEATING VALUE*.....	1143	1040	0.65
SPECIFIC GRAVITY.....	0.717	0.630	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE.

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

	INDEX 205 SAMPLE 18759	INDEX 206 SAMPLE 18038	INDEX 207 SAMPLE 18718
STATE.....	KANSAS	KANSAS	KANSAS
COUNTY.....	STEVENS	STEVENS	WALLACE
FIELD.....	WALKEMEYER	WALKEMEYER SE	ARAPAHOE
WELL NAME.....	WONDER "A" NO. 2	BAUGHMAN "G" NO. 2	JOHANNES NO. 1
API.....			
LOCATION.....	SEC. 29, T34S, R35W	SEC. 19, T34S, R35W	SEC. 18, T15S, R42W
OWNER.....	OXY U.S.A., INC.	CITIES SERVICE OIL & GAS CORP.	TXO PRODUCTION CORP.
COMPLETED.....	88/08/23	85/11/20	88/--/00
SAMPLED.....	89/02/22	86/04/01	89/01/12
FORMATION.....	PENN-MORROW	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	6264	6218	5150
WELLHEAD PRESSURE, PSIG.....	873	1108	610
OPEN FLOW, MCFD.....	1040	3712	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	87.8	91.7	31.1
ETHANE.....	5.0	0.1	3.1
PROPANE.....	2.1	0.0	2.5
N-BUTANE.....	0.6	0.1	0.7
ISOBUTANE.....	0.4	0.0	0.3
N-PENTANE.....	0.1	TRACE	0.2
ISOPENTANE.....	0.2	TRACE	0.1
CYCLOPENTANE.....	0.0	TRACE	0.0
HEXANES PLUS.....	0.1	0.1	0.1
NITROGEN.....	3.6	7.3	58.2
OXYGEN.....	0.0	TRACE	1.1
ARGON.....	TRACE	0.1	TRACE
HYDROGEN.....	0.0	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	TRACE	0.6
HELIUM.....	0.16	0.31	1.82
HEATING VALUE*.....	1081	940	492
SPECIFIC GRAVITY.....	0.637	0.587	0.865

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18765	INDEX SAMPLE 18025	INDEX SAMPLE 18401
STATE.....	KANSAS	KENTUCKY	KENTUCKY
COUNTY.....	WALLACE	BREATHITT	HARLAN
FIELD.....	ARAPAHOE	EASTERN	LOONEY CREEK
WELL NAME.....	HINRICHS NO. 1	E. J. EVANS NO. 55	PENN. VA. KY. RESOURCES NO.1
API.....			
LOCATION.....	SEC. 7, T15S, R42W	CARTER COORDINATES 12-M-78	APPALACHIA QUAD., 18F, 80E
OWNER.....	TXO PRODUCTION CORP.	ASHLAND EXPLORATION, INC.	ANR PRODUCTION CO.
COMPLETED.....	89/--/00	84/12/13	86/07/01
SAMPLED.....	89/02/24	86/03/19	87/07/13
FORMATION.....	PENN-MORROW	MISS-MAXON & DEVO-SHALE	DEVO-WEIR SHALE
GEOLOGIC PROVINCE CODE.....	360	160	160
DEPTH, FEET.....	NOT GIVEN	2380	5692
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	420	909
OPEN FLOW, MCFD.....	NOT GIVEN	330	1111
COMPONENT, MOLE PCT			
METHANE.....	30.5	72.8	75.6
ETHANE.....	3.1	6.8	10.7
PROPANE.....	2.2	2.8	3.4
N-BUTANE.....	1.0	0.8	0.7
ISOBUTANE.....	0.2	0.1	0.3
N-PENTANE.....	0.4	0.2	0.1
ISOPENTANE.....	0.5	0.1	0.3
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.2	0.2	0.1
NITROGEN.....	58.2	15.3	6.0
OXYGEN.....	1.3	0.2	1.5
ARGON.....	0.2	TRACE	0.7
HYDROGEN.....	0.1	0.3	0.4
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.1	0.1
HELIUM.....	1.79	0.34	0.04
HEATING VALUE*.....	508	990	1104
SPECIFIC GRAVITY.....	0.876	0.705	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 211 SAMPLE 18845	INDEX 212 SAMPLE 18636	INDEX 213 SAMPLE 19023
STATE.....	KENTUCKY	KENTUCKY	KENTUCKY
COUNTY.....	MCLEAN	PIKE	PIKE
FIELD.....	THREE WORLDS	BIG SANDY	EASTERN
WELL NAME.....	T. PLAIN UNIT NO. 1	POCAHONTAS NO. 1	REPUBLIC-BIG SANDY UNIT NO.1
API.....			
LOCATION.....	SEC. 11 & 12, L-27	ROAD FORK, BIG CREEK, VARNEY Q	CARTER COORDINATE 24-K-86
OWNER.....	PROGAS, INC.	COLUMBIA NATURAL RESOURCES, IN	ASHLAND EXPLORATION, INC.
COMPLETED.....	88/--/00	87/12/11	90/--/00
SAMPLED.....	89/03/08	88/07/08	90/09/13
FORMATION.....	PENN---	MISS-HAXON	MISS-BEREA-DEVONIAN
GEOLOGIC PROVINCE CODE...	315	160	160
DEPTH, FEET.....	600	1720	4750
WELLHEAD PRESSURE, PSIG...	175	618	650
OPEN FLOW, MCFT.....	1500	1233	1550
COMPONENT, MOLE PCT			
METHANE.....	95.8	81.9	89.4
ETHANE.....	0.0	9.7	6.3
PROPANE.....	0.0	3.8	1.5
N-BUTANE.....	0.0	0.6	0.3
ISOBUTANE.....	0.0	0.5	0.0
N-PENTANE.....	0.0	0.2	0.0
ISOPENTANE.....	0.0	TRACE	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	3.7	3.0	2.3
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	TRACE	0.0
HELIUM.....	0.06	0.19	0.04
HEATING VALUE*.....	970	1148	1068
SPECIFIC GRAVITY.....	0.574	0.673	0.613

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

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

	INDEX SAMPLE 214 18592	INDEX SAMPLE 215 18593	INDEX SAMPLE 216 18727
STATE.....	KENTUCKY	KENTUCKY	LOUISIANA
COUNTY.....	ROCKCASTLE	ROCKCASTLE	ACADIA
FIELD.....	NOT GIVEN	NOT GIVEN	CHURCH POINT
WELL NAME.....	LIVESAY NO. 1	LIVESAY NO. 1	SONNIER NO. 1
API.....			
LOCATION.....	CARTER COORDINATE 18-K-62	CARTER COORDINATE 18-K-62	SEC. 1, T8S, R2E
OWNER.....	HUNT'S NATURAL RESOURCES	HUNT'S NATURAL RESOURCES	GERMANY OIL CO.
COMPLETED.....	88/--/00	88/--/00	88/--/00
SAMPLED.....	88/05/09	88/05/09	89/01/26
FORMATION.....	ORDO-KNOX	ORDO-SUNNYBROOK-BRASSFIELD	OLIG-MARGINULINA-TEXANA
GEOLOGIC PROVINCE CODE.....	160	160	220
DEPTH, FEET.....	2140	1128	10852
WELLHEAD PRESSURE, PSIG.....	600	100	4840
OPEN FLOW, MCFD.....	250	38	2000
COMPONENT, MOLE PCT			
METHANE.....	65.6	66.6	91.8
ETHANE.....	3.9	3.8	4.7
PROPANE.....	1.2	1.2	1.9
N-BUTANE.....	0.3	0.2	0.3
ISOBUTANE.....	0.3	0.4	0.2
N-PENTANE.....	0.0	0.0	0.2
ISOPENTANE.....	0.2	0.1	0.2
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	27.7	27.0	0.3
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	0.0
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	TRACE	0.3
HELIUM.....	0.60	0.60	TRACE
HEATING VALUE*.....	796	801	1097
SPECIFIC GRAVITY.....	0.713	0.707	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18188	INDEX SAMPLE 218 18503	INDEX SAMPLE 219 18777
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	BEAUREGARD	CALCASIEU	CALCASIEU
FIELD.....	ORETTA	PINE RIDGE	STARKS W
WELL NAME.....	GREGG ESTATE NO. 1	W. B. LAWTON NO. 1	EARL C. HANKHAMER NO. 1
API.....			
LOCATION.....	NOT GIVEN	SEC. 26, T10S, R11W	SEC. 5, T9S, R13W
OWNER.....	LAMSON & CROCKER	PELTO OIL CO.	PRAIRIE PRODUCING CO.
COMPLETED.....	86/--/00	87/06/19	89/03/13
SAMPLED.....	86/07/29	87/12/17	89/04/04
FORMATION.....	EOCE-COCKFIELD	OLIG-HACKBERRY L	EOCE-YEGUA
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	8300	11176	10940
WELLHEAD PRESSURE, PSIG.....	2800	8082	7601
OPEN FLOW, MCFD.....	800	2469	9000
COMPONENT, MOLE PCT			
METHANE.....	86.1	92.4	86.7
ETHANE.....	6.3	3.6	7.1
PROPANE.....	3.6	1.3	2.7
N-BUTANE.....	1.1	0.4	0.7
ISOBUTANE.....	0.6	0.1	0.6
N-PENTANE.....	0.5	0.3	0.2
ISOPENTANE.....	0.2	0.0	0.3
CYCLOPENTANE.....	0.1	TRACE	0.1
HEXANES PLUS.....	0.4	0.1	0.1
NITROGEN.....	0.3	0.6	0.3
OXYGEN.....	0.0	0.1	0.1
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.9	1.1
HELIUM.....	0.01	0.01	TRACE
HEATING VALUE*.....	1190	1069	1151
SPECIFIC GRAVITY.....	0.679	0.612	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 220 SAMPLE 18076	INDEX 221 SAMPLE 18241	INDEX 222 SAMPLE 18361
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	CALDWELL	CAMERON	CAMERON
FIELD.....	COTTON PLANT	CHALKLEY	GRAND LAKE
WELL NAME.....	HESTER NO. 1	KATHERINE G. BREWER NO. 1	STATE LEASE 11728 NO. 1
API.....			
LOCATION.....	SEC. 22, T13N, R2E	SEC. 15, T12S, R6W	SEC. 36, T13S, R5W
OWNER.....	L. R. RESOURCES II	COCKRELL OIL CORP.	HUNT OIL CO.
COMPLETED.....	85/09/17	86/02/27	86/02/28
SAMPLED.....	86/04/15	86/10/22	87/04/29
FORMATION.....	CRET-HOSSTON	OLIG-MIOGYPSINOIDES	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	230	220	220
DEPTH, FEET.....	10346	14716	15980
WELLHEAD PRESSURE, PSIG.....	2500	10900	6000
OPEN FLOW, MCFD.....	1500	8688	1500
COMPONENT, MOLE PCT			
METHANE.....	92.0	93.3	81.8
ETHANE.....	0.1	2.2	7.3
PROPANE.....	0.0	0.8	3.7
N-BUTANE.....	0.1	0.1	2.3
ISOBUTANE.....	0.0	0.3	0.0
N-PENTANE.....	0.2	0.0	0.8
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.1	0.0	TRACE
HEXANES PLUS.....	0.1	0.1	0.2
NITROGEN.....	1.4	0.2	0.0
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.2	0.7
HYDROGEN SULFIDE**.....	0.0	0.0	0.1
CARBON DIOXIDE.....	5.8	2.6	0.0
HELIUM.....	0.04	TRACE	3.0
HEATING VALUE*.....	955	1029	TRACE
SPECIFIC GRAVITY.....	0.626	0.608	1179
			0.719

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18404	INDEX SAMPLE 18140	INDEX SAMPLE 19017
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	CLAIBORNE	CLAIBORNE	DE SOTO
FIELD.....	BLACKBURN	HAYNESVILLE E	BELLE BOWER
WELL NAME.....	A. B. TINSLEY ESTATE NO. 1	SALE NO. 1	SANDERS ESTATE NO. 1
API.....			17-031-22773
LOCATION.....	SEC. 30, T22N, R7W	SEC. 8, T23N, R6W	SEC. 7, T12N, R16W
OWNER.....	WHEELS INDUSTRIES, INC.	O'BRIEN OPERATING CO.	MARSHALL EXPLORATION, INC.
COMPLETED.....	86/11/05	86/04/18	90/07/09
SAMPLED.....	87/07/17	86/07/02	90/08/28
FORMATION.....	JURA-COTTON VALLEY	JURA-HAYNESVILLE	CRET-HOSSTON
GEOLOGIC PROVINCE CODE...	230	230	230
DEPTH, FEET.....	9206	9787	7000
WELLHEAD PRESSURE, PSIG...	2600	3200	2800
OPEN FLOW, MCFD.....	1145	5000	2550
COMPONENT, MOLE PCT			
METHANE.....	72.0	52.5	94.8
ETHANE.....	13.9	20.4	1.5
PROPANE.....	7.1	11.6	0.3
N-BUTANE.....	1.9	5.4	0.2
ISOBUTANE.....	0.5	3.2	0.0
N-PENTANE.....	0.4	2.2	0.0
ISOPENTANE.....	0.4	0.6	0.1
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.2	1.1	0.0
NITROGEN.....	1.2	0.2	2.4
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.2	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.0	2.9	0.7
HELIUM.....	0.02	TRACE	0.03
HEATING VALUE*.....	1292	1668	1005
SPECIFIC GRAVITY.....	0.776	1.015	0.586

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

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

	INDEX 226 SAMPLE 18885	INDEX 227 SAMPLE 18566	INDEX 228 SAMPLE 18255
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	IBERIA	JACKSON	JACKSON
FIELD.....	COTEAU	CHATHAM	CLAY
WELL NAME.....	RAYMOND DORE NO. 1	CROWN ZELLERBACH NO. 7-1	KHI CONTINENTAL ROYALTY NO.1
API.....			
LOCATION.....	SEC. 26, T11S, R5E	SEC. 7, T15N, R1E	SEC. 33, T17N, R3W
OWNER.....	QUINTANA PETROLEUM CORP.	LYONS, HILLIARD & WATSON, INC.	SUN EXPLORATION & PRODUCTION C
COMPLETED.....	89/01/04	86/--/00	86/05/15
SAMPLED.....	89/12/12	88/03/28	86/11/17
FORMATION.....	MIOC-ALLIANCE	CRET-JAMES LIME	JURA-COTTON VALLEY & DAVIS
GEOLOGIC PROVINCE CODE.....	220	230	230
DEPTH, FEET.....	11854	6724	11154
WELLHEAD PRESSURE, PSIG.....	4100	1250	8027
OPEN FLOW, MCFD.....	2000	2725	7219
COMPONENT, MOLE PCT			
METHANE.....	93.9	87.1	95.1
ETHANE.....	2.4	1.4	1.2
PROPANE.....	1.1	0.6	0.3
N-BUTANE.....	0.4	0.3	0.0
ISOBUTANE.....	0.6	0.1	0.2
N-PENTANE.....	0.0	0.5	0.0
ISOPENTANE.....	0.1	0.0	TRACE
CYCLOPENTANE.....	TRACE	0.1	0.0
HEXANES PLUS.....	0.5	0.2	0.0
NITROGEN.....	0.6	6.9	0.2
OXYGEN.....	0.0	0.1	TRACE
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.6
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	2.7	2.5
HELIUM.....	TRACE	0.08	TRACE
HEATING VALUE*.....	1089	968	1001
SPECIFIC GRAVITY.....	0.614	0.643	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 229 18395	INDEX SAMPLE 230 18172	INDEX SAMPLE 231 17956
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	JEFFERSON DAVIS	LAFOURCHE	LAFOURCHE
FIELD.....	LAKE ARTHUR	CHEENS	GRAND BOIS
WELL NAME.....	FANNIE E. WINN NO. 1	MR FEE 852 NO. 17	SIERRA NO. 2
API.....			
LOCATION.....	SEC. 7, T11S, R3W	SEC. 37, T16S, R20E	SEC. 19, T18S, R20E
OWNER.....	POGO PRODUCING CO.	PENNZOIL PRODUCING CO.	TENNECO OIL EXP. & PROD. CO.
COMPLETED.....	86/06/00	86/01/13	--/--/00
SAMPLED.....	87/06/26	86/--/07	86/01/16
FORMATION.....	OLIG-MIOGYP	MIOC-12000 SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	16978	12230	13160
WELLHEAD PRESSURE, PSIG.....	11000	3872	3600
OPEN FLOW, MCFD.....	45000	3100	6000
COMPONENT, MOLE PCT			
METHANE.....	91.9	89.2	90.5
ETHANE.....	2.9	3.8	4.0
PROPANE.....	0.9	2.0	1.4
N-BUTANE.....	0.0	1.2	0.6
ISOBUTANE.....	0.5	0.6	0.3
N-PENTANE.....	0.0	1.1	0.7
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.3	0.4
HEXANES PLUS.....	0.0	1.3	1.2
NITROGEN.....	0.5	0.1	0.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.3	0.2	0.7
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1022	1210	1162
SPECIFIC GRAVITY.....	0.619	0.680	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18752	INDEX SAMPLE 18627	INDEX SAMPLE 17520
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	LIVINGSTON	NATCHITOCHES	OFFSHORE-OCS
FIELD.....	WILDCAT	OAK GROVE CHURCH	CAMERON W, BLK. 197
WELL NAME.....	ERVA S. MAYERS ET VIR. NO. 1	BODCAW MINERALS NO. 1	OCS-G-3972 NO. A-1
API.....			
LOCATION.....	SEC. 44, T8S, R3E	SEC. 8, T13N, R6W	NOT GIVEN
OWNER.....	WACKER OIL, INC.	COBRA OIL & GAS CORP.	CHEVRON U.S.A., INC.
COMPLETED.....	88/10/02	87/09/18	83/01/26
SAMPLED.....	89/02/09	88/07/06	84/10/04
FORMATION.....	OLIG-EVANS	CRET-RODESSA	PLEI-SAND
GEOLOGIC PROVINCE CODE...	220	230	952
DEPTH, FEET.....	9705	6480	4970
WELLHEAD PRESSURE, PSIG...	3119	2800	2425
OPEN FLOW, MCFD.....	5017	3150	38581
COMPONENT, MOLE PCT			
METHANE.....	83.1	92.3	99.6
ETHANE.....	7.8	1.0	0.1
PROPANE.....	3.7	0.5	TRACE
N-BUTANE.....	1.2	0.2	0.0
ISOBUTANE.....	1.1	0.3	0.0
N-PENTANE.....	0.9	0.0	0.0
ISOPENTANE.....	0.2	0.2	0.0
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.6	0.0	0.0
NITROGEN.....	0.9	3.0	0.2
OXYGEN.....	0.1	TRACE	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.1	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	2.5	0.1
HELIUM.....	0.01	0.04	TRACE
HEATING VALUE*.....	1238	989	1011
SPECIFIC GRAVITY.....	0.709	0.612	0.557

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 235 SAMPLE 17985	INDEX 236 SAMPLE 18951	INDEX 237 SAMPLE 18349
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	OFFSHORE-OCS	RED RIVER	ST. MARTIN
FIELD.....	VERMILION AREA	BRACKY BRANCH	BAYOU CROOK CHENE
WELL NAME.....	OCS-G-4427 NO. A-1	WIGGINS NO. 1	DOW CHEMICAL CO. NO. 1
API.....			
LOCATION.....	BLOCK 318-A	SEC. 36, T14N, R10W	SEC. 34, T20S, R9E
OWNER.....	CNG PRODUCING CO.	SKLAR & PHILLIPS OIL CO.	SANDEFER OIL & GAS CO.
COMPLETED.....	--/--/00	89/08/16	86/--/00
SAMPLED.....	86/02/05	89/04/18	86/11/13
FORMATION.....	PLIO-L 2 REVISED	CRET-GLEN ROSE	OLIG-MARGINULINA
GEOLOGIC PROVINCE CODE.....	952	230	220
DEPTH, FEET.....	NOT GIVEN	3101	12860
WELLHEAD PRESSURE, PSIG.....	26750	1300	6950
OPEN FLOW, MCFD.....	20200	1500	2041
COMPONENT, MOLE PCT			
METHANE.....	93.6	96.2	86.0
ETHANE.....	1.8	1.3	8.0
PROPANE.....	0.8	0.2	3.3
N-BUTANE.....	0.5	0.0	0.5
ISOBUTANE.....	0.2	0.4	0.6
N-PENTANE.....	1.0	0.0	0.1
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.4	0.0	0.0
HEXANES PLUS.....	1.4	0.0	0.1
NITROGEN.....	0.0	1.6	0.8
OXYGEN.....	TRACE	0.0	TRACE
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.1	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.4	0.6
HELIUM.....	TRACE	0.03	TRACE
HEATING VALUE*.....	1155	1014	1147
SPECIFIC GRAVITY.....	0.644	0.578	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18234	INDEX SAMPLE 18911	INDEX SAMPLE 18378
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	TERREBONNE	VERMILION	WASHINGTON
FIELD.....	TURTLE BAYOU N	FRESHWATER BAYOU	ANGIE
WELL NAME.....	CONTINENTAL LAND & FUR NO. 1	E. A. MCILHENNY NO. B-1	O. ROBBINS NO. 1
API.....			
LOCATION.....	SEC. 13, T17S, R13E	SEC. 36, T16S, R2E	SEC. 52, T1S, R14E
OWNER.....	STANDARD OIL PRODUCTION CO.	SMITH, CONLEY P., OIL PRODUCIN	MOSBACHER ENERGY CO.
COMPLETED.....	85/10/03	89/--/00	86/--/00
SAMPLED.....	86/10/17	90/02/07	87/06/12
FORMATION.....	MIOC-ROB L	MIOC-ROB L5	CRET-JAMES LIDE
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	14897	11687	14466
WELLHEAD PRESSURE, PSIG.....	10200	3010	5600
OPEN FLOW, MCFD.....	4000	2100	2900
COMPONENT, MOLE PCT			
METHANE.....	91.7	93.7	94.6
ETHANE.....	3.0	3.3	0.1
PROPANE.....	1.9	0.9	0.1
N-BUTANE.....	0.4	0.0	0.0
ISOBUTANE.....	1.1	0.4	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.2	0.1	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.0
NITROGEN.....	0.4	0.5	1.1
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.1	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.2	0.0
CARBON DIOXIDE.....	1.2	1.0	4.0
HELIUM.....	TRACE	TRACE	0.02
HEATING VALUE*.....	1096	1048	965
SPECIFIC GRAVITY.....	0.631	0.600	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18842	INDEX SAMPLE 18998	INDEX SAMPLE 18888
STATE.....	LOUISIANA	MARYLAND	MICHIGAN
PARISH.....	WEST FELICIANA	GARRETT	ALPENA
FIELD.....	LAKE ROSEHOUND	MOUNTAIN LAKE PARK	NOT GIVEN
WELL NAME.....	LLOYD LINDSEY NO. 1	BECKMAN NO. 4857	SNOWFLOW NO. 1-5
API.....		19-023-10058	
LOCATION.....	SEC. 57, T1S, R3W	OAKLAND FIELD	SEC. 5, T29N, R5E
OWNER.....	TEXACO INC.	COLUMBIA NATURAL RESOURCES, IN	BROWN, H. L., JR.
COMPLETED.....	89/05/01	52/08/05	85/--/00
SAMPLED.....	89/08/24	90/08/01	89/12/00
FORMATION.....	CRET-TUSCALOOSA L	DEVO-ORISKANY	SILU-CLINTON
GEOLOGIC PROVINCE CODE...	220	160	305
DEPTH, FEET.....	14208	3351	5520
WELLHEAD PRESSURE, PSIG...	4200	940	2000
OPEN FLOW, MCFD.....	4000	509	1250
COMPONENT, MOLE PCT			
METHANE.....	59.8	94.9	79.0
ETHANE.....	17.5	0.9	9.3
PROPANE.....	10.3	0.1	4.5
N-BUTANE.....	2.0	0.0	1.2
ISOBUTANE.....	3.1	0.0	1.5
N-PENTANE.....	0.2	0.0	0.2
ISOPENTANE.....	0.6	0.0	0.6
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.4
NITROGEN.....	0.0	3.1	3.2
OXYGEN.....	0.0	0.7	TRACE
ARGON.....	0.0	0.1	TRACE
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	6.5	0.0	TRACE
HELIUM.....	TRACE	0.09	0.03
HEATING VALUE*.....	1391	982	1228
SPECIFIC GRAVITY.....	0.900	0.577	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18434	INDEX SAMPLE 18233	INDEX SAMPLE 18193
STATE.....	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY.....	ARENAC	ARENAC	MACOMB
FIELD.....	CLAYTON	TWINING	RICHMOND 31
WELL NAME.....	SEIGNIOUS UNIT NO. 1-10	HUBER NO. 1-26	KUHLMAN NO. 1-31
API.....			
LOCATION.....	SEC. 10, T20N, R4W	SEC. 26, T20N, R6E	SEC. 31, T5N, R14E
OWNER.....	AMOCO PRODUCTION CO.	SUN EXPLORATION & PRODUCTION C	SULLIVAN & CO.
COMPLETED.....	87/10/21	86/04/09	85/07/21
SAMPLED.....	87/09/10	86/10/15	86/08/01
FORMATION.....	ORDO-PAIRIE DU CHIEN	ORDO-PAIRIE DU CHIEN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE...	305	305	305
DEPTH, FEET.....	10681	11620	3206
WELLHEAD PRESSURE, PSIG....	3854	4175	1310
OPEN FLOW, MCFD.....	1950	4164	3100
COMPONENT, MOLE PCT			
METHANE.....	80.9	88.6	86.9
ETHANE.....	8.3	4.3	5.3
PROPANE.....	3.1	1.6	2.6
N-BUTANE.....	1.2	0.4	1.2
ISOBUTANE.....	0.5	0.8	0.9
N-PENTANE.....	0.6	0.2	0.6
ISOPENTANE.....	0.1	0.1	0.2
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.3	0.4	0.4
NITROGEN.....	4.6	3.2	1.4
OXYGEN.....	0.0	0.3	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	0.2
HELIUM.....	0.04	0.05	0.07
HEATING VALUE*	1157	1090	1172
SPECIFIC GRAVITY.....	0.697	0.641	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18218	INDEX SAMPLE 18508	INDEX SAMPLE 18935
STATE.....	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY.....	MANISTEE	MECOSTA	MIDLAND
FIELD.....	BEAR LAKE 24	ROGERS POND	PORTER
WELL NAME.....	CLINE NO. 1-24	ALBER NO. 1-23	CLINE NO. 1-32
API.....			
LOCATION.....	SEC. 24, T23N, R15W	SEC. 23, T14N, R10W	SEC. 32, T14N, R2W
OWNER.....	FEDERAL OIL CO.	SHELL WESTERN EXP. & PROD., IN	COASTAL OIL & GAS CORP.
COMPLETED.....	86/--/00	87/06/27	90/--/00
SAMPLED.....	86/09/16	87/12/29	90/03/19
FORMATION.....	SILU-SALINA & NIAGARAN	ORDO-PRAIRIE DU CHIEN	ORDO-PRAIRIE DU CHIEN
GEOLOGIC PROVINCE CODE.....	305	305	305
DEPTH, FEET.....	5371	8389	10669
WELLHEAD PRESSURE, PSIG.....	668	3300	4050
OPEN FLOW, MCFD.....	20000	26200	30000
COMPONENT, MOLE PCT			
METHANE.....	81.6	80.9	81.9
ETHANE.....	9.3	3.8	4.5
PROPANE.....	4.1	0.6	0.8
N-BUTANE.....	1.3	0.1	0.0
ISOBUTANE.....	1.4	0.2	0.3
N-PENTANE.....	0.5	0.0	0.0
ISOPENTANE.....	0.2	0.1	TRACE
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.4	0.0	0.0
NITROGEN.....	0.7	14.0	11.0
OXYGEN.....	TRACE	0.0	1.3
ARGON.....	TRACE	TRACE	0.1
HYDROGEN.....	0.0	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.1	0.1
HELIUM.....	0.02	0.05	0.05
HEATING VALUE*.....	1245	919	940
SPECIFIC GRAVITY.....	0.714	0.644	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18446	INDEX SAMPLE 19007	INDEX SAMPLE 18426
STATE.....	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY.....	MONTMORENCY	NEWAYGO	NEWAYGO
FIELD.....	VIENNA	CROTON	DENVER TOWNSHIP
WELL NAME.....	STATE VIENNA NO. 1-32	BIRD NO. 1-3	SCHROPP NO. 1-9
API.....			
LOCATION.....	SEC. 32, T31N, R1E	SEC. 3, T11N, R11W	SEC. 19, T14N, R14W
OWNER.....	SHELL WESTERN EXP. & PROD., IN	ARCO OIL & GAS CO.	TERRA ENERGY, LTD.
COMPLETED.....	86/12/11	90/--/00	87/02/13
SAMPLED.....	87/09/22	90/08/20	87/08/25
FORMATION.....	SILU-NIAGARAN	ORDO-GLENWOOD	SILU-CLINTON
GEOLOGIC PROVINCE CODE.....	305	305	305
DEPTH, FEET.....	5931	6942	5325
WELLHEAD PRESSURE, PSIG.....	2396	2500	1950
OPEN FLOW, MCFD.....	160142	8430	1200
COMPONENT, MOLE PCT			
METHANE.....	86.6	86.9	88.3
ETHANE.....	6.7	4.7	4.4
PROPANE.....	2.9	1.7	1.8
N-BUTANE.....	1.0	0.6	0.6
ISOBUTANE.....	0.7	0.6	0.5
N-PENTANE.....	0.4	0.2	0.2
ISOPENTANE.....	0.1	0.0	0.3
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.2	0.2
NITROGEN.....	1.2	4.9	1.8
OXYGEN.....	0.1	0.1	0.1
ARGON.....	TRACE	0.1	1.0
HYDROGEN.....	0.0	0.0	0.4
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.0	TRACE
HELIUM.....	0.02	0.08	0.05
HEATING VALUE*.....	1162	1066	1098
SPECIFIC GRAVITY.....	0.663	0.641	0.643

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18413	INDEX SAMPLE 254 18192	INDEX SAMPLE 255 18494
STATE.....	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY.....	NEWAYGO	NEWAYGO	OAKLAND
FIELD.....	HUBER	NOT GIVEN	LYON S
WELL NAME.....	VANDERLEY & MILLS NO. 1-5A	HUDSON NO. 1-35	RANDALL NO. 1-29
API.....			
LOCATION.....	SEC. 5, T14N, R14W	SEC. 35, T15N, R11W	SEC. 29, T1N, R7E
OWNER.....	TERRA ENERGY, LTD.	JENNINGS PETROLEUM CORP.	SOMOCO, INC.
COMPLETED.....	86/09/15	85/06/01	86/03/07
SAMPLED.....	87/07/25	86/07/31	87/12/07
FORMATION.....	ORDO-PRAIRIE DU CHIEN	ORDO-GLENWOOD	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE.....	305	305	305
DEPTH, FEET.....	6300	8025	3577
WELLHEAD PRESSURE, PSIG.....	1900	2700	NOT GIVEN
OPEN FLOW, MCFD.....	9000	4000	1000
COMPONENT, MOLE PCT			
METHANE.....	69.2	89.6	79.6
ETHANE.....	6.3	3.7	7.8
PROPANE.....	2.5	1.1	2.8
N-BUTANE.....	0.7	0.7	0.5
ISOBUTANE.....	0.6	0.1	0.9
N-PENTANE.....	0.5	0.5	0.0
ISOPENTANE.....	0.0	TRACE	0.2
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.5	0.4	0.0
NITROGEN.....	17.9	3.5	7.9
OXYGEN.....	1.2	0.0	0.0
ARGON.....	0.1	TRACE	TRACE
HYDROGEN.....	0.2	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.1
HELIUM.....	0.15	0.05	0.11
HEATING VALUE*.....	973	1075	1075
SPECIFIC GRAVITY.....	0.735	0.632	0.680

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18598	INDEX SAMPLE 18235	INDEX SAMPLE 18734
STATE.....	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY.....	OGEMAW	OSCEOLA	OSCEOLA
FIELD.....	WEST BRANCH	REED CITY	ROSELAKE
WELL NAME.....	TROUT NO. 3-18	RUME-GULF NO. 1-19A	WANNER NO. 1-32
API.....			
LOCATION.....	SEC. 18, T22N, R2E	SEC. 19, T18N, R10W	SEC. 32, T19N, R9W
OWNER.....	MARATHON OIL CO.	BROWN, H. L., JR.	SUN EXPLORATION & PRODUCTION C
COMPLETED.....	87/11/06	85/11/10	88/10/15
SAMPLED.....	88/05/24	86/10/20	89/01/31
FORMATION.....	ORDO-PRAIRIE DU CHIEN	ORDO-PRAIRIE DU CHIEN	ORDO-PRAIRIE DU CHIEN
GEOLOGIC PROVINCE CODE.....	305	305	305
DEPTH, FEET.....	10000	8962	9504
WELLHEAD PRESSURE, PSIG.....	3500	3527	3500
OPEN FLOW, MCFD.....	2500	82000	3000
COMPONENT, MOLE PCT			
METHANE.....	84.6	90.3	94.6
ETHANE.....	7.7	2.8	1.9
PROPANE.....	2.4	1.3	0.3
N-BUTANE.....	1.8	0.4	0.0
ISOBUTANE.....	0.2	0.7	0.0
N-PENTANE.....	0.0	0.2	0.0
ISOPENTANE.....	1.0	0.2	0.4
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.1	0.3	0.0
NITROGEN.....	1.8	3.6	2.2
OXYGEN.....	0.1	0.0	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.1	0.4
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.1	0.1
HELIUM.....	0.03	0.04	0.04
HEATING VALUE*.....	1173	1068	1017
SPECIFIC GRAVITY.....	0.680	0.628	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19052	INDEX SAMPLE 18036	INDEX SAMPLE 19038
STATE.....	MICHIGAN	MICHIGAN	MICHIGAN
COUNTY.....	OSCEOLA	OSCODA	PRESQUE ISLE
FIELD.....	WILDCAT	MIO	NOT GIVEN
WELL NAME.....	STATE SHERMAN ET AL NO. 1-33	U.S.A. MENTOR "C" NO. 1-29	STATE-BISMARCK NO. 1-16B
API.....	21-133-41327		
LOCATION.....	SEC. 33, T20N, R9W	SEC. 29, T25N, R3E	SEC. 9 & 17, T34N, R4E
OWNER.....	NORTHERN MICHIGAN EXPLORATION	SUN EXPLORATION & PRODUCTION C	NORTHERN PROCESSORS, INC.
COMPLETED.....	90/07/00	85/08/00	90/08/07
SAMPLED.....	90/11/07	86/03/31	90/10/09
FORMATION.....	ORDO-ST. PETER	ORDO-PRAIRIE DU CHIEN	SILU-NIAGARAN
GEOLOGIC PROVINCE CODE.....	305	305	305
DEPTH, FEET.....	10490	10042	3464
WELLHEAD PRESSURE, PSIG.....	202	3700	1350
OPEN FLOW, MCFD.....	455	2750	5000
COMPONENT, MOLE PCT			
METHANE.....	84.5	80.0	88.5
ETHANE.....	3.0	7.0	5.2
PROPANE.....	3.1	3.0	2.0
N-BUTANE.....	2.9	2.0	0.9
ISOBUTANE.....	2.0	0.9	0.5
N-PENTANE.....	0.8	2.3	0.2
ISOPENTANE.....	1.0	0.0	0.2
CYCLOPENTANE.....	0.0	0.3	0.0
HEXANES PLUS.....	0.4	2.5	0.1
NITROGEN.....	1.9	1.8	2.3
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.3	0.0	0.1
HYDROGEN.....	TRACE	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	TRACE	0.0
HELIUM.....	0.02	0.04	0.05
HEATING VALUE*.....	1254	1350	1107
SPECIFIC GRAVITY.....	0.731	0.780	0.640

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18950	INDEX SAMPLE 18887	INDEX SAMPLE 18130
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	AMITE	AMITE	COVINGTON
FIELD.....	INDEPENDENCE	LIBERTY	BOWIE CREEK
WELL NAME.....	JACK D. LOBRANO ETAL NO.1-36	FRED A. ANDERSON NO. 1	D. C. NAPIER ET AL NO.1
API.....			
LOCATION.....	SEC. 36, T2N, R2E	SEC. 15, T1N, R4E	SEC. 35, T7N, R16W
OWNER.....	ARKLA EXPLORATION CO.	C & D RESOURCES, INC.	CELERON OIL & GAS CO.
COMPLETED.....	89/--/00	89/--/00	85/07/24
SAMPLED.....	90/04/18	89/12/17	86/06/18
FORMATION.....	OLIG-FRIO	CRET-TUSCALOOSA B	CRET-SLIGO
GEOLOGIC PROVINCE CODE...	210	210	210
DEPTH, FEET.....	4011	12208	14992
WELLHEAD PRESSURE, PSIG....	50	2550	5200
OPEN FLOW, MCFD.....	440	1092	3500
COMPONENT, MOLE PCT			
METHANE.....	97.8	76.3	94.5
ETHANE.....	0.8	8.6	0.3
PROPANE.....	0.0	3.8	0.1
N-BUTANE.....	0.0	1.0	0.1
ISOBUTANE.....	0.0	1.0	0.0
N-PENTANE.....	0.0	0.2	0.2
ISOPENTANE.....	0.0	0.6	0.0
CYCLOPENTANE.....	0.0	0.0	TRACE
HEXANES PLUS.....	0.0	0.5	0.2
NITROGEN.....	1.0	3.1	1.5
OXYGEN.....	0.0	0.4	TRACE
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	TRACE	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	4.3	3.0
HELIUM.....	0.01	0.01	0.04
HEATING VALUE*.....	1005	1156	987
SPECIFIC GRAVITY.....	0.566	0.751	0.602

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18292	INDEX SAMPLE 18378	INDEX SAMPLE 17992
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	COVINGTON	HINDS	HINDS
FIELD.....	MCRANEY	EDWARDS	NEWMAN
WELL NAME.....	JOSEPH DALE NO. 2	TUPPER 8-10 NO. 2	LAURA NEWMAN EMERICK NO. 1-4
API.....			
LOCATION.....	SEC. 3, T7N, R17W	SEC. 8, T5N, R4W	SEC. 4, T14N, R5E
OWNER.....	UNION OIL CO. OF CALIFORNIA	AMERADA HESS CORP.	INDREX, INC.
COMPLETED.....	87/01/10	85/12/25	85/06/00
SAMPLED.....	87/01/28	89/11/09	86/02/16
FORMATION.....	CRET-HOSSTON & HARPER	JURA-COTTON VALLEY	JURA-COTTON VALLEY
GEOLOGIC PROVINCE CODE...	210	210	210
DEPTH, FEET.....	15296	17300	16885
WELLHEAD PRESSURE, PSIG...	4325	5600	3200
OPEN FLOW, MCFD.....	1000	1839	3000
COMPONENT, MOLE PCT			
METHANE.....	91.9	79.8	80.5
ETHANE.....	0.6	2.0	3.7
PROPANE.....	0.3	1.2	2.3
N-BUTANE.....	0.1	0.3	1.0
ISOBUTANE.....	0.1	0.9	1.0
N-PENTANE.....	0.1	0.2	0.7
ISOPENTANE.....	0.2	0.5	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.5	0.6
NITROGEN.....	2.9	5.2	1.5
OXYGEN.....	0.0	0.1	TRACE
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.7	9.3	8.3
HELIUM.....	0.04	0.04	0.04
HEATING VALUE*.....	969	970	1078
SPECIFIC GRAVITY.....	0.617	0.732	0.744

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

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

	INDEX SAMPLE 18470	INDEX SAMPLE 17975	INDEX SAMPLE 18999
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	HOLMES	JEFFERSON DAVIS	JEFFERSON DAVIS
FIELD.....	TCHULA LAKE	GRANGE	GRANGE
WELL NAME.....	SHADRACH DAVIS, JR., NO. 1	ROBERTSON ESTATE NO. 1	DONALDSON 25-16 NO. 1
API.....			
LOCATION.....	SEC. 8, T15N, R1W	SEC. 36, T8N, R20W	SEC. 25, T8N, R20W
OWNER.....	TRIAD OIL & GAS CO.	SPOONER PETROLEUM CO.	TEXAS CRUDE EXPLORATION, INC.
COMPLETED.....	87/03/07	85/10/10	90/04/25
SAMPLED.....	87/07/15	86/02/01	90/07/18
FORMATION.....	JURA-SMACKOVER	CRET-HOSSTON	CRET-SLIGO
GEOLOGIC PROVINCE CODE.....	210	210	210
DEPTH, FEET.....	9832	14500	13950
WELLHEAD PRESSURE, PSIG.....	2835	3000	5200
OPEN FLOW, MCFD.....	4639	7200	2000
COMPONENT, MOLE PCT			
METHANE.....	41.6	92.7	94.9
ETHANE.....	5.5	0.2	0.7
PROPANE.....	3.1	0.3	0.3
N-BUTANE.....	2.0	0.0	0.1
ISOBUTANE.....	1.7	0.5	0.1
N-PENTANE.....	0.7	0.0	0.1
ISOPENTANE.....	0.6	0.5	0.1
CYCLOPENTANE.....	TRACE	TRACE	0.0
HEXANES PLUS.....	0.3	TRACE	0.0
NITROGEN.....	2.1	1.2	1.3
OXYGEN.....	0.0	TRACE	0.1
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	42.3	4.5	2.4
HELIUM.....	0.01	0.03	0.01
HEATING VALUE*.....	796	989	993
SPECIFIC GRAVITY.....	1.122	0.624	0.595

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18940	INDEX SAMPLE 18687	INDEX SAMPLE 18103
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	JONES	JONES	LAWRENCE
FIELD.....	FREE STATE	GITANO	TOPEKA
WELL NAME.....	FRANKIE SMITH NO. 1	WADE NO. 1	FEDERAL LAND BANK NO. 6-1
API.....			
LOCATION.....	SEC. 19, T8N, R13W	SEC. 9, T9N, R13W	NOT GIVEN
OWNER.....	ORYX ENERGY CO.	GOLDSBERRY OPERATING CO.	LOUISIANA LAND & EXPLORATION C
COMPLETED.....	89/11/09	85/11/23	85/04/15
SAMPLED.....	90/03/23	88/11/10	86/05/08
FORMATION.....	CRET-HOSSTON	CRET-EUTAW-STANLEY SAND	NOT GIVEN
GEOLOGIC PROVINCE CODE..	210	210	210
DEPTH, FEET.....	15906	9746	14329
WELLHEAD PRESSURE, PSIG..	NOT GIVEN	50	4500
OPEN FLOW, MCFD.....	3750	1000	2000
COMPONENT, MOLE PCT			
METHANE.....	86.0	96.7	94.9
ETHANE.....	5.4	0.3	0.3
PROPANE.....	2.1	0.0	TRACE
N-BUTANE.....	0.8	0.4	0.1
ISOBUTANE.....	0.8	0.0	0.0
N-PENTANE.....	0.4	0.0	0.2
ISOPENTANE.....	0.2	0.4	0.0
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.4	0.0	0.3
NITROGEN.....	0.9	1.6	0.8
OXYGEN.....	TRACE	TRACE	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.8	0.5	3.0
HELIUM.....	0.03	0.03	0.02
HEATING VALUE*.....	1122	1015	998
SPECIFIC GRAVITY.....	0.679	0.581	0.601

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

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

	INDEX SAMPLE 18567	INDEX SAMPLE 18380	INDEX SAMPLE 18382
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	LEE	LEE	LEE
FIELD.....	PALMETTO S	SHANNON	SHANNON E
WELL NAME.....	TUCKER NO. 9-13	WEST 25-4 NO. 1	MARY RUTHERFORD NO. 1
API.....			
LOCATION.....	SEC. 9, T11S, R5E	SEC. 25, T11S, R5E	SEC. 17, T11S, R6E
OWNER.....	MOON-HINES-TIGRETT OPERATING C	MOON-HINES-TIGRETT OPERATING C	ENSOURCE, INC.
COMPLETED.....	87/---/00	87/---/00	87/---/00
SAMPLED.....	88/04/00	87/06/17	87/06/17
FORMATION.....	MISS-LEWIS	MISS-CARTER	MISS-LEWIS
GEOLOGIC PROVINCE CODE...	200	200	200
DEPTH, FEET.....	2262	1517	2058
WELLHEAD PRESSURE, PSIG...	936	530	675
OPEN FLOW, MCFD.....	1387	1240	1557
COMPONENT, MOLE PCT			
METHANE.....	97.7	97.0	94.8
ETHANE.....	1.0	0.3	0.6
PROPANE.....	TRACE	TRACE	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.1	2.2	3.8
OXYGEN.....	0.0	TRACE	0.5
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.2	0.2
HELIUM.....	0.07	0.12	0.06
HEATING VALUE*.....	1009	990	973
SPECIFIC GRAVITY.....	0.565	0.567	0.578

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

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

	INDEX SAMPLE 18091	INDEX SAMPLE 18236	INDEX SAMPLE 17966
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	MARION	MONROE	PEARL RIVER
FIELD.....	SANDY HOOK	WISE GAP	POPLARVILLE
WELL NAME.....	FORBES NO. 1	COCKERHAM NO. 32-2	BATSON-MCGEEHEE NO. 1
API.....			
LOCATION.....	SEC. 35, T1N, R14E	SEC. 32, T14S, R17W	SEC. 8, T8S, R16W
OWNER.....	TXP OPERATING CO.	PRUET PRODUCTION CO.	EXXON CO., U.S.A.
COMPLETED.....	84/12/28	86/--/00	85/12/00
SAMPLED.....	86/04/25	86/10/00	--/--/00
FORMATION.....	CRET-HOSSTON	MISS-CARTER	CRET-HOSSTON
GEOLOGIC PROVINCE CODE...	210	200	210
DEPTH, FEET.....	14968	3110	15474
WELLHEAD PRESSURE, PSIG...	8411	920	8800
OPEN FLOW, MCFD.....	10000	1906	13000
COMPONENT, MOLE PCT			
METHANE.....	95.7	98.1	93.5
ETHANE.....	0.1	0.0	0.1
PROPANE.....	0.0	0.1	TRACE
N-BUTANE.....	0.2	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.2	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.3	0.0	0.0
NITROGEN.....	2.2	1.4	0.6
OXYGEN.....	0.2	TRACE	TRACE
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.2	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.7	0.3	5.7
HELIUM.....	0.03	0.09	0.02
HEATING VALUE*.....	1006	997	949
SPECIFIC GRAVITY.....	0.586	0.564	0.612

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

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

	INDEX SAMPLE 18296	INDEX SAMPLE 18917	INDEX SAMPLE 18861
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	PERRY	RANKIN	RANKIN
FIELD.....	TIGER	HOLLYBUSH	PISGAH S
WELL NAME.....	MCLAURIN 4-13 NO. 1	MCKAY ETAL NO. 1	HAUBERG NO. 5
API.....			
LOCATION.....	SEC. 4, T5N, R10W	SEC. 30, T7N, R5E	SEC. 36, T7N, R4E
OWNER.....	UNION OIL CO. OF CALIFORNIA	SHELL WESTERN EXP. & PROD., IN	SHELL WESTERN EXP. & PROD., IN
COMPLETED.....	77/07/29	89/11/15	89/08/03
SAMPLED.....	87/02/11	90/02/13	89/10/02
FORMATION.....	CRET-HOSSTON	JURA-NORPHLET	JURA-NORPHLET
GEOLOGIC PROVINCE CODE.....	210	210	210
DEPTH, FEET.....	14441	16250	16162
WELLHEAD PRESSURE, PSIG.....	2300	1500	4450
OPEN FLOW, MCFD.....	200	9000	32500
COMPONENT, MOLE PCT			
METHANE.....	84.0	0.5	0.6
ETHANE.....	6.2	0.0	0.0
PROPANE.....	3.0	TRACE	0.1
N-BUTANE.....	1.0	0.0	0.0
ISOBUTANE.....	1.0	TRACE	0.0
N-PENTANE.....	0.4	0.0	0.0
ISOPENTANE.....	0.2	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.3	0.0	0.0
NITROGEN.....	1.4	4.1	8.1
OXYGEN.....	0.0	0.8	2.3
ARGON.....	0.0	0.1	0.1
HYDROGEN.....	TRACE	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.2	94.5	88.7
HELIUM.....	0.02	TRACE	0.01
HEATING VALUE*.....	1148	7	8
SPECIFIC GRAVITY.....	0.705	1.498	1.467

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18907	INDEX SAMPLE 18922	INDEX SAMPLE 18430
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	SMITH	SMITH	WARREN
FIELD.....	TRIMBLE	TRIMBLE	OAK RIDGE
WELL NAME.....	PURSER NO. 17-1	BOARD OF SUPERVISORS NO. 1	BILLY BROWN 20-11 NO. 1
API.....			
LOCATION.....	SEC. 17, T10N, R16W.	SEC. 16, T10N, R16W	SEC. 20, T17W, R5E
OWNER.....	COBRA OIL & GAS CORP.	COBRA OIL & GAS CORP.	UNION OIL CO. OF CALIFORNIA
COMPLETED.....	88/12/19	89/09/09	80/09/11
SAMPLED.....	90/01/29	90/02/13	87/08/25
FORMATION.....	CRET-EUTAW-STANLEY	CRET-EUTAW-STANLEY	CRET-RODESSA
GEOLOGIC PROVINCE CODE..	210	210	210
DEPTH, FEET.....	7488	7494	11260
WELLHEAD PRESSURE, PSIG..	2700	2700	3785
OPEN FLOW, MCFD.....	3128	3036	7000
COMPONENT, MOLE PCT			
METHANE.....	96.4	96.7	93.0
ETHANE.....	0.4	0.4	0.8
PROPANE.....	TRACE	0.2	0.2
N-BUTANE.....	0.3	0.0	0.5
ISOBUTANE.....	0.0	0.3	0.0
N-PENTANE.....	0.0	0.0	0.3
ISOPENTANE.....	0.4	TRACE	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	1.9	1.8	2.4
OXYGEN.....	0.0	TRACE	TRACE
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.5	2.5
HELIUM.....	0.03	0.03	0.03
HEATING VALUE*.....	1011	1004	1004
SPECIFIC GRAVITY.....	0.582	0.577	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 286 18432	INDEX SAMPLE 287 18697	INDEX SAMPLE 288 19056
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	WARREN	WARREN	WAYNE
FIELD.....	OAK RIDGE	OAK RIDGE	HIWASSEE N
WELL NAME.....	BILLY BROWN 20-11 NO. 2	ANDERSON TULLY 28-7 NO. 2	BOARD OF EDUCATION 16-14 NO2
API.....			
LOCATION.....	SEC. 20, T17N, R5E	SEC. 28, T17N, R5E	SEC. 16, T10N, R7W
OWNER.....	UNION OIL CO. OF CALIFORNIA	MURPHY OIL U.S.A., INC.	INEXCO OIL CO.
COMPLETED.....	82/09/08	83/02/01	88/--/00
SAMPLED.....	87/08/25	88/11/28	90/11/12
FORMATION.....	CRET-HOSSTON	JURA-COTTON VALLEY	JURA-SHACKOVER
GEOLOGIC PROVINCE CODE.....	210	210	210
DEPTH, FEET.....	12378	16500	15562
WELLHEAD PRESSURE, PSIG.....	3780	2300	1757
OPEN FLOW, MCFD.....	1500	1800	5693
COMPONENT, MOLE PCT			
METHANE.....	93.0	81.9	79.3
ETHANE.....	0.8	2.1	8.3
PROPANE.....	0.2	1.2	4.4
N-BUTANE.....	0.5	0.6	1.6
ISOBUTANE.....	0.0	0.8	1.5
N-PENTANE.....	0.3	0.3	0.3
ISOPENTANE.....	0.1	0.2	0.6
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.3	0.2
NITROGEN.....	2.4	4.1	1.0
OXYGEN.....	TRACE	0.1	0.2
ARGON.....	0.0	0.0	0.1
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.1
CARBON DIOXIDE.....	2.5	8.3	2.5
HELIUM.....	0.04	0.04	TRACE
HEATING VALUE*.....	1004	985	1216
SPECIFIC GRAVITY.....	0.614	0.714	0.738

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

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

	INDEX 289 SAMPLE 18229	INDEX 290 SAMPLE 18520	INDEX 291 SAMPLE 18496
STATE.....	MISSISSIPPI	MISSISSIPPI	MONTANA
COUNTY.....	WAYNE	WILKINSON	BLAINE
FIELD.....	WAYNESBORO	NEWTONTIA	SAWTOOTH MOUNTAIN
WELL NAME.....	EDNA GRAY NO. 1	COON HEIRS NO. 1	CAMPBELL NO. 9-4
API.....			
LOCATION.....	SEC. 32, T9N, R6W	SEC. 27, T2N, R1W	SEC. 4, T27N, R19E
OWNER.....	CONQUEST EXPLORATION CO.	SABINE CORP.	MONTANA POWER CO.
COMPLETED.....	85/02/25	87/--/00	86/07/23
SAMPLED.....	86/10/09	88/02/20	87/12/09
FORMATION.....	JURA-SMACKOVER	CRET-TUSCALOOSA	CRET-EAGLE
GEOLOGIC PROVINCE CODE.....	210	210	395
DEPTH, FEET.....	13326	12391	1512
WELLHEAD PRESSURE, PSIG..	2500	2000	410
OPEN FLOW, MCFD.....	1560	500	1000
COMPONENT, MOLE PCT			
METHANE.....	23.9	83.8	85.0
ETHANE.....	21.1	5.9	2.8
PROPANE.....	20.8	2.4	1.5
N-BUTANE.....	7.6	0.6	0.3
ISOBUTANE.....	5.6	0.6	0.5
N-PENTANE.....	1.8	0.3	0.0
ISOPENTANE.....	2.0	0.3	0.1
CYCLOPENTANE.....	0.2	0.1	0.0
HEXANES PLUS.....	0.9	0.3	0.0
NITROGEN.....	0.5	1.0	9.6
OXYGEN.....	2.1	0.0	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	10.4	0.0	0.0
CARBON DIOXIDE.....	3.1	4.4	TRACE
HELIUM.....	TRACE	0.01	0.08
HEATING VALUE*.....	1888	1106	983
SPECIFIC GRAVITY.....	1.277	0.695	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18865	INDEX SAMPLE 17958	INDEX SAMPLE 17959
STATE.....	MONTANA	MONTANA	MONTANA
COUNTY.....	CARBON	CARBON	CARBON
FIELD.....	ELK BASIN NW	GOLDEN DOME	GOLDEN DOME
WELL NAME.....	HELEN NO. 6	REICKEN NO. 8-14	JUROVICH NO. 15-12
API.....			
LOCATION.....	SEC. 29, T9S, R23E	SEC. 14, T7S, R22E	SEC. 12, T7S, R22E
OWNER.....	AMOCO PRODUCTION CO.	MONTANA POWER CO.	MONTANA POWER CO.
COMPLETED.....	88/08/31	85/05/28	85/04/29
SAMPLED.....	89/10/18	86/01/16	86/01/16
FORMATION.....	CRET-CLOVERLY	CRET-GREYBULL	CRET-FRONTIER
GEOLOGIC PROVINCE CODE.....	520	520	520
DEPTH, FEET.....	4472	5710	3832
WELLHEAD PRESSURE, PSIG.....	32	2500	1600
OPEN FLOW, MCFD.....	325	2000	1500
COMPONENT, MOLE PCT			
METHANE.....	72.4	70.7	85.8
ETHANE.....	14.3	15.2	5.3
PROPANE.....	6.5	6.8	2.5
N-BUTANE.....	1.3	2.0	0.9
ISOBUTANE.....	0.9	0.9	0.4
N-PENTANE.....	0.1	0.8	0.4
ISOPENTANE.....	0.5	0.4	0.3
CYCLOPENTANE.....	0.0	0.1	0.2
HEXANES PLUS.....	0.0	0.6	0.4
NITROGEN.....	3.2	2.2	3.8
OXYGEN.....	0.6	TRACE	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.2	0.1
HELIUM.....	0.03	0.03	0.05
HEATING VALUE*.....	1257	1349	1131
SPECIFIC GRAVITY.....	0.754	0.792	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18092	INDEX SAMPLE 18017	INDEX SAMPLE 18224
STATE.....	MONTANA	MONTANA	MONTANA
COUNTY.....	LIBERTY	PHILLIPS	TOOLE
FIELD.....	WHITLASH	ASHFIELD	DUTCH JOHN COULEE
WELL NAME.....	BROWN NO. 1	1221 NO. 2	STATE NO. 24-16
API.....			
LOCATION.....	SEC. 30, T37N, R4E	SEC. 12, T32N, R31E	SEC. 16, T35N, R2E
OWNER.....	CROFT PETROLEUM CO.	FMP OPERATING CO.	MERIDIAN OIL, INC.
COMPLETED.....	84/11/27	84/08/08	86/02/21
SAMPLED.....	86/04/30	86/03/13	86/09/24
FORMATION.....	CRET-BOW ISLAND	CRET-PHILLIPS	CRET-SUNBURST
GEOLOGIC PROVINCE CODE.....	500	395	500
DEPTH, FEET.....	1804	1191	1893
WELLHEAD PRESSURE, PSIG.....	330	293	350
OPEN FLOW, MCFD.....	1200	1502	2300
COMPONENT, MOLE PCT			
METHANE.....	94.9	93.2	80.7
ETHANE.....	0.7	0.2	8.0
PROPANE.....	0.1	TRACE	4.1
N-BUTANE.....	0.2	0.0	1.2
ISOBUTANE.....	0.0	0.0	0.7
N-PENTANE.....	0.2	0.0	0.3
ISOPENTANE.....	TRACE	0.0	0.2
CYCLOPENTANE.....	TRACE	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.2
NITROGEN.....	3.1	6.0	3.8
OXYGEN.....	0.1	TRACE	0.1
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.3	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.2	0.8
HELIUM.....	0.08	0.07	0.05
HEATING VALUE*.....	998	948	1163
SPECIFIC GRAVITY.....	0.580	0.580	0.703

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18150	INDEX SAMPLE 18027	INDEX SAMPLE 18594
STATE.....	MONTANA	MONTANA	NEW MEXICO
COUNTY.....	TOOLE	TOOLE	CHAVES
FIELD.....	PRAIRIE DELL	WILLOW RIDGE S	BITTER LAKES
WELL NAME.....	COLLIER NO. 2-27	KANNING NO. 1-6	J. R. STATE NO. 1
API.....			
LOCATION.....	SEC. 27, T34N, R1W	SEC. 6, T33N, R3E	SEC. 32, T8S, R27E
OWNER.....	CAVALIER PETROLEUM, INC.	MCCARTHY, LAWRENCE J.	ELK OIL CO.
COMPLETED.....	85/11/16	85/12/04	87/12/03
SAMPLED.....	86/07/06	86/02/00	88/05/18
FORMATION.....	JURA-BOW ISLAND & SUNBURST	CRET-SUNBURST	PENN----
GEOLOGIC PROVINCE CODE.....	500	500	430
DEPTH, FEET.....	1310	1820	6341
WELLHEAD PRESSURE, PSIG.....	20	1629	1860
OPEN FLOW, MCFD.....	35	5000	1452
COMPONENT, MOLE PCT			
METHANE.....	91.1	93.2	90.1
ETHANE.....	2.7	2.1	3.9
PROPANE.....	1.2	1.0	1.2
N-BUTANE.....	0.6	0.5	0.3
ISOBUTANE.....	0.1	0.2	0.4
N-PENTANE.....	0.3	0.1	0.0
ISOPENTANE.....	TRACE	0.2	0.2
CYCLOPENTANE.....	0.1	TRACE	0.0
HEXANES PLUS.....	0.3	0.1	0.0
NITROGEN.....	1.7	1.3	3.4
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	TRACE	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.8	1.1	0.3
HELIUM.....	0.04	0.04	0.16
HEATING VALUE*.....	1058	1050	1048
SPECIFIC GRAVITY.....	0.629	0.609	0.617

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 301 SAMPLE 18941	INDEX 302 SAMPLE 18201	INDEX 303 SAMPLE 18639
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	CHAVES	CHAVES	CHAVES
FIELD.....	DIABLO	PECOS SLOPE	PECOS SLOPE
WELL NAME.....	MCHIRIDE STATE COMM. NO. 1	O'BRIEN "EA" NO. 1	LOOKOUT FEDERAL NO. 5
API.....			
LOCATION.....	SEC. 28, T10S, R27E	SEC. 33, T7S, R29E	SEC. 9, T6S, R22E
OWNER.....	STEVENS OPERATING CORP.	STEVENS OPERATING CORP.	MCKAY OIL CORP.
COMPLETED.....	89/11/28	86/03/05	87/--/00
SAMPLED.....	90/04/10	86/08/19	88/07/11
FORMATION.....	SILU-FUSSELMAN	PERM-ABO BASAL	PERM-ABO
GEOLOGIC PROVINCE CODE..	430	430	430
DEPTH, FEET.....	6218	6324	NOT GIVEN
WELLHEAD PRESSURE, PSIG..	2000	200	113
OPEN FLOW, MCFD.....	2500	NOT GIVEN	35000
COMPONENT, MOLE PCT			
METHANE.....	82.3	66.2	88.4
ETHANE.....	5.3	12.9	3.1
PROPANE.....	2.0	8.5	1.4
N-BUTANE.....	0.5	3.8	0.5
ISOBUTANE.....	0.7	1.2	0.1
N-PENTANE.....	0.0	1.6	0.3
ISOPENTANE.....	0.2	1.0	TRACE
CYCLOPENTANE.....	0.0	0.3	0.0
HEXANES PLUS.....	0.0	0.9	0.1
NITROGEN.....	5.6	3.1	5.6
OXYGEN.....	0.7	0.0	TRACE
ARGON.....	0.3	TRACE	0.0
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.2	0.2	0.2
HELIUM.....	0.22	0.09	0.30
HEATING VALUE*.....	1029	1460	1028
SPECIFIC GRAVITY.....	0.672	0.870	0.626

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

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

	INDEX SAMPLE 18640	INDEX SAMPLE 18331	INDEX SAMPLE 306 SAMPLE 19043
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTRY.....	CHAVES	EDDY	EDDY
FIELD.....	PECOS SLOPE W	ANTELOPE SINK	DARK CANYON
WELL NAME.....	MILLER FEDERAL NO. 5	PANOS FED. COMM NO. 1	MOSLEY SPRING "32" NO. 3
API.....			
LOCATION.....	SEC. 6, T6S, R23E	SEC. 1, T19S, R23E	SEC. 32, T22S, R25E
OWNER.....	MCKAY OIL CORP.	EXXON CO., U.S.A.	GREAT WESTERN DRILLING CO.
COMPLETED.....	87/--/00	85/10/01	90/--/00
SAMPLED.....	88/07/11	87/03/12	90/10/19
FORMATION.....	NOT GIVEN	PENN-STRAWN	PENN-STRAWN
GEOLOGIC PROVINCE CODE...	430	430	430
DEPTH, FEET.....	NOT GIVEN	7650	9842
WELLHEAD PRESSURE, PSIG...	112	1550	2240
OPEN FLOW, MC/D.....	85000	566	1400
COMPONENT, MOLE PCT			
METHANE.....	88.4	90.4	96.1
ETHANE.....	2.7	4.5	2.5
PROPANE.....	1.2	1.6	0.6
N-BUTANE.....	0.5	0.3	0.2
ISOBUTANE.....	0.2	0.6	0.1
N-PENTANE.....	0.2	0.0	0.0
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.0	TRACE	0.0
HEXANES PLUS.....	0.2	0.2	0.0
NITROGEN.....	6.2	1.5	0.0
OXYGEN.....	0.1	0.2	0.0
ARGON.....	0.0	TRACE	0.1
HYDROGEN.....	0.0	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.5	0.4
HELIUM.....	0.31	0.04	0.03
HEATING VALUE*.....	1013	1083	1043
SPECIFIC GRAVITY.....	0.624	0.625	0.582

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19054	INDEX SAMPLE 18797	INDEX SAMPLE 18397
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	EDDY	EDDY	EDDY
FIELD.....	HAPPY VALLEY	HESS E	LOCO HILLS
WELL NAME.....	FEDERAL "N" NO. 1	STATE "EB" NO. 1	CEDAR LAKE "ADI" NO. 1
API.....			
LOCATION.....	SEC. 6, T22S, R26E	SEC. 2, T24S, R23E	SEC. 26, T17S, R30E
OWNER.....	HEMBOURNE OIL CO.	OXY U.S.A., INC.	YATES PETROLEUM CORP.
COMPLETED.....	89/04/22	89/--/00	86/--/00
SAMPLED.....	90/11/14	89/05/16	87/07/01
FORMATION.....	PENN-CANYON	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE.....	430	430	430
DEPTH, FEET.....	9780	10316	10673
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	3100	2145
OPEN FLOW, MCFD.....	150	1100	2500
COMPONENT, MOLE PCT			
METHANE.....	81.3	94.3	50.3
ETHANE.....	10.6	1.9	14.7
PROPANE.....	4.2	0.3	14.6
N-BUTANE.....	1.2	0.0	7.2
ISOBUTANE.....	0.9	0.2	3.1
N-PENTANE.....	0.2	0.0	3.0
ISOPENTANE.....	0.2	0.0	2.8
CYCLOPENTANE.....	0.1	0.0	0.5
HEXANES PLUS.....	0.2	0.0	2.0
NITROGEN.....	0.9	1.9	1.6
OXYGEN.....	TRACE	0.1	TRACE
ARGON.....	0.1	TRACE	0.0
HYDROGEN.....	TRACE	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	1.3	0.1
HELIUM.....	0.02	0.03	0.03
HEATING VALUE*.....	1225	1002	1869
SPECIFIC GRAVITY.....	0.701	0.590	1.107

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18699	INDEX SAMPLE 18802	INDEX SAMPLE 18780
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	EDDY	EDDY	EDDY
FIELD.....	LOVING N	MCKITTRICK HILLS	NOT GIVEN
WELL NAME.....	BRANTLEY "A" NO. 1	SHELBY FEDERAL NO. 3	ELAND "AFC" FED. COM. NO. 1
API.....			
LOCATION.....	SEC. 7, T23S, R28E	SEC. 12, T22S, R24E	SEC. 12, T20S, R29E
OWNER.....	OXY U.S.A., INC.	UNION TEXAS PETROLEUM CORP.	YATES PETROLEUM CORP.
COMPLETED.....	88/06/03	88/11/16	89/--/00
SAMPLED.....	88/12/02	89/05/23	89/04/03
FORMATION.....	PENN-ATOKA	PENN-CISCO	PENN-STRAWN
GEOLOGIC PROVINCE CODE.....	430	430	430
DEPTH, FEET.....	11265	7830	11065
WELLHEAD PRESSURE, PSIG.....	1200	1720	3300
OPEN FLOW, MCFD.....	750	28706	2100
COMPONENT, MOLE PCT			
METHANE.....	95.6	88.8	51.9
ETHANE.....	2.2	4.1	26.1
PROPANE.....	0.2	1.0	12.4
N-BUTANE.....	0.4	1.0	3.9
ISOBUTANE.....	0.0	0.0	2.4
N-PENTANE.....	0.0	1.7	1.4
ISOPENTANE.....	0.1	1.0	0.3
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.1	0.4	0.5
NITROGEN.....	0.8	1.2	0.4
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.1	0.0
CARBON DIOXIDE.....	0.6	0.5	0.5
HELIUM.....	0.02	0.02	TRACE
HEATING VALUE*.....	1037	1172	1629
SPECIFIC GRAVITY.....	0.586	0.674	0.957

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 313 SAMPLE 18617	INDEX 314 SAMPLE 18779	INDEX 315 SAMPLE 18396
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	EDDY	EDDY	EDDY
FIELD.....	RED LAKE	ROCKY ARROYO	SALADAR
WELL NAME.....	SCOGGINS DRAW FED. COM. NO. 1	LOAFER DRAW FEDERAL NO. 1	STONEWALL EP STATE NO. 4
API.....			
LOCATION.....	SEC. 22, T18S, R27E	SEC. 28, T21S, R22E	SEC. 30, T20S, R28E
OWNER.....	SUN EXPLORATION & PRODUCTION C	YATES PETROLEUM CORP.	YATES PETROLEUM CORP.
COMPLETED.....	87/07/30	88/--/00	86/--/00
SAMPLED.....	88/06/11	89/04/06	87/07/01
FORMATION.....	PENN-ATOKA-MORROW	PENN-MORROW	PENN-STRAWN
GEOLOGIC PROVINCE CODE..	430	430	430
DEPTH, FEET.....	9732	8770	10126
WELLHEAD PRESSURE, PSIG..	1950	2750	2150
OPEN FLOW, MCFD.....	28208	337	5000
COMPONENT, MOLE PCT			
METHANE.....	90.6	76.5	75.1
ETHANE.....	5.4	14.8	10.1
PROPANE.....	2.2	4.2	5.0
N-BUTANE.....	0.4	1.1	1.4
ISOBUTANE.....	0.3	0.4	1.8
N-PENTANE.....	0.2	0.5	1.8
ISOPENTANE.....	TRACE	0.2	0.0
CYCLOPENTANE.....	0.1	0.0	1.1
HEXANES PLUS.....	0.1	0.2	3.2
NITROGEN.....	0.3	1.6	0.3
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.3	0.1
HELIUM.....	0.02	0.05	0.04
HEATING VALUE*.....	1109	1242	1459
SPECIFIC GRAVITY.....	0.626	0.722	0.835

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18453	INDEX SAMPLE 18778	INDEX SAMPLE 17950
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	EDDY	EDDY	EDDY
FIELD.....	SHEP DRAW NE	TURKEY TRACK N	UNDESIGNATED
WELL NAME.....	HAPPY VALLEY FEDERAL NO. 1	DIXON-YATES "LM" FED. NO. 1	FEDERAL "AC" NO. 1
API.....			
LOCATION.....	SEC. 28, T22S, R26E	SEC. 28, T18S, R29E	SEC. 35, T23S, R23E
OWNER.....	EXXON CO., U.S.A.	YATES PETROLEUM CORP.	CITIES SERVICE OIL & GAS CORP.
COMPLETED.....	86/--/00	88/07/00	85/08/21
SAMPLED.....	87/--/00	89/03/27	86/01/17
FORMATION.....	PENN-STRAWN	PENN-CISCO	PENN-MORROW
GEOLOGIC PROVINCE CODE..	430	430	430
DEPTH, FEET.....	10294	9792	10202
WELLHEAD PRESSURE, PSIG..	3640	740	2950
OPEN FLOW, MCFD.....	5200	119	8224
COMPONENT, MOLE PCT			
METHANE.....	89.6	71.4	95.5
ETHANE.....	5.8	16.4	2.0
PROPANE.....	1.7	6.0	0.3
N-BUTANE.....	0.6	1.9	0.1
ISOBUTANE.....	0.3	0.6	TRACE
N-PENTANE.....	0.2	1.1	0.1
ISOPENTANE.....	0.0	0.2	TRACE
CYCLOPENTANE.....	0.1	0.1	TRACE
HEXANES PLUS.....	0.2	0.3	0.1
NITROGEN.....	0.9	1.6	0.5
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	TRACE	0.0	0.0
CARBON DIOXIDE.....	0.5	0.3	1.4
HELIUM.....	0.02	0.02	0.20
HEATING VALUE*.....	1109	1332	1024
SPECIFIC GRAVITY.....	0.634	0.779	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18443	INDEX SAMPLE 18311	INDEX SAMPLE 18312
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	EDDY	HARDING	HARDING
FIELD.....	WILDCAT	NOT GIVEN	NOT GIVEN
WELL NAME.....	GULF "5" FEDERAL NO. 1	DE BACA WELL NO. 2YB	MITCHELL LEASE NO. 6M
API.....			
LOCATION.....	SEC. 5, T22S, R29E	SEC. 31, T20N, R31E	SEC. 8, T19N, R30E
OWNER.....	ENRON OIL & GAS CO.	AMERIGAS, INC.	AMERIGAS, INC.
COMPLETED.....	86/--/00	87/02/24	87/02/24
SAMPLED.....	87/09/18	87/02/24	87/02/24
FORMATION.....	PENN-ATOKA	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	430	445	445
DEPTH, FEET.....	12425	NOT GIVEN	NOT GIVEN
WELLHEAD PRESSURE, PSIG.....	1750	250	512
OPEN FLOW, MCFD.....	1500	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	96.4	0.0	0.0
ETHANE.....	1.6	0.0	0.0
PROPANE.....	TRACE	0.0	0.0
N-BUTANE.....	0.3	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	TRACE	0.0	0.0
ISOPENTANE.....	0.4	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.7	0.4	1.3
OXYGEN.....	0.0	TRACE	0.3
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	99.6	98.4
HELIUM.....	0.01	TRACE	TRACE
HEATING VALUE*.....	1033	0	0
SPECIFIC GRAVITY.....	0.582	1.527	1.520

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18313	INDEX SAMPLE 18314	INDEX SAMPLE 18994
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	HARDING	HARDING	LEA
FIELD.....	NOT GIVEN	NOT GIVEN	BILBREY
WELL NAME.....	MITCHELL LEASE NO. 20K	LIBBY WELL NO. 4K	BILBREY 28-A FEDERAL NO. 1
API.....			
LOCATION.....	SEC. 5, T18N, R30E	SEC. 16, T20N, R31E	SEC. 28, T21S, R32E
OWNER.....	AMERIGAS, INC.	AMERIGAS, INC.	SANTA FE ENERGY RESOURCES, INC
COMPLETED.....	87/02/24	87/--/00	90/--/00
SAMPLED.....	87/02/24	87/02/24	90/07/25
FORMATION.....	NOT GIVEN	NOT GIVEN	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	445	445	430
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	13902
WELLHEAD PRESSURE, PSIG.....	462	250	6500
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	7106
COMPONENT, MOLE PCT			
METHANE.....	0.0	0.0	93.0
ETHANE.....	0.0	0.0	3.4
PROPANE.....	0.0	0.0	1.0
N-BUTANE.....	0.0	0.0	0.3
ISOBUTANE.....	0.0	0.2	0.0
N-PENTANE.....	0.0	0.0	0.1
ISOPENTANE.....	0.0	TRACE	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.1	0.1
NITROGEN.....	0.3	0.4	1.7
OXYGEN.....	0.1	0.1	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	99.6	99.1	0.3
HELIUM.....	0.01	TRACE	0.02
HEATING VALUE*.....	0	12	1049
SPECIFIC GRAVITY.....	1.527	1.527	0.600

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18473	INDEX SAMPLE 18668	INDEX SAMPLE 19053
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	LEA	LEA	LEA
FIELD.....	BUFFALO VALLEY	OJO CHISO	TONTO
WELL NAME.....	LANGLEY FEDERAL COM. NO. 3	CHISO NO. 1	WYNELL FEDERAL NO. 1
API.....			
LOCATION.....	SEC. 14, T15S, R27E	SEC. 14, T22S, R34E	SEC. 15, T19S, R33E
OWNER.....	READ & STEVENS, INC.	BTA OIL PRODUCERS	MANZANO OIL CORP.
COMPLETED.....	85/09/05	88/02/10	89/10/00
SAMPLED.....	87/11/00	88/09/01	90/11/14
FORMATION.....	PENN-ATOKA	PENN-MORROW	PENN-ATOKA
GEOLOGIC PROVINCE CODE.....	430	430	430
DEPTH, FEET.....	8522	12801	12630
WELLHEAD PRESSURE, PSIG.....	1335	2612	2250
OPEN FLOW, MCFD.....	850	2750	32504
COMPONENT, MOLE PCT			
METHANE.....	88.6	94.8	40.0
ETHANE.....	6.4	2.9	20.5
PROPANE.....	2.1	0.8	23.1
N-BUTANE.....	0.6	0.2	7.5
ISOBUTANE.....	0.1	0.2	3.8
N-PENTANE.....	0.2	0.0	1.6
ISOPENTANE.....	0.2	0.2	1.6
CYCLOPENTANE.....	0.0	0.0	0.4
HEXANES PLUS.....	0.1	0.0	0.7
NITROGEN.....	1.3	0.5	0.5
OXYGEN.....	0.1	0.1	0.0
ARGON.....	TRACE	0.0	0.3
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.4	0.0
HELIUM.....	0.03	0.02	TRACE
HEATING VALUE*.....	1113	1052	1940
SPECIFIC GRAVITY.....	0.637	0.591	1.150

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18633	INDEX SAMPLE 18771	INDEX SAMPLE 17954
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	LEA	RIO ARRIBA	RIO ARRIBA
FIELD.....	UNDESIGNATED	BLANCO	LINDRITH W
WELL NAME.....	BRINNINSTOOL "21" FED. NO. 1	NORTHEAST BLANCO NO. 401	JICARILLA "F" NO. 8
API.....			
LOCATION.....	SEC. 21, T25S, R33E	SEC. 9, T30N, R7W	SEC. 33, T26N, R4W
OWNER.....	ENRON OIL & GAS CO.	BLACKWOOD & NICHOLS CO.	UNION TEXAS PETROLEUM CORP.
COMPLETED.....	88/01/07	88/11/17	85/08/06
SAMPLED.....	88/07/08	89/03/15	86/01/13
FORMATION.....	PENN-MORROW D	CRET-FRUITLAND	CRET-MESAVERDE & GALLUP
GEOLOGIC PROVINCE CODE.....	430	580	580
DEPTH, FEET.....	15259	3019	5311
WELLHEAD PRESSURE, PSIG.....	8400	1515	1160
OPEN FLOW, MCFD.....	2950	2617	3243
COMPONENT, MOLE PCT			
METHANE.....	97.7	91.4	73.1
ETHANE.....	1.0	0.2	9.3
PROPANE.....	0.1	0.1	3.7
N-BUTANE.....	0.0	0.0	1.2
ISOBUTANE.....	TRACE	0.1	0.5
N-PENTANE.....	0.0	0.0	0.6
ISOPENTANE.....	0.1	0.1	0.3
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.5
NITROGEN.....	0.2	0.3	7.8
OXYGEN.....	0.1	0.0	2.0
ARGON.....	0.0	0.0	0.1
HYDROGEN.....	0.0	0.5	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	7.4	0.5
HELIUM.....	0.01	TRACE	0.02
HEATING VALUE*.....	1015	937	1128
SPECIFIC GRAVITY.....	0.572	0.630	0.742

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

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

	INDEX 331 SAMPLE 18586	INDEX 332 SAMPLE 18028	INDEX 333 SAMPLE 18375
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	RIO ARriba	RIO ARriba	RIO ARriba
FIELD.....	LINDRITH W	OTERO	WILDCAT
WELL NAME.....	JICARILLA F NO. 5A	SALAZAR NO. 10	JICARILLA 464 NO. 1
API.....			
LOCATION.....	SEC. 33, T26N, R4W	SEC. 22, T25N, R6W	SEC. 30, T30N, R3W
OWNER.....	UNION TEXAS PETROLEUM CORP.	LITTLE, CURTIS J.	BAYLESS, ROBERT L.
COMPLETED.....	87/12/07	85/09/16	86/12/01
SAMPLED.....	88/04/15	86/03/24	87/05/31
FORMATION.....	CRET-MESAVERDE-DAKOTA	CRET-CHACRA	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE.....	580	580	580
DEPTH, FEET.....	5063	3412	3740
WELLHEAD PRESSURE, PSIG.....	1204	300	1202
OPEN FLOW, MCFD.....	3149	523	3923
COMPONENT, MOLE PCT			
METHANE.....	83.1	85.0	86.7
ETHANE.....	10.5	7.1	7.6
PROPANE.....	3.8	3.4	3.2
N-BUTANE.....	0.7	1.1	0.4
ISOBUTANE.....	0.8	0.5	0.8
N-PENTANE.....	0.0	0.5	TRACE
ISOPENTANE.....	0.2	0.3	0.2
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.0	0.4	0.1
NITROGEN.....	0.4	1.2	0.6
OXYGEN.....	0.1	0.1	TRACE
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.2	0.2
HELIUM.....	0.03	0.02	TRACE
HEATING VALUE*.....	1188	1190	1154
SPECIFIC GRAVITY.....	0.677	0.682	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18112	INDEX SAMPLE 18711	INDEX SAMPLE 18451
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	SAN JUAN	SAN JUAN	SAN JUAN
FIELD.....	ALAMO EXTENSION	ANGELS PEAK	BLANCO
WELL NAME.....	FLORANCE NO. 8A	HUERFANO NO. 287Y	FIELDS NO. 16
API.....			
LOCATION.....	SEC. 14, T30N, R9W	SEC. 5, T26N, R10W	SEC. 25, T32N, R11W
OWNER.....	TENNECO OIL CO.	MERIDIAN OIL, INC.	TENNECO OIL EXP. & PROD. CO.
COMPLETED.....	84/12/12	88/02/04	87/07/30
SAMPLED.....	86/05/22	88/12/21	87/09/28
FORMATION.....	CRET-FRUITLAND & COAL	CRET-GALLUP	CRET-PICTURED CLIFFS
GEOLOGIC PROVINCE CODE.....	580	580	580
DEPTH, FEET.....	2518	5438	3150
WELLHEAD PRESSURE, PSIG.....	550	NOT GIVEN	650
OPEN FLOW, MCFD.....	204	1046	1300
COMPONENT, MOLE PCT			
METHANE.....	84.5	71.5	75.5
ETHANE.....	7.2	13.4	5.0
PROPANE.....	3.7	9.1	1.8
N-BUTANE.....	1.2	0.0	0.6
ISOBUTANE.....	0.6	3.2	0.1
N-PENTANE.....	0.5	1.1	0.4
ISOPENTANE.....	0.3	0.0	0.0
CYCLOPENTANE.....	0.1	0.1	TRACE
HEXANES PLUS.....	0.5	0.2	0.2
NITROGEN.....	0.3	0.9	14.7
OXYGEN.....	0.1	0.1	TRACE
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.2	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	TRACE
CARBON DIOXIDE.....	0.8	0.5	1.6
HELIUM.....	0.01	0.07	TRACE
HEATING VALUE*.....	1206	1368	952
SPECIFIC GRAVITY.....	0.692	0.796	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 337 SAMPLE 18712	INDEX 338 SAMPLE 18000	INDEX 339 SAMPLE 18622
STATE.....	NEW MEXICO	NEW MEXICO	NEW YORK
COUNTY.....	SAN JUAN	SANDOVAL	CAYUGA
FIELD.....	CEDAR HILL	BALLARD	AUBURN W
WELL NAME.....	VANDERSLICE NO. 101	JICARILLA 183 NO. 11	E. H. PATTERSON NO. 660-4
API.....			
LOCATION.....	SEC. 19, T32N, R10W	SEC. 27, T23N, R3W	AURELIUS DIST., CAYUGA QUAD.
OWNER.....	MERIDIAN OIL, INC.	EL PASO NATURAL GAS CO.	MERIDIAN EXPLORATION CORP.
COMPLETED.....	88/06/07	85/10/18	87/--/00
SAMPLED.....	88/12/22	86/02/26	88/06/22
FORMATION.....	CRET-FRUITLAND	CRET-PICTURED CLIFFS	ORDO-QUEENSTON
GEOLOGIC PROVINCE CODE.....	580	580	160
DEPTH, FEET.....	2728	3032	1495
WELLHEAD PRESSURE, PSIG.....	1308	693	580
OPEN FLOW, MCFD.....	2280	1865	2860
COMPONENT, MOLE PCT			
METHANE.....	92.1	82.8	96.8
ETHANE.....	0.2	7.1	1.3
PROPANE.....	TRACE	4.6	0.1
N-BUTANE.....	0.0	1.5	0.0
ISOBUTANE.....	TRACE	1.0	TRACE
N-PENTANE.....	0.0	0.5	0.0
ISOPENTANE.....	0.1	0.3	0.0
CYCLOPENTANE.....	0.0	TRACE	0.0
HEXANES PLUS.....	0.0	0.2	0.0
NITROGEN.....	0.1	1.7	1.6
OXYGEN.....	0.1	TRACE	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	7.3	0.1	0.1
HELIUM.....	TRACE	0.04	0.12
HEATING VALUE*.....	945	1214	1006
SPECIFIC GRAVITY.....	0.631	0.701	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 340 18703	INDEX SAMPLE 341 18213	INDEX SAMPLE 342 18462
STATE.....	NEW YORK	NEW YORK	NEW YORK
COUNTY.....	CAYUGA	CHAUTAUQUA	GENESEE
FIELD.....	AUBURN W	STEBBINS CORNERS	ATTICA-DANLEY CORNERS AREA
WELL NAME.....	O'HARA FARMS NO. 11	ANDERSON NO. 5-B	ARNOLD NO. 2
API.....			
LOCATION.....	SEC. 12, CAYUGA QUAD, AURELIUS	SEC. A, N. HARMONY TWP., PANAMA	BATAVIA TWP
OWNER.....	MERIDIAN EXPLORATION CORP.	RESOURCE EXPLORATION, INC.	GYPSUM ENERGY MANAGEMENT CO.
COMPLETED.....	88/--/00	86/--/00	84/09/20
SAMPLED.....	88/12/01	86/09/00	87/10/30
FORMATION.....	SILU-ROCHESTER SHALE	DEVO-ONANDAGO	SILU-MEDINA
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	1321	2820	960
WELLHEAD PRESSURE, PSIG...	570	525	210
OPEN FLOW, MCFD.....	8000	5500	200
COMPONENT, MOLE PCT			
METHANE.....	97.0	80.9	83.1
ETHANE.....	1.2	10.6	9.8
PROPANE.....	0.1	3.8	2.3
N-BUTANE.....	0.0	1.1	0.6
ISOBUTANE.....	0.1	0.1	0.0
N-PENTANE.....	0.0	0.4	0.4
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.0	TRACE	0.1
HEXANES PLUS.....	0.0	0.1	0.2
NITROGEN.....	1.4	2.3	3.1
OXYGEN.....	TRACE	0.0	TRACE
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.0	0.4	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	0.1	0.2
HELIUM.....	0.13	0.17	0.19
HEATING VALUE*.....	1010	1176	1125
SPECIFIC GRAVITY.....	0.569	0.683	0.661

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18465	INDEX SAMPLE 18993	INDEX SAMPLE 19006
STATE.....	NEW YORK	NEW YORK	NEW YORK
COUNTY.....	GENESSEE	SENECA	SENECA
FIELD.....	ATTICA-DANLEY CORNERS AREA	SENECA N	SENECA N
WELL NAME.....	MEYER NO. 1	W. FRIER UNIT NO. 1	J. SKINNER UNIT NO. 1
API.....		31-099-19583	31-099-19584
LOCATION.....	TOWN OF ALEXANDER	42 52 30 LAT, 76 52 30 LON	42 52 30 LAT, 76 52 30 LONG
OWNER.....	GYPSUM ENERGY MANAGEMENT CO.	MITCHELL ENERGY CORP.	MITCHELL ENERGY CORP.
COMPLETED.....	83/05/18	86/03/21	86/03/06
SAMPLED.....	87/10/29	90/07/21	90/08/09
FORMATION.....	SILU-MEDINA	ORDO-QUEENSTON	ORDO-QUEENSTON
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	1328	1799	1785
WELLHEAD PRESSURE, PSIG...	180	520	588
OPEN FLOW, MCFD.....	28	2151	4913
COMPONENT, MOLE PCT			
METHANE.....	85.1	96.7	96.7
ETHANE.....	7.8	1.2	1.2
PROPANE.....	1.7	0.2	0.2
N-BUTANE.....	0.5	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.4	0.0	0.0
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.0	0.0
NITROGEN.....	3.8	1.8	1.7
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.1	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	-0.0
CARBON DIOXIDE.....	0.2	0.0	TRACE
HELIUM.....	0.19	0.12	0.11
HEATING VALUE*.....	1091	1006	1007
SPECIFIC GRAVITY.....	0.647	0.569	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 346 SAMPLE 18097	INDEX 347 SAMPLE 18463	INDEX 348 SAMPLE 18464
STATE.....	NEW YORK	NEW YORK	NEW YORK
COUNTY.....	STEUBEN	WYOMING	WYOMING
FIELD.....	BATH TOWNSHIP	ATTICA-DANLEY CORNERS AREA	ATTICA-DANLEY CORNERS AREA
WELL NAME.....	FEE NO.1	RUPERT NO. 1	KIRSCH NO. 1
API.....			
LOCATION.....	SEC 3, BATH QUAD.	BENNINGTON TWP	SHELDON TWP
OWNER.....	VILLAGE OF BATH, N.Y.	GYPSUM ENERGY MANAGEMENT CO.	GYPSUM ENERGY MANAGEMENT CO.
COMPLETED.....	83/--/00	83/05/05	83/03/08
SAMPLED.....	86/--/00	87/10/30	87/10/30
FORMATION.....	DEVO-MARCELLUS	SILJU-MEDINA	SILJU-MEDINA
GEOLOGIC PROVINCE CODE.....	160	160	160
DEPTH, FEET.....	2771	1732	2736
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	200	160
OPEN FLOW, MCFD.....	274	45	2
COMPONENT, MOLE PCT			
METHANE.....	86.0	88.5	89.1
ETHANE.....	9.5	6.1	4.2
PROPANE.....	1.7	0.8	0.5
N-BUTANE.....	0.4	0.4	0.3
ISOBUTANE.....	0.1	0.0	0.0
N-PENTANE.....	0.3	0.3	0.3
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.3	0.0	0.2
NITROGEN.....	1.1	3.3	4.7
OXYGEN.....	0.1	TRACE	TRACE
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.4	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	0.1	0.2
HELIUM.....	0.03	0.14	0.19
HEATING VALUE*.....	1136	1062	1026
SPECIFIC GRAVITY.....	0.644	0.622	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18906	INDEX SAMPLE 18032	INDEX SAMPLE 18923
STATE.....	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY.....	MCKENZIE	MCKENZIE	MCKENZIE
FIELD.....	ANTELOPE DEEP	BLUE BUTTES	BUFFALO WALLOW
WELL NAME.....	MCKEEN NO. 30-23	RIGGS NO. 10-31	CONOCO-NELSON NO. 41-7
API.....			
LOCATION.....	SEC. 30, T153N, R94W	SEC. 31, T151N, R95W	SEC. 7, T148N, R100W
OWNER.....	AMERADA HESS CORP.	TEXACO INC.	CONOCO, INC.
COMPLETED.....	89/09/00	85/05/04	89/06/26
SAMPLED.....	90/01/15	86/03/24	90/02/00
FORMATION.....	ORDO-RED RIVER	ORDO-STONEWALL	ORDO-RED RIVER A & B
GEOLOGIC PROVINCE CODE.....	395	395	395
DEPTH, FEET.....	13644	13540	13626
WELLHEAD PRESSURE, PSIG.....	3300	3309	NOT GIVEN
OPEN FLOW, MCFD.....	1100	1863	1203
COMPONENT, MOLE PCT			
METHANE.....	80.6	70.9	81.6
ETHANE.....	8.1	13.5	7.9
PROPANE.....	2.6	7.2	2.6
N-BUTANE.....	0.3	3.2	0.3
ISOBUTANE.....	0.6	0.6	1.2
N-PENTANE.....	0.0	1.8	0.0
ISOPENTANE.....	0.4	0.4	0.8
CYCLOPENTANE.....	0.0	0.2	0.0
HEXANES PLUS.....	0.0	1.0	0.0
NITROGEN.....	3.1	0.0	3.5
OXYGEN.....	1.1	TRACE	0.0
ARGON.....	0.1	0.0	0.1
HYDROGEN.....	0.1	0.2	TRACE
HYDROGEN SULFIDE**.....	2.4	0.0	0.8
CARBON DIOXIDE.....	0.7	0.9	1.3
HELIUM.....	0.04	0.01	0.04
HEATING VALUE*.....	1091	1429	1121
SPECIFIC GRAVITY.....	0.683	0.829	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18272	INDEX SAMPLE 18626	INDEX SAMPLE 18285
STATE.....	NORTH DAKOTA	NORTH DAKOTA	NORTH DAKOTA
COUNTY.....	MCKENZIE	MCKENZIE	WILLIAMS
FIELD.....	FOE	SPRING CREEK	NOT GIVEN
WELL NAME.....	L.M. STENEHJEM NO. 2	SOVIG NO. 44-31	ZIMMERMAN NO. 10-1
API.....			
LOCATION.....	SEC. 10, T151N, R100W	SEC. 31, T151N, R100W	SEC. 10, T152N, R104W
OWNER.....	TEXACO INC.	NATIONAL OIL CO.	COLUMBIA GAS DEVELOPMENT CORP.
COMPLETED.....	86/08/03	83/12/17	14/86/11
SAMPLED.....	86/11/20	88/06/27	87/01/07
FORMATION.....	ORDO-RED RIVER	ORDO-RED RIVER	ORDO-RED RIVER
GEOLOGIC PROVINCE CODE.....	395	395	395
DEPTH, FEET.....	14226	13757	12906
WELLHEAD PRESSURE, PSIG.....	2500	940	2564
OPEN FLOW, MCFD.....	600	15000	417
COMPONENT, MOLE PCT			
METHANE.....	81.6	74.6	60.0
ETHANE.....	9.7	7.6	19.1
PROPANE.....	3.6	2.3	11.9
N-BUTANE.....	0.9	0.8	3.5
ISOBUTANE.....	0.2	0.6	2.7
N-PENTANE.....	0.2	0.2	0.0
ISOPENTANE.....	0.3	0.3	0.9
CYCLOPENTANE.....	0.0	0.0	TRACE
HEXANES PLUS.....	0.2	0.2	0.0
NITROGEN.....	0.6	0.4	1.0
OXYGEN.....	0.2	0.0	TRACE
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	1.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.5	12.0	0.0
CARBON DIOXIDE.....	0.8	0.9	0.6
HELIUM.....	0.03	0.03	0.04
HEATING VALUE*.....	1169	1109	1507
SPECIFIC GRAVITY.....	0.678	0.739	0.888

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18121	INDEX SAMPLE 18914	INDEX SAMPLE 18410
STATE.....	NORTH DAKOTA	OKLAHOMA	OKLAHOMA
COUNTY.....	WILLIAMS	ALFALFA	ALFALFA
FIELD.....	TIOGA	AMORITA S	SALT PLAINS NE
WELL NAME.....	TIOGA MADISON UNIT NO. D-132	STATE OF OKLAHOMA NO. 2-36	STOABS "A" NO. 1-34
API.....			
LOCATION.....	SEC. 35, T158N, R95W	SEC. 36, T28N, R11W	SEC. 34, T27N, R9W
OWNER.....	AMERADA HESS CORP.	RAMCO ENERGY CORP.	ANADARKO PETROLEUM CORP.
COMPLETED.....	86/03/10	89/08/08	87/04/05
SAMPLED.....	86/06/13	90/02/05	87/07/24
FORMATION.....	PENN-AMSDEN	DEVO-MISENER	DEVO-MISENER
GEOLOGIC PROVINCE CODE.....	395	360	360
DEPTH, FEET.....	6696	5610	5945
WELLHEAD PRESSURE, PSIG.....	2520	1153	2100
OPEN FLOW, MCFD.....	20000	402	1146
COMPONENT, MOLE PCT			
METHANE.....	1.0	84.4	77.9
ETHANE.....	0.0	7.0	6.8
PROPANE.....	0.0	2.7	3.7
N-BUTANE.....	0.0	0.6	1.2
ISOBUTANE.....	0.0	0.1	0.2
N-PENTANE.....	0.0	0.1	0.3
ISOPENTANE.....	0.0	0.2	0.4
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	97.6	4.5	7.9
OXYGEN.....	0.1	0.0	0.8
ARGON.....	TRACE	TRACE	0.1
HYDROGEN.....	0.0	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.2	0.1	0.2
HELIUM.....	0.05	0.16	0.15
HEATING VALUE*.....	10	1090	1094
SPECIFIC GRAVITY.....	0.969	0.654	0.702

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18886	INDEX SAMPLE 18720	INDEX SAMPLE 18357
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ATOKA	BEAVER	BEAVER
FIELD.....	ARKOMA	COMO	DOMBEY
WELL NAME.....	J. C. LAFEVERS NO. 1	REISWIG UNIT NO. 1	PITTMAN NO. 2-20
API.....			
LOCATION.....	SEC. 10, T1N, R13E	SEC. 19, T2N, R25ECM	SEC. 20, T3N, R22ECM
OWNER.....	TEXACO INC.	BEELER, P. F.	LADD PETROLEUM CORP.
COMPLETED.....	88/11/02	88/10/05	86/08/22
SAMPLED.....	89/12/14	89/01/17	87/04/27
FORMATION.....	PENN-WAPANUCKA	PERM-COUNCIL GROVE	PENN-CHESTER BASAL
GEOLOGIC PROVINCE CODE...	400	360	360
DEPTH, FEET.....	12285	3594	7587
WELLHEAD PRESSURE, PSIG...	4240	935	2160
OPEN FLOW, MCFD.....	13914	4813	1764
COMPONENT, MOLE PCT			
METHANE.....	96.7	78.0	87.3
ETHANE.....	1.2	5.1	3.8
PROPANE.....	0.2	2.4	1.6
N-BUTANE.....	0.0	0.6	1.2
ISOBUTANE.....	0.1	0.1	0.0
N-PENTANE.....	0.0	0.4	0.0
ISOPENTANE.....	TRACE	0.0	0.5
CYCLOPENTANE.....	0.0	0.0	TRACE
HEXANES PLUS.....	0.0	0.2	0.1
NITROGEN.....	0.4	12.5	3.8
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.4	0.0	1.6
HELIUM.....	0.03	0.55	0.13
HEATING VALUE*.....	1008	998	1060
SPECIFIC GRAVITY.....	0.579	0.678	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18948	INDEX SAMPLE 18471	INDEX SAMPLE 18291
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	BEAVER	BEAVER	BEAVER
FIELD.....	FORGAN NW	GREENOUGH	GREENOUGH NW
WELL NAME.....	ADAMS NO. H-1	AMEN NO. 3-31	WALLACE "B" NO. 1
API.....			
LOCATION.....	SEC. 16, T6N, R23E	SEC. 31, T6N, R21ECH	SEC. 22, T6N, R21ECH
OWNER.....	ANADARKO PETROLEUM CORP.	LADD PETROLEUM CORP.	J. M. HUBER CORP.
COMPLETED.....	88/05/16	87/02/03	86/05/21
SAMPLED.....	90/04/18	87/11/05	87/01/00
FORMATION.....	PENN-MORROW U	MISS-CHESTER	PENN-OSWEGO L
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	5791	6521	5590
WELLHEAD PRESSURE, PSIG.....	1280	400	20
OPEN FLOW, MCFD.....	7460	1251	31
COMPONENT, MOLE PCT			
METHANE.....	85.4	86.3	74.5
ETHANE.....	5.5	4.8	7.1
PROPANE.....	3.8	3.4	3.6
N-BUTANE.....	0.0	0.0	1.1
ISOBUTANE.....	2.3	1.9	0.5
N-PENTANE.....	0.0	0.0	0.6
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.2
HEXANES PLUS.....	0.0	0.0	0.5
NITROGEN.....	2.7	3.3	11.5
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.1	TRACE	TRACE
HYDROGEN.....	TRACE	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	0.1
HELIUM.....	0.10	0.16	0.29
HEATING VALUE*.....	1138	1112	1088
SPECIFIC GRAVITY.....	0.667	0.655	0.725

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18796	INDEX SAMPLE 18960	INDEX SAMPLE 18436
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	BEAVER	BEAVER	BEAVER
FIELD.....	LIGHT	MOCANE-LAVERNE GAS AREA	UNION STAR
WELL NAME.....	HUNT-LIGHT NO. 2	VIRGIL DEAN NO. 1-13	VENABLE UNIT NO. 34-1
API.....			
LOCATION.....	SEC. 9, T6N, R21E4M	SEC. 13, T4N, R23E4M	SEC. 34, T3N, R23E4M
OWNER.....	J. M. HUBER CORP.	VINTAGE PETROLEUM, INC.	ARCO OIL & GAS CO.
COMPLETED.....	79/02/20	89/07/26	87/04/02
SAMPLED.....	89/05/12	90/05/16	87/09/14
FORMATION.....	PENN-MORROW/MISS-CHESTER	PERM-COUNCIL GROVE	MISS-ST. LOUIS
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	5103	3094	8050
WELLHEAD PRESSURE, PSIG.....	660	NOT GIVEN	1128
OPEN FLOW, MCFD.....	337	784	552
COMPONENT, MOLE PCT			
METHANE.....	90.8	84.4	94.7
ETHANE.....	4.4	5.8	1.8
PROPANE.....	1.7	3.8	0.4
N-BUTANE.....	0.7	0.0	0.4
ISOBUTANE.....	0.1	2.1	0.0
N-PENTANE.....	0.6	0.0	0.3
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.2	0.0	0.2
NITROGEN.....	1.1	3.8	1.7
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.0	0.2
HELIUM.....	0.10	0.15	0.14
HEATING VALUE*.....	1104	1126	1041
SPECIFIC GRAVITY.....	0.628	0.667	0.594

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17994	INDEX SAMPLE 18921	INDEX SAMPLE 18809
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	BEAVER	BECKHAM	BECKHAM
FIELD.....	UNION STAR W	MAYFIELD SW	NEW LIBERTY
WELL NAME.....	RUTH NO. 2-27	SOONER UNIT NO. 2	RODKEY NO. 8-1
API.....			
LOCATION.....	SEC. 33, T3N, R22ECM	SEC. 35, T10N, R26W	SEC. 8, T10N, R23W
OWNER.....	LADD PETROLEUM CORP.	HELMERICH & PAYNE, INC.	DERNICK RESOURCES, INC.
COMPLETED.....	85/01/07	89/01/20	88/06/21
SAMPLED.....	85/02/00	90/02/21	89/06/14
FORMATION.....	MISS-CHESTER	PENN-VIRGIL RED	PENN-ATOKA
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	7266	5671	15366
WELLHEAD PRESSURE, PSIG.....	1060	1436	4250
OPEN FLOW, MCFD.....	1245	1277	2838
COMPONENT, MOLE PCT			
METHANE.....	88.7	84.8	96.6
ETHANE.....	4.7	5.3	1.8
PROPANE.....	2.5	2.7	0.3
N-BUTANE.....	0.9	0.7	0.0
ISOBUTANE.....	0.2	0.5	0.2
N-PENTANE.....	0.4	0.2	0.0
ISOPENTANE.....	0.3	0.4	0.1
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.3	0.3	0.0
NITROGEN.....	1.3	4.9	0.3
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.1	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.1	0.8
HELIUM.....	0.11	0.17	0.02
HEATING VALUE*.....	1134	1102	1027
SPECIFIC GRAVITY.....	0.650	0.664	0.579

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

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

	INDEX SAMPLE 370 18144	INDEX SAMPLE 371 18366	INDEX SAMPLE 372 17999
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	BECKHAM	BECKHAM	BLAINE
FIELD.....	NEW LIBERTY S	NOT GIVEN	ELM GROVE
WELL NAME.....	BURCH NO. 1-12	DAMRON NO. 1-2	LAUBHAN-FRIESEN NO. 1-32
API.....			
LOCATION.....	SEC. 12, T10N, R24W	SEC. 2, T9N, R23W	SEC. 32, T13N, R12W
OWNER.....	INDREX, INC.	WAGNER & BROWN	WARD PETROLEUM CORP.
COMPLETED.....	85/08/02	85/06/11	84/07/25
SAMPLED.....	86/07/10	87/05/18	86/02/21
FORMATION.....	PENN-GRANITE WASH	PENN-SPRINGER	PENN-SPRINGER
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	12681	14137	12546
WELLHEAD PRESSURE, PSIG.....	3900	1210	6317
OPEN FLOW, MCFD.....	3775	560	22237
COMPONENT, MOLE PCT			
METHANE.....	85.6	90.4	93.5
ETHANE.....	6.3	5.1	2.6
PROPANE.....	2.8	1.9	0.6
N-BUTANE.....	1.1	0.2	0.2
ISOBUTANE.....	0.5	0.6	0.1
N-PENTANE.....	0.6	0.0	0.2
ISOPENTANE.....	0.2	0.2	0.0
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.5	0.1	0.2
NITROGEN.....	1.5	0.5	1.1
OXYGEN.....	TRACE	TRACE	0.2
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	TRACE	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	0.8	1.1
HELIUM.....	0.06	0.02	0.02
HEATING VALUE*.....	1170	1098	1042
SPECIFIC GRAVITY.....	0.681	0.627	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 373 18326	INDEX SAMPLE 374 18822	INDEX SAMPLE 375 17939
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	BLAINE	BLAINE	BLAINE
FIELD.....	ELM GROVE	ELM GROVE	HYDRO NE
WELL NAME.....	MORDECAI NO. 2-36	GROENDYKE NO. 1-18	RUTH NO. 1
API.....			
LOCATION.....	SEC. 36, T13N, R12W	SEC. 18, T13N, R12W	SEC. 31, T13N, R12W
OWNER.....	ANR PRODUCTION CO.	WARD PETROLEUM CORP.	COTTON PETROLEUM CORP.
COMPLETED.....	87/01/05	89/02/20	85/10/08
SAMPLED.....	87/03/05	89/07/18	85/12/27
FORMATION.....	PENN-RED FORK	PENN-SPRINGER	PENN-CUNNINGHAM
GEOLOGIC PROVINCE CODE..	360	360	360
DEPTH, FEET.....	11488	12097	12600
WELLHEAD PRESSURE, PSIG..	4650	3250	6000
OPEN FLOW, MCFD.....	5800	4259	15000
COMPONENT, MOLE PCT			
METHANE.....	83.1	94.6	94.4
ETHANE.....	9.0	2.9	2.9
PROPANE.....	3.3	0.6	0.7
N-BUTANE.....	0.6	0.1	0.2
ISOBUTANE.....	0.5	0.2	0.1
N-PENTANE.....	0.1	0.0	0.2
ISOPENTANE.....	0.2	0.1	0.0
CYCLOPENTANE.....	TRACE	0.0	0.1
HEXANES PLUS.....	0.1	0.0	0.2
NITROGEN.....	0.7	0.3	0.2
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.3	1.1	1.1
HELIUM.....	0.03	0.02	0.02
HEATING VALUE*.....	1144	1041	1059
SPECIFIC GRAVITY.....	0.682	0.594	0.603

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

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

	INDEX 376 SAMPLE 18389	INDEX 377 SAMPLE 18659	INDEX 378 SAMPLE 18113
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	BLAINE	BLAINE	BLAINE
FIELD.....	HYDRO NE	OKENE	SOONER TREND
WELL NAME.....	H. C. GROENDYKE NO. 1-11	EVA NO. 1-30	CRAIL NO. 1
API.....			
LOCATION.....	SEC. 11, T13N, R13W	SEC. 30, T18N, R10W	SEC. 26, T18N, R10W
OWNER.....	NOVA ENERGY CORP.	BOGERT OIL CO.	RED EAGLE OIL CO.
COMPLETED.....	85/10/24	86/02/00	86/01/09
SAMPLED.....	87/06/29	88/08/15	86/05/21
FORMATION.....	PENN-MORROW	PENN-ATOKA-MORROW	MISS-CHESTER
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	11844	7892	7820
WELLHEAD PRESSURE, PSIG.....	5900	2221	350
OPEN FLOW, MCFD.....	1600	1122	1000
COMPONENT, MOLE PCT			
METHANE.....	88.4	92.0	89.0
ETHANE.....	3.7	4.3	4.9
PROPANE.....	1.3	1.8	2.1
N-BUTANE.....	0.0	0.3	0.9
ISOBUTANE.....	0.3	0.5	0.1
N-PENTANE.....	0.0	0.0	0.5
ISOPENTANE.....	0.0	0.3	0.2
CYCLOPENTANE.....	0.0	0.0	0.2
HEXANES PLUS.....	0.0	0.0	0.4
NITROGEN.....	4.3	0.4	1.0
OXYGEN.....	1.1	0.1	0.2
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	TRACE	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	0.4	0.4
HELIUM.....	0.03	0.02	0.03
HEATING VALUE*.....	1006	1093	1136
SPECIFIC GRAVITY.....	0.622	0.616	0.651

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 379 18014	INDEX SAMPLE 380 18110	INDEX SAMPLE 381 18304
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CADDO	CADDO	CADDO
FIELD.....	APACHE TOWNSITE	BRIDGEPORT	BRIDGEPORT W
WELL NAME.....	DUNLAP NO. 2	HARRY UNIT NO. 1	FOSTER FARMS NO. 1-1
API.....			
LOCATION.....	SEC. 21, T5N, R11W	SEC. 33, T12N, R13W	SEC. 1, T12N, R13W
OWNER.....	MINERVA OIL CO.	AMOCO PRODUCTION CO.	AN-SON CO.
COMPLETED.....	85/08/23	85/11/18	86/02/22
SAMPLED.....	--/--/00	86/05/08	87/02/23
FORMATION.....	CAMO-ARBUCKLE	PENN-RED FORK	PENN-CUNNINGHAM
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	4402	12028	12886
WELLHEAD PRESSURE, PSIG.....	1425	5627	6650
OPEN FLOW, MCFD.....	1900	3237	2128
COMPONENT, MOLE PCT			
METHANE.....	87.0	80.1	93.0
ETHANE.....	6.6	9.5	3.4
PROPANE.....	2.7	5.1	1.0
N-BUTANE.....	1.0	1.4	0.1
ISOBUTANE.....	0.2	0.7	0.4
N-PENTANE.....	0.6	0.5	0.0
ISOPENTANE.....	0.1	0.6	0.0
CYCLOPENTANE.....	0.2	0.2	0.0
HEXANES PLUS.....	0.5	0.5	0.1
NITROGEN.....	1.0	0.5	0.4
OXYGEN.....	TRACE	0.0	TRACE
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.1	0.2	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.7	1.5
HELIUM.....	0.01	0.03	0.02
HEATING VALUE*.....	1174	1265	1051
SPECIFIC GRAVITY.....	0.667	0.729	0.607

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

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

	INDEX SAMPLE 18467	INDEX SAMPLE 18844	INDEX SAMPLE 18341
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CADDO	CADDO	CADDO
FIELD.....	BROXTON N	CEMENT	CROW PROSPECT
WELL NAME.....	SADLER NO. 1	G. H. RAY UNIT NO. 1	KRUPKA NO. 1-33
API.....			
LOCATION.....	SEC. 3, T6N, R12W	SEC. 30, T6N, R9W	SEC. 33, T8N, R9W
OWNER.....	SANGUINE, LTD.	AMOCO PRODUCTION CO.	SOHIO PETROLEUM CO.
COMPLETED.....	85/10/05	88/07/15	85/07/09
SAMPLED.....	87/10/29	89/08/23	87/03/23
FORMATION.....	PENN-BRITT	MISS-GODDARD	PENN-SPRINGER
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	20896	19326	16349
WELLHEAD PRESSURE, PSIG...	13500	5800	7500
OPEN FLOW, MCFD.....	2668	1200	962
COMPONENT, MOLE PCT			
METHANE.....	97.5	95.4	96.0
ETHANE.....	0.6	0.7	1.4
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.0	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.4	1.0	0.9
OXYGEN.....	0.0	0.6	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.7	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.4	1.5	1.2
HELIUM.....	0.02	0.02	0.00
HEATING VALUE*.....	1002	984	1006
SPECIFIC GRAVITY.....	0.574	0.577	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18015	INDEX SAMPLE 18500	INDEX SAMPLE 19003
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CADDO	CADDO	CADDO
FIELD.....	EAKLY E	EAKLY E	EAKLY-WEATHERFORD
WELL NAME.....	YOUNG NO. 1-33	MCCLAIN NO. 1-4	LORENE NO. 1-33
API.....			
LOCATION.....	SEC. 33, T10N, R12W	SEC. 4, T9N, R12W	SEC. 33, T10N, R12W
OWNER.....	AN-SON CO.	HELMERICH & PAYNE, INC.	ANSON CO.
COMPLETED.....	85/11/11	87/05/28	88/10/24
SAMPLED.....	86/03/13	87/12/00	90/08/06
FORMATION.....	PENN-PRIMROSE	PENN-SPRINGER	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	15374	15752	12802
WELLHEAD PRESSURE, PSIG.....	10960	9280	2700
OPEN FLOW, MCFD.....	24955	1809	265
COMPONENT, MOLE PCT			
METHANE.....	97.1	96.2	86.1
ETHANE.....	0.9	0.6	6.4
PROPANE.....	0.1	0.1	2.5
N-BUTANE.....	0.0	0.0	0.5
ISOBUTANE.....	0.0	0.0	0.2
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.3	1.0	3.1
OXYGEN.....	TRACE	0.2	0.8
ARGON.....	TRACE	2.0	0.1
HYDROGEN.....	0.1	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.4	0.0	0.3
HELIUM.....	0.02	0.02	0.03
HEATING VALUE*.....	1003	988	1081
SPECIFIC GRAVITY.....	0.574	0.581	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18387	INDEX SAMPLE 18529	INDEX SAMPLE 18558
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CADDO	CADDO	CADDO
FIELD.....	FORT COBB NW	HINTON E	LIBBIE
WELL NAME.....	STOCKTON NO. 1-21	OAKES NO. 1-10	FLANIGIN NO. 2-A
API.....			
LOCATION.....	SEC. 21, T8N, R12W	SEC. 10, T11N, R11W	SEC. 31, T12N, R12W
OWNER.....	SOHIO PETROLEUM CO.	APACHE CORP.	APACHE CORP.
COMPLETED.....	86/10/00	87/12/08	87/09/17
SAMPLED.....	87/06/24	88/03/02	88/03/21
FORMATION.....	PENN-SPRINGER	PENN-MORROW U	PENN-SPRINGER
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	18500	12726	14008
WELLHEAD PRESSURE, PSIG...	4000	5924	4096
OPEN FLOW, MCFD.....	2500	8766	17393
COMPONENT, MOLE PCT			
METHANE.....	95.7	92.7	96.7
ETHANE.....	0.5	4.4	1.2
PROPANE.....	0.1	1.1	0.2
N-BUTANE.....	0.0	0.1	0.0
ISOBUTANE.....	TRACE	0.2	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.1	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.3	0.4	0.3
OXYGEN.....	0.3	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.0	1.0	1.4
HELIUM.....	0.02	0.02	0.02
HEATING VALUE*.....	981	1057	1010
SPECIFIC GRAVITY.....	0.584	0.602	0.579

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18095	INDEX SAMPLE 18468	INDEX SAMPLE 18466
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CADDO	CADDO	CADDO
FIELD.....	NOT GIVEN	ONEY	ONEY E
WELL NAME.....	MANDY NO. 1-1	COWAN NO. 1	MARIE NO. 1
API.....			
LOCATION.....	SEC. 1, T6N, R10W	SEC. 18, T9N, R11W	SEC. 9, T9N, R11W
OWNER.....	SOHIO PETROLEUM CO.	SANGUINE, LTD.	SANGUINE, LTD.
COMPLETED.....	85/--/00	85/04/29	86/05/20
SAMPLED.....	86/04/28	87/10/28	87/10/28
FORMATION.....	PENN-BRITT & SPRINGER	PENN-BRITT	PENN-BRITT
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	17676	16097	15697
WELLHEAD PRESSURE, PSIG.....	9950	10800	10000
OPEN FLOW, MCFD.....	7239	8100	12138
COMPONENT, MOLE PCT			
METHANE.....	94.2	96.2	95.4
ETHANE.....	1.7	1.4	1.4
PROPANE.....	0.2	TRACE	0.2
N-BUTANE.....	0.3	0.3	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.8	0.0	0.0
ISOPENTANE.....	0.0	0.3	0.1
CYCLOPENTANE.....	0.3	0.0	0.0
HEXANES PLUS.....	1.1	0.0	0.0
NITROGEN.....	0.0	0.3	1.2
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.2	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.1	1.6	1.6
HELIUM.....	0.02	0.02	0.02
HEATING VALUE*.....	1102	1020	1001
SPECIFIC GRAVITY.....	0.626	0.587	0.586

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19058	INDEX SAMPLE 18437	INDEX SAMPLE 18252
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CADDO	CANADIAN	CANADIAN
FIELD.....	WATONGA-CHICKASHA TREND	CONCHO N	NILES E
WELL NAME.....	FLETCHER NO. 1-36	SCHROEDER NO. 1-12	HATCHER "A" NO. 2
API.....			
LOCATION.....	SEC. 36, T9N, R9W	SEC. 21, T14N, R8W	SEC. 32, T11N, R9W
OWNER.....	KAISER-FRANCIS OIL CO.	CONFED OIL CO.	AMOCO PRODUCTION CO.
COMPLETED.....	90/08/15	87/07/11	85/07/28
SAMPLED.....	90/11/20	87/09/15	86/11/14
FORMATION.....	PENN-YULE SAND	ORDO-VIOLA	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	7986	10750	12075
WELLHEAD PRESSURE, PSIG.....	2700	1500	2900
OPEN FLOW, MCFD.....	3000	47	2887
COMPONENT, MOLE PCT			
METHANE.....	88.0	89.2	96.9
ETHANE.....	3.1	5.8	1.1
PROPANE.....	0.9	1.8	0.2
N-BUTANE.....	0.2	0.7	0.0
ISOBUTANE.....	0.0	0.0	0.1
N-PENTANE.....	0.1	0.2	0.0
ISOPENTANE.....	0.1	0.2	TRACE
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.0	0.2	0.0
NITROGEN.....	7.2	1.1	0.3
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.3
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.6	1.0
HELIUM.....	0.17	0.04	0.02
HEATING VALUE*.....	986	1107	1011
SPECIFIC GRAVITY.....	0.618	0.636	0.573

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18560	INDEX SAMPLE 18770	INDEX SAMPLE 18867
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CANADIAN	CANADIAN	CANADIAN
FIELD.....	UNION CITY	UNION CITY	UNION CITY
WELL NAME.....	HENRY JO NO. 3-7	COIT NO. 8-2	BARBOUR NO. 1-12
API.....			
LOCATION.....	SEC. 7, T12N, R8W	SEC. 8, T11N, R7W	SEC. 12, T10N, R7W
OWNER.....	SAMEDAN OIL CORP.	SANTA FE MINERALS, INC.	MERRICO RESOURCES, INC.
COMPLETED.....	87/12/08	88/11/28	88/08/04
SAMPLED.....	88/03/24	89/03/17	89/10/24
FORMATION.....	ORDO-VIOLA	PENN-HOXBAR	PENN-TONKAWA
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	12090	6953	7510
WELLHEAD PRESSURE, PSIG...	2300	1445	2100
OPEN FLOW, MCFD.....	1375	14810	1307
COMPONENT, MOLE PCT			
METHANE.....	91.9	73.1	87.8
ETHANE.....	4.6	5.4	5.7
PROPANE.....	1.3	2.7	2.8
N-BUTANE.....	0.2	0.7	0.5
ISOBUTANE.....	0.5	0.7	0.8
N-PENTANE.....	0.0	0.3	0.0
ISOPENTANE.....	0.0	TRACE	0.2
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.1	0.4	0.5
NITROGEN.....	0.3	16.2	1.2
OXYGEN.....	0.0	0.1	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.0	0.2	0.2
HELIUM.....	0.02	0.11	0.08
HEATING VALUE*.....	1081	992	1153
SPECIFIC GRAVITY.....	0.617	0.716	0.657

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19018	INDEX SAMPLE 18840	INDEX SAMPLE 18912
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CLEVELAND	COMANCHE	COMANCHE
FIELD.....	WILDCAT	MIDWAY	STERLING
WELL NAME.....	BOOMER NO. 1-31	CITY OF LAWTON NO. 1-11	BETTY LOU NO. 1-21
API.....			
LOCATION.....	SEC. 31, T10N, R3W	SEC. 11, T4N, R11W	SEC. 21, T3N, R9W
OWNER.....	SANTA FE ENERGY RESOURCES, INC	BEARD OIL CO.	C D OPERATING CO.
COMPLETED.....	90/08/00	88/08/08	88/10/14
SAMPLED.....	90/08/28	89/08/00	90/02/00
FORMATION.....	ORDO-SIMPSON PERM-DOLOMITE	CAMO-ARBUCKLE	PENN-BRISCOE U
GEOLOGIC PROVINCE CODE.....	355	350	350
DEPTH, FEET.....	9051	3971	7016
WELLHEAD PRESSURE, PSIG.....	2810	1101	1100
OPEN FLOW, MCFD.....	11569	1874	1000
COMPONENT, MOLE PCT			
METHANE.....	86.4	84.3	90.4
ETHANE.....	6.4	8.6	3.6
PROPANE.....	2.7	4.3	1.4
N-BUTANE.....	0.9	0.4	0.2
ISOBUTANE.....	0.3	1.0	0.3
N-PENTANE.....	0.2	0.0	0.0
ISOPENTANE.....	0.1	0.0	0.2
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.0
NITROGEN.....	2.7	1.4	3.6
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.1	0.0	0.0
HYDROGEN.....	TRACE	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.0	0.0	0.1
HELIUM.....	0.03	0.04	0.08
HEATING VALUE*.....	1120	1167	1045
SPECIFIC GRAVITY.....	0.652	0.667	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 403 SAMPLE 18688	INDEX 404 SAMPLE 18411	INDEX 405 SAMPLE 18475
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CUSTER	CUSTER	CUSTER
FIELD.....	ALEDO SE	ALEDO SW	ANTHON NE
WELL NAME.....	ARNOLD NO. 1	THIESSEN NO. 1-12	COIT NO. 2
API.....			
LOCATION.....	SEC. 1, T15N, R18W	SEC. 12, T15N, R18W	SEC. 17, T15N, R17W
OWNER.....	AMR PRODUCTION CO.	WARD PETROLEUM CORP.	SAMSON RESOURCES CO.
COMPLETED.....	78/01/03	86/08/20	85/12/31
SAMPLED.....	88/11/00	87/07/28	87/11/11
FORMATION.....	PENN-SPRINGER C	PENN-ATOKA	PENN-MORROW
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	12214	10854	12259
WELLHEAD PRESSURE, PSIG...	2000	1150	1500
OPEN FLOW, MCFD.....	1150	4518	1200
COMPONENT, MOLE PCT			
METHANE.....	84.7	80.5	97.3
ETHANE.....	9.5	10.5	0.8
PROPANE.....	3.6	4.7	0.1
N-BUTANE.....	0.9	1.1	0.0
ISOBUTANE.....	0.3	0.7	0.1
N-PENTANE.....	0.2	0.3	0.0
ISOPENTANE.....	TRACE	0.3	TRACE
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.1	0.2	0.0
NITROGEN.....	0.1	0.7	0.3
OXYGEN.....	0.1	TRACE	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.3	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.7	1.4
HELIUM.....	0.03	0.03	0.02
HEATING VALUE*.....	1174	1221	1005
SPECIFIC GRAVITY.....	0.668	0.704	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18761	INDEX SAMPLE 18824	INDEX SAMPLE 17973
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CUSTER	CUSTER	CUSTER
FIELD.....	CUSTER CITY N	CUSTER CITY N	FAY E
WELL NAME.....	KRUGER NO. 1-6	LAUREN NO. 1-31	CARL PAYNE NO. 36-1
API.....			
LOCATION.....	SEC. 6, T14N, R15W	SEC. 31, T15N, R15W	SEC. 36, T15N, R14W
OWNER.....	COBB OIL & GAS CO.	COBB OIL & GAS CO.	HARPER OIL CO.
COMPLETED.....	83/07/27	89/01/06	85/11/09
SAMPLED.....	89/02/28	89/07/19	86/01/30
FORMATION.....	ORDO-SIMPSON	ORDO-VIOLA	PENN-MORROW
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	15085	15026	11253
WELLHEAD PRESSURE, PSIG...	1100	3060	5100
OPEN FLOW, MCFD.....	1050	15166	1300
COMPONENT, MOLE PCT			
METHANE.....	94.3	95.4	81.8
ETHANE.....	0.3	0.3	5.2
PROPANE.....	TRACE	0.1	1.7
N-BUTANE.....	0.0	0.0	0.4
ISOBUTANE.....	0.0	TRACE	0.2
N-PENTANE.....	0.0	0.0	0.2
ISOPENTANE.....	0.0	TRACE	0.1
CYCLOPENTANE.....	0.0	0.0	TRACE
HEXANES PLUS.....	0.2	0.0	0.1
NITROGEN.....	1.8	1.0	7.6
OXYGEN.....	0.4	0.2	2.0
ARGON.....	TRACE	0.0	0.1
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.9	3.0	0.6
HELIUM.....	0.02	0.02	0.03
HEATING VALUE*.....	972	976	1004
SPECIFIC GRAVITY.....	0.599	0.592	0.664

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

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

	INDEX SAMPLE 18671	INDEX SAMPLE 18256	INDEX SAMPLE 18562
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CUSTER	CUSTER	CUSTER
FIELD.....	HAMMOND E	MOOREWOOD	STAFFORD
WELL NAME.....	CLIFT NO. 1	BROADBENT NO. 25-1	DERBY NO. 1-13
API.....			
LOCATION.....	SEC. 3, T13N, R20W	SEC. 25, T15N, R20W	SEC. 13, T12N, R19W
OWNER.....	AN-SON CO.	WOODS PETROLEUM CORP.	AN-SON CO.
COMPLETED.....	82/05/21	86/01/13	87/10/07
SAMPLED.....	88/08/14	86/11/19	88/03/25
FORMATION.....	PENN-ATOKA	PENN-PRUE	PENN-RED FORK
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	13676	11242	12824
WELLHEAD PRESSURE, PSIG.....	3000	4500	6832
OPEN FLOW, MCFD.....	1075	4435	13573
COMPONENT, MOLE PCT			
METHANE.....	93.1	80.3	87.6
ETHANE.....	2.6	9.9	6.4
PROPANE.....	1.1	5.0	2.6
N-BUTANE.....	0.3	1.3	0.5
ISOBUTANE.....	0.4	0.6	0.5
N-PENTANE.....	0.5	0.3	0.3
ISOPENTANE.....	0.0	0.3	0.1
CYCLOPENTANE.....	0.1	0.1	TRACE
HEXANES PLUS.....	0.5	0.3	0.2
NITROGEN.....	0.2	0.4	0.4
OXYGEN.....	TRACE	TRACE	TRACE
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.6	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.2	0.7	1.4
HELIUM.....	0.02	0.03	0.03
HEATING VALUE*.....	1088	1231	1128
SPECIFIC GRAVITY.....	0.623	0.708	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18244	INDEX SAMPLE 18356	INDEX SAMPLE 18021
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	CUSTER	CUSTER	DEWEY
FIELD.....	WEATHERFORD	WEATHERFORD	CAMARGO NE
WELL NAME.....	MCCULLOCK NO. 1-13	CORNELL NO. 2-24	MYERS NO. 1
API.....			
LOCATION.....	SEC. 13, T12N, R14W	SEC. 24, T13N, R25W	SEC. 8, T18N, R19W
OWNER.....	AN-SON CO.	ARKLA EXPLORATION CO.	MONSANTO OIL CO.
COMPLETED.....	86/08/12	87/02/16	85/06/05
SAMPLED.....	86/10/31	87/04/27	86/03/19
FORMATION.....	PENN-DEESE	PENN-SKINNER	PENN-OSWEGO
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	12153	11328	8800
WELLHEAD PRESSURE, PSIG.....	2400	3609	1620
OPEN FLOW, MCFD.....	3889	2214	300
COMPONENT, MOLE PCT			
METHANE.....	86.5	73.7	78.3
ETHANE.....	7.3	6.9	10.7
PROPANE.....	3.1	2.0	5.4
N-BUTANE.....	0.7	2.6	1.9
ISOBUTANE.....	0.4	0.0	0.6
N-PENTANE.....	0.1	0.0	0.8
ISOPENTANE.....	0.2	9.3	0.6
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.2	0.0	0.3
NITROGEN.....	0.5	1.7	0.7
OXYGEN.....	TRACE	0.1	0.1
ARGON.....	0.0	0.1	TRACE
HYDROGEN.....	0.1	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	3.5	0.5
HELIUM.....	0.03	0.04	0.05
HEATING VALUE*.....	1152	1410	1289
SPECIFIC GRAVITY.....	0.660	0.871	0.744

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

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

	INDEX SAMPLE 18630	INDEX SAMPLE 18377	INDEX SAMPLE 18675
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	DEWEY	DEWEY	DEWEY
FIELD.....	CANTON SW	HUCHAC	HUCHAC
WELL NAME.....	WILLIE PORTER NO. 1-9	VAN METER NO. 1-8	CURTIS NO. 3-19
API.....			
LOCATION.....	SEC. 9, T17N, R14W	SEC. 8, T18N, R14W	SEC. 19, T18N, R14W
OWNER.....	LADD PETROLEUM CORP.	HAWKINS OIL & GAS, INC.	LADD PETROLEUM CORP.
COMPLETED.....	87/10/11	87/01/06	87/08/28
SAMPLED.....	88/06/27	87/06/00	88/09/07
FORMATION.....	DEVO-HUNTON	PENN-MORROW	CAMO-ARBUCLE
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	11490	9066	12454
WELLHEAD PRESSURE, PSIG...	1550	2838	3656
OPEN FLOW, MCFD.....	24418	2078	35459
COMPONENT, MOLE PCT			
METHANE.....	94.4	80.7	95.2
ETHANE.....	2.3	8.5	2.0
PROPANE.....	0.7	4.7	0.6
N-BUTANE.....	0.2	0.7	0.2
ISOBUTANE.....	0.3	1.1	0.2
N-PENTANE.....	0.0	0.5	0.2
ISOPENTANE.....	0.2	0.4	0.0
CYCLOPENTANE.....	0.0	0.4	0.0
HEXANES PLUS.....	0.0	1.1	0.1
NITROGEN.....	0.6	1.4	1.2
OXYGEN.....	TRACE	0.1	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.4	0.3	0.4
HELIUM.....	0.02	0.05	0.05
HEATING VALUE*.....	1037	1262	1038
SPECIFIC GRAVITY.....	0.599	0.731	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18891	INDEX SAMPLE 18359	INDEX SAMPLE 18088
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	DEWEY	DEWEY	DEWEY
FIELD.....	OAKWOOD N	SQUIRREL CREEK S	WATONGA-CHICKASHA TREND
WELL NAME.....	WASINGER-MEYER NO. 1	TRUST NO. 1-17	J. WILLIS NO. 1-35
API.....			
LOCATION.....	SEC. 6, T17N, R14W	SEC. 17, T16N, R15W	SEC. 35, T18N, R14W
OWNER.....	TXO PRODUCTION CORP.	MARSHALL OIL CORP.	LADD PETROLEUM CORP.
COMPLETED.....	89/07/26	86/11/00	85/05/31
SAMPLED.....	89/12/28	87/04/27	86/04/15
FORMATION.....	DEVO-HUNTON	PENN-MORROW	DEVO-HUNTON
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	11415	10670	11250
WELLHEAD PRESSURE, PSIG.....	3900	3450	3800
OPEN FLOW, MCFD.....	8827	1500	10440
COMPONENT, MOLE PCT			
METHANE.....	94.0	93.8	88.0
ETHANE.....	2.2	3.2	4.5
PROPANE.....	0.8	0.9	1.5
N-BUTANE.....	0.1	0.4	0.8
ISOBUTANE.....	0.4	TRACE	0.0
N-PENTANE.....	0.0	0.0	1.4
ISOPENTANE.....	0.0	0.3	0.0
CYCLOPENTANE.....	0.0	0.0	0.6
HEXANES PLUS.....	0.3	0.0	2.1
NITROGEN.....	1.1	0.4	0.3
OXYGEN.....	0.0	0.0	0.1
ARGON.....	0.1	0.0	0.0
HYDROGEN.....	0.0	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	0.9	0.6
HELIUM.....	0.03	0.03	0.02
HEATING VALUE*.....	1047	1057	1229
SPECIFIC GRAVITY.....	0.603	0.601	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18877	INDEX SAMPLE 18119	INDEX SAMPLE 18881
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ELLIS	ELLIS	GARFIELD
FIELD.....	ARNETT	PEEK S	GREEN VALLEY
WELL NAME.....	WAYLAND NO. 1-17	GERALD BROWN NO. 1-33	BARBARA J NO. 1
API.....			
LOCATION.....	SEC. 17, T20N, R23W	SEC. 33, T18N, R22W	SEC. 12, T21N, R3W
OWNER.....	PETRO-ENERGY EXPLORATION, INC.	CELERON OIL & GAS CO.	D & H OIL, INC.
COMPLETED.....	89/05/22	85/03/28	89/01/17
SAMPLED.....	89/09/00	86/06/10	89/11/27
FORMATION.....	MISS-MERAMEC	PENN-OSWEGO	PENN-OSWEGO
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	11842	9680	4692
WELLHEAD PRESSURE, PSIG.....	3304	2725	1600
OPEN FLOW, MCFD.....	42039	2084	2000
COMPONENT, MOLE PCT			
METHANE.....	96.1	80.5	56.3
ETHANE.....	0.3	10.0	11.0
PROPANE.....	0.1	4.6	10.7
N-BUTANE.....	0.0	1.6	3.6
ISOBUTANE.....	0.0	0.4	4.2
N-PENTANE.....	0.0	0.7	0.0
ISOPENTANE.....	0.0	0.4	1.3
CYCLOPENTANE.....	0.0	0.1	0.4
HEXANES PLUS.....	0.0	0.4	3.4
NITROGEN.....	2.1	0.5	8.6
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.2	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.3	0.6	0.2
HELIUM.....	0.03	0.04	0.09
HEATING VALUE*.....	980	1253	1556
SPECIFIC GRAVITY.....	0.578	0.720	0.988

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 424 18650	INDEX SAMPLE 425 18479	INDEX SAMPLE 426 18476
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	GARFIELD	GARFIELD	GRADY
FIELD.....	KREMLIN SW	SOONER TREND	CHICKASHA
WELL NAME.....	CLARA NO. 1-27	T. W. HODGEN NO. 2	COWBOY "B" NO. 1
API.....			
LOCATION.....	SEC. 27, T24N, R7W	SEC. 33, T22N, R8W	SEC. 35, T7N, R7W
OWNER.....	INTERSTATE OIL & GAS, INC.	SUN EXPLORATION & PRODUCTION C	APACHE CORP.
COMPLETED.....	87/10/03	87/07/20	84/08/13
SAMPLED.....	88/07/29	87/11/09	87/11/12
FORMATION.....	MISS-OSWEGO	PENN-CHEROKEE	PENN-HOXBAR
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	5498	6392	8110
WELLHEAD PRESSURE, PSIG.....	610	1440	1320
OPEN FLOW, MCFD.....	120	520	1450
COMPONENT, MOLE PCT			
METHANE.....	89.1	91.6	91.3
ETHANE.....	4.9	3.9	3.1
PROPANE.....	2.3	1.1	1.3
N-BUTANE.....	0.6	0.2	0.4
ISOBUTANE.....	0.3	0.1	0.0
N-PENTANE.....	0.3	0.0	0.2
ISOPENTANE.....	TRACE	0.2	0.1
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.0	0.1
NITROGEN.....	1.8	2.2	3.2
OXYGEN.....	TRACE	0.1	TRACE
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.4	0.2
HELIUM.....	0.10	0.12	0.10
HEATING VALUE*.....	1104	1047	1045
SPECIFIC GRAVITY.....	0.636	0.607	0.612

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

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

	INDEX SAMPLE 18019	INDEX SAMPLE 18315	INDEX SAMPLE 19009
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	GRADY	GRADY	GRADY
FIELD.....	CHICKASHA NW	GOLDEN TREND	GOLDEN TREND
WELL NAME.....	MABEL-LUCEIL NO. 1-30	BROWN NO. 1-27	RIDDLE NO. 1
API.....			35-051-22116
LOCATION.....	SEC. 30, T7N, R7W	SEC. 27, T5N, R5W	SEC. 32, T5N, R5W
OWNER.....	MARSHALL OIL CORP.	PETROCORP, INC.	HOME-STAKE ROYALTY CORP.
COMPLETED.....	84/06/19	86/01/16	90/03/07
SAMPLED.....	--/--/00	87/02/25	90/08/22
FORMATION.....	PENN-WADE	PENN-CUNNINGHAM & BOATWRIGHT	PENN-PRIMROSE
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	8538	9925	10064
WELLHEAD PRESSURE, PSIG...	1700	3161	1620
OPEN FLOW, MCFD.....	2225	2547	2784
COMPONENT, MOLE PCT			
METHANE.....	91.8	86.5	87.7
ETHANE.....	2.9	7.2	5.3
PROPANE.....	1.3	3.0	2.6
N-BUTANE.....	0.5	0.7	0.8
ISOBUTANE.....	0.1	0.5	0.2
N-PENTANE.....	0.4	0.1	0.2
ISOPENTANE.....	TRACE	0.2	0.2
CYCLOPENTANE.....	0.2	TRACE	0.0
HEXANES PLUS.....	0.5	0.2	0.1
NITROGEN.....	1.5	1.1	2.5
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	0.0	0.0	0.1
HYDROGEN.....	0.1	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.3	0.1
HELIUM.....	0.09	0.05	0.10
HEATING VALUE*.....	1086	1147	1112
SPECIFIC GRAVITY.....	0.624	0.655	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18330	INDEX SAMPLE 17981	INDEX SAMPLE 18791
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	GRADY	GRADY	GRANT
FIELD.....	NOT GIVEN	POCASSET	HAWLEY E
WELL NAME.....	MEDELL NO. 1-35	MYERS NO. 2-2	KENT TRUST NO. 1
API.....			
LOCATION.....	SEC. 35, T3N, R7W	SEC. 2, T8N, R8W	SEC. 16, T26N, R7W
OWNER.....	SOHIO PETROLEUM CO.	CHEVRON U.S.A., INC.	SUN EXPLORATION & PRODUCTION C
COMPLETED.....	85/06/20	85/12/30	88/12/22
SAMPLED.....	86/09/12	86/02/05	89/04/25
FORMATION.....	PENN-SPRINGER	PENN-MORROW	DEVO-MISENER
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	18842	12706	6011
WELLHEAD PRESSURE, PSIG...	5684	6742	6011
OPEN FLOW, MCFD.....	2455	2332	1900
COMPONENT, MOLE PCT			
METHANE.....	96.5	79.7	79.8
ETHANE.....	1.1	4.5	9.0
PROPANE.....	0.2	1.4	3.9
N-BUTANE.....	0.0	0.4	1.2
ISOBUTANE.....	0.1	0.1	0.6
N-PENTANE.....	0.0	0.2	0.6
ISOPENTANE.....	0.0	0.1	0.1
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.3	0.3
NITROGEN.....	0.7	5.9	3.8
OXYGEN.....	0.0	1.5	0.1
ARGON.....	TRACE	0.1	TRACE
HYDROGEN.....	TRACE	0.1	0.3
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.2	5.6	0.1
HELIUM.....	0.03	0.02	0.08
HEATING VALUE*.....	1006	973	1184
SPECIFIC GRAVITY.....	0.577	0.701	0.705

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

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

	INDEX SAMPLE 18783	INDEX SAMPLE 18790	INDEX SAMPLE 18205
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	GRANT	GRANT	GRANT
FIELD.....	HAWLEY NE	HAWLEY SE	MANCHESTER S
WELL NAME.....	GERRY LOU NO. 1	KRAUS NO. 1	MANCHESTER NO. 1
API.....			
LOCATION.....	SEC. 25, T27N, R8W	SEC. 5, T26N, R7W	SEC. 14, T29N, R8W
OWNER.....	BHP PETROLEUM (AMERICAS), INC.	SUN EXPLORATION & PRODUCTION C	TXO PRODUCTION CORP.
COMPLETED.....	89/--/00	89/02/22	85/08/09
SAMPLED.....	89/04/07	89/04/25	86/--/08
FORMATION.....	DEVO-MISENER	DEVO-MISENER	PENN-TONKAWA
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	NOT GIVEN		
WELLHEAD PRESSURE, PSIG...	1480	5985	3935
OPEN FLOW, MCFD.....	1800	921	1200
COMPONENT, MOLE PCT		2900	1400
METHANE.....	83.4	79.5	86.0
ETHANE.....	6.1	7.9	5.0
PROPANE.....	2.2	3.8	2.4
N-BUTANE.....	1.0	1.4	1.1
ISOBUTANE.....	0.2	0.2	0.2
N-PENTANE.....	0.6	1.1	0.6
ISOPENTANE.....	0.0	0.5	0.1
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.2	0.2	0.4
NITROGEN.....	5.7	4.9	3.7
OXYGEN.....	0.1	0.1	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.2	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	0.2
HELIUM.....	0.16	0.12	0.13
HEATING VALUE*.....	1092	1178	1122
SPECIFIC GRAVITY.....	0.669	0.712	0.664

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

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

	INDEX SAMPLE 18689	INDEX SAMPLE 18104	INDEX SAMPLE 18768
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	GRANT	GRANT	GRANT
FIELD.....	NASH NE	RENFROW E	VICAR N
WELL NAME.....	TRENTON "B" UNIT NO. 1	ENGLAND 1 NO. 1	KIRK NO. 1-22
API.....			
LOCATION.....	SEC. 17, T26N, R7W	SEC. 3, T28N, R4W	SEC. 22, T26N, R7W
OWNER.....	MOBIL OIL CORP.	WIL-MC OIL CORP.	GUNGOLL, CARL E., EXPLORATION,
COMPLETED.....	88/04/06	85/09/00	87/06/13
SAMPLED.....	88/11/11	86/05/09	88/08/17
FORMATION.....	DEVO-MISENER	PENN-DREAD LINE	PENN-UNCONFORMITY
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	5969	3123	5256
WELLHEAD PRESSURE, PSIG....	NOT GIVEN	1300	1000
OPEN FLOW, MCFD.....	2396	6300	85
COMPONENT, MOLE PCT			
METHANE.....	80.3	79.1	77.4
ETHANE.....	5.9	4.5	5.9
PROPANE.....	1.0	2.8	4.2
N-BUTANE.....	4.3	1.1	2.2
ISOBUTANE.....	0.0	0.2	1.5
N-PENTANE.....	0.0	0.6	1.1
ISOPENTANE.....	3.0	0.2	1.0
CYCLOPENTANE.....	TRACE	0.1	0.6
HEXANES PLUS.....	0.1	0.3	1.3
NITROGEN.....	4.4	10.6	3.7
OXYGEN.....	0.1	0.0	0.6
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.2	0.7
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.7	0.2	0.0
HELIUM.....	0.13	0.25	0.08
HEATING VALUE*.....	1228	1052	1300
SPECIFIC GRAVITY.....	0.747	0.694	0.778

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18946	INDEX SAMPLE 18484	INDEX SAMPLE 18939
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	HARPER	HARPER	HARPER
FIELD.....	BOILING SPRINGS N	LOVEDALE	NOT GIVEN
WELL NAME.....	SMITH NO. 1-19	SELMAN NO. A1-32	AMBER NO. 1
API.....	35-059-35345		
LOCATION.....	SEC. 19, T25N, R20W	SEC. 32, T27N, R20W	SEC. 22, T25N, R22W
OWNER.....	MIDWESTERN EXPLORATION CO.	STEWART, K. PETROLEUM CORP.	MEWBOURNE OIL CO.
COMPLETED.....	90/01/16	87/03/02	89/07/01
SAMPLED.....	90/04/16	87/11/19	90/03/19
FORMATION.....	MISS-CHESTER U	PENN-MORROW	PENN-MORROW L
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	7004	5882	7314
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	2100	2200
OPEN FLOW, MCFD.....	6200	1800	1548
COMPONENT, MOLE PCT			
METHANE.....	89.4	94.2	94.1
ETHANE.....	3.5	3.2	2.2
PROPANE.....	1.5	0.9	0.6
N-BUTANE.....	0.0	0.2	0.1
ISOBUTANE.....	1.0	0.1	0.2
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.3	0.3	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.8	0.6	1.4
OXYGEN.....	1.8	TRACE	0.5
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	TRACE	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.4	0.7
HELIUM.....	0.10	0.06	0.07
HEATING VALUE*.....	1055	1057	1022
SPECIFIC GRAVITY.....	0.631	0.596	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 442 18676	INDEX SAMPLE 443 18278	INDEX SAMPLE 444 18102
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	HASKELL	HASKELL	HUGHES
FIELD.....	KINTA	WHITEFIELD S	GERTY
WELL NAME.....	SAPPHINGTON NO. 2	MOORE-TUCKER NO. 1-29	SESSUMS NO. 1-29
API.....			
LOCATION.....	SEC. 22, T7N, R19E	SEC. 32, T9N, R20E	SEC. 29, T5N, R10E
OWNER.....	SAMSON RESOURCES CO.	ROYE REALTY & DEVELOPING, INC.	SAMEDAN OIL CORP.
COMPLETED.....	88/04/00	85/06/25	85/01/22
SAMPLED.....	88/10/04	86/12/03	86/05/07
FORMATION.....	PENN-HARTSHORNE	DEVO-HUNTON	PENN-CROMWELL
GEOLOGIC PROVINCE CODE.....	345	345	355
DEPTH, FEET.....	2709	4970	4622
WELLHEAD PRESSURE, PSIG.....	608	1500	710
OPEN FLOW, MCFD.....	1200	3941	1226
COMPONENT, MOLE PCT			
METHANE.....	89.6	94.0	89.3
ETHANE.....	6.9	0.9	5.5
PROPANE.....	2.1	0.1	1.5
N-BUTANE.....	0.3	0.0	0.4
ISOBUTANE.....	0.4	TRACE	TRACE
N-PENTANE.....	0.0	0.0	0.3
ISOPENTANE.....	0.2	TRACE	0.0
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.3
NITROGEN.....	0.3	3.2	2.0
OXYGEN.....	0.1	0.1	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	1.5	0.2
HELIUM.....	0.04	0.08	0.12
HEATING VALUE*.....	1115	971	1088
SPECIFIC GRAVITY.....	0.626	0.587	0.626

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18142	INDEX SAMPLE 18580	INDEX SAMPLE 18607
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	HUGHES	HUGHES	HUGHES
FIELD.....	GERTY	HILL TOP W	RIVER BEND
WELL NAME.....	R. F. LAWRENCE NO.1	MOBIL NO. 1	EDWARDS NO. 1-9
API.....			
LOCATION.....	SEC. 9, T4N, R10E	SEC. 20, T5N, R11E	SEC. 9, T6N, R10E
OWNER.....	MUREXCO PETROLEUM CORP.	DIAMOND, HARRY H., INC.	QUINTANA PETROLEUM CORP.
COMPLETED.....	85/04/15	87/09/17	87/02/11
SAMPLED.....	86/07/05	88/04/00	88/04/14
FORMATION.....	PENN-CROMWELL	PENN-HARTSHORNE	PENN-HARTSHORNE
GEOLOGIC PROVINCE CODE.....	355	355	355
DEPTH, FEET.....	6086	3286	3018
WELLHEAD PRESSURE, PSIG.....	2259	240	680
OPEN FLOW, MCFD.....	4509	1400	990
COMPONENT, MOLE PCT			
METHANE.....	85.1	92.1	86.9
ETHANE.....	6.6	3.9	3.6
PROPANE.....	2.3	1.5	2.4
N-BUTANE.....	1.0	0.2	1.4
ISOBUTANE.....	0.2	0.4	0.0
N-PENTANE.....	0.7	0.0	0.1
ISOPENTANE.....	0.2	0.1	0.8
CYCLOPENTANE.....	0.2	0.0	0.0
HEXANES PLUS.....	0.5	0.0	0.0
NITROGEN.....	2.2	1.5	4.4
OXYGEN.....	0.4	0.0	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.3	0.3
HELIUM.....	0.07	0.11	0.15
HEATING VALUE*.....	1152	1066	1092
SPECIFIC GRAVITY.....	0.677	0.608	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19046	INDEX SAMPLE 18708	INDEX SAMPLE 18321
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	HUGHES	KINGFISHER	KINGFISHER
FIELD.....	WETUMKA SE	REEDING S	SOONER TREND
WELL NAME.....	BRAY NO. 1	GREENFIELD NO. 25-2	NORRIS "A" NO. 1
API.....	35-063-22855		
LOCATION.....	SEC. 25, T9N, R10E	SEC. 25, T15N, R6W	SEC. 8, T19N, R8W
OWNER.....	G R B RESOURCES, INC.	BOGERT OIL CO.	CITIES SERVICE OIL & GAS CORP.
COMPLETED.....	89/10/20	88/01/06	86/10/10
SAMPLED.....	90/11/00	88/12/13	87/03/02
FORMATION.....	PENN-RED FORK	PENN-SKINNER	ORDO-SIMPSON
GEOLOGIC PROVINCE CODE...	355	360	360
DEPTH, FEET.....	1310	7079	8490
WELLHEAD PRESSURE, PSIG.....	600	1980	2785
OPEN FLOW, MCFD.....	1500	1979	3731
COMPONENT, MOLE PCT			
METHANE.....	90.5	87.0	81.6
ETHANE.....	1.3	5.6	7.9
PROPANE.....	0.6	2.8	3.8
N-BUTANE.....	0.0	0.9	1.2
ISOBUTANE.....	0.1	0.1	0.7
N-PENTANE.....	0.0	0.5	0.5
ISOPENTANE.....	TRACE	0.0	0.2
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.3	0.3
NITROGEN.....	7.1	2.1	3.1
OXYGEN.....	0.1	TRACE	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.6	0.5
HELIUM.....	0.21	0.07	0.06
HEATING VALUE*.....	959	1127	1180
SPECIFIC GRAVITY.....	0.599	0.657	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 451 18894	INDEX SAMPLE 452 18895	INDEX SAMPLE 453 18077
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	LATIMER	LATIMER	LATIMER
FIELD.....	HARTSHORNE S	HARTSHORNE S	PANOLA
WELL NAME.....	PATTERSON UNIT NO. 1-C	PATTERSON UNIT NO. 1-T	LIVELY NO. 1-6
API.....			
LOCATION.....	SEC. 27, T4N, R17E	SEC. 27, T4N, R17E	SEC. 6, T5N, R20E
OWNER.....	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	FORTUNA ENERGY CORP.
COMPLETED.....	89/05/31	89/05/31	84/12/11
SAMPLED.....	90/01/00	90/01/00	86/04/16
FORMATION.....	PENN-SPIRO	PENN-WAPANUCKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	11643
WELLHEAD PRESSURE, PSIG.....	4100	4100	5950
OPEN FLOW, MCFD.....	14500	14500	5984
COMPONENT, MOLE PCT			
METHANE.....	96.1	96.1	95.8
ETHANE.....	1.3	1.4	1.2
PROPANE.....	0.2	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.1	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.4	0.3	0.2
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	TRACE	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.9	1.9	2.4
HELIUM.....	0.03	0.03	0.03
HEATING VALUE*.....	1003	1007	995
SPECIFIC GRAVITY.....	0.583	0.584	0.584

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

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

	INDEX SAMPLE 19036	INDEX SAMPLE 18505	INDEX SAMPLE 18774
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	LATIMER	LE FLORE	LE FLORE
FIELD.....	PANOLA	CAMERON	CEDARS W
WELL NAME.....	LIVELY NO. 2-6	ROLLIN NO. 1	SATTERFIELD NO. 2
API.....	35-077-20534		
LOCATION.....	SEC. 6, T5N, R20E	SEC. 25, T8N, R26E	SEC. 14, T9N, R26E
OWNER.....	M E C, INC.	SAMSON RESOURCES CO.	HANNA OIL & GAS CO.
COMPLETED.....	90/06/05	87/06/10	88/01/23
SAMPLED.....	90/10/05	87/12/15	89/03/31
FORMATION.....	PENN-CECIL	MISS-RED OAK	PENN-ATOKA M-SPIRO
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	11952	5836	5389
WELLHEAD PRESSURE, PSIG.....	5800	695	1490
OPEN FLOW, MCFD.....	900	1350	351
COMPONENT, MOLE PCT			
METHANE.....	96.0	96.4	95.8
ETHANE.....	1.0	1.6	1.4
PROPANE.....	0.2	0.2	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	TRACE	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	TRACE	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.8	0.3	1.3
OXYGEN.....	0.2	0.1	0.3
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.7	1.3	0.9
HELIUM.....	0.02	0.07	0.06
HEATING VALUE*.....	995	1010	1002
SPECIFIC GRAVITY.....	0.582	0.578	0.579

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

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

	INDEX 457 SAMPLE 18431	INDEX 458 SAMPLE 18856	INDEX 459 SAMPLE 18022
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	LE FLORE	LINCOLN	LINCOLN
FIELD.....	SPIRO	DAVENPORT DISTRICT W	SPORN
WELL NAME.....	FOXWOOD NO. 2	TISLOW NO. 1	HERT NO. 22-1
API.....			
LOCATION.....	SEC. 6, T9N, R25E	SEC. 6, T14N, R5E	SEC. 22, T17N, R3E
OWNER.....	SAMSON RESOURCES CO.	WITTY, TOM	PHILLIPS OIL OPERATING CO.
COMPLETED.....	87/01/14	87/09/15	84/05/00
SAMPLED.....	87/09/08	89/09/20	86/02/10
FORMATION.....	PENN-GILCREASE	PENN-RED FORK	PENN-RED FORK
GEOLOGIC PROVINCE CODE...	345	355	355
DEPTH, FEET.....	5067	3950	4052
WELLHEAD PRESSURE, PSIG...	396	1350	460
OPEN FLOW, MCFD.....	11324	1780	1076
COMPONENT, MOLE PCT			
METHANE.....	96.2	80.6	75.6
ETHANE.....	1.1	6.2	7.9
PROPANE.....	0.1	3.2	4.8
N-BUTANE.....	0.0	0.5	2.0
ISOBUTANE.....	0.1	1.1	0.3
N-PENTANE.....	0.0	0.0	1.1
ISOPENTANE.....	0.0	TRACE	0.3
CYCLOPENTANE.....	0.0	0.0	0.5
HEXANES PLUS.....	0.0	0.0	1.0
NITROGEN.....	0.7	8.0	6.2
OXYGEN.....	TRACE	0.1	TRACE
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.7	0.2	0.1
HELIUM.....	0.08	0.09	0.08
HEATING VALUE*.....	1000	1068	1240
SPECIFIC GRAVITY.....	0.581	0.677	0.763

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 460 18669	INDEX SAMPLE 461 18061	INDEX SAMPLE 462 18726
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	LOGAN	LOGAN	MAJOR
FIELD.....	COYLE S	ELK HORN	CAMPBELL
WELL NAME.....	OKLAHOMA STATE NO. 1-36	CARPENTER NO. 1	RANDALL "A" NO. 1-20
API.....			
LOCATION.....	SEC. 36, T17N, R1E	SEC. 1, T19N, R3W	SEC. 20, T23N, R15W
OWNER.....	KAISER INVESTMENTS	ONYX ENERGY CORP.	ANADARKO PETROLEUM CORP.
COMPLETED.....	88/04/04	85/12/09	87/11/09
SAMPLED.....	88/09/09	86/04/04	89/01/23
FORMATION.....	PENN-CLEVELAND	PERM-VERTZ	MISS---
GEOLOGIC PROVINCE CODE.....	355	355	360
DEPTH, FEET.....	3800	2392	7054
WELLHEAD PRESSURE, PSIG.....	650	930	2200
OPEN FLOW, MCFD.....	100	1965	1290
COMPONENT, MOLE PCT			
METHANE.....	70.8	68.7	92.6
ETHANE.....	9.6	4.5	3.3
PROPANE.....	6.8	2.9	1.2
N-BUTANE.....	2.2	1.5	0.4
ISOBUTANE.....	1.0	0.2	0.1
N-PENTANE.....	0.9	1.0	0.2
ISOPENTANE.....	0.1	TRACE	TRACE
CYCLOPENTANE.....	0.1	0.3	0.1
HEXANES PLUS.....	0.4	0.8	0.2
NITROGEN.....	7.9	19.4	1.2
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.2	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.4
HELIUM.....	0.06	0.31	0.05
HEATING VALUE*.....	1241	1005	1069
SPECIFIC GRAVITY.....	0.784	0.754	0.610

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 463 SAMPLE 18572	INDEX 464 SAMPLE 18555	INDEX 465 SAMPLE 18756
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	MAJOR	MAJOR	MAJOR
FIELD.....	CAMPBELL E	CHEYENNE VALLEY	CHEYENNE VALLEY W
WELL NAME.....	BANE "B" NO. 2	KLIEWER "A" NO. 3	BALL HOUK NO. 1-9
API.....			
LOCATION.....	SEC. 35, T23, R15	SEC. 11, T22N, R13W	SEC. 9, T21N, R15W
OWNER.....	ANADARKO PETROLEUM CORP.	BHP PETROLEUM (AMERICAS), INC.	EARLSBORO ENERGIES CORP.
COMPLETED.....	87/11/00	87/07/26	87/06/16
SAMPLED.....	88/04/07	88/03/08	89/02/22
FORMATION.....	MISS-OSWEGO & CHESTER	MISS-OSAGE	MISS-CHESTER-INOLA
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	6148	7102	7201
WELLHEAD PRESSURE, PSIG.....	2150	850	1100
OPEN FLOW, MCFD.....	650	257000	690
COMPONENT, MOLE PCT			
METHANE.....	93.6	84.6	87.7
ETHANE.....	3.4	7.4	6.5
PROPANE.....	1.3	3.8	2.2
N-BUTANE.....	0.2	1.3	0.7
ISOBUTANE.....	0.4	0.5	0.6
N-PENTANE.....	0.0	0.4	0.2
ISOPENTANE.....	0.2	0.4	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.2	0.2
NITROGEN.....	0.5	1.3	1.1
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.2	0.4
HELIUM.....	0.04	0.04	0.06
HEATING VALUE*.....	1073	1189	1134
SPECIFIC GRAVITY.....	0.602	0.681	0.650

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

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

	INDEX SAMPLE 466 18202	INDEX SAMPLE 467 18595	INDEX SAMPLE 468 18983
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	MAJOR	MCCLAIN	MCINTOSH
FIELD.....	ROSCO NW	WISHBONE AREA	NEEDHAM NE
WELL NAME.....	HUBBLE "A" NO. 6-20	CHIEF NO. 1-34	STEWART NO. 1
API.....			35-091-20854
LOCATION.....	SEC. 20, T22N, R13W	SEC. 34, T10N, R4W	SEC. 9, T11N, R18E
OWNER.....	ANADARKO PETROLEUM CORP.	SANTA FE ENERGY CO.	TEXAKOMA OIL & GAS CORP.
COMPLETED.....	86/02/22	87/06/23	89/12/20
SAMPLED.....	86/08/20	88/05/11	90/06/26
FORMATION.....	PENN-& MISS	ORDO-WILCOX	PENN-POPE CHAPEL
GEOLOGIC PROVINCE CODE.....	360	355	355
DEPTH, FEET.....	7290	9275	1093
WELLHEAD PRESSURE, PSIG.....	1800	1850	550
OPEN FLOW, MCFD.....	443	4000	1500
COMPONENT, MOLE PCT			
METHANE.....	82.4	85.8	87.8
ETHANE.....	8.1	6.6	6.3
PROPANE.....	3.9	2.7	1.7
N-BUTANE.....	1.7	0.8	0.2
ISOBUTANE.....	0.3	0.4	0.1
N-PENTANE.....	0.9	0.3	0.0
ISOPENTANE.....	0.3	0.2	0.0
CYCLOPENTANE.....	0.2	0.0	0.0
HEXANES PLUS.....	0.5	0.1	0.0
NITROGEN.....	1.0	2.6	3.5
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.1	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.4	0.1
HELIUM.....	0.03	0.05	0.14
HEATING VALUE*.....	1233	1126	1060
SPECIFIC GRAVITY.....	0.709	0.659	0.624

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 469 18248	INDEX SAMPLE 470 17980	INDEX SAMPLE 471 18979
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	MUSKOGEE	MUSKOGEE	MUSKOGEE
FIELD.....	BOYNTON	TAFT DISTRICT	WAINWRIGHT
WELL NAME.....	TAC NO. 1	MILLIGAN NO. 4	WARNER-BORUM-WARNER NE NO. 1
API.....			35-101-22640
LOCATION.....	SEC. 27, T14N, R16E	SEC. 17, T15N, R17E	SEC. 25, T14N, R16E
OWNER.....	ROCKET ENERGY DRILLING	GENERAL MINING CORP.	F. D. & JACK OIL CO.
COMPLETED.....	86/06/20	84/10/00	89/12/00
SAMPLED.....	86/10/28	--/--/00	90/06/00
FORMATION.....	PENN-DUTCHER	PENN-HARTSHORNE	PENN-CROMWELL
DEPTH, FEET.....	355	355	355
WELLHEAD PRESSURE, PSIG.....	1800	1050	2140
OPEN FLOW, MCFD.....	600	220	950
COMPONENT, MOLE PCT	2200	750000	1000
METHANE.....	82.9	96.8	79.6
ETHANE.....	7.9	0.5	13.2
PROPANE.....	3.2	0.1	5.1
N-BUTANE.....	0.7	0.2	1.6
ISOBUTANE.....	0.3	0.1	0.4
N-PENTANE.....	0.1	0.2	0.0
ISOPENTANE.....	0.2	0.0	0.0
CYCLOPENTANE.....	0.0	TRACE	0.0
HEXANES PLUS.....	0.1	0.1	0.0
NITROGEN.....	3.4	1.3	0.0
OXYGEN.....	0.4	0.1	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.3	0.3	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.2	0.0
HELIUM.....	0.12	0.04	0.11
HEATING VALUE*.....	1117	1017	1242
SPECIFIC GRAVITY.....	0.664	0.575	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18011	INDEX SAMPLE 18060	INDEX SAMPLE 18026
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	NOBLE	OKFUSKEE	OKLAHOMA
FIELD.....	PERRY DISTRICT	CLEARVIEW DISTRICT	EDMOND NE
WELL NAME.....	VANN NO. 3	MCDONALD HEIRS NO. 1	SINGLETARY NO. 1-4
API.....			
LOCATION.....	SEC. 28, T21N, R1W	SEC. 14, T11N, R10E	SEC. 4, T13N, R2W
OWNER.....	MAY PETROLEUM, INC.	KWB PROPERTY MANAGEMENT, INC.	SCOUT ENERGY CORP.
COMPLETED.....	85/03/08	84/10/10	85/12/00
SAMPLED.....	86/03/10	86/04/09	86/03/24
FORMATION.....	PENN-OSWEGO	PENN-CROMWELL	PENN-SKINNER
GEOLOGIC PROVINCE CODE.....	355	355	355
DEPTH, FEET.....	4479	3197	5900
WELLHEAD PRESSURE, PSIG.....	1675	850	2000
OPEN FLOW, MCFD.....	1900	1600	500
COMPONENT, MOLE PCT			
METHANE.....	76.3	75.6	72.6
ETHANE.....	6.3	11.5	9.9
PROPANE.....	4.0	5.4	6.3
N-BUTANE.....	1.4	1.7	2.8
ISOBUTANE.....	0.3	0.3	0.5
N-PENTANE.....	0.8	0.7	2.1
ISOPENTANE.....	0.1	0.2	0.0
CYCLOPENTANE.....	0.4	0.1	1.1
HEXANES PLUS.....	0.8	0.4	2.5
NITROGEN.....	9.1	3.5	1.7
OXYGEN.....	TRACE	0.1	TRACE
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.1	0.2	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.3	0.1
HELIUM.....	0.14	0.09	0.06
HEATING VALUE*.....	1142	1243	1448
SPECIFIC GRAVITY.....	0.734	0.742	0.844

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18565	INDEX SAMPLE 18219	INDEX SAMPLE 18353
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	OKLAHOMA	OKMULGEE	OKMULGEE
FIELD.....	MIDDLE LUTHER	MORRIS S	NUYAKA
WELL NAME.....	ARTHUR ROOT NO. 2-35	WILLIE NO. 1-19	LOWE NO. 3-32
API.....			
LOCATION.....	SEC. 35, T14N, R1E	SEC. 19, T13N, R14E	SEC. 32, T13N, R11E
OWNER.....	CHERMAC ENERGY CORP.	GMG OIL & GAS CORP.	GMG OIL & GAS CORP.
COMPLETED.....	87/07/00	86/08/15	87/03/20
SAMPLED.....	88/03/10	86/09/19	87/04/23
FORMATION.....	PENN-CLEVELAND	PENN-BOOCH	PENN-DUTCHER
GEOLOGIC PROVINCE CODE.....	355	355	355
DEPTH, FEET.....	4225	1233	2492
WELLHEAD PRESSURE, PSIG.....	1675	130	400
OPEN FLOW, MCFD.....	6000	350	250
COMPONENT, MOLE PCT			
METHANE.....	72.4	85.2	72.8
ETHANE.....	9.3	7.7	11.0
PROPANE.....	8.2	2.2	6.6
N-BUTANE.....	3.8	0.5	1.4
ISOBUTANE.....	1.4	0.2	1.2
N-PENTANE.....	1.8	0.2	0.0
ISOPENTANE.....	0.0	0.1	0.5
CYCLOPENTANE.....	0.5	0.1	0.1
HEXANES PLUS.....	1.3	0.0	0.0
NITROGEN.....	1.1	3.4	5.9
OXYGEN.....	0.0	TRACE	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.0	0.3	0.2
HELIUM.....	0.04	0.08	0.10
HEATING VALUE*.....	1454	1098	1219
SPECIFIC GRAVITY.....	0.843	0.649	0.752

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 478 18683	INDEX SAMPLE 479 18155	INDEX SAMPLE 480 18068
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	OKMULGEE	OSAGE	PAYNE
FIELD.....	POLLYANA-TULSA S	MYERS DOME	SPORN NE
WELL NAME.....	ROOT NO. 1	MAZE NO. 7	ROBERT NO. 1-15
API.....			
LOCATION.....	SEC. 9, T15N, R12E	SEC. 12, T26N, R8E	SEC. 15, T17N R3E
OWNER.....	SHEPARD, JAMES E.	SERVICE DRILLING CO.	NONDORF OIL & GAS, INC.
COMPLETED.....	82/01/19	85/04/00	84/12/12
SAMPLED.....	88/10/24	86/07/15	86/04/15
FORMATION.....	PENN-DUTCHER	PENN-BIG LIME	PENN-RED FORK
GEOLOGIC PROVINCE CODE.....	355	355	355
DEPTH, FEET.....	2238	1799	3935
WELLHEAD PRESSURE, PSIG.....	210	380	1200
OPEN FLOW, MCFD.....	50000	175	1100
COMPONENT, MOLE PCT			
METHANE.....	68.9	75.6	71.3
ETHANE.....	12.1	7.2	6.2
PROPANE.....	7.6	2.9	4.4
N-BUTANE.....	0.0	0.9	2.9
ISOBUTANE.....	2.2	0.5	0.6
N-PENTANE.....	1.0	0.7	2.7
ISOPENTANE.....	0.0	0.2	0.6
CYCLOPENTANE.....	0.1	0.1	2.1
HEXANES PLUS.....	0.2	0.4	3.9
NITROGEN.....	7.7	10.7	5.0
OXYGEN.....	0.0	0.0	0.1
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.0	0.4	TRACE
HELIUM.....	0.15	0.37	0.07
HEATING VALUE*.....	1246	1080	1486
SPECIFIC GRAVITY.....	0.783	0.716	0.900

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 481 SAMPLE 18792	INDEX 482 SAMPLE 18793	INDEX 483 SAMPLE 18491
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	PITTSBURG	PITTSBURG	PITTSBURG
FIELD.....	BLOCKER SE	BLOCKER SE	BREWER S
WELL NAME.....	VAUGHN NO. 2-13	GOVERNMENT NO. 3A-7	PEARL "A" NO. 1
API.....			
LOCATION.....	SEC. 13, T6N, R16E	SEC. 7, T6N, R17E	SEC. 32, T4N, R14E
OWNER.....	EBERLY & MEADE, INC.	EBERLY & MEADE, INC.	TXO PRODUCTION CORP.
COMPLETED.....	89/01/09	88/10/05	84/11/00
SAMPLED.....	89/04/25	89/04/25	87/11/30
FORMATION.....	PENN-HARTSHORNE	PENN-ATOKA M	PENN-WAPANUCKA
GEOLOGIC PROVINCE CODE...	345	345	345
DEPTH, FEET.....	2174	7095	9725
WELLHEAD PRESSURE, PSIG.....	298	601	2220
OPEN FLOW, MCFD.....	2000	2600	2000
COMPONENT, MOLE PCT			
METHANE.....	93.9	96.2	95.3
ETHANE.....	3.4	1.5	0.4
PROPANE.....	0.7	0.2	TRACE
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.2	TRACE	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.1	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.1	0.3	1.1
OXYGEN.....	0.0	0.0	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.2	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	1.5	2.9
HELIUM.....	0.04	0.03	0.06
HEATING VALUE*.....	1038	1012	978
SPECIFIC GRAVITY.....	0.590	0.580	0.592

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

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

	INDEX SAMPLE 18827	INDEX SAMPLE 18828	INDEX SAMPLE 17960
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	PITTSBURG	PITTSBURG	PITTSBURG
FIELD.....	CHOCTAW THRUST	CHOCTAW THRUST	HAILEYVILLE SW
WELL NAME.....	GARRETT A NO. 1	GARRETT A NO. 1	VAN DYKE NO. 1
API.....			
LOCATION.....	SEC. 2, T3N, R16E	SEC. 2, T3N, R16E	SEC. 35, T4N, R15E
OWNER.....	AMOCO PRODUCTION CO.	AMOCO PRODUCTION CO.	SAMSON RESOURCES CO.
COMPLETED.....	89/--/00	89/--/00	85/10/30
SAMPLED.....	89/07/31	89/07/31	86/01/12
FORMATION.....	PENN-CROMWELL	PENN-SPIRO	PENN-ATOKA
GEOLOGIC PROVINCE CODE...	345	345	345
DEPTH, FEET.....	13882	13194	9000
WELLHEAD PRESSURE, PSIG...	5049	3690	2800
OPEN FLOW, MCFD.....	9000	6000	4400
COMPONENT, MOLE PCT			
METHANE.....	95.9	95.8	96.0
ETHANE.....	1.3	0.9	1.6
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.0	0.0	TRACE
ISOBUTANE.....	TRACE	0.1	0.0
N-PENTANE.....	0.0	0.0	TRACE
ISOPENTANE.....	0.2	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	TRACE
HEXANES PLUS.....	0.0	0.0	TRACE
NITROGEN.....	0.3	0.3	0.3
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.0	2.8	1.8
HELIUM.....	0.03	0.03	0.03
HEATING VALUE*.....	1007	993	1006
SPECIFIC GRAVITY.....	0.587	0.590	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 487 18992	INDEX SAMPLE 488 18637	INDEX SAMPLE 489 18989
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	PITTSBURG	PITTSBURG	PITTSBURG
FIELD.....	HAILEYVILLE SW	MCALESTER	MCALESTER SW
WELL NAME.....	SCOTT UNIT NO. 1	FIELDS NO. 1-26	CABLE NO. 3-18
API.....	35-121-21490		35-121-21510
LOCATION.....	SEC. 36, T4N, R15E	SEC. 26, T5W, R15E	SEC. 18, T4N, R15E
OWNER.....	AMOCO PRODUCTION CO.	MUSTANG PRODUCTION CO.	SANTA FE MINERALS, INC.
COMPLETED.....	89/11/09		90/01/17
SAMPLED.....	90/07/00	88/03/31	90/07/12
FORMATION.....	PENN-BRAZIL	MISS-RED OAK	PENN-ATOKA
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	6494	8384	7004
WELLHEAD PRESSURE, PSIG.....	2100	520	1580
OPEN FLOW, MCFD.....	7000	3256	1032
COMPONENT, MOLE PCT			
METHANE.....	92.9	95.5	95.2
ETHANE.....	3.1	1.0	2.5
PROPANE.....	1.0	0.2	0.6
N-BUTANE.....	0.1	0.0	0.0
ISOBUTANE.....	TRACE	TRACE	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	2.0	0.3	1.1
OXYGEN.....	0.6	0.0	0.0
ARGON.....	0.1	0.0	TRACE
HYDROGEN.....	0.1	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	2.9	0.5
HELIUM.....	0.04	0.06	0.05
HEATING VALUE*.....	1025	992	1027
SPECIFIC GRAVITY.....	0.595	0.590	0.583

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18724	INDEX SAMPLE 17986	INDEX SAMPLE 18279
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	PITTSBURG	POTTAWATOMIE	POTTAWATOMIE
FIELD.....	WILBURTON	MORVIN	TECUMSEH NW
WELL NAME.....	LEWIS UNIT NO. 3	AKERMAN NO. 1-32	ROBERTSON "B" NO. 1
API.....			
LOCATION.....	SEC. 12, T4N, R16E	SEC. 32, T9N, R3E	SEC. 6, T9N, R3E
OWNER.....	MARATHON OIL CO.	REGENCY EXPLORATION, INC.	ESTORIL PRODUCING CORP.
COMPLETED.....	87/11/26	84/02/02	86/01/03
SAMPLED.....	88/12/01	86/01/17	86/12/04
FORMATION.....	PENN-SPIRO-BASAL 2ND-ATOKA	PENN-BASAL	PENN-RED FORK
GEOLOGIC PROVINCE CODE...	345	355	355
DEPTH, FEET.....	12390	4710	4950
WELLHEAD PRESSURE, PSIG...	2502	1550	564
OPEN FLOW, MCFD.....	4145	500	1137
COMPONENT, MOLE PCT			
METHANE.....	94.8	67.8	72.0
ETHANE.....	0.7	7.0	9.4
PROPANE.....	0.1	3.6	4.7
N-BUTANE.....	0.0	1.0	1.1
ISOBUTANE.....	TRACE	0.5	0.6
N-PENTANE.....	0.0	0.1	0.4
ISOPENTANE.....	0.0	TRACE	0.0
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.2	0.2
NITROGEN.....	0.0	19.4	10.9
OXYGEN.....	0.0	0.1	0.3
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.2	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	TRACE	0.0
CARBON DIOXIDE.....	4.2	0.1	0.1
HELIUM.....	0.04	0.12	0.08
HEATING VALUE*.....	977	975	1108
SPECIFIC GRAVITY.....	0.599	0.738	0.735

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18323	INDEX SAMPLE 18062	INDEX SAMPLE 18490
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD.....	BERLIN	BERLIN N	BERLIN NE
WELL NAME.....	MACKEY NO. 1-3	SCHOU NO. 1-3	TAYLOR ESTATE NO. 1-27
API.....			
LOCATION.....	SEC. 3, T11N, R24W	SEC. 3, T12N, R23W	SEC. 27, T12N, R23W
OWNER.....	SOHIO PETROLEUM CO.	SOHIO PETROLEUM CO.	APACHE CORP.
COMPLETED.....	86/12/03	85/08/25	87/04/15
SAMPLED.....	87/03/05	86/04/09	87/12/01
FORMATION.....	PENN-MORROW U	PENN-MORROW	PENN-MORROW
GEOLOGIC PROVINCE CODE..	360	360	360
DEPTH, FEET.....	18203	16337	17288
WELLHEAD PRESSURE, PSIG..	9742	11500	12224
OPEN FLOW, MCFD.....	1660	13050	22451
COMPONENT, MOLE PCT			
METHANE.....	97.0	96.7	96.9
ETHANE.....	0.3	0.4	0.3
PROPANE.....	TRACE	0.1	TRACE
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.3	0.2	0.3
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.1	0.3	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	TRACE
CARBON DIOXIDE.....	2.2	2.4	2.3
HELIUM.....	0.02	0.01	0.01
HEATING VALUE*.....	988	990	995
SPECIFIC GRAVITY.....	0.578	0.581	0.582

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

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

	INDEX SAMPLE 18811	INDEX SAMPLE 18569	INDEX SAMPLE 18342
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD.....	CHEYENNE S	CHEYENNE SE	CHEYENNE SW
WELL NAME.....	KLOPFENSTEIN NO. 1-26	BOGGS NO. 2-10	SPROWLS NO. 3-28
API.....			
LOCATION.....	SEC. 26, T12N, R24W	SEC. 10, T12N, R23W	SEC. 28, T13N, R23W
OWNER.....	STANDARD OIL PRODUCTION CO.	APACHE CORP.	AN-SON CO.
COMPLETED.....	89/01/21	86/12/16	86/04/10
SAMPLED.....	89/07/05	88/04/07	87/03/25
FORMATION.....	PENN-MORROW	PENN-MORROW	PENN-RED FORK
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	18326	16911	13692
WELLHEAD PRESSURE, PSIG.....	7261	7154	5925
OPEN FLOW, MCFD.....	4155	3511	20459
COMPONENT, MOLE PCT			
METHANE.....	96.6	96.9	94.4
ETHANE.....	0.4	0.3	2.7
PROPANE.....	TRACE	TRACE	0.5
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.2
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.2	0.2	0.5
OXYGEN.....	0.0	0.0	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.7	2.5	1.5
HELIUM.....	0.02	0.02	0.00
HEATING VALUE*.....	986	988	1025
SPECIFIC GRAVITY.....	0.584	0.582	0.593

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY -

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 499 18611	INDEX SAMPLE 500 18618	INDEX SAMPLE 501 18806
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD.....	CHEYENNE W	CHEYENNE W	CHEYENNE W
WELL NAME.....	FRANCES NO. 1-22	THURMOND NO. 3-26	LESTER "C" NO. 1-9
API.....			
LOCATION.....	SEC. 22, T13N, R23W	SEC. 26, T13N, R24W	SEC. 9, T13N, R24W
OWNER.....	AN-SON CO.	APACHE CORP.	HELMERICH & PAYNE, INC.
COMPLETED.....	87/09/18	88/01/16	88/11/01
SAMPLED.....	88/06/09	88/06/20	89/05/25
FORMATION.....	PENN-CHEROKEE	PENN-CHEROKEE	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	13300	13390	14938
WELLHEAD PRESSURE, PSIG.....	1862	2660	1878
OPEN FLOW, MCFD.....	3253	1283	2412
COMPONENT, MOLE PCT			
METHANE.....	94.8	94.4	96.5
ETHANE.....	2.9	2.5	0.6
PROPANE.....	0.5	0.5	0.2
N-BUTANE.....	0.0	0.1	0.0
ISOBUTANE.....	0.0	0.2	0.3
N-PENTANE.....	0.2	0.0	0.0
ISOPENTANE.....	0.1	TRACE	0.3
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.1	0.0
NITROGEN.....	0.3	0.3	0.2
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.3	1.8	1.9
HELIUM.....	0.02	0.02	0.02
HEATING VALUE*.....	1035	1030	1015
SPECIFIC GRAVITY.....	0.592	0.598	0.588

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

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

	INDEX SAMPLE 18082	INDEX SAMPLE 18507	INDEX SAMPLE 18394
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD.....	DEMPSEY	DEMPSEY	HAMMON NW
WELL NAME.....	HIGGINS NO. 1-10	SHAW NO. 2-16	LAURENCE NO. 1
API.....			
LOCATION.....	SEC. 10, T12N, R24W	SEC. 16, T12N, R24W	SEC. 5, T13N, R21W
OWNER.....	SOHIO PETROLEUM CO.	KAISER-FRANCIS OIL CO.	APACHE CORP.
COMPLETED.....	85/12/31	87/07/02	83/09/04
SAMPLED.....	86/04/23	87/12/22	87/07/02
FORMATION.....	OLIG-PIERCE	PENN-MORROW	PENN-DES MOINES
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	17270	17432	12610
WELLHEAD PRESSURE, PSIG.....	8060	7750	4120
OPEN FLOW, MCFD.....	5858	2700	1900
COMPONENT, MOLE PCT			
METHANE.....	95.5	94.7	90.5
ETHANE.....	0.4	0.4	5.6
PROPANE.....	0.0	0.1	1.6
N-BUTANE.....	0.2	0.0	TRACE
ISOBUTANE.....	0.0	0.0	0.5
N-PENTANE.....	0.4	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.2	0.0	0.0
HEXANES PLUS.....	0.5	0.0	0.0
NITROGEN.....	0.5	1.6	0.5
OXYGEN.....	0.1	0.4	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.0	2.7	1.1
HELIUM.....	0.01	0.01	0.02
HEATING VALUE*.....	1032	969	1077
SPECIFIC GRAVITY.....	0.604	0.592	0.619

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19048	INDEX SAMPLE 17998	INDEX SAMPLE 18497
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD.....	HAMMON NW	MOOREWOOD NE	MULE TRAIN
WELL NAME.....	WILLIAMS NO. 3-17	SMITH "A" NO. 3-2	COBB NO. 2-22
API.....	35-129-21512		
LOCATION.....	SEC. 17, T15N, R21W	SEC. 3, T15N, R21W	SEC. 22, T15N, R23W
OWNER.....	APACHE CORP.	WOODS PETROLEUM CORP.	APACHE CORP.
COMPLETED.....	90/07/02	85/12/26	87/08/01
SAMPLED.....	90/11/06	86/02/26	87/12/10
FORMATION.....	PENN-PRUE	PENN-RED FORK	PENN-SKINNER
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	11201	11318	11263
WELLHEAD PRESSURE, PSIG.....	3359	3400	4105
OPEN FLOW, MCFD.....	5855	1200	5116
COMPONENT, MOLE PCT			
METHANE.....	84.0	81.3	84.8
ETHANE.....	8.0	8.7	8.8
PROPANE.....	3.3	4.1	3.4
N-BUTANE.....	1.0	1.2	0.5
ISOBUTANE.....	0.2	0.6	0.7
N-PENTANE.....	0.2	0.6	0.0
ISOPENTANE.....	0.1	0.5	0.1
CYCLOPENTANE.....	0.0	0.3	0.0
HEXANES PLUS.....	0.1	1.0	0.0
NITROGEN.....	2.6	0.6	0.6
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.8	0.9
HELIUM.....	0.03	0.02	0.03
HEATING VALUE*.....	1140	1256	1152
SPECIFIC GRAVITY.....	0.669	0.727	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18638	INDEX SAMPLE 18120	INDEX SAMPLE 17976
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD.....	NOT GIVEN	RANKIN SE	ROLL NE
WELL NAME.....	J. R. SIMMONS NO. 1-36	PURVIS NO. 2-30	HARPER STATE NO. 1
API.....			
LOCATION.....	SEC. 36, T12N, R23W	SEC. 30, T13N, R25W	SEC. 36, T16N, R24W
OWNER.....	DYCO PETROLEUM CORP.	WILLIFORD ENERGY CO.	HARPER OIL CO.
COMPLETED.....	88/03/02	85/04/05	82/05/09
SAMPLED.....	88/07/15	86/06/09	86/02/04
FORMATION.....	PENN-MORROW U	PENN-CHEROKEE	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	17394	13913	11340
WELLHEAD PRESSURE, PSIG.....	7100	1800	2000
OPEN FLOW, MCFD.....	2800	1991	1250
COMPONENT, MOLE PCT			
METHANE.....	96.8	94.1	82.6
ETHANE.....	0.4	3.1	9.8
PROPANE.....	0.1	0.6	4.1
N-BUTANE.....	0.0	0.3	1.0
ISOBUTANE.....	0.0	0.0	0.4
N-PENTANE.....	0.0	0.3	0.3
ISOPENTANE.....	0.0	0.0	0.2
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.4	0.2
NITROGEN.....	0.2	0.2	0.4
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.5	0.8	1.0
HELIUM.....	0.02	0.02	0.02
HEATING VALUE*.....	990	1072	1201
SPECIFIC GRAVITY.....	0.582	0.606	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17995	INDEX SAMPLE 19049	INDEX SAMPLE 18489
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	ROGER MILLS	ROGER MILLS
FIELD.....	STRONG CITY	STRONG CITY DISTRICT	SWEETWATER NE
WELL NAME.....	CORDUM "B" NO. 1	MOONEY NO. 1-26	W. W. BROWN NO. 1-26
API.....		35-129-21513	
LOCATION.....	SEC. 2, T14N, R22W	SEC. 26, T15N, R23W	SEC. 26, T12N, R25W
OWNER.....	TXO PRODUCTION CORP.	APACHE CORP.	SANGUINE, LTD.
COMPLETED.....	85/12/17	90/07/01	86/02/26
SAMPLED.....	86/02/22	90/11/06	87/11/24
FORMATION.....	PENN-RED FORK	PENN-PRUE-RED FORK	PENN-PURYEAR
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	12130	11244	17832
WELLHEAD PRESSURE, PSIG.....	5950	4350	8000
OPEN FLOW, MCFD.....	3100	1817	30000
COMPONENT, MOLE PCT			
METHANE.....	86.3	85.9	97.0
ETHANE.....	6.8	6.5	0.5
PROPANE.....	2.0	2.4	TRACE
N-BUTANE.....	0.4	1.0	0.0
ISOBUTANE.....	0.3	0.2	0.0
N-PENTANE.....	0.2	0.3	0.0
ISOPENTANE.....	0.1	0.2	0.0
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.2	0.2	0.0
NITROGEN.....	1.8	2.2	0.2
OXYGEN.....	0.4	0.0	TRACE
ARGON.....	TRACE	0.1	TRACE
HYDROGEN.....	0.1	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.3	1.0	2.2
HELIUM.....	0.02	0.03	0.01
HEATING VALUE*.....	1099	1121	992
SPECIFIC GRAVITY.....	0.653	0.663	0.580

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18085	INDEX SAMPLE 18423	INDEX SAMPLE 18605
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	ROGER MILLS	STEPHENS	STEPHENS
FIELD.....	SWEETWATER NW	MARLOW W	MARLOW W
WELL NAME.....	COFFEY NO. 1-30	LOUGHRIDGE NO. 1	MILLER NO. 1-18
API.....			
LOCATION.....	SEC. 30, T12N, R25W	SEC. 19, T2N, R8W	SEC. 18, T2N, R7W
OWNER.....	SOHIO PETROLEUM CO.	KAISER-FRANCIS OIL CO.	HELMERICH & PAYNE, INC.
COMPLETED.....	85/06/02	87/04/28	86/08/26
SAMPLED.....	86/04/22	87/08/12	88/06/02
FORMATION.....	PENN-MORROW	-CHEEK	PENN-COLINE
GEOLOGIC PROVINCE CODE.....	360	350	350
DEPTH, FEET.....	NOT GIVEN	4450	8618
WELLHEAD PRESSURE, PSIG.....	9580	1125	2450
OPEN FLOW, MCFD.....	10700	660	695
COMPONENT, MOLE PCT			
METHANE.....	94.9	87.9	79.7
ETHANE.....	0.5	4.7	7.8
PROPANE.....	0.1	2.2	4.0
N-BUTANE.....	0.3	0.7	2.7
ISOBUTANE.....	0.0	0.3	0.0
N-PENTANE.....	0.8	0.4	0.0
ISOPENTANE.....	0.0	0.0	1.4
CYCLOPENTANE.....	0.4	0.1	0.0
HEXANES PLUS.....	1.2	0.2	0.1
NITROGEN.....	0.1	3.2	3.8
OXYGEN.....	0.1	0.0	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.2	0.3	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.4	0.1	0.4
HELIUM.....	0.01	0.04	0.05
HEATING VALUE*.....	1094	1094	1207
SPECIFIC GRAVITY.....	0.628	0.640	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19047	INDEX SAMPLE 18081	INDEX SAMPLE 519
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	STEPHENS	STEPHENS	STEPHENS
FIELD.....	MILROY	SHO-VEL-TUM	SHO-VEL-TUM
WELL NAME.....	HEFNER NO. 1-10	PAYNE "T" NO. 1-2	J. J. MCCLANAHAN NO. 29
API.....	35-137-24820		
LOCATION.....	SEC. 10, T2S, R4W	SEC. 2, T1N, R5W	SEC. 35, T1S, R5W
OWNER.....	APACHE CORP.	TENNECO OIL EXP. & PROD. CO.	TEXACO INC.
COMPLETED.....	90/03/19	84/04/00	87/05/20
SAMPLED.....	90/11/06	86/04/17	88/06/27
FORMATION.....	ORDO-OIL CREEK	MISS-SYCAMORE	PENN-ALDRIDGE
GEOLOGIC PROVINCE CODE.....	350	350	350
DEPTH, FEET.....	7872	8372	2115
WELLHEAD PRESSURE, PSIG.....	1159	1650	630
OPEN FLOW, MCFD.....	20704	3270	2500
COMPONENT, MOLE PCT			
METHANE.....	77.2	60.1	79.3
ETHANE.....	8.1	8.4	8.4
PROPANE.....	4.6	4.3	6.7
N-BUTANE.....	3.1	5.3	2.3
ISOBUTANE.....	0.5	0.0	0.9
N-PENTANE.....	0.8	9.3	0.6
ISOPENTANE.....	0.4	1.5	0.3
CYCLOPENTANE.....	0.1	2.1	0.1
HEXANES PLUS.....	0.3	8.2	0.2
NITROGEN.....	4.5	0.0	1.0
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	0.2	0.0	0.0
HYDROGEN.....	TRACE	0.4	0.0
HYDROGEN SULFIDE**.....	0.3	0.0	0.0
CARBON DIOXIDE.....	0.0	0.5	0.1
HELIUM.....	0.06	0.04	0.02
HEATING VALUE*.....	1235	2011	1292
SPECIFIC GRAVITY.....	0.747	1.170	0.743

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 520 18673	INDEX SAMPLE 521 18704	INDEX SAMPLE 522 18316
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	STEPHENS	STEPHENS	TEXAS
FIELD.....	SHO-VEL-TUM	SHO-VEL-TUM	CARRICK GAS AREA
WELL NAME.....	VIOLA PICKLE "B" NO. 1	STODDARD "B" NO. 1	WESTMORELAND "C" NO. 2-26
API.....			
LOCATION.....	SEC. 5, T1N, R5W	SEC. 26, T1S, R5W	SEC. 26, T1N, R18ECM
OWNER.....	CHEVRON U.S.A., INC.	PHILLIPS PETROLEUM CO.	PLAINS PETROLEUM OPERATING CO.
COMPLETED.....	84/11/20	88/10/06	86/11/20
SAMPLED.....	88/09/13	88/12/09	87/02/27
FORMATION.....	PENN-ALDRIDGE	ORDO-TULIP CREEK	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	350	350	360
DEPTH, FEET.....	4162	6592	7002
WELLHEAD PRESSURE, PSIG.....	1375	2499	1353
OPEN FLOW, MCFD.....	9663	11199	4814
COMPONENT, MOLE PCT			
METHANE.....	85.1	80.7	95.7
ETHANE.....	5.4	6.0	1.8
PROPANE.....	2.9	3.3	0.6
N-BUTANE.....	1.0	1.5	TRACE
ISOBUTANE.....	0.4	0.4	0.2
N-PENTANE.....	0.5	0.8	0.0
ISOPENTANE.....	0.1	0.1	0.1
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.3	0.4	0.0
NITROGEN.....	4.1	5.9	1.4
OXYGEN.....	0.1	0.1	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.5	0.0
CARBON DIOXIDE.....	TRACE	0.1	0.3
HELIUM.....	0.08	0.10	0.05
HEATING VALUE*.....	1122	1139	1028
SPECIFIC GRAVITY.....	0.668	0.703	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17943	INDEX SAMPLE 18347	INDEX SAMPLE 18297
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	TEXAS	TEXAS	TEXAS
FIELD.....	GUYMON NW	GUYMON S	HOOKER E
WELL NAME.....	CHENAULT "A" NO. 2	PEARL NO. 4	STRICKLIN NO. 3
API.....			
LOCATION.....	SEC. 2, T3N, R14ECM	SEC. 16, T1N, R15ECM	SEC. 35, T5N, R18ECM
OWNER.....	CITIES SERVICE OIL & GAS CORP.	PHILLIPS PETROLEUM CO.	APACHE CORP.
COMPLETED.....	85/07/09	85/03/25	84/06/23
SAMPLED.....	86/01/10	87/04/00	87/02/17
FORMATION.....	PENN-MORROW	PENN-CHEROKEE	MISS-CHESTER
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	6088	5956	6546
WELLHEAD PRESSURE, PSIG...	1358	NOT GIVEN	850
OPEN FLOW, MCFD.....	4224	1981	4345
COMPONENT, MOLE PCT			
METHANE.....	91.0	80.7	85.2
ETHANE.....	0.0	9.2	5.3
PROPANE.....	0.0	4.6	3.7
N-BUTANE.....	0.0	1.1	1.1
ISOBUTANE.....	0.0	0.4	0.7
N-PENTANE.....	0.0	0.2	0.3
ISOPENTANE.....	0.0	0.3	0.3
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.1	0.4
NITROGEN.....	8.0	2.9	2.3
OXYGEN.....	0.2	TRACE	0.1
ARGON.....	0.1	0.0	TRACE
HYDROGEN.....	TRACE	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.2	0.2
HELIUM.....	0.39	0.08	0.14
HEATING VALUE*.....	922	1183	1165
SPECIFIC GRAVITY.....	0.591	0.696	0.679

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 526 18270	INDEX SAMPLE 527 18393	INDEX SAMPLE 528 18200
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	TEXAS	WASHITA	WASHITA
FIELD.....	HOUGH S	BRAITHWAIT	BREATHWAITE
WELL NAME.....	BONNER "B" NO. 1	CHARTER NO. 2-10	STATE SCHMIDT "B" NO.1
API.....			
LOCATION.....	SEC. 9, T4N, R14E	SEC. 10, T11N, R18W	SEC. 3, T10N, R18W
OWNER.....	ANADARKO PETROLEUM CORP.	MERIDIAN OIL, INC.	EXXON CO., U.S.A.
COMPLETED.....	86/03/19	86/03/28	83/06/15
SAMPLED.....	86/11/00	87/07/02	86/08/13
FORMATION.....	PENN-MORROW C	PENN-DES MOINES&GRANITE WASH	PENN-GRANITE WASH
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	6148	12550	12759
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	2316	3000
OPEN FLOW, MCFD.....	3500	1768	370
COMPONENT, MOLE PCT			
METHANE.....	80.7	83.6	63.5
ETHANE.....	4.5	9.0	10.1
PROPANE.....	3.1	4.3	8.1
N-BUTANE.....	0.5	0.8	5.7
ISOBUTANE.....	0.5	0.7	1.1
N-PENTANE.....	0.2	TRACE	3.3
ISOPENTANE.....	0.0	0.2	2.7
CYCLOPENTANE.....	0.0	0.0	1.1
HEXANES PLUS.....	0.2	0.0	3.1
NITROGEN.....	9.8	0.8	0.4
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.1	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.5	0.9
HELIUM.....	0.25	0.03	0.03
HEATING VALUE*.....	1031	1180	1721
SPECIFIC GRAVITY.....	0.674	0.677	1.011

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 529 SAMPLE 18398	INDEX 530 SAMPLE 18801	INDEX 531 SAMPLE 18974
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	WASHITA	WASHITA	WASHITA
FIELD.....	CORDELL W	CORN-COLONY	SENTINEL
WELL NAME.....	BAIRD ESTATE NO. 1-11	KATIE A-11 NO. 1	CLUCK NO. 1-7
API.....			
LOCATION.....	SEC. 11, T9N, R18W	SEC. 11, T11N, R15W	SEC. 7, T8N, R19W
OWNER.....	POGO PRODUCING CO.	HELMERICH & PAYNE, INC.	KAISER-FRANCIS OIL CO.
COMPLETED.....	86/07/31	88/12/28	88/09/11
SAMPLED.....	87/07/08	89/05/24	90/06/06
FORMATION.....	PENN-GRANITE WASH	PENN-RED FORK	PENN-CUNNINGHAM-MORROW
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	9160	12675	12565
WELLHEAD PRESSURE, PSIG...	2508	2834	1700
OPEN FLOW, MCFD.....	1250	1660	1360
COMPONENT, MOLE PCT			
METHANE.....	89.7	90.7	93.7
ETHANE.....	5.0	4.8	3.7
PROPANE.....	2.4	1.4	0.7
N-BUTANE.....	0.5	0.3	0.7
ISOBUTANE.....	0.6	TRACE	TRACE
N-PENTANE.....	TRACE	0.2	0.0
ISOPENTANE.....	0.2	0.6	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.0
NITROGEN.....	1.1	1.3	0.5
OXYGEN.....	0.0	0.1	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.1	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.5	0.7
HELIUM.....	0.04	0.03	0.02
HEATING VALUE*.....	1115	1086	1057
SPECIFIC GRAVITY.....	0.633	0.624	0.599

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 532 SAMPLE 18702	INDEX 533 SAMPLE 18789	INDEX 534 SAMPLE 18280
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	WOODS	WOODS	WOODS
FIELD.....	CAPRON	CAPRON	FALKNER SE
WELL NAME.....	DICKEY NO. 1-24	ELIZABETH GAIL NO. 1	SCHULTZ NO. 2-22
API.....			
LOCATION.....	SEC. 24, T28N, R13W	SEC. 23, T28N, R13W	SEC. 22, T28N, R16W
OWNER.....	LADD PETROLEUM CORP.	SULLIVAN & CO.	PIONEER PRODUCTION CORP.
COMPLETED.....	87/02/23	88/07/20	85/05/30
SAMPLED.....	88/12/02	89/03/05	86/11/13
FORMATION.....	PENN-TONKAWA	NOT GIVEN	PERM-DEWEY
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	1463	4252	5136
WELLHEAD PRESSURE, PSIG.....	1625	2110	NOT GIVEN
OPEN FLOW, MCFD.....	3000	1205	1600
COMPONENT, MOLE PCT			
METHANE.....	81.1	81.6	84.2
ETHANE.....	3.4	3.3	5.0
PROPANE.....	2.0	1.8	3.7
N-BUTANE.....	0.6	0.4	1.3
ISOBUTANE.....	0.2	0.7	0.6
N-PENTANE.....	0.4	0.0	0.5
ISOPENTANE.....	TRACE	0.2	0.1
CYCLOPENTANE.....	0.0	0.0	0.2
HEXANES PLUS.....	0.2	0.1	0.4
NITROGEN.....	11.5	11.1	3.7
OXYGEN.....	0.1	0.0	0.1
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.2	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	TRACE
HELIUM.....	0.28	0.29	0.13
HEATING VALUE*.....	994	991	1157
SPECIFIC GRAVITY.....	0.667	0.660	0.685

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18709	INDEX SAMPLE 18564	INDEX SAMPLE 18208
STATE.....	OKLAHOMA	OKLAHOMA	OKLAHOMA
COUNTY.....	WOODS	WOODS	WOODWARD
FIELD.....	OAKDALE	WHITEHORSE N	VICI W
WELL NAME.....	VIRGIL NO. 1-21	ENGLE "B" NO. 1-6	ANN NO. 1-34
API.....			
LOCATION.....	SEC. 21, T23N, R13W	SEC. 6, T27N, R16W	SEC. 34, T20N, R21W
OWNER.....	D & J OIL CO.	ANADARKO PETROLEUM CORP.	SAWSON RESOURCES CO.
COMPLETED.....	88/07/12	87/08/00	85/10/01
SAMPLED.....	88/12/16	88/03/28	86/08/00
FORMATION.....	DEVO-HUNTON	MISS-OSWEGO	PENN-MORROW
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	6900	5750	10142
WELLHEAD PRESSURE, PSIG...	1500	1760	1310
OPEN FLOW, MCFD.....	350	980	1689
COMPONENT, MOLE PCT			
METHANE.....	85.0	85.3	84.3
ETHANE.....	7.6	7.6	8.4
PROPANE.....	3.4	3.4	3.3
N-BUTANE.....	1.6	0.8	1.0
ISOBUTANE.....	0.0	0.6	0.3
N-PENTANE.....	0.5	0.4	0.4
ISOPENTANE.....	0.2	0.2	0.1
CYCLOPENTANE.....	0.1	0.1	TRACE
HEXANES PLUS.....	0.2	0.2	0.2
NITROGEN.....	1.0	0.3	0.4
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	1.1	1.2
HELIUM.....	0.04	0.05	0.04
HEATING VALUE*.....	1180	1175	1166
SPECIFIC GRAVITY.....	0.676	0.676	0.675

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17962	INDEX SAMPLE 18189	INDEX SAMPLE 18732
STATE.....	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY.....	CENTRE	CLINTON	CLINTON
FIELD.....	SNOWSHOE	BEECH CREEK	BEND N
WELL NAME.....	TEXAS GULF NO. 1	TRACT 248 NO. 2	TURNER NO. 1
API.....			
LOCATION.....	BOGGS TWP.	SLAUGHTERING GROUND TRAIL	SEC. B, RENOV E QUAD., CHAPMA
OWNER.....	DAMSON OIL CORP.	EASTERN STATES EXPLORATION CO.	CABOT OIL & GAS CORP.
COMPLETED.....	77/12/05	86/01/30	88/--/00
SAMPLED.....	86/01/22	86/07/28	89/02/01
FORMATION.....	SILU-TUSCARORA	DEVO-ELK	DEVO-LOCK HAVEN
GEOLOGIC PROVINCE CODE.....	160	160	160
DEPTH, FEET.....	10049	3250	3318
WELLHEAD PRESSURE, PSIG.....	2990	NOT GIVEN	1200
OPEN FLOW, MCFD.....	2200	NOT GIVEN	1400
COMPONENT, MOLE PCT			
METHANE.....	74.6	95.3	95.5
ETHANE.....	2.4	2.5	2.3
PROPANE.....	0.1	0.1	0.2
N-BUTANE.....	0.1	0.1	0.0
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.1	0.1	0.0
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	TRACE	TRACE	0.0
HEXANES PLUS.....	TRACE	0.1	0.0
NITROGEN.....	22.3	1.1	0.8
OXYGEN.....	TRACE	0.1	0.1
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	TRACE	0.4	0.9
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	TRACE
HELIUM.....	0.21	0.18	0.11
HEATING VALUE*.....	809	1027	1021
SPECIFIC GRAVITY.....	0.662	0.577	0.569

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18700	INDEX SAMPLE 18962	INDEX SAMPLE 18106
STATE.....	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY.....	CLINTON	ERIE	LYCOMING
FIELD.....	SLAUGHTERING GROUND	ELK CREEK	PENNSYLVANIA STATE FOREST
WELL NAME.....	TG FOREST PRODUCTS NO. C-2	WILBUR KEAN NO. 1	PENN STATE TRACT 289 NO. 1
API.....			
LOCATION.....	SEC. E, HOWARD NW QUAD., BEECH	SEC. 1, ALBION QUAD	MC HENRY TWP., SLATE RUN QUAD.
OWNER.....	EASTERN STATES EXPLORATION CO.	TEXAS MERIDIAN OPERATING CO.,	TEXACO INC.
COMPLETED.....	88/06/01	82/12/04	86/08/10
SAMPLED.....	88/11/28	90/05/16	86/05/12
FORMATION.....	DEVO-ELK	DEVO-ORISKANY	ORDO-OSWEGO
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	2536	2442	13158
WELLHEAD PRESSURE, PSIG...	1680	6	2600
OPEN FLOW, MCFD.....	4920	NOT GIVEN	1700
COMPONENT, MOLE PCT			
METHANE.....	96.3	83.6	95.9
ETHANE.....	2.4	4.8	2.0
PROPANE.....	0.2	3.4	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.1	1.5	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.8	6.5	1.5
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	TRACE	0.2
HELIUM.....	0.13	0.29	0.06
HEATING VALUE*.....	1027	1069	1013
SPECIFIC GRAVITY.....	0.573	0.660	0.574

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18753	INDEX SAMPLE 19042	INDEX SAMPLE 18755
STATE.....	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY.....	SOMERSET	SOMERSET	SOMERSET
FIELD.....	GLESSNER	HIGGINS RUN	MOUNT DAVIS
WELL NAME.....	KEYSER NO. 1	LAMBERSON NO. 4141	COMMONWEALTH NO. 1
API.....			
LOCATION.....	SEC. F, BOSWELL QUAD., JENNER T	STOYSTOWN QUAD	SEC. 1, TRACT 280, MARKLETON Q
OWNER.....	CNG DEVELOPMENT CO.	CNG DEVELOPMENT CO.	CNG DEVELOPMENT CO.
COMPLETED.....	88/09/12	89/11/01	88/09/02
SAMPLED.....	89/02/21	90/10/12	89/02/21
FORMATION.....	DEVO-ORISKANY	DEVO-ORISKANY	DEVO-CHERT-ORISKANY
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	8662	8897	8618
WELLHEAD PRESSURE, PSIG...	3850	3500	3050
OPEN FLOW, MCFD.....	7500	4500	1500
COMPONENT, MOLE PCT			
METHANE.....	97.6	98.2	97.4
ETHANE.....	1.1	0.6	0.9
PROPANE.....	0.1	0.1	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.7	0.6	1.0
OXYGEN.....	0.1	0.1	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.3	0.4
HELIUM.....	0.03	0.03	0.04
HEATING VALUE*.....	1013	1010	1005
SPECIFIC GRAVITY.....	0.568	0.565	0.568

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18733	INDEX SAMPLE 18892	INDEX SAMPLE 19040
STATE.....	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY.....	SOMERSET	VENANGO	VENANGO
FIELD.....	OHIOPTYLE	BREEDTOWN	COOPERSTOWN
WELL NAME.....	COMMONWEALTH OF PENN. NO. 1	R. O. & D. L. SHAFFER NO. 1	PHYLLIS B. MOTTER NO. 1
API.....			
LOCATION.....	SEC. G, TRACT 111-A, KINGWOOD	SEC. E, CHERRYTREE DIST.	SEC. B., PLUM DIST., DEMPSEY T
OWNER.....	CABOT OIL & GAS CORP.	QUAKER STATE CORP.	MARK RESOURCES CORP.
COMPLETED.....	88/--/00	86/10/25	84/09/19
SAMPLED.....	89/02/02	90/01/02	90/10/12
FORMATION.....	DEVO-ONONDAGA-HUNTERSVILLE	SILU-MEDINA-GRINSBY	SILU-MEDINA
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	8040	5596	5300
WELLHEAD PRESSURE, PSIG...	2850	1190	1500
OPEN FLOW, MCFD.....	852	1200	1200
COMPONENT, MOLE PCT			
METHANE.....	97.0	93.1	92.2
ETHANE.....	1.3	2.6	3.4
PROPANE.....	0.1	0.3	0.9
N-BUTANE.....	0.0	0.2	0.2
ISOBUTANE.....	0.1	0.1	0.1
N-PENTANE.....	0.0	0.0	0.2
ISOPENTANE.....	0.2	0.3	0.0
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.1
NITROGEN.....	0.6	3.0	2.9
OXYGEN.....	0.1	0.0	0.1
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.4	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	TRACE	0.0
HELIUM.....	0.03	0.09	0.09
HEATING VALUE*.....	1022	1023	1039
SPECIFIC GRAVITY.....	0.569	0.593	0.601

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18916	INDEX SAMPLE 18383	INDEX SAMPLE 18879
STATE.....	PENNSYLVANIA	PENNSYLVANIA	PENNSYLVANIA
COUNTY.....	VENANGO	WESTMORELAND	WESTMORELAND
FIELD.....	CRAMERVEN	FORBES STATE FOREST	JOHNSTOWN
WELL NAME.....	CHRIS G. BELL NO. 1-A	COMMONWEALTH OF PENN. 353-2	MELLON BANK NA NO. 1
API.....			
LOCATION.....	CANAL TOWNSHIP	SEC. H, LIGONIER TWP.	SEC. C, LIGONIER DIST., LIGONI
OWNER.....	CABOT OIL & GAS CORP.	CNG DEVELOPMENT CO.	CNG DEVELOPMENT CO.
COMPLETED.....	89/07/22	87/02/04	88/--/00
SAMPLED.....	90/01/29	87/06/16	89/11/17
FORMATION.....	SILU-MEDINA	DEVO-HUNTERSVILLE	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	5250	8093	7704
WELLHEAD PRESSURE, PSIG...	1380	2900	1100
OPEN FLOW, MCFD.....	2909	15000	6500
COMPONENT, MOLE PCT			
METHANE.....	91.9	96.5	97.6
ETHANE.....	4.0	1.2	1.3
PROPANE.....	0.6	0.1	TRACE
N-BUTANE.....	0.2	0.0	0.0
ISOBUTANE.....	0.1	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.3	0.0	0.0
NITROGEN.....	2.7	1.7	0.7
OXYGEN.....	0.0	0.3	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.3	0.2
HELIUM.....	0.09	0.03	0.03
HEATING VALUE*.....	1042	1001	1013
SPECIFIC GRAVITY.....	0.603	0.572	0.567

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18136	INDEX SAMPLE 18298	INDEX SAMPLE 18079
STATE.....	SOUTH DAKOTA	TENNESSEE	TEXAS
COUNTY.....	HARDING	PICKETT	AUSTIN
FIELD.....	SHORT PINE HILLS W	NOT GIVEN	EL PLEASANT
WELL NAME.....	FEDERAL NO. 1-32	RAY HUDDLESTON NO. 1	O. R. BENTON NO. 1
API.....			
LOCATION.....	SEC. 32, T16N, R2E	SEC. 2, A-53	MOORE SUR., A-381
OWNER.....	INLAND OIL & GAS CORP.	OHIO KENTUCKY OIL CORP.	ANSCHUTZ CORP.
COMPLETED.....	85/10/14	86/04/26	85/01/16
SAMPLED.....	86/06/29	87/01/12	86/04/15
FORMATION.....	CRET-SHANNON	ORDO-LEXINGTON & CURDSVILLE	EOCE-WILCOX
GEOLOGIC PROVINCE CODE...	395	300	220
DEPTH, FEET.....	1180	626	10296
WELLHEAD PRESSURE, PSIG...	275	40	3500
OPEN FLOW, MCFD.....	465	1100	3950
COMPONENT, MOLE PCT			
METHANE.....	93.1	79.7	83.8
ETHANE.....	0.2	10.9	7.4
PROPANE.....	TRACE	3.8	2.9
N-BUTANE.....	0.0	0.7	0.8
ISOBUTANE.....	0.0	0.4	0.4
N-PENTANE.....	0.0	0.1	0.2
ISOPENTANE.....	0.0	0.1	0.2
CYCLOPENTANE.....	0.0	TRACE	0.1
HEXANES PLUS.....	0.0	0.1	0.2
NITROGEN.....	6.5	3.7	0.5
OXYGEN.....	0.0	TRACE	TRACE
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	TRACE	0.2	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	TRACE	3.2
HELIUM.....	0.02	0.16	TRACE
HEATING VALUE*.....	947	1153	1129
SPECIFIC GRAVITY.....	0.583	0.682	0.684

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 556 18557	INDEX SAMPLE 557 18492	INDEX SAMPLE 558 18089
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	BRAZORIA	BRAZORIA	BRAZOS
FIELD.....	COLUMBIA E	DANBURY	KURTEN
WELL NAME.....	H. R. HAWES NO. 1	KILROY-VRAZEL NO. 1	CALVIN GUEST NO. 1
API.....			
LOCATION.....	SAMUEL CARTER SUR., A-53	MATTIE SHAPARD SUR., A-668	GEORGE POWELL SUR., A-192
OWNER.....	GENERAL ATLANTIC ENERGY CORP.	KILROY CO. OF TEXAS	PATTERSON PETROLEUM, INC.
COMPLETED.....	86/--/00	87/07/00	84/05/22
SAMPLED.....	88/03/10	87/12/05	86/04/22
FORMATION.....	OLIG-FRIO	OLIG-NODOSARIA BLANPIEDI	CRET-BUDA
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	10462	8983	10045
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	3500	NOT GIVEN
OPEN FLOW, MCFD.....	3591	3450	3350
COMPONENT, HOLE PCT			
METHANE.....	94.3	89.6	73.4
ETHANE.....	2.2	5.5	10.9
PROPANE.....	1.1	1.9	3.8
N-BUTANE.....	0.1	0.4	1.4
ISOBUTANE.....	0.5	0.4	0.4
N-PENTANE.....	0.0	0.2	1.1
ISOPENTANE.....	0.2	TRACE	0.4
CYCLOPENTANE.....	0.0	0.0	0.5
HEXANES PLUS.....	0.0	0.2	1.6
NITROGEN.....	0.5	0.8	2.4
OXYGEN.....	0.1	0.1	TRACE
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.0	1.0	3.7
HELIUM.....	TRACE	TRACE	0.02
HEATING VALUE*.....	1055	1099	1264
SPECIFIC GRAVITY.....	0.603	0.634	0.795

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 559 SAMPLE 18098	INDEX 560 SAMPLE 17993	INDEX 561 SAMPLE 18059
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	BROOKS	BROOKS	CALHOUN
FIELD.....	MARIPOSA	QUITERIA	FOESTER
WELL NAME.....	O.J. SULLIVAN "F" NO. 21	R. J. KLEBERG JR., NO. 120	BISHOP-BRETT NO. 1
API.....			
LOCATION.....	DEL ENCINAL GRANT, A-370	QUITERIA GRANT, A-256	MENAN MILLS SUR.
OWNER.....	EXXON CO., U.S.A.	EXXON CO., U.S.A.	TSCHOEPE, ARTHUR J.
COMPLETED.....	09/84/02	85/03/31	85/02/25
SAMPLED.....	86/05/05	86/02/13	86/04/04
FORMATION.....	OLIG-FRIO	OLIG-FRIO	OLIG-FRIO L
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	8319	8870	8461
WELLHEAD PRESSURE, PSIG.....	2766	3100	2825
OPEN FLOW, MCFD.....	23000	5000	2100
COMPONENT, MOLE PCT			
METHANE.....	88.0	92.6	87.8
ETHANE.....	5.2	3.6	6.4
PROPANE.....	2.5	1.2	2.4
N-BUTANE.....	1.0	0.5	0.8
ISOBUTANE.....	0.7	0.4	0.4
N-PENTANE.....	0.8	0.4	0.4
ISOPENTANE.....	0.0	0.0	0.2
CYCLOPENTANE.....	0.2	0.1	0.2
HEXANES PLUS.....	0.9	0.5	0.5
NITROGEN.....	0.3	0.6	TRACE
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.2	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.6
HELIUM.....	TRACE	0.01	TRACE
HEATING VALUE*.....	1195	1111	1166
SPECIFIC GRAVITY.....	0.673	0.623	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18282	INDEX SAMPLE 17929	INDEX SAMPLE 18787
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	CAMERON	COLEMAN	CONCHO
FIELD.....	WILDCAT	LAKE NOVICE	BRANCH S
WELL NAME.....	STATE TRACT 667 NO. 1	RAY PARKER NO. 1	G. WHITEHEAD NO. 7
API.....			
LOCATION.....	PORT ISABEL SUR., A-265	SEC. 31, BLK. 2, T&NO SUR., A-	SEC. 113, T&NO SUR., A-884
OWNER.....	ADOBE OIL & GAS CORP.	HRUBETZ OIL CO.	MARATHON OIL CO.
COMPLETED.....	86/--/00	83/11/12	88/12/08
SAMPLED.....	86/12/17	85/12/11	89/04/17
FORMATION.....	PLIO-NOT GIVEN	CRET-GARDNER	PENN-PALO PINTO
GEOLOGIC PROVINCE CODE.....	220	425	410
DEPTH, FEET.....	5968	3687	2142
WELLHEAD PRESSURE, PSIG.....	2485	200	605
OPEN FLOW, MCFD.....	1969	2601	2140
COMPONENT, MOLE PCT			
METHANE.....	98.6	67.6	90.1
ETHANE.....	0.2	8.9	1.4
PROPANE.....	0.2	6.6	1.0
N-BUTANE.....	0.0	2.7	0.2
ISOBUTANE.....	0.1	0.7	0.4
N-PENTANE.....	0.0	1.2	0.0
ISOPENTANE.....	TRACE	0.6	0.3
CYCLOPENTANE.....	0.0	0.4	0.0
HEXANES PLUS.....	0.0	1.0	0.0
NITROGEN.....	0.6	9.7	5.8
OXYGEN.....	TRACE	TRACE	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.1	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	0.3	0.5
HELIUM.....	TRACE	0.29	0.21
HEATING VALUE*.....	1011	1273	997
SPECIFIC GRAVITY.....	0.560	0.825	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 565 18839	INDEX SAMPLE 566 18846	INDEX SAMPLE 567 18231
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	COTTLE	CROCKETT	CROCKETT
FIELD.....	MOON CAMP	COOS	HUPPLER
WELL NAME.....	BURNETT-TRIANGLE NO. A-2	E. M. BARNES NO. 1	MILLER RANCH "C" NO. 1
API.....			
LOCATION.....	SEC. 27, BLK. K, R.M. THOMPSON	SEC. 42, BLK. O, GH&SA SUR., A	SEC. 9, BLK. 000, GC&SF SUR.
OWNER.....	GUNN OIL CO.	UNION OIL CO. OF CALIFORNIA	TXO PRODUCTION CORP.
COMPLETED.....	88/05/04	87/12/05	86/06/11
SAMPLED.....	89/08/19	89/09/05	86/10/13
FORMATION.....	PENN-PALO PINTO	PENN-STRAWN	ORDO-ELLENBURGER
GEOLOGIC PROVINCE CODE.....	435	430	430
DEPTH, FEET.....	5250	10946	11844
WELLHEAD PRESSURE, PSIG.....	1913	4090	3800
OPEN FLOW, HCFD.....	7500	3300	80000
COMPONENT, MOLE PCT			
METHANE.....	74.3	93.8	89.2
ETHANE.....	7.5	0.0	0.8
PROPANE.....	6.2	0.0	0.1
N-BUTANE.....	0.9	0.0	0.0
ISOBUTANE.....	1.5	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	9.3	1.9	3.2
OXYGEN.....	0.0	0.1	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	4.1	6.5
HELIUM.....	0.17	0.05	0.10
HEATING VALUE*.....	1130	950	921
SPECIFIC GRAVITY.....	0.729	0.603	0.635

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 568 18924	INDEX SAMPLE 569 18273	INDEX SAMPLE 570 18918
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	CROCKETT	CROCKETT	DENTON
FIELD.....	OZONA SW	UNIVERSITY 31	MONTEATH
WELL NAME.....	VADA BEAN NO. 3	UNIVERSITY "32-17" NO. 1	H & B JACKSON NO. 1
API.....			
LOCATION.....	SEC. 14, BLK. M., GC&SF SUR.	SEC. 17, BLK. 32, UNIV. LANDS	A. HENRY SUR., A-527
OWNER.....	HARRISON INTERESTS, LTD.	THOMPSON, J. CLEO	ENRE CORP.
COMPLETED.....	90/04/10	86/07/25	10/90/02
SAMPLED.....	90/03/01	86/11/25	90/02/13
FORMATION.....	PENN-STRAWN	PENN-STRAWN, DETRITAL	PENN-PREGNANT SHALE
GEOLOGIC PROVINCE CODE.....	430	430	420
DEPTH, FEET.....	9185	9240	5171
WELLHEAD PRESSURE, PSIG.....	2990	2755	1200
OPEN FLOW, MCFD.....	11000	9600	375
COMPONENT, MOLE PCT			
METHANE.....	95.9	92.5	78.3
ETHANE.....	1.2	4.3	6.6
PROPANE.....	0.1	0.9	3.4
N-BUTANE.....	0.0	TRACE	0.6
ISOBUTANE.....	TRACE	0.3	0.6
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.1	TRACE	0.5
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.2	1.1	8.4
OXYGEN.....	TRACE	0.0	0.8
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.5	0.7	0.6
HELIUM.....	0.03	0.04	0.13
HEATING VALUE*.....	999	1048	1061
SPECIFIC GRAVITY.....	0.582	0.600	0.694

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

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

	INDEX 571 SAMPLE 18455	INDEX 572 SAMPLE 18071	INDEX 573 SAMPLE 18391
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	DEWITT	DEWITT	DEWITT
FIELD.....	BADE	GUNPOINT	GUNPOINT N
WELL NAME.....	BADE NO. 1	A. H. NAGEL NO. 1	L. E. SCHRADE NO. 1
API.....			
LOCATION.....	JAMES JONES SUR., A-279	NOT GIVEN	JAMES JONES SUR., A-279
OWNER.....	HANSON MINERALS CO.	APACHE CORP.	APACHE CORP.
COMPLETED.....	87/--/00	85/06/00	85/12/00
SAMPLED.....	87/05/12	86/04/16	87/07/00
FORMATION.....	OLIG-GREY SAND	EOCE-WILCOX	EOCE-WILCOX L
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	13483	12429	12937
WELLHEAD PRESSURE, PSIG.....	5800	6400	5450
OPEN FLOW, MCFD.....	17000	33000	6992
COMPONENT, MOLE PCT			
METHANE.....	88.4	85.6	86.6
ETHANE.....	4.0	5.9	5.2
PROPANE.....	1.1	1.4	1.3
N-BUTANE.....	0.0	0.4	0.0
ISOBUTANE.....	0.8	0.3	0.6
N-PENTANE.....	0.0	0.3	0.0
ISOPENTANE.....	0.0	0.1	TRACE
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.0	0.3	0.0
NITROGEN.....	0.1	0.2	0.3
OXYGEN.....	TRACE	TRACE	TRACE
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.0	0.2	TRACE
HYDROGEN SULFIDE**.....	TRACE	0.0	0.0
CARBON DIOXIDE.....	5.5	5.1	6.0
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1024	1070	1024
SPECIFIC GRAVITY.....	0.652	0.674	0.662

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 574 18392	INDEX SAMPLE 575 18852	INDEX SAMPLE 576 18860
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	DEWITT	DEWITT	DEWITT
FIELD.....	GUNPOINT S	MEYERSVILLE	RAMBLER
WELL NAME.....	LOVEL A. BLAIN NO. 3	DENNIS KENNE NO. 1	J. B. MUSSELMAN NO. 1
API.....			
LOCATION.....	MUNFORD HOUSE SUR., A-226	PATRICK DOWLEARN SUR., A-152	K.C.A PARK SUR., A-391
OWNER.....	APACHE CORP.	COASTAL OIL & GAS CORP.	BASS ENTERPRISES PRODUCTION CO
COMPLETED.....	86/08/00	88/07/28	87/11/14
SAMPLED.....	87/07/00	89/09/11	89/09/28
FORMATION.....	EOCE-WILCOX M	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE...	220	220	220
DEPTH, FEET.....	11036	13614	12063
WELLHEAD PRESSURE, PSIG...	5900	8900	7100
OPEN FLOW, MCFD.....	4273	4500	10700
COMPONENT, MOLE PCT			
METHANE.....	81.3	89.2	84.5
ETHANE.....	8.7	1.6	6.6
PROPANE.....	3.9	0.2	1.7
N-BUTANE.....	0.6	0.0	0.3
ISOBUTANE.....	1.0	TRACE	0.7
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.2	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.6
NITROGEN.....	0.4	0.8	0.2
OXYGEN.....	0.0	0.1	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.9	8.1	5.1
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1141	939	1092
SPECIFIC GRAVITY.....	0.704	0.647	0.689

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 577 SAMPLE 18080	INDEX 578 SAMPLE 18571	INDEX 579 SAMPLE 19000
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	DUVAL	DUVAL	DUVAL
FIELD.....	CADEAN	FOUR SEVENS	MUY GRANDE
WELL NAME.....	C. M. ROBINSON NO. 2	OLVERA GAS UNIT NO. 1	FROST NATIONAL BANK NO. 1
API.....	NOT GIVEN	J. W. FISHER SUR., A-220	42-131-37305
LOCATION.....	GLACIER ENERGY, INC.	SANTA FE ENERGY CO.	W. H. BROOKS SUR., NO. 30
OWNER.....	86/02/16	86/--/00	AMOCO PRODUCTION CO.
COMPLETED.....	86/04/15	88/04/08	--/--/00
SAMPLED.....	EOCE-YEGUA	EOCE-YEGUA C	90/08/02
FORMATION.....	220	220	NOT GIVEN
GEOLOGIC PROVINCE CODE.....			220
DEPTH, FEET.....	6296	8112	NOT GIVEN
WELLHEAD PRESSURE, PSIG.....	1350	4359	7500
OPEN FLOW, HCFD.....	460	2700	1250
COMPONENT, MOLE PCT			
METHANE.....	90.5	89.9	88.9
ETHANE.....	4.8	5.2	0.0
PROPANE.....	1.9	2.3	TRACE
N-BUTANE.....	0.6	0.5	0.0
ISOBUTANE.....	0.2	0.4	0.0
N-PENTANE.....	0.3	0.2	0.0
ISOPENTANE.....	0.1	0.2	0.0
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.0	0.0
NITROGEN.....	0.3	0.1	0.4
OXYGEN.....	0.0	0.0	0.1
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	1.2	10.6
HELIUM.....	0.01	TRACE	TRACE
HEATING VALUE*.....	1111	1111	901
SPECIFIC GRAVITY.....	0.632	0.637	0.660

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 580 SAMPLE 19001	INDEX 581 SAMPLE 18568	INDEX 582 SAMPLE 18574
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	DUVAL	DUVAL	DUVAL
FIELD.....	MUY GRANDE	STAR BRITE	STAR BRITE
WELL NAME.....	PETERS ESTATE GAS UNIT NO. 1	LYDIA SAENZ GAS NO. 1	M. RAMIREZ NO. 1 (LOWER)
API.....			
LOCATION.....	NOT GIVEN	F. L. GACIA SUR. 218, A-1596	L. RAMIREZ 13 SUR., A-586
OWNER.....	AMOCO PRODUCTION CO.	SANTA FE ENERGY CO.	SANTA FE ENERGY CO.
COMPLETED.....	89/--/00	86/--/00	86/--/00
SAMPLED.....	90/08/02	88/04/00	88/04/07
FORMATION.....	EOCE-WILCOX-MUY GRANDE	EOCE-YEGUA 7800 FT.	EOCE-YEGUA 7080 FT.
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	14756	7777	7102
WELLHEAD PRESSURE, PSIG.....	7000	3926	3300
OPEN FLOW, MCFD.....	5200	1100	690
COMPONENT, MOLE PCT			
METHANE.....	88.7	88.7	87.5
ETHANE.....	0.0	5.8	6.1
PROPANE.....	0.0	2.5	3.1
N-BUTANE.....	0.0	0.5	0.8
ISOBUTANE.....	0.0	0.4	0.7
N-PENTANE.....	0.0	0.2	0.4
ISOPENTANE.....	0.0	0.2	0.3
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	0.3	0.1	0.2
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	10.8	1.4	0.7
HELIUM.....	0.00	TRACE	TRACE
HEATING VALUE*.....	900	1118	1170
SPECIFIC GRAVITY.....	0.662	0.646	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18575	INDEX SAMPLE 18606	INDEX SAMPLE 585 SAMPLE 18324
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	DUVAL	EASTLAND	ERATH
FIELD.....	STAR BRITE	HAWKINS	THURBER RANCH
WELL NAME.....	M. RAMIREZ NO. 1 (UPPER)	HAWKINS NO. 1-20	INDIANOLA "23" NO. 1
API.....			
LOCATION.....	L. RAMIREZ 13 SUR., A-586	SPIRES DOOLEY SUR., 10, A-77	NOT GIVEN
OWNER.....	SANTA FE ENERGY CO.	ENRE CORP.	SUN EXPLORATION & PRODUCTION C
COMPLETED.....	86/--/00	86/06/09	86/09/03
SAMPLED.....	88/04/07	88/06/03	87/03/06
FORMATION.....	EOCE-YEGUA 6860 FT.	EOCE-SALINE L	PENN-BIG SALINE 5
GEOLOGIC PROVINCE CODE...	220	425	415
DEPTH, FEET.....	6868	3307	3214
WELLHEAD PRESSURE, PSIG...	2186	280	1412
OPEN FLOW, MCFD.....	36	180	1600
COMPONENT, MOLE PCT			
METHANE.....	90.8	74.0	77.9
ETHANE.....	4.9	11.7	9.8
PROPANE.....	2.1	5.6	5.1
N-BUTANE.....	0.5	1.3	1.1
ISOBUTANE.....	0.5	0.9	0.8
N-PENTANE.....	0.2	0.3	0.2
ISOPENTANE.....	0.1	0.3	0.4
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.2	0.1	0.1
NITROGEN.....	0.1	5.3	4.0
OXYGEN.....	0.0	0.0	0.1
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.3	0.2
HELIUM.....	TRACE	0.21	0.12
HEATING VALUE*.....	1120	1213	1192
SPECIFIC GRAVITY.....	0.633	0.741	0.714

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

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

	INDEX SAMPLE 18459	INDEX SAMPLE 17990	INDEX SAMPLE 18965
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	FORT BEND	FRANKLIN	FREESTONE
FIELD.....	MOORE'S ORCHARD	HAGANSFORT	BEAR GRASS
WELL NAME.....	FREUDENSPRUNG NO. 2	KOSLER NO. 1	LOVERING NO. 1
API.....			
LOCATION.....	GAIL BORDEN SUR., A-12	SPRR SUR., A-467	NOT GIVEN
OWNER.....	PARTNERS OIL CO.	TXO PRODUCTION CORP.	GRACE PETROLEUM CORP.
COMPLETED.....	86/06/03	85/09/26	89/06/19
SAMPLED.....	87/10/26	86/02/13	90/05/24
FORMATION.....	EOCE-WILCOX	JURA-SMACKOVER	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE.....	220	260	260
DEPTH, FEET.....	12257	8866	9412
WELLHEAD PRESSURE, PSIG.....	8333	3000	3500
OPEN FLOW, MCFD.....	3750.	19875	1400
COMPONENT, MOLE PCT			
METHANE.....	84.5	34.1	94.7
ETHANE.....	4.9	3.5	3.1
PROPANE.....	1.9	1.8	0.2
N-BUTANE.....	0.7	0.8	0.0
ISOBUTANE.....	0.1	0.8	0.7
N-PENTANE.....	0.4	0.1	0.0
ISOPENTANE.....	0.3	0.1	0.1
CYCLOPENTANE.....	0.3	0.1	0.0
HEXANES PLUS.....	0.5	0.2	0.0
NITROGEN.....	3.4	46.2	0.0
OXYGEN.....	0.9	0.1	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	3.0	0.0
CARBON DIOXIDE.....	2.1	9.0	1.2
HELIUM.....	TRACE	0.11	0.01
HEATING VALUE*.....	1082	551	1048
SPECIFIC GRAVITY.....	0.679	0.922	0.596

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18072	INDEX SAMPLE 18090	INDEX SAMPLE 18620
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	FREESTONE	FREESTONE	GLASSCOCK
FIELD.....	BUTLER S	EVANS LAKE W	S.F.M.
WELL NAME.....	S. W. UNIVERSITY NO. 1	HILL "K" NO. 11	K. S. BOONE "B" NO. 1
API.....			
LOCATION.....	JAMES M. LYON SUR., A-19	PETER S. ELLIOT SUR., A-11	SEC. 17. BLK. 36, T&P SUR.
OWNER.....	CHAMPLIN PETROLEUM CO.	SAXTON PETROLEUM CORP.	SUN EXPLORATION & PRODUCTION C
COMPLETED.....	85/08/01	85/01/01	88/01/07
SAMPLED.....	86/04/14	86/04/28	88/06/23
FORMATION.....	JURA-COTTON VALLEY	CRET-RODESSA U	PENN-STRAWN
GEOLOGIC PROVINCE CODE.....	260	260	430
DEPTH, FEET.....	17400	9003	10141
WELLHEAD PRESSURE, PSIG...	8801	3505	3050
OPEN FLOW, MCFD.....	20500	39800	9700
COMPONENT, MOLE PCT			
METHANE.....	96.2	84.7	75.3
ETHANE.....	0.1	5.1	13.9
PROPANE.....	TRACE	2.3	6.3
N-BUTANE.....	0.0	1.4	1.6
ISOBUTANE.....	0.0	0.4	0.5
N-PENTANE.....	0.0	1.5	0.4
ISOPENTANE.....	0.0	0.0	0.2
CYCLOPENTANE.....	0.0	0.4	0.1
HEXANES PLUS.....	0.0	1.7	0.1
NITROGEN.....	0.6	0.6	1.1
OXYGEN.....	0.2	0.1	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.2	0.3	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.8	0.0	0.0
HELIUM.....	TRACE	1.6	0.5
HEATING VALUE*	977	0.02	0.02
SPECIFIC GRAVITY.....	0.585	1237	1282
		0.725	0.744

* CALCULATED GROSS BTU PER 'CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17935	INDEX SAMPLE 18850	INDEX SAMPLE 18439
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	GOLIAD	GOLIAD	HANSFORD
FIELD.....	SOL PARKS	WAYNO BUENO	HANNAS DRAW
WELL NAME.....	WILLIAM T. DONOGHUE NO. 1	NEWTON WELDER NO. 1	ALLAR NO. 1
API.....			
LOCATION.....	MARIA DE JESUS BARBO SUR., A-5	ANTONIO VASQUEZ SUR., A-282	SEC. 213, BLK. 2, GH&H SUR.
OWNER.....	PHYLKO ENERGY CORP.	ROYAL OIL & GAS CORP.	CAMBRIDGE & NAIL PET. EXP. SER
COMPLETED.....	85/05/13	88/02/02	87/02/13
SAMPLED.....	--/--/00	89/09/10	87/09/16
FORMATION.....	OLIG-FRIO	EOCE-WILCOX	PERM-HUGOTON
GEOLOGIC PROVINCE CODE.....	220	220	360
DEPTH, FEET.....	3385	9195	3030
WELLHEAD PRESSURE, PSIG.....	1359	4300	342
OPEN FLOW, MCFD.....	3760	6236	2600
COMPONENT, MOLE PCT			
METHANE.....	97.5	86.3	76.6
ETHANE.....	0.1	6.6	7.1
PROPANE.....	TRACE	2.2	3.5
N-BUTANE.....	0.0	0.0	1.2
ISOBUTANE.....	0.0	1.0	0.0
N-PENTANE.....	0.0	0.0	0.4
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	1.5	0.3	9.9
OXYGEN.....	0.3	0.0	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	3.6	0.2
HELIUM.....	0.01	TRACE	0.56
HEATING VALUE*.....	989	1083	1070
SPECIFIC GRAVITY.....	0.567	0.661	0.700

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18896	INDEX SAMPLE 19041	INDEX SAMPLE 18942
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	HANSFORD	HANSFORD	HANSFORD
FIELD.....	HANSFORD	MORSE SW	VENNEMAN
WELL NAME.....	ETTER NO. 2	WOMBLE NO. 3	VENNEMAN NO. 1
API.....		42-195-31077	
LOCATION.....	SEC. 25, BLK. R, B&B SUR.	SEC. 27, BLK. 3, GH&H SUR.	SEC. 29, BLK. 1, WCRR SUR.
OWNER.....	BHP PETROLEUM (AMERICAS), INC.	J. M. HUBER CORP.	STRAT LAND EXPLORATION CO.
COMPLETED.....	89/06/26	90/05/10	88/09/29
SAMPLED.....	90/01/04	90/10/00	90/04/11
FORMATION.....	PENN-CLEVELAND	PERM-WICHITA-ALBANY	PENN-ATOKA
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	6533	30178	6444
WELLHEAD PRESSURE, PSIG.....	1462	342	1040
OPEN FLOW, MCFD.....	3527	2200	1100
COMPONENT, MOLE PCT			
METHANE.....	82.0	71.4	85.3
ETHANE.....	6.7	7.5	6.1
PROPANE.....	4.3	4.1	2.5
N-BUTANE.....	1.3	1.2	0.8
ISOBUTANE.....	0.6	0.2	0.4
N-PENTANE.....	0.2	0.1	0.0
ISOPENTANE.....	0.5	0.1	0.1
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.5	0.0	0.0
NITROGEN.....	3.3	14.1	2.2
OXYGEN.....	0.0	0.0	2.2
ARGON.....	0.0	0.2	0.1
HYDROGEN.....	0.0	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.0	0.3
HELIUM.....	0.17	1.02	0.09
HEATING VALUE*.....	1189	1020	1083
SPECIFIC GRAVITY.....	0.704	0.713	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 598 SAMPLE 18516	INDEX 599 SAMPLE 18619	INDEX 600 SAMPLE 18123
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	HARRIS	HARRIS	HARRISON
FIELD.....	LEE BELL	ULRICH	GOOCH NW
WELL NAME.....	MOORE NO. 1	HANNAH NASH NO. 5	ADDISON ROLLAND NO. 1
API.....			
LOCATION.....	RAMSEY H. PARKER SUR., A-651	NOT GIVEN	G.W. ROBINSON SUR., A-602
OWNER.....	ROSEWOOD RESOURCES, INC.	MOBIL OIL CORP.	KEY PRODUCTION CO., INC.
COMPLETED.....	86/--/00	88/05/20	85/06/04
SAMPLED.....	88/01/22	88/06/24	86/06/12
FORMATION.....	OLIG-DISCORBIS	EOCE-YEGUA	CRET-TRAVIS PEAK
GEOLOGIC PROVINCE CODE.....	220	220	260
DEPTH, FEET.....	11640	10770	7376
WELLHEAD PRESSURE, PSIG.....	5500	2700	2580
OPEN FLOW, MCFD.....	4095	70000	15000
COMPONENT, MOLE PCT			
METHANE.....	92.5	89.5	92.7
ETHANE.....	3.3	5.1	3.5
PROPANE.....	1.4	2.5	0.7
N-BUTANE.....	0.4	0.6	0.3
ISOBUTANE.....	0.4	0.5	0.1
N-PENTANE.....	0.3	0.2	0.2
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	TRACE	TRACE
HEXANES PLUS.....	0.2	0.2	0.2
NITROGEN.....	0.3	0.2	0.5
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.2	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.1	1.2	1.5
HELIUM.....	TRACE	TRACE	0.01
HEATING VALUE*.....	1080	1120	1053
SPECIFIC GRAVITY.....	0.617	0.643	0.609

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY.

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18209	INDEX SAMPLE 18122	INDEX SAMPLE 18578
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	HARRISON	HARRISON	HEMPHILL
FIELD.....	LEIGH	WOODLAWN	BRISCOE
WELL NAME.....	TRICE NO. 1	BEN POPE ET AL NO. 1	HOLLAND "C" NO. 3-57
API.....			
LOCATION.....	HUGH LONG SUR., A-420		SEC. 57, BLK. M1, H&GN SUR.
OWNER.....	ROBBINS PETROLEUM CORP.	H. VARDEMAN SUR., A-726	ANADARKO PETROLEUM CORP.
COMPLETED.....	85/06/15	85/08/01	88/01/00
SAMPLED.....	86/08/26	86/06/12	88/04/08
FORMATION.....	CRET-TRAVIS PEAK	CRET-TRAVIS PEAK	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE.....	260	260	360
DEPTH, FEET.....	6069	6734	11300
WELLHEAD PRESSURE, PSIG.....	1981	2680	3150
OPEN FLOW, MCFD.....	1250	1800	2000
COMPONENT, MOLE PCT			
METHANE.....	91.5	91.2	81.6
ETHANE.....	5.0	4.4	9.5
PROPANE.....	0.9	0.8	4.3
N-BUTANE.....	0.4	0.4	1.3
ISOBUTANE.....	0.1	0.0	0.9
N-PENTANE.....	0.3	0.3	0.5
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	TRACE	TRACE	0.1
HEXANES PLUS.....	0.2	0.3	0.4
NITROGEN.....	0.5	1.4	0.8
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	1.1	0.4
HELIUM.....	0.01	0.02	0.03
HEATING VALUE*.....	1080	1065	1235
SPECIFIC GRAVITY.....	0.616	0.620	0.709

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18517	INDEX SAMPLE 18843	INDEX SAMPLE 18478
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	HEMPHILL	HEMPHILL	HEMPHILL
FIELD.....	GILL RANCH	HEMPHILL	HILDERBRAND
WELL NAME.....	MATHERS NO. 2-14	CLARK NO. 8	COLEMAN-GRAHAM NO. 6
API.....			
LOCATION.....	SEC. 14, BLK. A2, H&GN SUR.	SEC. 5, BLK. 1, I&GN SUR.	SEC. 179, BLK. 41, H&TC SUR.
OWNER.....	HARSH, TOM F., INC.	KERR MCGEE CORP.	MAXUS EXPLORATION CO.
COMPLETED.....	87/09/05	88/12/20	87/10/14
SAMPLED.....	88/02/05	89/08/25	87/11/13
FORMATION.....	PENN-MORROW	PENN-DOUGLAS B & C	PERM-GRANITE WASH
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	11801	7644	9908
WELLHEAD PRESSURE, PSIG.....	3600	980	1685
OPEN FLOW, MCFD.....	1749	1300	1699
COMPONENT, MOLE PCT			
METHANE.....	92.1	70.5	69.5
ETHANE.....	2.4	7.5	11.4
PROPANE.....	1.0	5.9	5.6
N-BUTANE.....	0.4	1.2	1.7
ISOBUTANE.....	0.3	1.3	0.4
N-PENTANE.....	0.3	0.3	0.6
ISOPENTANE.....	0.0	0.1	0.3
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.2	0.0	0.2
NITROGEN.....	1.4	2.2	1.0
OXYGEN.....	0.2	0.0	0.1
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	TRACE	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.3	10.9	9.0
HELIUM.....	0.03	0.08	0.03
HEATING VALUE*.....	1061	1103	1176
SPECIFIC GRAVITY.....	0.623	0.811	0.813

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18310	INDEX SAMPLE 18199	INDEX SAMPLE 18399
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	HEMPHILL	HEMPHILL	HEMPHILL
FIELD.....	HOWE RANCH	JONES	VIKING
WELL NAME.....	GENE HOWE NO. 7	JONES NO. 24A	JONES NO. 11-1
API.....			
LOCATION.....	SEC. 140, BLK. 41, HETC SUR.	SEC. 24, BLK. 1, G&M SUR.	SEC. 11, BLK. 1, WADE & HOOPER
OWNER.....	MERIDIAN OIL, INC.	WOODS PETROLEUM CORP.	HNG OIL CO.
COMPLETED.....	85/09/27	85/12/03	--/--/00
SAMPLED.....	87/02/25	86/08/12	87/07/09
FORMATION.....	PENN-CLEVELAND	PENN-DOUGLAS	PENN-MORROW
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	9288	7140	14980
WELLHEAD PRESSURE, PSIG...	3945	1393	2700
OPEN FLOW, MCFD.....	7500	1737	24300
COMPONENT, MOLE PCT			
METHANE.....	82.5	78.3	97.1
ETHANE.....	9.2	8.2	0.5
PROPANE.....	4.1	5.3	0.1
N-BUTANE.....	0.9	1.9	0.0
ISOBUTANE.....	0.8	0.5	TRACE
N-PENTANE.....	0.3	0.9	0.0
ISOPENTANE.....	0.2	0.3	0.0
CYCLOPENTANE.....	TRACE	0.2	0.0
HEXANES PLUS.....	0.2	0.6	0.0
NITROGEN.....	0.8	3.1	0.3
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.1	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	0.4	1.9
HELIUM.....	0.03	0.16	0.02
HEATING VALUE*.....	1196	1248	997
SPECIFIC GRAVITY.....	0.694	0.741	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18101	INDEX SAMPLE 18677	INDEX SAMPLE 19014
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	HOUSTON	HUTCHINSON	HUTCHINSON
FIELD.....	LATEXO E	ARRINGTON	ARRINGTON
WELL NAME.....	E.D. MOORE NO. 1	KIOWA NO. 1	OWNBEY NO. 2
API.....			42-233-32412
LOCATION.....	J.N. TYRE SUR., A-1047	SEC. 117, BLK. 5T, T&NO SUR.	SEC. 25, Z. C. COLLIER SUR.
OWNER.....	WESTLAND OIL DEVELOPMENT CORP.	ARRINGTON OIL CO., INC.	STRAT LAND EXPLORATION CO.
COMPLETED.....	85/05/00	87/07/12	90/06/10
SAMPLED.....	86/05/01	88/10/05	90/08/00
FORMATION.....	CRET-TRAVIS PEAK	MISS-ST. GENEVIEVE	PENN-DOUGLAS-TONKAWA
GEOLOGIC PROVINCE CODE.....	260	440	440
DEPTH, FEET.....	11960	6680	5032
WELLHEAD PRESSURE, PSIG.....	5800	1850	1176
OPEN FLOW, ICFD.....	4050	2350	1900
COMPONENT, MOLE PCT			
METHANE.....	94.2	90.7	86.0
ETHANE.....	0.6	4.0	3.3
PROPANE.....	0.2	2.0	2.0
N-BUTANE.....	0.2	0.3	0.8
ISOBUTANE.....	TRACE	0.4	0.2
N-PENTANE.....	0.6	0.3	0.2
ISOPENTANE.....	0.0	0.0	0.2
CYCLOPENTANE.....	0.3	0.0	0.0
HEXANES PLUS.....	1.1	0.2	0.1
NITROGEN.....	0.6	1.7	6.8
OXYGEN.....	0.0	0.1	0.0
ARGON.....	0.0	0.0	0.1
HYDROGEN.....	0.3	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.9	0.2	0.0
HELIUM.....	0.01	0.12	0.30
HEATING VALUE*.....	1071	1088	1040
SPECIFIC GRAVITY.....	0.626	0.624	0.645

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18729	INDEX SAMPLE 17969	INDEX SAMPLE 18138
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	HUTCHINSON	JACKSON	JIM HOGG
FIELD.....	MORSE SW	EL TORO	MESTENA
WELL NAME.....	OTIS PHILLIPS "B" NO. 2	R. T. BAIN NO. 1	SECTION 388 "A" NO. 1
API.....			
LOCATION.....	SEC. 39, BLK. 3, GH&H SUR.	J. YEAMANS SUR., A-304	J.O. DEWEES SUR. 388, A-95
OWNER.....	J. M. HUBER CORP.	LADD PETROLEUM CORP.	JENNINGS EXPLORATION CO.
COMPLETED.....	88/10/10	85/09/09	86/01/04
SAMPLED.....	89/01/27	86/01/22	86/07/02
FORMATION.....	PERM-WICHITA-ALBANY	EOCE-CLAIBORNE L	EOCE-PETTUS
GEOLOGIC PROVINCE CODE.....	440	220	220
DEPTH, FEET.....	3030	8992	5178
WELLHEAD PRESSURE, PSIG.....	275	5200	1647
OPEN FLOW, MCFD.....	1368	2512	15300
COMPONENT, MOLE PCT			
METHANE.....	72.2	90.8	86.5
ETHANE.....	7.3	4.2	6.9
PROPANE.....	4.5	1.7	3.1
N-BUTANE.....	1.0	0.5	0.9
ISOBUTANE.....	0.1	0.2	0.6
N-PENTANE.....	0.4	0.2	0.4
ISOPENTANE.....	0.0	0.2	0.3
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.2	0.2	0.4
NITROGEN.....	13.1	0.4	0.3
OXYGEN.....	0.0	0.1	TRACE
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.2	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.1	0.0	0.0
CARBON DIOXIDE.....	0.1	1.5	0.3
HELIUM.....	0.78	TRACE	TRACE
HEATING VALUE*.....	1045	1094	1185
SPECIFIC GRAVITY.....	0.716	0.635	0.671

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 616 SAMPLE 18513	INDEX 617 SAMPLE 17957	INDEX 618 SAMPLE 18527
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	JIM WELLS	KENEDY	LA SALLE
FIELD.....	BEN BOLT W	SAN JOSE E	STOREY E
WELL NAME.....	ROGER HOFFMAN NO. 1	KING RANCH TIO NOVA NO. 23	PAUL TREFF NO. 1
API.....	NOT GIVEN	CARRICITOS GRANT, A-8	HG&N SUR. 121, A-260
LOCATION.....	COASTAL OIL & GAS CORP.	EXXON CO., U.S.A.	WILSON, VERN, ENERGY, INC.
OWNER.....	87/09/00	85/03/09	86/--/00
COMPLETED.....	88/01/20	86/01/17	88/02/29
SAMPLED.....	EOCE-YEGUA	MIOC-H 41 SAND	OLIG-FRIO
FORMATION.....	220	220	220
GEOLOGIC PROVINCE CODE.....	7700	7313	5341
DEPTH, FEET.....	4100	2300	NOT GIVEN
WELLHEAD PRESSURE, PSIG.....	86000	3200	1630
OPEN FLOW, MCFD.....			
COMPONENT, MOLE PCT			
METHANE.....	91.3	96.5	74.7
ETHANE.....	4.4	1.2	8.4
PROPANE.....	1.9	0.1	7.8
N-BUTANE.....	0.4	0.1	2.6
ISOBUTANE.....	0.4	0.0	2.2
N-PENTANE.....	TRACE	0.1	1.1
ISOPENTANE.....	0.3	0.0	0.7
CYCLOPENTANE.....	0.0	TRACE	0.2
HEXANES PLUS.....	0.0	0.1	0.8
NITROGEN.....	0.2	1.9	0.9
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.1	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	TRACE	0.5
HELIUM.....	TRACE	0.01	TRACE
HEATING VALUE*.....	1093	1014	1390
SPECIFIC GRAVITY.....	0.623	0.575	0.809

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18332	INDEX SAMPLE 18855	INDEX SAMPLE 621 18191
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	LAVACA	LAVACA	LAVACA
FIELD.....	BORCHERS	DRY HOLLOW	SPENCER JACK
WELL NAME.....	A. H. VAUGHN NO. 1	CHARLEY FRANKS, JR. NO. 1	HILL BANK & TRUST NO. 2
API.....			
LOCATION.....	JOHN ALLEY SUR., A-526	NICHOLAS PECL SUR., A-357	JACK SPENCER SUR., A-22
OWNER.....	HOWELL DRILLING, INC.	UNION TEXAS PETROLEUM CORP.	AXEM RESOURCES, INC.
COMPLETED.....	87/--/00	88/--/00	85/09/10
SAMPLED.....	87/02/06	89/09/18	86/08/01
FORMATION.....	EOCE-YEGUA	EOCE-WILCOX	EOCE-WILCOX
GEOLOGIC PROVINCE CODE...	220	220	220
DEPTH, FEET.....	3711	12500	9800
WELLHEAD PRESSURE, PSIG...	1550	NOT GIVEN	3150
OPEN FLOW, MCFD.....	12000	5023	12000
COMPONENT, MOLE PCT			
METHANE.....	99.0	85.4	83.0
ETHANE.....	0.1	6.1	7.2
PROPANE.....	TRACE	2.1	3.5
N-BUTANE.....	0.0	0.0	1.2
ISOBUTANE.....	0.0	0.8	0.4
N-PENTANE.....	0.0	0.0	0.5
ISOPENTANE.....	0.0	0.0	0.3
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.3
NITROGEN.....	0.4	0.8	0.2
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	TRACE	0.0	0.1
HYDROGEN SULFIDE**.....	TRACE	0.0	0.0
CARBON DIOXIDE.....	0.3	4.6	3.3
HELIUM.....	0.01	TRACE	0.01
HEATING VALUE*.....	1005	1057	1168
SPECIFIC GRAVITY.....	0.558	0.667	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18966	INDEX SAMPLE 18862	INDEX SAMPLE 17835
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	LEON	LEON	LEON
FIELD.....	BEAR GRASS	EILEEN SULLIVAN	PETEE WISEBAKER
WELL NAME.....	MCASHAN NO. 3	LEMKE NO. 1	LOIS VAUGHN NO. 1
API.....			
LOCATION.....	NOT GIVEN	R. HOLLAND SUR., A-416	DEL VALLE SUR., A-29
OWNER.....	GRACE PETROLEUM CORP.	WISEBAKER PRODUCTION CO.	WISEBAKER PRODUCTION CO.
COMPLETED.....	89/06/16	88/10/21	85/05/21
SAMPLED.....	90/05/24	89/10/09	85/09/17
FORMATION.....	JURA-COTTON VALLEY	CRET-GLEN ROSE	CRET-GLEN ROSE G
GEOLOGIC PROVINCE CODE...	260	260	260
DEPTH, FEET.....	14167	8947	10234
WELLHEAD PRESSURE, PSIG...	6500	3065	3200
OPEN FLOW, MCFD.....	12000	808	1380
COMPONENT, MOLE PCT			
METHANE.....	94.0	82.9	81.4
ETHANE.....	3.3	8.9	6.2
PROPANE.....	0.0	4.0	3.7
N-BUTANE.....	0.0	0.9	1.7
ISOBUTANE.....	0.0	0.7	1.3
N-PENTANE.....	0.0	0.2	0.8
ISOPENTANE.....	0.0	0.3	0.8
CYCLOPENTANE.....	0.0	0.0	0.2
HEXANES PLUS.....	0.0	0.5	1.0
NITROGEN.....	0.0	0.3	0.8
OXYGEN.....	0.0	0.0	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	TRACE	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.8	1.3	1.9
HELIUM.....	TRACE	0.01	0.01
HEATING VALUE*.....	1010	1205	1260
SPECIFIC GRAVITY.....	0.598	0.699	0.748

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 19019	INDEX SAMPLE 18510	INDEX SAMPLE 18438
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	LIBERTY	LIMESTONE	LIPSCOMB
FIELD.....	HATHAWAY HARDY SE	PERSONVILLE N	DARDEN
WELL NAME.....	STONE NO. 2	MUSE NO. 2	PINCKARD "B" NO. 6
API.....			
LOCATION.....	NOT GIVEN	NOT GIVEN	HT&B SUR.
OWNER.....	ARCO OIL & GAS CO.	MITCHELL ENERGY & DEVELOPMENT	TXO PRODUCTION CORP.
COMPLETED.....	89/--/00	87/07/23	87/--/00
SAMPLED.....	90/09/06	88/01/13	87/09/16
FORMATION.....	EOCE-YEGUA	JURA-COTTON VALLEY	PENN-CHEROKEE
GEOLOGIC PROVINCE CODE...	220	260	360
DEPTH, FEET.....	10411	11193	7740
WELLHEAD PRESSURE, PSIG...	NOT GIVEN	5415	NOT GIVEN
OPEN FLOW, MCFD.....	24620	6511	1034
COMPONENT, MOLE PCT			
METHANE.....	87.6	93.6	81.0
ETHANE.....	5.7	1.0	9.4
PROPANE.....	2.3	0.2	4.6
N-BUTANE.....	0.9	0.0	1.6
ISOBUTANE.....	0.3	0.1	0.1
N-PENTANE.....	0.2	0.0	0.6
ISOPENTANE.....	0.2	0.0	0.1
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.2	0.0	0.3
NITROGEN.....	1.9	1.5	1.5
OXYGEN.....	0.1	0.3	0.2
ARGON.....	0.1	TRACE	0.0
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	3.1	0.4
HELIUM.....	TRACE	TRACE	0.07
HEATING VALUE*.....	1119	977	1215
SPECIFIC GRAVITY.....	0.651	0.602	0.706

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18701	INDEX SAMPLE 18006	INDEX SAMPLE 18788
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD.....	DARROUZETT	EUGENE	PAINE
WELL NAME.....	MILLER NO. 1-159	HANSHU ET AL. NO. 3	PARKER "994" NO. B-5
API.....			
LOCATION.....	SEC. 159, BLK. 10, BBB&C SUR.	SEC. 726, BLK. 43, H&TC SUR.	SEC. 944, BLK. 43, HB&TC SUR.
OWNER.....	READING & BATES PETROLEUM CO.	DIAMOND SHAMROCK EXPLORATION C	APACHE CORP.
COMPLETED.....	87/09/00	85/10/01	88/12/21
SAMPLED.....	88/12/07	86/03/05	89/04/26
FORMATION.....	PENN-MORROW BASAL	PENN-CLEVELAND	PENN-MORROW
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	8908	7556	8768
WELLHEAD PRESSURE, PSIG...	2234	1721	1542
OPEN FLOW, MCFD.....	1267	12000	7890
COMPONENT, MOLE PCT			
METHANE.....	95.8	86.0	86.4
ETHANE.....	1.6	6.9	7.2
PROPANE.....	0.5	2.5	2.9
N-BUTANE.....	0.2	1.0	0.7
ISOBUTANE.....	TRACE	0.1	0.3
N-PENTANE.....	0.0	0.7	0.3
ISOPENTANE.....	0.2	0.1	0.3
CYCLOPENTANE.....	0.0	0.5	0.0
HEXANES PLUS.....	0.0	1.1	0.2
NITROGEN.....	0.4	0.3	0.7
OXYGEN.....	TRACE	TRACE	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.1	0.5	0.6
HELIUM.....	0.06	0.05	0.06
HEATING VALUE*.....	1029	1207	1150
SPECIFIC GRAVITY.....	0.587	0.686	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 631 SAMPLE 19022	INDEX 632 SAMPLE 18981	INDEX 633 SAMPLE 18816
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	LIPSCOMB	LIPSCOMB	LIPSCOMB
FIELD.....	SPERRY	STABEL	TROSPER
WELL NAME.....	HARRELSON NO. 1-1137	HERBERT & BECHTOLD NO. 1	HOSTUTTLER "451" NO. 1
API.....			
LOCATION.....	SEC. 1137, BLK. 43, H&TC SUR.	SEC. 989, BLK. 43, H&TC SUR.	SEC. 451, BLK. 43, H&TC SUR.
OWNER.....	ZINKE & TRUMBO, LTD.	PRINCESS THREE	ENSERCH EXPLORATION, INC.
COMPLETED.....	89/06/03	88/07/14	89/03/15
SAMPLED.....	90/09/07	90/08/06	89/07/05
FORMATION.....	PENN-MORROW	PENN-TONKAWA	PENN-ATOKA
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	9003	6544	9392
WELLHEAD PRESSURE, PSIG.....	1118	1800	1124
OPEN FLOW, MCFD.....	625	4600	1330
COMPONENT, MOLE PCT			
METHANE.....	86.4	84.8	93.7
ETHANE.....	5.7	6.5	3.5
PROPANE.....	2.9	2.9	0.7
N-BUTANE.....	1.2	1.2	0.0
ISOBUTANE.....	0.4	0.2	0.1
N-PENTANE.....	0.3	0.2	0.0
ISOPENTANE.....	0.3	0.2	0.3
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.1	0.0
NITROGEN.....	2.2	3.2	0.8
OXYGEN.....	0.0	0.2	0.0
ARGON.....	0.1	0.3	0.0
HYDROGEN.....	TRACE	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.0	0.7
HELIUM.....	0.06	0.09	0.05
HEATING VALUE.....	1139	1123	1048
SPECIFIC GRAVITY.....	0.665	0.665	0.597

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18959	INDEX SAMPLE 18243	INDEX SAMPLE 18472
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	LIVE OAK	LIVE OAK	LOVING
FIELD.....	GOEBEL S	SHARON LEE	WHITE MULE
WELL NAME.....	GOEBEL GAS UNIT NO. 8	BLANCHE HERRING NO. 1	TEXACO "35" NO. 1
API.....	42-297-33815	NOT GIVEN	SEC. 35, BLK. 54, T-2, T&P SUR
LOCATION.....	J. POITEVENT SUR., A-338	TEXACO INC.	CITIES SERVICE OIL & GAS CORP.
OWNER.....	BRIDGE OIL CO.	85/06/23	86/04/25
COMPLETED.....	88/04/14	86/11/03	87/11/02
SAMPLED.....	90/05/14	CRET-SLIGO	PENN-CRITTENDON
FORMATION.....	EOCE-SLICK	220	430
GEOLOGIC PROVINCE CODE...	220	16692	15386
DEPTH, FEET.....	6900	9300	1200
WELLHEAD PRESSURE, PSIG...	1850	7000	3000
OPEN FLOW, MCFD.....	2600		
COMPONENT, MOLE PCT			
METHANE.....	85.1	90.9	97.5
ETHANE.....	4.5	0.0	0.7
PROPANE.....	2.8	0.1	TRACE
N-BUTANE.....	0.0	0.0	0.2
ISOBUTANE.....	1.2	TRACE	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.1
NITROGEN.....	2.9	2.0	0.3
OXYGEN.....	1.3	0.1	0.0
ARGON.....	0.2	0.0	TRACE
HYDROGEN.....	TRACE	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.1	6.9	1.1
HELIUM.....	TRACE	0.01	0.01
HEATING VALUE*.....	1053	924	1012
SPECIFIC GRAVITY.....	0.663	0.632	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 637 SAMPLE 17983	INDEX 638 SAMPLE 18226	INDEX 639 SAMPLE 18381
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	MATAGORDA	MATAGORDA	MCMULLEN
FIELD.....	BRAZOS	BRAZOS AREA	COW CREEK S
WELL NAME.....	A-1 L	STATE TRACT 440-L NO. A-1	JEFFERSON NO. 1
API.....	STATE TRACT 440 L	BLK. 440-L (SW 14)	CALVIN P. WRIGHT SUR., A-1154
LOCATION.....	CONQUEST EXPLORATION CO.	CONQUEST EXPLORATION CO.	FINA OIL & CHEMICAL CO.
OWNER.....	85/12/28	85/12/28	85/12/02
COMPLETED.....	86/02/03	86/10/01	87/06/18
SAMPLED.....	MIOC---	MIOC-C SAND & D SAND	EOCE-WILCOX
FORMATION.....	220	220	220
GEOLOGIC PROVINCE CODE...	9172	8715	8300
DEPTH, FEET.....	4550	2550	3182
WELLHEAD PRESSURE, PSIG...	17500	55000	1200
OPEN FLOW, MCFD.....			
COMPONENT, MOLE PCT			
METHANE.....	95.7	96.1	87.3
ETHANE.....	1.7	1.8	5.3
PROPANE.....	0.3	0.5	3.1
N-BUTANE.....	0.2	0.0	0.6
ISOBUTANE.....	0.1	0.4	0.8
N-PENTANE.....	0.3	0.0	0.1
ISOPENTANE.....	0.0	0.1	0.4
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.5	0.0	0.2
NITROGEN.....	0.5	0.5	0.4
OXYGEN.....	0.1	TRACE	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.1	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.5	1.8
HELIUM.....	TRACE	0.01	TRACE
HEATING VALUE*.....	1060	1036	1136
SPECIFIC GRAVITY.....	0.596	0.583	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18521	INDEX SAMPLE 18367	INDEX SAMPLE 18403
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	MC MULLEN	MC MULLEN	MC MULLEN
FIELD.....	DEVIL'S WATER HOLE	LA CHUSA	RHODE RANCH
WELL NAME.....	NAUMANN NO. 1	RIVES TRUST NO. 1	WHEELER "C" NO. 3
API.....			
LOCATION.....	CHARLES T. STANSEL SUR., A-113	P. GUEYDAN SUR., A-600	J. POITEVENT SUR., A-402
OWNER.....	AMERICAN COMETRA, INC.	CSX OIL & GAS CORP.	CSX OIL & GAS CORP.
COMPLETED.....	86/--/00	86/04/00	85/10/20
SAMPLED.....	88/02/18	87/05/00	87/07/21
FORMATION.....	EOCE-WILCOX	CRET-SLIGO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	8650	15978	8600
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	11828	2405
OPEN FLOW, MCFD.....	4124	6878	4000
COMPONENT, MOLE PCT			
METHANE.....	87.8	88.0	86.4
ETHANE.....	4.8	0.0	6.1
PROPANE.....	2.5	TRACE	2.6
N-BUTANE.....	0.5	0.0	0.7
ISOBUTANE.....	0.5	0.0	0.3
N-PENTANE.....	0.1	0.0	0.3
ISOPENTANE.....	0.2	0.0	0.2
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	1.3	3.4	0.6
OXYGEN.....	0.2	0.5	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	TRACE	0.5	0.2
HYDROGEN SULFIDE**.....	0.0	0.1	0.0
CARBON DIOXIDE.....	2.1	7.4	2.2
HELIUM.....	TRACE	0.01	TRACE
HEATING VALUE*.....	1085	895	1119
SPECIFIC GRAVITY.....	0.651	0.642	0.665

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 643 18624	INDEX SAMPLE 644 18713	INDEX SAMPLE 645 18609
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	MENARD	NACOGDOCHES	NOLAN
FIELD.....	MENARD W	BRILEY-TOWN	USSERY
WELL NAME.....	BRANDENBERGER ESTATE NO. 3	J. W. KEY NO. 1	JOHNNY USSERY NO. 1
API.....			
LOCATION.....	SEC. 244, I&GN SUR., A-445	MARIA D. CASTRO SUR., A-133	MARY JONES F-1110 SUR.
OWNER.....	NORDAN OIL & GAS CORP.	CHAMBERS EXPLORATION, INC.	WATCO ENERGY, INC.
COMPLETED.....	87/05/00	86/--/00	87/10/10
SAMPLED.....	88/06/00	88/12/00	88/06/10
FORMATION.....	PENN-MORRIS	CRET-TRAVIS PEAK	PENN-CADDO
GEOLOGIC PROVINCE CODE...	410	260	430
DEPTH, FEET.....	2447	8400	6495
WELLHEAD PRESSURE, PSIG...	995	1900	1800
OPEN FLOW, MCFD.....	4736	220	320
COMPONENT, MOLE PCT			
METHANE.....	85.2	93.9	63.2
ETHANE.....	1.2	3.6	12.5
PROPANE.....	0.4	0.7	4.0
N-BUTANE.....	0.0	0.2	5.8
ISOBUTANE.....	0.2	0.1	0.0
N-PENTANE.....	0.0	0.1	0.0
ISOPENTANE.....	0.0	0.3	TRACE
CYCLOPENTANE.....	0.0	0.0	2.9
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	12.2	0.0	0.4
OXYGEN.....	TRACE	0.8	8.7
ARGON.....	TRACE	0.1	0.6
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.3	1.4
HELIUM.....	0.43	0.01	0.07
HEATING VALUE*.....	905	1059	1324
SPECIFIC GRAVITY.....	0.620	0.597	0.871

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18284	INDEX SAMPLE 18823	INDEX SAMPLE 648 SAMPLE 17970
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	NUECES	NUECES	OCHILTREE
FIELD.....	M-4	SHIELD	ALPAR
WELL NAME.....	STATE TRACT NO. 915-S	JACK DEAL NO. 1	PEARSON NO. 4
API.....			
LOCATION.....	MUSTANG ISLAND AREA, BLK. 915-	A. F. MARTIN SUR.	SEC. 105, T4, T&NO SUR.
OWNER.....	SEAGULL ENERGY EXP. & PROD., I	AMOCO PRODUCTION CO.	GEODYNE RESOURCES, INC.
COMPLETED.....	86/--/00	89/06/26	84/07/30
SAMPLED.....	86/12/00	89/07/20	86/01/23
FORMATION.....	OLIG-MARGINULINA & FRIO	OLIG-VICKSBURG	MISS-ST. LOUIS
GEOLOGIC PROVINCE CODE.....	220	220	360
DEPTH, FEET.....	8300	14796	8258
WELLHEAD PRESSURE, PSIG...	2200	10500	2100
OPEN FLOW, MCFD.....	3864	32000	700
COMPONENT, MOLE PCT			
METHANE.....	94.0	88.2	90.6
ETHANE.....	2.8	6.1	4.1
PROPANE.....	0.9	1.3	1.8
N-BUTANE.....	0.2	0.2	0.9
ISOBUTANE.....	0.4	0.4	0.1
N-PENTANE.....	0.2	0.0	0.6
ISOPENTANE.....	0.0	0.1	0.1
CYCLOPENTANE.....	TRACE	0.0	0.1
HEXANES PLUS.....	0.1	0.0	0.5
NITROGEN.....	0.8	0.3	0.6
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.1	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	3.3	0.6
HELIUM.....	0.01	TRACE	0.05
HEATING VALUE*	1060	1061	1131
SPECIFIC GRAVITY.....	0.597	0.643	0.644

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18355	INDEX SAMPLE 18927	INDEX SAMPLE 18972
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	OCHILTREE	OCHILTREE	OCHILTREE
FIELD.....	ALPAR	CALLIE JOE	CALLIE JOE
WELL NAME.....	NITSCHKE "A" NO. 3	BROWNLEE NO. 1	MCGARRAUGH NO. 1
API.....	SEC. 110, BLK. 4T, T&NO SUR.	SEC. 305, BLK. 43, H&TC SUR.	42-357-31941
LOCATION.....	PHILLIPS PETROLEUM CO.	MEWBOURNE OIL CO.	SEC. 224, BLK. 43, H&TC SUR.
OWNER.....	86/12/24	89/11/22	NEWBOURNE OIL CO.
COMPLETED.....	87/04/27	90/03/07	90/03/19
SAMPLED.....	PENN-MORROW U	PENN-MORROW	90/05/30
FORMATION.....	360	360	PENN-MORROW U
GEOLOGIC PROVINCE CODE...			360
DEPTH, FEET.....	7450	9044	9028
WELLHEAD PRESSURE, PSIG...	1381	2225	2153
OPEN FLOW, MCFT.....	4400	4000	5000
COMPONENT, MOLE PCT			
METHANE.....	93.5	87.1	87.2
ETHANE.....	3.8	7.0	5.9
PROPANE.....	0.9	3.0	3.0
N-BUTANE.....	0.0	0.9	0.0
ISOBUTANE.....	TRACE	0.4	1.1
N-PENTANE.....	0.0	0.2	0.0
ISOPENTANE.....	0.0	0.3	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.3	0.0
NITROGEN.....	1.6	TRACE	1.9
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.7	0.8
HELIUM.....	0.13	0.08	0.08
HEATING VALUE*.....	1040	1167	1105
SPECIFIC GRAVITY.....	0.589	0.663	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 652 SAMPLE 18002	INDEX 653 SAMPLE 17936	INDEX 654 SAMPLE 18427
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	OCHILTREE	OCHILTREE	OCHILTREE
FIELD.....	CHUNN	CREST	FARNSWORTH
WELL NAME.....	PEARSON-DARDEN NO.1	WRIGHT NO. 1	PAUL NO. 1-46
API.....	SEC. 80, 4T, T&NO SUR.	SEC. 1014, BLK. 43, H&TC SUR.	SEC. 46, T4T, T&NO SUR.
LOCATION.....	TXO PRODUCTION CORP.	ARGONAUT ENERGY CORP.	COURSON OIL & GAS, INC.
OWNER.....	85/07/12	85/04/16	86/12/16
COMPLETED.....	86/03/05	--/--/00	87/08/25
SAMPLED.....	PENN-NOVI	PENN-ELGIN	PENN-CLEVELAND
FORMATION.....	360	360	360
GEOLOGIC PROVINCE CODE...	7296	5273	6475
DEPTH, FEET.....	710	973	1438
WELLHEAD PRESSURE, PSIG...	466	1108	3900
OPEN FLOW, MCFD.....			
COMPONENT, MOLE PCT			
METHANE.....	76.7	82.2	81.6
ETHANE.....	12.5	5.7	3.9
PROPANE.....	5.2	3.6	4.5
N-BUTANE.....	1.7	1.4	1.4
ISOBUTANE.....	0.2	0.3	0.3
N-PENTANE.....	0.8	0.9	0.3
ISOPENTANE.....	0.2	TRACE	0.3
CYCLOPENTANE.....	0.2	0.4	0.1
HEXANES PLUS.....	0.6	1.0	0.1
NITROGEN.....	1.0	3.9	6.2
OXYGEN.....	0.2	TRACE	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.1	0.0	0.4
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.2	0.5
HELIUM.....	0.03	0.23	0.24
HEATING VALUE*.....	1281	1190	1113
SPECIFIC GRAVITY.....	0.744	0.710	0.691

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18345	INDEX SAMPLE 18418	INDEX SAMPLE 18997
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	OCHILTREE	OCHILTREE	OCHILTREE
FIELD.....	HANKER RANCH	HANKER RANCH	HANSFORD
WELL NAME.....	R. H. HOLLAND NO. 2	DANIEL KUNKEL NO. 2	BLODGETT NO. 2
API.....			
LOCATION.....	SEC. 649, BLK. 43, H&TC SUR.	SEC. 739, BLK. 43, H&TC SUR.	SEC. 24, BLK. R, B&B SUR.
OWNER.....	DIAMOND SHAMROCK EXPLORATION C	MAXUS EXPLORATION CO.	BHP PETROLEUM (AMERICAS), INC.
COMPLETED.....	87/01/07	87/04/27	89/05/17
SAMPLED.....	87/04/06	87/08/04	90/07/26
FORMATION.....	PENN-MORROW L	PENN-MORROW L	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	9900	9242	6622
WELLHEAD PRESSURE, PSIG...	4605	2690	1115
OPEN FLOW, MCFD.....	14000	5600	3400
COMPONENT, MOLE PCT			
METHANE.....	95.2	85.0	82.7
ETHANE.....	1.4	5.2	5.9
PROPANE.....	0.5	2.4	4.1
N-BUTANE.....	0.0	0.5	1.8
ISOBUTANE.....	0.2	0.5	0.4
N-PENTANE.....	0.0	0.0	0.3
ISOPENTANE.....	0.0	0.3	0.4
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	1.3	1.2	4.0
OXYGEN.....	0.2	0.2	0.0
ARGON.....	TRACE	3.8	0.1
HYDROGEN.....	0.1	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.2	0.7	0.0
HELIUM.....	0.05	0.05	0.17
HEATING VALUE*.....	1009	1065	1161
SPECIFIC GRAVITY.....	0.588	0.668	0.692

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 658 18514	INDEX SAMPLE 659 18287	INDEX SAMPLE 660 18522
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	OCHILTREE	OCHILTREE	OCHILTREE
FIELD.....	HORIZON	LIPS W	MEKEEL
WELL NAME.....	SWINK "C" NO. 2	ODC NO. 2-53	ESTHER MAY NO. 2-227
API.....			
LOCATION.....	SEC. 121, BLK. 13, T&NO SUR.	SEC. 53, BLK. R, AB&M SUR.	SEC. 227, BLK. 43, H&TC SUR.
OWNER.....	PHILLIPS PETROLEUM CO.	DIAMOND SHANROCK EXPLORATION C	NATURAL GAS ANADARKO CO.
COMPLETED.....	87/02/10	86/07/29	87/07/06
SAMPLED.....	88/01/25	87/01/10	88/02/22
FORMATION.....	PENN-MORROW L	PENN-CLEVELAND	PENN-MORROW U
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	8990	6638	9364
WELLHEAD PRESSURE, PSIG.....	2279	1320	2065
OPEN FLOW, MCFD.....	4000	8400	2150
COMPONENT, MOLE PCT			
METHANE.....	85.7	82.9	82.0
ETHANE.....	5.8	9.0	9.4
PROPANE.....	4.0	4.3	5.2
N-BUTANE.....	1.5	1.1	1.1
ISOBUTANE.....	0.5	0.5	0.4
N-PENTANE.....	0.5	0.3	0.2
ISOPENTANE.....	0.5	0.1	0.1
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.2	0.1	0.2
NITROGEN.....	0.5	1.1	0.6
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.2	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.3	0.7
HELIUM.....	0.06	0.06	0.05
HEATING VALUE*.....	1195	1193	1208
SPECIFIC GRAVITY.....	0.683	0.685	0.696

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 661 SAMPLE 18228	INDEX 662 SAMPLE 18216	INDEX 663 SAMPLE 18632
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	OCHILTREE	OCHILTREE	OCHILTREE
FIELD.....	PARNELL	PEERY	ROADSIDE
WELL NAME.....	MCCARTER NO. 1-209-C	CALLIHAM NO. 1-497	GOOD NO. 1-231
API.....			
LOCATION.....	SEC. 309, BLK. 43, H&TC SUR.	SEC. 497, BLK. 43, H&TC SUR.	SEC. 231, BLK. 43, H&TC SUR.
OWNER.....	COUROIL, INC.	SCARTH OIL & GAS CO.	PHILCON DEVELOPMENT CO.
COMPLETED.....	85/10/28	84/09/01	87/08/00
SAMPLED.....	86/10/08	86/09/08	88/07/08
FORMATION.....	PENN-MORROW U	PENN-CLEVELAND & ATOKA	PENN-ATOKA
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	8627	7200	9300
WELLHEAD PRESSURE, PSIG.....	1035	795	1100
OPEN FLOW, MCFD.....	525	580	6000
COMPONENT, MOLE PCT			
METHANE.....	85.2	83.4	85.0
ETHANE.....	7.1	7.3	9.2
PROPANE.....	3.7	3.9	3.0
N-BUTANE.....	1.1	2.0	0.7
ISOBUTANE.....	0.5	0.1	0.1
N-PENTANE.....	0.4	0.9	0.3
ISOPENTANE.....	0.3	0.4	TRACE
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.3	0.4	0.1
NITROGEN.....	0.8	0.7	0.5
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.5	0.8
HELIUM.....	0.08	0.09	0.06
HEATING VALUE*.....	1189	1228	1151
SPECIFIC GRAVITY.....	0.683	0.705	0.662

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

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

	INDEX 664 SAMPLE 17947	INDEX 665 SAMPLE 18653	INDEX 666 SAMPLE 18135
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	OCHILTREE	OCHILTREE	OFFSHORE-OCS
FIELD.....	TWITCHELL	WAKA W	BRAZOS
WELL NAME.....	MCGARRAUGH NO. 2-129	VINCENT NO. 2	A-1 OCS-G-2658
API.....			
LOCATION.....	SEC. 129, BLK. 10, SPRR SUR.	SEC. 47, BLK. 45-T, T&NO SUR.	BA, BLK. A-17-A
OWNER.....	NATURAL GAS ANADARKO CO.	KAISER-FRANCIS OIL CO.	TENNECO OIL EXP. & PROD. CO.
COMPLETED.....	85/01/18	88/06/28	80/04/11
SAMPLED.....	86/01/10	88/08/06	86/06/24
FORMATION.....	PENN-MORROW	PENN-CLEVELAND	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	360	360	955
DEPTH, FEET.....	8154	6492	7682
WELLHEAD PRESSURE, PSIG...	1843	1175	1380
OPEN FLOW, MCFD.....	3500	2345	4300
COMPONENT, MOLE PCT			
METHANE.....	79.9	82.2	94.7
ETHANE.....	8.9	3.9	2.0
PROPANE.....	5.8	4.6	0.8
N-BUTANE.....	1.7	1.2	0.3
ISOBUTANE.....	0.2	0.6	0.1
N-PENTANE.....	0.6	0.3	0.3
ISOPENTANE.....	TRACE	0.1	TRACE
CYCLOPENTANE.....	0.1	0.1	0.2
HEXANES PLUS.....	0.3	0.2	0.4
NITROGEN.....	1.7	5.4	0.5
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	TRACE	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	TRACE
CARBON DIOXIDE.....	0.6	1.2	0.6
HELIUM.....	0.11	0.24	TRACE
HEATING VALUE*.....	1228	1113	1070
SPECIFIC GRAVITY.....	0.718	0.694	0.605

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18134	INDEX SAMPLE 17967	INDEX SAMPLE 18096
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	OFFSHORE-OCS	OFFSHORE-OCS	OFFSHORE-OCS
FIELD.....	GALVESTON	MATAGORDA ISLAND	MATAGORDA ISLAND
WELL NAME.....	A-1 OCS-G-3740	P. EMILY HAWES NO. 1	OCS-G-3733 NO. A-1
API.....			
LOCATION.....	GA, BLK. 391, A&B	ISAAC W. BOONE SUR., A-56	BLOCK 703
OWNER.....	TENNECO OIL EXP. & PROD. CO.	GEOSOUTHERN ENERGY CORP.	ARCO OIL & GAS CO.
COMPLETED.....	86/--/00	84/09/20	82/11/11
SAMPLED.....	86/06/24	85/12/20	86/05/06
FORMATION.....	PLIO-NOT GIVEN	MIOC-BASAL	MIOC-1F
GEOLOGIC PROVINCE CODE.....	955	955	955
DEPTH, FEET.....	4631	6276	10110
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	3250	3175
OPEN FLOW, MCFD.....	4500	20000	10400
COMPONENT, MOLE PCT			
METHANE.....	97.3	96.2	95.1
ETHANE.....	1.0	1.8	1.5
PROPANE.....	0.2	0.8	0.4
N-BUTANE.....	0.2	0.2	0.2
ISOBUTANE.....	0.0	0.2	0.1
N-PENTANE.....	0.2	0.1	0.5
ISOPENTANE.....	0.0	TRACE	0.0
CYCLOPENTANE.....	TRACE	TRACE	0.3
HEXANES PLUS.....	0.1	TRACE	0.9
NITROGEN.....	0.5	0.5	0.1
OXYGEN.....	TRACE	TRACE	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	TRACE	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.2	0.8
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1029	1045	1090
SPECIFIC GRAVITY.....	0.575	0.583	0.615

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18031	INDEX SAMPLE 671 18225	INDEX SAMPLE 672 18386
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	PALO PINTO	PALO PINTO	PALO PINTO
FIELD.....	BIG SALINE	COALVILLE	RANCHO DE PAZ
WELL NAME.....	HART RANCH NO. 877-1	C. B. LONG "A" NO. 1	MIKE HOLLAND NO. 1
API.....			
LOCATION.....	SEC. 877, T8S1L SUR.	AB&M SUR. 7, A-11	HENRY BIRD SUR., A-26
OWNER.....	GULF ENERGY PRODUCTION CO.	UPHAM OIL & GAS CO.	UPHAM OIL & GAS CO.
COMPLETED.....	--/--/00	86/02/00	85/02/25
SAMPLED.....	86/03/27	86/10/01	87/06/20
FORMATION.....	PENN-CONGLOMERATE	PENN-BEND CONGLOMERATE	PENN-BEND CONGLOMERATE
GEOLOGIC PROVINCE CODE...	425	425	425
DEPTH, FEET.....	4345	3750	3400
WELLHEAD PRESSURE, PSIG...	NOT GIVEN	1485	1479
OPEN FLOW, MCFD.....	NOT GIVEN	3200	6900
COMPONENT, MOLE PCT			
METHANE.....	70.7	78.2	78.0
ETHANE.....	9.3	9.0	9.9
PROPANE.....	0.0	3.9	4.3
N-BUTANE.....	1.5	1.3	0.9
ISOBUTANE.....	3.1	0.7	0.9
N-PENTANE.....	0.1	0.7	0.2
ISOPENTANE.....	1.7	0.1	0.3
CYCLOPENTANE.....	TRACE	0.4	TRACE
HEXANES PLUS.....	0.2	1.0	0.1
NITROGEN.....	9.1	4.2	4.7
OXYGEN.....	0.3	0.1	0.2
ARGON.....	0.2	0.0	0.0
HYDROGEN.....	0.3	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.2	0.4	0.2
HELIUM.....	0.10	0.13	0.12
HEATING VALUE*.....	1126	1223	1172
SPECIFIC GRAVITY.....	0.779	0.737	0.710

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

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

	INDEX 673 SAMPLE 18183	INDEX 674 SAMPLE 18254	INDEX 675 SAMPLE 18402
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	PARKER	PARKER	PECOS
FIELD.....	RENO	TIM MITCHELL	FT. STOCKTON
WELL NAME.....	J. C. MOOREFIELD NO. 4	W. L. COLLINS NO. 2	ROBERTS "A" NO. 1
API.....			
LOCATION.....	W. R. SMITH SUR., A-2827	JOSEPH R. ERWIN SUR., A-423	SEC. 2, BLK. 106, T&STL SUR.
OWNER.....	DIAMOND SHAMROCK EXPLORATION C	MITCHELL ENERGY CORP.	GRAHAM, BILL J., OIL & GAS
COMPLETED.....	86/03/14	86/07/10	87/--/00
SAMPLED.....	86/07/25	86/11/17	87/07/14
FORMATION.....	PENN-CONGLOMERATE U	PENN-BEND CONGLOMERATE	PERM-YATES
GEOLOGIC PROVINCE CODE.....	420	420	430
DEPTH, FEET.....	4200	5122	3171
WELLHEAD PRESSURE, PSIG.....	587	1669	555
OPEN FLOW, MCFD.....	10000	16600	3200
COMPONENT, MOLE PCT			
METHANE.....	80.9	82.7	84.8
ETHANE.....	8.5	9.3	4.3
PROPANE.....	3.1	3.1	2.4
N-BUTANE.....	1.1	0.4	0.8
ISOBUTANE.....	0.3	0.4	0.2
N-PENTANE.....	0.5	0.0	0.2
ISOPENTANE.....	0.2	0.1	0.2
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.4	0.1	0.2
NITROGEN.....	3.5	2.6	6.3
OXYGEN.....	0.6	0.0	0.1
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.6	0.3
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.7	0.5	0.1
HELIUM.....	0.12	0.14	0.05
HEATING VALUE*.....	1154	1123	1062
SPECIFIC GRAVITY.....	0.698	0.660	0.654

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 676 18084	INDEX SAMPLE 677 18680	INDEX SAMPLE 678 18681
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POLK	POTTER	POTTER
FIELD.....	CHIEF COLABE	BIVINS RANCH	BIVINS RANCH
WELL NAME.....	CAMDEN TIMBER NO. 1	BIVINS NO. 1-212	BIVINS NO. 1-212
API.....			
LOCATION.....	SINA RUNNELS SUR., A-67	SEC. 212, BLK. 2, AB&M SUR.	SEC. 212, BLK. 2, AB&M SUR.
OWNER.....	UNION OIL CO. OF CALIFORNIA	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED.....	85/05/24	88/10/17	88/01/17
SAMPLED.....	86/04/09	88/10/21	88/10/21
FORMATION.....	EOCE-WILCOX	PERM-BROWN DOLOMITE	PERM-BROWN DOLOMITE
GEOLOGIC PROVINCE CODE...	220	440	440
DEPTH, FEET.....	8800	3428	3428
WELLHEAD PRESSURE, PSIG...	2960	500	500
OPEN FLOW, MCFD.....	8422	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	77.5	57.3	60.3
ETHANE.....	5.3	3.1	3.3
PROPANE.....	4.4	1.4	1.5
N-BUTANE.....	2.3	0.3	0.3
ISOBUTANE.....	1.3	0.3	0.3
N-PENTANE.....	1.4	0.0	0.0
ISOPENTANE.....	1.3	0.2	0.2
CYCLOPENTANE.....	1.2	0.0	0.0
HEXANES PLUS.....	2.6	0.0	0.0
NITROGEN.....	1.1	23.1	24.1
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	0.0	0.1	0.1
HYDROGEN.....	0.2	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.6	12.8	8.5
HELIUM.....	0.02	1.38	1.44
HEATING VALUE*.....	1410	702	736
SPECIFIC GRAVITY.....	0.837	0.812	0.775

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 679 SAMPLE 18695	INDEX 680 SAMPLE 18696	INDEX 681 SAMPLE 18705
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BIVINS RANCH	BIVINS RANCH	BIVINS RANCH
WELL NAME.....	BIVINS NO. 1-212	BIVINS NO. 1-212	BIVINS NO. 1-212
API.....			
LOCATION.....	SEC. 212, BLK. 2, AB&M SUR.	SEC. 212, BLK. 2, AB&M SUR.	SEC. 212, BLK. 2, AB&M SUR.
OWNER.....	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED.....	88/10/17	88/10/17	88/10/17
SAMPLED.....	88/11/28	88/11/28	88/12/13
FORMATION.....	PERM-BROWN DOLOMITE	PERM-BROWN DOLOMITE	PERM-BROWN DOLOMITE
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3428	3428	3428
WELLHEAD PRESSURE, PSIG.....	500	500	500
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	64.7	65.9	65.2
ETHANE.....	3.5	3.5	3.3
PROPANE.....	0.7	1.3	1.6
N-BUTANE.....	0.9	1.1	0.1
ISOBUTANE.....	0.0	0.0	0.6
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	2.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.2	0.2	0.1
NITROGEN.....	24.7	25.1	24.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	0.1
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.2	1.0	3.3
HELIUM.....	1.92	1.52	1.50
HEATING VALUE*.....	865	818	795
SPECIFIC GRAVITY.....	0.744	0.718	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 682 18706	INDEX SAMPLE 683 18715	INDEX SAMPLE 684 18757
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BIVINS RANCH	BIVINS RANCH	BIVINS RANCH
WELL NAME.....	BIVINS NO. 1-212	BIVINS NO. 1-212	BIVINS NO. 1-212
API.....			
LOCATION.....	SEC. 212, BLK. 2, AB&M SUR.	SEC. 212, BLK. 2, AB&M SUR.	SEC. 212, BLK. 2, AB&M SUR.
OWNER.....	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.	BAKER & TAYLOR DRILLING CO.
COMPLETED.....	88/10/17	88/10/17	88/10/17
SAMPLED.....	88/12/13	88/12/30	89/02/27
FORMATION.....	PERM-BROWN DOLOMITE	PERM-BROWN DOLOMITE	PERM-BROWN DOLOMITE
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3428	3428	3428
WELLHEAD PRESSURE, PSIG.....	500	500	500
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	65.0	65.8	63.0
ETHANE.....	3.4	3.3	3.6
PROPANE.....	1.5	1.4	1.3
N-BUTANE.....	0.3	0.4	0.3
ISOBUTANE.....	0.1	0.2	0.4
N-PENTANE.....	0.4	0.2	0.0
ISOPENTANE.....	0.0	TRACE	0.1
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.2	0.1	0.1
NITROGEN.....	24.1	23.8	25.5
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	0.2
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.3	3.2	3.9
HELIUM.....	1.50	1.53	1.53
HEATING VALUE*.....	802	796	772
SPECIFIC GRAVITY.....	0.733	0.724	0.739

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18758	INDEX SAMPLE 18146	INDEX SAMPLE 18149
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BIVINS RANCH	BUSH DOME	BUSH DOME
WELL NAME.....	BIVINS NO. 1-212	BIVINS NO. A-11	BIVINS NO. A-9
API.....			
LOCATION.....	SEC. 212, BLK. 2, AB&M SUR.	SEC. 2, BJAD, BS&F SUR.	SEC. 2, BJAD, BS&F SUR.
OWNER.....	BAKER & TAYLOR DRILLING CO.	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	88/10/17	67/01/06	65/04/04
SAMPLED.....	89/02/27	86/07/10	86/07/10
FORMATION.....	PERM-BROWN DOLOMITE	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3428	3509	3424
WELLHEAD PRESSURE, PSIG.....	500	647	637
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	63.4	64.6	64.7
ETHANE.....	3.5	3.8	3.8
PROPANE.....	1.1	1.8	1.9
N-BUTANE.....	0.4	0.7	0.7
ISOBUTANE.....	0.0	0.1	0.2
N-PENTANE.....	0.2	0.3	0.3
ISOPENTANE.....	0.1	0.1	0.1
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.1	0.2	0.2
NITROGEN.....	25.6	25.3	25.2
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.2	0.1	0.1
HYDROGEN.....	TRACE	TRACE	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.8	0.9	0.8
HELIUM.....	1.50	1.76	1.85
HEATING VALUE*.....	768	827	834
SPECIFIC GRAVITY.....	0.737	0.723	0.725

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

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

	INDEX 688 SAMPLE 18151	INDEX 689 SAMPLE 18152	INDEX 690 SAMPLE 18163
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME.....	BUSH NO. A-11	BIVINS NO. B-2	FUQUA NO. A-1
API.....			
LOCATION.....	SEC. 21, BLK. 6, BS&F SUR.	SEC. 28, BLK. 6, BS&F SUR.	SEC. 18, BLK. 6, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	67/10/03	67/10/27	28/05/17
SAMPLED.....	86/07/14	86/07/14	86/07/22
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	NOT GIVEN	3466	3454
WELLHEAD PRESSURE, PSIG.....	643	653	623
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	66.1	64.0	66.7
ETHANE.....	3.8	3.7	3.9
PROPANE.....	1.8	1.7	1.6
N-BUTANE.....	0.6	0.7	0.5
ISOBUTANE.....	0.2	0.1	TRACE
N-PENTANE.....	0.2	0.3	0.3
ISOPENTANE.....	0.1	TRACE	TRACE
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.1	0.2	0.2
NITROGEN.....	23.7	25.6	24.2
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.2	0.1
HYDROGEN.....	TRACE	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.3	1.4	0.3
HELIUM.....	1.88	1.97	1.78
HEATING VALUE*.....	833	813	831
SPECIFIC GRAVITY.....	0.717	0.727	0.704

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 691 SAMPLE 18165	INDEX 692 SAMPLE 18166	INDEX 693 SAMPLE 18169
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME.....	BUSH NO. B-1	BUSH NO. A-8	BIVINS NO. B-1
API.....			
LOCATION.....	SEC. 19, BLK. 6, BS&F SUR.	SEC. 28, BLK. 6, BS&F SUR.	SEC. 28, BLK. 6, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	28/11/13	63/06/25	67/10/13
SAMPLED.....	86/07/22	86/07/22	86/07/23
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE...	440	440	440
DEPTH, FEET.....	3332	3496	3401
WELLHEAD PRESSURE, PSIG...	628	652	648
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	66.6	65.4	65.5
ETHANE.....	3.9	3.8	3.8
PROPANE.....	1.9	1.8	1.8
N-BUTANE.....	0.7	0.7	0.7
ISOBUTANE.....	0.2	0.1	0.1
N-PENTANE.....	0.3	0.3	0.3
ISOPENTANE.....	0.1	0.1	0.1
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.2	0.2	0.2
NITROGEN.....	23.3	23.8	24.0
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	0.1
HYDROGEN.....	0.1	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	1.2	0.9
HELIUM.....	1.73	1.96	2.12
HEATING VALUE*.....	856	836	837
SPECIFIC GRAVITY.....	0.718	0.718	0.716

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

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

	INDEX 694 SAMPLE 18170	INDEX 695 SAMPLE 18171	INDEX 696 SAMPLE 18180
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME	BUSH DOME	BUSH DOME
WELL NAME.....	BUSH NO. A-9	FUQUA NO. A-2	BUSH NO. A-10, OBSERVATION
API.....			
LOCATION.....	SEC. 25, BLK. 6, BS&F SUR.	SEC. 24, BLK. 6, BS&F SUR.	SEC. 3, BLK. JAD, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	65/03/09	65/03/18	67/01/26
SAMPLED.....	86/07/23	86/07/23	86/07/30
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3411	3374	3455
WELLHEAD PRESSURE, PSIG.....	621	532	573
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	66.9	65.7	64.5
ETHANE.....	3.9	3.9	3.9
PROPANE.....	1.7	1.7	1.7
N-BUTANE.....	0.6	0.6	0.7
ISOBUTANE.....	0.1	0.1	0.1
N-PENTANE.....	0.2	0.3	0.3
ISOPENTANE.....	0.1	0.1	0.1
CYCLOPENTANE.....	0.1	0.1	0.1
HEXANES PLUS.....	0.2	0.2	0.2
NITROGEN.....	23.7	24.7	25.8
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	0.2
HYDROGEN.....	0.1	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.4	0.6
HELIUM.....	1.71	1.82	1.93
HEATING VALUE*.....	842	835	826
SPECIFIC GRAVITY.....	0.709	0.713	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 697 SAMPLE 18198	INDEX 698 SAMPLE 18147	INDEX 699 SAMPLE 18148
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME	BUSH DOME INVADED	BUSH DOME INVADED
WELL NAME.....	BIVINS NO. A-8R	BUSH NO. A-3	BIVINS NO. A-15
API.....			
LOCATION.....	SEC. 26, BLK. 6, BS&F SUR.	SEC. 27, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	63/05/16	42/06/05	67/09/22
SAMPLED.....	86/08/07	86/07/23	86/07/10
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	2408	3322	3450
WELLHEAD PRESSURE, PSIG.....	412	NOT GIVEN	637
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	65.3	8.9	64.0
ETHANE.....	3.9	0.5	3.8
PROPANE.....	1.7	0.2	1.8
N-BUTANE.....	0.6	0.2	0.7
ISOBUTANE.....	0.1	0.0	0.1
N-PENTANE.....	0.2	0.1	0.3
ISOPENTANE.....	0.1	TRACE	0.1
CYCLOPENTANE.....	0.1	TRACE	0.1
HEXANES PLUS.....	0.1	0.1	0.2
NITROGEN.....	25.7	25.9	23.3
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.2	TRACE	0.1
HYDROGEN.....	0.1	0.6	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	0.1	1.1
HELIUM.....	1.82	63.10	4.24
HEATING VALUE*.....	821	122	821
SPECIFIC GRAVITY.....	0.711	0.407	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 700 18154	INDEX SAMPLE 701 18164	INDEX SAMPLE 702 18174
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME INVADED	BUSH DOME INVADED	BUSH DOME INVADED
WELL NAME.....	BIVINS NO. A-2	FUQUA NO. A-3	BIVINS NO. A-3
API.....			
LOCATION.....	SEC. 22, BLK. 6, BS&F SUR.	SEC. 18, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	35/02/02	67/09/14	41/09/27
SAMPLED.....	86/07/16	86/07/22	86/07/28
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3300	3433	3104
WELLHEAD PRESSURE, PSIG.....	542	633	658
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	38.6	58.5	11.0
ETHANE.....	2.3	3.5	0.6
PROPANE.....	1.1	1.7	0.2
N-BUTANE.....	0.5	0.7	0.2
ISOBUTANE.....	TRACE	0.1	0.0
N-PENTANE.....	0.3	0.3	0.1
ISOPENTANE.....	0.1	0.1	TRACE
CYCLOPENTANE.....	0.1	0.1	TRACE
HEXANES PLUS.....	0.2	0.2	0.1
NITROGEN.....	24.7	25.4	25.6
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	TRACE
HYDROGEN.....	0.2	0.1	0.6
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.5	0.1
HELIUM.....	31.60	8.72	61.30
HEATING VALUE*.....	509	758	145
SPECIFIC GRAVITY.....	0.573	0.689	0.414

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

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

	INDEX 703 SAMPLE 18176	INDEX 704 SAMPLE 18177	INDEX 705 SAMPLE 18178
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME INVADED	BUSH DOME INVADED	BUSH DOME INVADED
WELL NAME.....	BIVINS NO. A-5	BUSH NO. A-4	BIVINS NO. A-14
API.....			
LOCATION.....	SEC. 26, BLK. 6, BS&F SUR.	SEC. 23, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	42/03/13	43/04/15	67/12/06
SAMPLED.....	86/08/04	86/08/04	86/08/04
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3272	3252	3314
WELLHEAD PRESSURE, PSIG.....	646	580	663
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	38.6	29.6	1.6
ETHANE.....	2.4	1.8	0.1
PROPANE.....	1.1	0.9	TRACE
N-BUTANE.....	0.6	0.4	0.0
ISOBUTANE.....	TRACE	0.0	0.0
N-PENTANE.....	0.3	0.2	0.0
ISOPENTANE.....	0.1	TRACE	0.0
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.2	0.2	0.0
NITROGEN.....	25.3	25.7	25.4
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	TRACE
HYDROGEN.....	0.4	0.5	0.5
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.1	TRACE
HELIUM.....	30.30	40.40	72.40
HEATING VALUE*.....	515	393	20
SPECIFIC GRAVITY.....	0.583	0.526	0.356

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 706 18179	INDEX SAMPLE 707 18181	INDEX SAMPLE 708 18182
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME INVADED	BUSH DOME INVADED	BUSH DOME INVADED
WELL NAME.....	BUSH NO. 2-A	BIVINS NO. A-4	BIVINS NO. A-13
API.....			
LOCATION.....	SEC. 23, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.	SEC. 22, BLK. 6, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	39/10/24	42/01/11	42/01/11
SAMPLED.....	86/07/29	86/07/30	86/07/30
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3220	3362	3362
WELLHEAD PRESSURE, PSIG.....	660	688	663
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	5.0	0.0	3.0
ETHANE.....	0.3	0.0	0.1
PROPANE.....	TRACE	0.0	0.1
N-BUTANE.....	0.2	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.1	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	TRACE	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.0
NITROGEN.....	25.5	0.1	26.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.7	0.0	0.5
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	TRACE	TRACE
HELIUM.....	68.00	99.80	70.20
HEATING VALUE*.....	74	0	36
SPECIFIC GRAVITY.....	0.381	0.139	0.369

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 709 SAMPLE 18195	INDEX 710 SAMPLE 18196	INDEX 711 SAMPLE 18197
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	BUSH DOME INVADED	BUSH DOME INVADED	BUSH DOME INVADED
WELL NAME.....	BUSH NO. A-5	BIVINS NO. A-6	BIVINS NO. A-7
API.....			
LOCATION.....	SEC. 25, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.	SEC. 26, BLK. 6, BS&F SUR.
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES
COMPLETED.....	44/06/20	42/12/15	58/08/16
SAMPLED.....	86/08/07	86/08/07	86/08/07
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3305	3320	3373
WELLHEAD PRESSURE, PSIG.....	635	664	622
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	34.7	1.9	29.5
ETHANE.....	2.0	0.0	1.8
PROPANE.....	1.0	0.0	0.9
N-BUTANE.....	0.4	0.0	0.5
ISOBUTANE.....	0.1	0.0	0.1
N-PENTANE.....	0.2	0.0	0.2
ISOPENTANE.....	TRACE	0.0	0.1
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.1	0.0	0.1
NITROGEN.....	25.5	21.1	25.8
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	TRACE	0.1
HYDROGEN.....	0.3	0.7	0.5
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.1	0.3
HELIUM.....	35.30	76.20	40.10
HEATING VALUE*.....	449	22	398
SPECIFIC GRAVITY.....	0.551	0.322	0.533

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 712 18175	INDEX SAMPLE 713 18348	INDEX SAMPLE 714 18157
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	POTTER
FIELD.....	HORSE CREEK DOME	NOT GIVEN	TUCK TRIGG DOME
WELL NAME.....	BUŞH NO. A-7, OBSERVATION	BIVINS RANCH NO. 1-2	USBM NO. 1R
API.....			
LOCATION.....	SEC. 25, BLK. 6, BS&F SUR.	SEC. 2, BLK. 4, ACH&B SUR.	SEC. 37, BLK. 5, G&M SUR.
OWNER.....	U.S. BUREAU OF MINES	BAKER & TAYLOR DRILLING CO.	U.S. BUREAU OF MINES
COMPLETED.....	63/06/05	87/--/00	66/11/02
SAMPLED.....	86/07/28	87/04/15	86/07/18
FORMATION.....	PERM-WICHITA-ALBANY	PERM-BROWN DOLOMITE	PERM-WICHITA-ALBANY
GEOLOGIC PROVINCE CODE.....	440	440	440
DEPTH, FEET.....	3523	3300	2491
WELLHEAD PRESSURE, PSIG.....	701	NOT GIVEN	369
OPEN FLOW, MCFD.....	NOT GIVEN	2200	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	69.1	58.4	70.7
ETHANE.....	4.1	3.0	5.8
PROPANE.....	1.9	1.6	3.0
N-BUTANE.....	0.8	0.4	0.9
ISOBUTANE.....	0.1	0.5	0.1
N-PENTANE.....	0.3	0.0	0.4
ISOPENTANE.....	0.1	0.1	TRACE
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.2	0.1	0.2
NITROGEN.....	20.8	33.0	17.9
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.2	0.1
HYDROGEN.....	0.1	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	0.6	TRACE
HELIUM.....	1.42	2.32	0.67
HEATING VALUE*.....	885	727	963
SPECIFIC GRAVITY.....	0.709	0.739	0.714

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 715 18158	INDEX SAMPLE 716 18159	INDEX SAMPLE 717 18194
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	POTTER	POTTER	RAINS
FIELD.....	TUCK TRIGG DOME	TUCK TRIGG DOME	GINGER
WELL NAME.....	BUSH NO. B-2R	USBM NO. 2R	JENKINS "C" NO. 1
API.....			
LOCATION.....	SEC. 30, BLK. M-19, G&M SUR.	SEC. 37, BLK. 5, G&M SUR.	A. WOODRING SUR., A-272
OWNER.....	U.S. BUREAU OF MINES	U.S. BUREAU OF MINES	TXO PRODUCTION CORP.
COMPLETED.....	65/03/10	66/11/10	85/01/28
SAMPLED.....	86/07/18	86/07/18	86/08/04
FORMATION.....	PERM-WICHITA-ALBANY	PERM-WICHITA-ALBANY	JURA-SMACKOVER
GEOLOGIC PROVINCE CODE.....	440	440	260
DEPTH, FEET.....	2492	2507	12082
WELLHEAD PRESSURE, PSIG.....	413	420	2450
OPEN FLOW, MCFD.....	NOT GIVEN	NOT GIVEN	5100
COMPONENT, MOLE PCT			
METHANE.....	71.2	70.2	51.8
ETHANE.....	5.7	5.8	6.8
PROPANE.....	2.8	2.9	2.1
N-BUTANE.....	0.8	0.8	1.0
ISOBUTANE.....	0.1	0.1	0.4
N-PENTANE.....	0.3	0.4	0.5
ISOPENTANE.....	TRACE	0.0	0.1
CYCLOPENTANE.....	TRACE	TRACE	0.1
HEXANES PLUS.....	0.1	0.2	0.3
NITROGEN.....	18.1	18.8	1.7
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.1	0.1	TRACE
HYDROGEN.....	0.1	0.1	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	28.4
CARBON DIOXIDE.....	TRACE	TRACE	6.6
HELIUM.....	0.63	0.63	0.01
HEATING VALUE*.....	945	948	976
SPECIFIC GRAVITY.....	0.705	0.714	0.902

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 718 SAMPLE 18970	INDEX 719 SAMPLE 18556	INDEX 720 SAMPLE 18642
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	REFUGIO	ROBERTS	ROBERTS
FIELD.....	L SQUARED	CLARK MARTIN	CREE-FLOWERS
WELL NAME.....	BERNADINE WOOD NO. 1	MARTIN-CLARK NO. 1-93	WINNIFRED "A" NO. 1
API.....			
LOCATION.....	EDMUND ST. JOHN SUR., A-69	SEC. 93, BLK. C, G&M SUR.	SEC. 69, BLK. C, G&M SUR.
OWNER.....	ORYX ENERGY CO.	CNG PRODUCING CO.	PHILLIPS PETROLEUM CO.
COMPLETED.....	89/01/00	87/10/05	88/04/15
SAMPLED.....	90/05/24	88/03/10	88/07/25
FORMATION.....	OLIG-FRIO-SINTON "A" SAND	PENN-GRANITE WASH	PERM-WOLFCAMP
GEOLOGIC PROVINCE CODE..	220	360	360
DEPTH, FEET.....	4799	8872	4297
WELLHEAD PRESSURE, PSIG..	NOT GIVEN	1868	NOT GIVEN
OPEN FLOW, MCFD.....	618	1257	996
COMPONENT, MOLE PCT			
METHANE.....	95.6	76.9	77.6
ETHANE.....	2.0	11.9	8.8
PROPANE.....	0.4	6.3	6.1
N-BUTANE.....	0.0	1.7	1.4
ISOBUTANE.....	1.1	0.8	1.2
N-PENTANE.....	0.0	0.5	0.0
ISOPENTANE.....	0.3	0.2	0.0
CYCLOPENTANE.....	0.0	0.1	TRACE
HEXANES PLUS.....	0.0	0.3	0.3
NITROGEN.....	0.0	0.8	4.4
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.4	TRACE
HELIUM.....	0.01	0.05	0.12
HEATING VALUE*.....	1068	1289	1209
SPECIFIC GRAVITY.....	0.597	0.745	0.726

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 721 SAMPLE 18818	INDEX 722 SAMPLE 18018	INDEX 723 SAMPLE 17974
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	ROBERTS	ROBERTS	ROBERTS
FIELD.....	KIM FLOWERS	MENDOTA NW	MORRISON RANCH
WELL NAME.....	KIM FLOWERS NO. 2	LOIS WEBB NO. 7-83	MARY T. MORRISON NO. H-3
API.....			
LOCATION.....	NOT GIVEN	SEC. 83, BLK. B-1, H&GN SUR.	SEC. 194, BLK. 42, H&TC SUR.
OWNER.....	MEDALLION PETROLEUM, INC.	DIAMOND SHAHROCK EXPLORATION C	DIAMOND SHAHROCK EXPLORATION C
COMPLETED.....	89/01/24	85/12/19	85/12/04
SAMPLED.....	89/07/10	86/03/01	86/01/30
FORMATION.....	PENN-MORROW	PENN-CHEROKEE	PENN-MORROW L
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	9295	9898	10247
WELLHEAD PRESSURE, PSIG.....	797	1624	NOT GIVEN
OPEN FLOW, MCFD.....	1879	10200	4615
COMPONENT, MOLE PCT			
METHANE.....	90.2	70.4	86.0
ETHANE.....	6.5	8.8	6.6
PROPANE.....	1.3	3.5	2.6
N-BUTANE.....	0.0	0.9	0.9
ISOBUTANE.....	0.4	0.3	0.7
N-PENTANE.....	0.0	0.3	0.7
ISOPENTANE.....	0.0	0.1	0.1
CYCLOPENTANE.....	0.0	0.1	0.2
HEXANES PLUS.....	0.0	0.2	0.8
NITROGEN.....	0.5	11.4	0.2
OXYGEN.....	0.0	2.9	TRACE
ARGON.....	0.0	0.1	0.0
HYDROGEN.....	0.0	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.1	0.8	1.3
HELIUM.....	0.06	0.04	0.03
HEATING VALUE*.....	1076	1034	1194
SPECIFIC GRAVITY.....	0.617	0.736	0.690

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 724 SAMPLE 18581	INDEX 725 SAMPLE 18232	INDEX 726 SAMPLE 18570
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	ROBERTS	ROBERTS	SHACKELFORD
FIELD.....	PARSELL SE	R. D. MILLS	NAIL RANCH
WELL NAME.....	GOBER NO. 1	R. D. MILLS NO. 1-4B	NAIL 2J NO. 2
API.....			
LOCATION.....	SEC. 140, BLK. 42, H&TC SUR.	SEC. 4B, CLAY CSL	ETRR SUR., A-1234
OWNER.....	BHP PETROLEUM (AMERICAS), INC.	NATURAL GAS ANADARKO CO.	JACOBS, C. E., CO.
COMPLETED.....	87/09/00	84/08/15	87/--/00
SAMPLED.....	88/03/00	86/10/14	88/03/05
FORMATION.....	PENN-DOUGLAS L	PENN-MORROW	PENN-CONGLOMERATE
GEOLOGIC PROVINCE CODE...	360	360	425
DEPTH, FEET.....	6410	10710	4644
WELLHEAD PRESSURE, PSIG...	2175	3397	500
OPEN FLOW, MCFD.....	2800	572	3580
COMPONENT, MOLE PCT			
METHANE.....	78.5	96.1	71.0
ETHANE.....	10.3	1.0	11.4
PROPANE.....	5.6	0.2	6.0
N-BUTANE.....	1.3	0.0	1.3
ISOBUTANE.....	0.7	0.1	0.6
N-PENTANE.....	0.2	0.0	0.3
ISOPENTANE.....	0.2	0.0	0.2
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	2.9	0.3	8.7
OXYGEN.....	0.1	0.0	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	2.2	0.2
HELIUM.....	0.14	0.03	0.24
HEATING VALUE*.....	1207	1000	1171
SPECIFIC GRAVITY.....	0.712	0.585	0.749

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 727 SAMPLE 17945	INDEX 728 SAMPLE 18502	INDEX 729 SAMPLE 18608
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	SHERMAN	SHERMAN	SHERMAN
FIELD.....	BERTIE	CECILIA	CECILIA
WELL NAME.....	FERGUSON "P" NO. 1	RITTE NO. 2	CECILIA "A" NO. 1
API.....			
LOCATION.....	SEC. 23, BLK. 3B, GH&H SUR.	SEC. 64, BLK. 1-C, GH&H SUR.	SEC. 87, BLK. 1-C, GH&H SUR.
OWNER.....	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED.....	85/05/21	87/07/28	87/04/01
SAMPLED.....	86/01/10	87/12/22	88/06/03
FORMATION.....	PENN-MARVATON	PENN-MARVATON	PENN-MARVATON
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	5456	5615	5586
WELLHEAD PRESSURE, PSIG...	1088	1281	1275
OPEN FLOW, MCFD.....	3300	3200	2650
COMPONENT, MOLE PCT			
METHANE.....	72.4	69.8	75.6
ETHANE.....	8.6	8.2	8.4
PROPANE.....	5.0	4.7	3.9
N-BUTANE.....	1.6	1.2	3.0
ISOBUTANE.....	0.3	0.5	0.0
N-PENTANE.....	0.7	0.3	0.1
ISOPENTANE.....	0.2	TRACE	1.3
CYCLOPENTANE.....	0.2	0.1	0.2
HEXANES PLUS.....	0.5	0.2	0.2
NITROGEN.....	9.8	12.4	6.6
OXYGEN.....	TRACE	2.0	0.2
ARGON.....	TRACE	0.1	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.5	0.4
HELIUM.....	0.26	0.16	0.17
HEATING VALUE*.....	1153	1060	1193
SPECIFIC GRAVITY.....	0.752	0.749	0.746

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 730 SAMPLE 18333	INDEX 731 SAMPLE 18596	INDEX 732 SAMPLE 18597
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	SHERMAN	SHERMAN	SHERMAN
FIELD.....	COLDWATER RANCH	COLDWATER RANCH	COLDWATER RANCH
WELL NAME.....	COLDWATER "C" NO. 10	COLDWATER "C" NO. 11	BRIDWELL "A" NO. 1
API.....			
LOCATION.....	SEC. 37, BLK. 3-B, GH&H SUR.	SEC. 37, BLK. 3-B, GH&H SUR.	SEC. 89, BLK. 1-C, GH&H SUR.
OWNER.....	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED.....	86/10/20	88/01/27	87/10/27
SAMPLED.....	87/03/26	88/05/22	88/05/22
FORMATION.....	PENN-TONKAWA	MISS-ST. LOUIS	PENN-CLEVELAND
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	4844	6235	5407
WELLHEAD PRESSURE, PSIG.....	1055	1520	1154
OPEN FLOW, MCFD.....	4800	5659	3600
COMPONENT, MOLE PCT			
METHANE.....	74.7	80.3	71.4
ETHANE.....	6.9	5.1	9.1
PROPANE.....	4.7	3.1	5.8
N-BUTANE.....	1.1	0.9	1.4
ISOBUTANE.....	0.6	0.4	0.5
N-PENTANE.....	0.2	0.4	0.3
ISOPENTANE.....	0.2	TRACE	0.2
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.1	0.2	0.1
NITROGEN.....	11.0	8.9	10.4
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.5
HELIUM.....	0.21	0.37	0.25
HEATING VALUE*.....	1082	1061	1131
SPECIFIC GRAVITY.....	0.716	0.682	0.747

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 733 18825	INDEX SAMPLE 734 18826	INDEX SAMPLE 735 18714
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	SHERMAN	SHERMAN	SHERMAN
FIELD.....	COLDWATER RANCH	COLDWATER RANCH	HARLAND
WELL NAME.....	COLDWATER "C" NO. 11	BRIDWELL "A" NO. 1	RENNER NO. 1
API.....			
LOCATION.....	SEC. 37, BLK. 3-B, GH&H SUR.	SEC. 89, BLK. 1-C, GH&H SUR.	SEC. 22, BLK. 1, PSL
OWNER.....	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	KAISER-FRANCIS OIL CO.
COMPLETED.....	88/01/27	87/10/27	88/01/12
SAMPLED.....	89/07/20	89/07/20	89/01/07
FORMATION.....	MISS-ST. LOUIS	PENN-CLEVELAND	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	6235	5407	6794
WELLHEAD PRESSURE, PSIG...	1507	1154	1050
OPEN FLOW, MCFD.....	16000	3600	1800
COMPONENT, MOLE PCT			
METHANE.....	79.9	72.2	81.3
ETHANE.....	5.3	9.4	7.3
PROPANE.....	2.5	4.5	4.0
N-BUTANE.....	0.8	1.1	1.3
ISOBUTANE.....	0.5	0.4	0.4
N-PENTANE.....	0.4	0.5	0.6
ISOPENTANE.....	0.4	0.2	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.4
NITROGEN.....	9.5	11.1	4.4
OXYGEN.....	0.1	0.1	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.3	0.1
HELIUM.....	0.39	0.26	0.17
HEATING VALUE*.....	1046	1094	1167
SPECIFIC GRAVITY.....	0.680	0.729	0.699

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 736 SAMPLE 18835	INDEX 737 SAMPLE 18910	INDEX 738 SAMPLE 18805
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	SHERMAN	SHERMAN	SHERMAN
FIELD.....	LUNDBERG	PALO DURO CREEK	STEVENS N
WELL NAME.....	LUNDBERG NO. 1	FIKE NO. 2	RENTIE NO. 2
API.....			
LOCATION.....	SEC. 233, BLK. 1-T, T&NO SUR.	SEC. 11, BLK. 3-B, GH&H SUR.	SEC. 199, BLK. 1-C, GH&H SUR.
OWNER.....	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.	PHILLIPS PETROLEUM CO.
COMPLETED.....	89/02/17	89/11/08	89/--/00
SAMPLED.....	89/08/09	90/02/07	89/06/02
FORMATION.....	PENN-MORROW	PENN-VIRGIL L	PENN-MARMATON
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	5234	4228	4992
WELLHEAD PRESSURE, PSIG...	1071	639	1073
OPEN FLOW, MCFD.....	9100	38800	3600
COMPONENT, MOLE PCT			
METHANE.....	75.7	73.3	65.5
ETHANE.....	7.0	6.0	10.2
PROPANE.....	4.3	4.0	5.1
N-BUTANE.....	0.7	1.0	1.7
ISOBUTANE.....	1.1	0.6	0.5
N-PENTANE.....	0.0	0.1	1.2
ISOPENTANE.....	0.0	0.7	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.3
NITROGEN.....	10.3	13.6	14.7
OXYGEN.....	0.0	0.1	0.2
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.5	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.2
HELIUM.....	0.31	0.46	0.31
HEATING VALUE*.....	1066	1042	1122
SPECIFIC GRAVITY.....	0.700	0.720	0.784

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 739 SAMPLE 18943	INDEX 740 SAMPLE 18524	INDEX 741 SAMPLE 18040
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	SHERMAN	STERLING	TAYLOR
FIELD.....	STRAITFORD DOME	SUGG RANCH	LAKE ABILENE
WELL NAME.....	BRYAN NO. 2	COUNCIL NO. 516	RODE "E" NO. 1
API.....			
LOCATION.....	SEC. 369, BLK. 1-T, FS7WL SUR.	H&TC SUR.	J. TOWNSEND SUR. 63
OWNER.....	BRYAN EXPLORATION CO.	WAGNER & BROWN	HARKEN PRODUCTION CO.
COMPLETED.....	89/10/25	87/--/00	85/12/06
SAMPLED.....	90/03/06	88/02/26	86/04/05
FORMATION.....	PENN-CISCO LIME U	PENN-CANYON	PENN-HONE CREEK
GEOLOGIC PROVINCE CODE.....	360	430	425
DEPTH, FEET.....	2852	7200	3296
WELLHEAD PRESSURE, PSIG.....	31	1020	987
OPEN FLOW, MCFD.....	1400	1030	13000
COMPONENT, MOLE PCT			
METHANE.....	62.3	73.6	71.9
ETHANE.....	6.9	10.1	5.1
PROPANE.....	6.0	7.3	4.0
N-BUTANE.....	2.7	1.6	1.4
ISOBUTANE.....	2.8	0.7	0.4
N-PENTANE.....	0.0	0.4	0.6
ISOPENTANE.....	2.7	0.1	0.2
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.1	0.4
NITROGEN.....	15.0	5.5	15.1
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.1	TRACE	TRACE
HYDROGEN.....	TRACE	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	0.4	0.2
HELIUM.....	0.73	0.11	0.41
HEATING VALUE*.....	1210	1226	1043
SPECIFIC GRAVITY.....	0.852	0.753	0.736

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 742 SAMPLE 18448	INDEX 743 SAMPLE 18450	INDEX 744 SAMPLE 18203
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	TERRELL	TERRELL	TOM GREEN
FIELD.....	BROWN-BASSETT	BROWN-BASSETT	TD
WELL NAME.....	HERMAN 8 NO. 1 (LOWER ZONE)	HERMAN 8 NO. 1 (UPPER ZONE)	MUNN-B "1125" NO. 12
API.....			
LOCATION.....	SEC. 8, BLK. 161, THRR SUR.	SEC. 8, BLK. 161, THRR SUR.	SEC. 1125, TTRR SUR., A-4369
OWNER.....	TENNECO OIL EXP. & PROD. CO.	TENNECO OIL EXP. & PROD. CO.	PHILLIPS PETROLEUM CO.
COMPLETED.....	84/10/16	86/11/16	86/03/13
SAMPLED.....	87/09/28	87/09/28	86/08/18
FORMATION.....	ORDO-FUSSELMAN	PENN-STRAWN	PENN-6575 FT. SAND
GEOLOGIC PROVINCE CODE.....	430	430	430
DEPTH, FEET.....	12806	11631	6175
WELLHEAD PRESSURE, PSIG.....	1781	2329	1488
OPEN FLOW, MCFD.....	5000	3725	2400
COMPONENT, MOLE PCT			
METHANE.....	95.7	94.8	66.9
ETHANE.....	1.2	0.2	12.3
PROPANE.....	0.0	0.0	7.5
N-BUTANE.....	0.3	0.3	2.8
ISOBUTANE.....	0.0	0.0	0.5
N-PENTANE.....	0.2	0.3	1.4
ISOPENTANE.....	0.0	0.0	0.6
CYCLOPENTANE.....	TRACE	TRACE	0.3
HEXANES PLUS.....	0.1	0.1	0.9
NITROGEN.....	0.6	0.6	6.1
OXYGEN.....	TRACE	TRACE	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.0	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	TRACE	0.0
CARBON DIOXIDE.....	1.9	3.6	0.4
HELIUM.....	0.02	0.02	0.10
HEATING VALUE*.....	1014	995	1348
SPECIFIC GRAVITY.....	0.592	0.606	0.834

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 745 SAMPLE 18474	INDEX 746 SAMPLE 19064	INDEX 747 SAMPLE 18109
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	VAL VERDE	VAN ZANDT	VICTORIA
FIELD.....	BAXTER-WENTWORTH	BEN WHEELER	NOT GIVEN
WELL NAME.....	BUNGER "6" NO. 1	M. G. MARSH NO. 1	ANNIE BRACKEN ALLEN NO.2
API.....	SEC. 6, BLK. Q3, TC&RR SUR.	J. H. BOWMAN SUR., A-65	T&NO SUR., 7A-360
LOCATION.....	FELMONT OIL CORP.	ENERGY DEVELOPMENT CORP.	WEST, THOMAS S., JR.
OWNER.....	86/03/25	88/07/00	86/--/00
COMPLETED.....	87/11/00	90/11/27	86/05/16
SAMPLED.....	PENN-CANYON	CRET-BACON LIMESTONE	MIOC-NOT GIVEN
FORMATION.....	430	260	220
GEOLOGIC PROVINCE CODE...		8493	2194
DEPTH, FEET.....	3654	3011	NOT GIVEN
WELLHEAD PRESSURE, PSIG...	370	6700	6200
OPEN FLOW, MCFD.....	633		
COMPONENT, MOLE PCT			
METHANE.....	88.6	87.6	99.0
ETHANE.....	3.1	5.9	0.0
PROPANE.....	1.5	2.3	0.0
N-BUTANE.....	0.6	0.8	0.0
ISOBUTANE.....	TRACE	0.5	0.0
N-PENTANE.....	0.1	0.4	0.0
ISOPENTANE.....	0.3	0.1	0.0
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.0	0.2	0.0
NITROGEN.....	4.5	0.8	0.7
OXYGEN.....	0.8	0.0	0.0
ARGON.....	0.1	0.1	TRACE
HYDROGEN.....	0.0	TRACE	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	1.3	0.1
HELIUM.....	0.09	0.02	0.01
HEATING VALUE*.....	1030	1129	1004
SPECIFIC GRAVITY.....	0.628	0.657	0.557

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

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

	INDEX 748 SAMPLE 18007	INDEX 749 SAMPLE 19035	INDEX 750 SAMPLE 18322
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	WASHINGTON	WEBB	WEBB
FIELD.....	BRENHAM NW	BASHARA HEREFORD	LAREDO LOBO
WELL NAME.....	FRED HEINEKE NO. 1	C. BRUNI MINERAL TRUST NO. 22	ACEVEDO-HAERING NO. 2
API.....		42-479-35004	
LOCATION.....	ELIZABETH GORDON SUR., A-49	JOSE ANTONIO TREVINO NO. 56	D. GARCIA SUR. 44, A-54
OWNER.....	WILLIAMS, CLAYTON W., JR.	CHEVRON U.S.A., INC.	CONSOLIDATED OIL & GAS, INC.
COMPLETED.....	84/12/09	90/06/04	85/02/00
SAMPLED.....	86/03/05	90/09/24	87/03/03
FORMATION.....	JURA-TAYLOR	CRET-LOBO	EOCE-WILCOX
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	11879	7199	6336
WELLHEAD PRESSURE, PSIG.....	6200	4320	2300
OPEN FLOW, MCFD.....	1903	21300	7800
COMPONENT, MOLE PCT			
METHANE.....	84.3	90.4	89.0
ETHANE.....	8.6	4.8	5.4
PROPANE.....	1.9	1.5	2.2
N-BUTANE.....	0.5	0.4	0.5
ISOBUTANE.....	0.4	0.3	0.7
N-PENTANE.....	0.4	0.2	0.2
ISOPENTANE.....	0.0	0.0	0.2
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.4	0.2	0.4
NITROGEN.....	0.2	1.5	0.4
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.1	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	3.2	0.6	0.7
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1129	1082	1137
SPECIFIC GRAVITY.....	0.681	0.625	0.649

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 751 SAMPLE 18995	INDEX 752 SAMPLE 18125	INDEX 753 SAMPLE 18693
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	WHARTON	WHARTON	WHEELER
FIELD.....	JONES CREEK	MATHEWS SE	ALLISON PARKS
WELL NAME.....	ELRAY MATZKE NO. 1	O'CONNELL NO. 1	REID TRUST NO. 1
API.....			
LOCATION.....	G. G. GIFFORD SUR., A-662	THOMAS RABB SUR., A-54	SEC. 18, BLK. RE, R&E SUR.
OWNER.....	MEDALLION OIL CO.	ETHYL PROPERTIES, INC.	ETS ENTERPRISES, INC.
COMPLETED.....	89/11/05	84/03/23	88/04/00
SAMPLED.....	90/07/24	86/06/12	88/11/21
FORMATION.....	EOCE-WILCOX	EOCE-YEGUA	PENN-MORROW
GEOLOGIC PROVINCE CODE.....	220	220	360
DEPTH, FEET.....	14000	6673	15310
WELLHEAD PRESSURE, PSIG.....	10300	2400	3692
OPEN FLOW, MCFD.....	4568	120000	3200
COMPONENT, MOLE PCT			
METHANE.....	84.4	88.2	95.9
ETHANE.....	4.8	5.0	0.9
PROPANE.....	1.6	2.1	0.1
N-BUTANE.....	0.4	0.8	0.1
ISOBUTANE.....	0.2	0.5	0.0
N-PENTANE.....	0.1	0.4	0.0
ISOPENTANE.....	0.2	0.7	0.0
CYCLOPENTANE.....	0.0	0.5	0.0
HEXANES PLUS.....	0.1	1.1	0.2
NITROGEN.....	1.6	0.1	0.0
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	6.5	0.6	2.7
HELIUM.....	0.00	TRACE	0.02
HEATING VALUE*.....	1021	1204	1003
SPECIFIC GRAVITY.....	0.682	0.683	0.592

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

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

	INDEX 754 SAMPLE 18769	INDEX 755 SAMPLE 18317	INDEX 756 SAMPLE 18483
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	WHEELER	WHEELER	WHEELER
FIELD.....	ALLISON-BRITT	B & B	B & B
WELL NAME.....	J. BEAN NO. 3-10	REID-JACKSON NO. 1	FRYE RANCH NO. 1
API.....			
LOCATION.....	SEC. 10, BLK. 2, B&B SUR.	SEC. 9, R&E SUR.	SEC. 48, BLK. A-3, H&GN SUR.
OWNER.....	APACHE CORP.	HORIZON OIL & GAS CO.	INDREX, INC.
COMPLETED.....	88/02/03	85/05/27	87/05/27
SAMPLED.....	89/03/14	87/02/27	87/11/17
FORMATION.....	PENN-GRANITE WASH	PENN-GRANITE WASH	PENN-CHEROKEE-GRANITE WASH A
GEOLOGIC PROVINCE CODE...	360	360	360
DEPTH, FEET.....	12470	12060	12142
WELLHEAD PRESSURE, PSIG...	1862	4250	3550
OPEN FLOW, MCFD.....	4627	5400	1200
COMPONENT, MOLE PCT			
METHANE.....	85.9	79.0	77.0
ETHANE.....	8.6	11.1	13.0
PROPANE.....	2.6	4.9	5.5
N-BUTANE.....	0.5	1.3	1.3
ISOBUTANE.....	0.5	1.0	0.5
N-PENTANE.....	0.2	0.5	0.3
ISOPENTANE.....	0.3	0.3	0.4
CYCLOPENTANE.....	0.0	0.2	0.0
HEXANES PLUS.....	0.2	0.5	0.1
NITROGEN.....	0.9	0.7	1.6
OXYGEN.....	0.0	0.0	0.1
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.4	0.3
HELIUM.....	0.04	0.03	0.03
HEATING VALUE*.....	1159	1271	1245
SPECIFIC GRAVITY.....	0.658	0.731	0.724

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 757 18956	INDEX SAMPLE 758 18173	INDEX SAMPLE 759 18346
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	WHEELER	WHEELER	WHEELER
FIELD.....	BRITT RANCH W	BUFFALO WALLOW	LISTER
WELL NAME.....	THOMAS NO. 2-3	BACH NO. 1-12	STREET E B NO. 1
API.....			
LOCATION.....	SEC. 3, BLK. 5, B&B SUR.	SEC. 12, CDSL SUR.	SEC. 15, BLK. L, J. M. LINDSEY
OWNER.....	HARDY OIL & GAS U.S.A.	MARSH, TOM F., INC.	SUN EXPLORATION & PRODUCTION C
COMPLETED.....	89/07/31	85/07/07	87/01/15
SAMPLED.....	90/05/08	86/07/30	87/04/00
FORMATION.....	PENN-GRANITE WASH	PENN-MORROW	PENN-GRANITE WASH
GEOLOGIC PROVINCE CODE.....	360	360	360
DEPTH, FEET.....	12120	14748	12251
WELLHEAD PRESSURE, PSIG...	1914	3165	2725
OPEN FLOW, MCFD.....	10000	9250	11939
COMPONENT, MOLE PCT			
METHANE.....	77.8	96.1	85.5
ETHANE.....	12.6	1.2	7.8
PROPANE.....	4.9	TRACE	3.4
N-BUTANE.....	1.7	0.1	0.7
ISOBUTANE.....	0.9	0.0	0.6
N-PENTANE.....	0.0	0.2	0.1
ISOPENTANE.....	0.6	0.0	0.2
CYCLOPENTANE.....	0.0	TRACE	0.0
HEXANES PLUS.....	0.0	0.1	0.1
NITROGEN.....	1.5	0.2	1.4
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	TRACE	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.0	1.9	0.2
HELIUM.....	0.04	0.02	0.04
HEATING VALUE*.....	1255	1012	1156
SPECIFIC GRAVITY.....	0.723	0.586	0.663

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 760 SAMPLE 18694	INDEX 761 SAMPLE 18328	INDEX 762 SAMPLE 18329
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	WHEELER	WINKLER	WINKLER
FIELD.....	WILDCAT	CRITTENDON	CRITTENDON
WELL NAME.....	SIMMONS NO. 1-2	TUBB ESTATE NO. 1-21	TUBB ESTATE NO. 23
API.....			
LOCATION.....	SEC. 2, BLK. L, J. M. LINDSEY	NOT GIVEN	NOT GIVEN
OWNER.....	HAWKINS OIL & GAS, INC.	HERITAGE RESOURCES, INC.	HERITAGE RESOURCES, INC.
COMPLETED.....	88/03/30	86/07/00	86/07/00
SAMPLED.....	88/11/16	87/03/10	86/10/21
FORMATION.....	PENN-GRANITE WASH	ORDO-FUSSELMAN	PENN-STRAWN
GEOLOGIC PROVINCE CODE.....	360	430	430
DEPTH, FEET.....	11408	18000	13900
WELLHEAD PRESSURE, PSIG.....	3000	3600	7800
OPEN FLOW, MCFD.....	500	18000	20000
COMPONENT, MOLE PCT			
METHANE.....	79.0	84.1	96.8
ETHANE.....	11.9	0.8	1.2
PROPANE.....	4.7	0.1	0.2
N-BUTANE.....	1.8	0.0	0.0
ISOBUTANE.....	0.1	TRACE	0.1
N-PENTANE.....	0.3	0.0	0.0
ISOPENTANE.....	0.4	0.0	TRACE
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.0	0.0
NITROGEN.....	1.4	10.6	0.7
OXYGEN.....	0.1	2.7	TRACE
ARGON.....	0.0	0.1	TRACE
HYDROGEN.....	0.0	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.1	0.0
CARBON DIOXIDE.....	0.0	1.4	0.9
HELIUM.....	0.04	0.03	0.01
HEATING VALUE*.....	1241	870	1011
SPECIFIC GRAVITY.....	0.715	0.633	0.575

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

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

	INDEX SAMPLE 17972	INDEX SAMPLE 17944	INDEX SAMPLE 18344
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	WISE	WISE	YOUNG
FIELD.....	BOONSVILLE	BRIDGEPORT	WILEY
WELL NAME.....	ORAN SPEERS NO. 6	GUY BROWN NO. 5	WILEY NO. 1
API.....			
LOCATION.....	ARCHIBALD BLOUNT SUR., A-30	MARGARET SWIFT SUR., A-739	J. EDDLEMAN SUR., A-1728
OWNER.....	MITCHELL ENERGY CORP.	MITCHELL ENERGY CORP.	RANGER OPERATING CO.
COMPLETED.....	85/09/09	85/07/29	86/04/26
SAMPLED.....	86/01/29	86/01/09	87/04/02
FORMATION.....	PENN-BEND CONGLOMERATE	PENN-STRAWN	MISS---
GEOLOGIC PROVINCE CODE...	420	420	425
DEPTH, FEET.....	5618	3995	4298
WELLHEAD PRESSURE, PSIG...	1667	822	1780
OPEN FLOW, MCFD.....	17200	8400	7900
COMPONENT, MOLE PCT			
METHANE.....	78.4	77.1	72.9
ETHANE.....	10.1	5.1	10.0
PROPANE.....	5.2	5.1	6.1
N-BUTANE.....	1.5	2.1	1.8
ISOBUTANE.....	0.5	0.7	0.8
N-PENTANE.....	0.5	0.9	0.6
ISOPENTANE.....	0.3	0.3	0.4
CYCLOPENTANE.....	0.1	0.2	0.1
HEXANES PLUS.....	0.3	0.6	0.3
NITROGEN.....	2.4	7.5	6.3
OXYGEN.....	0.1	TRACE	0.1
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	TRACE	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.3	0.3
HELIUM.....	0.10	0.19	0.17
HEATING VALUE*.....	1231	1189	1226
SPECIFIC GRAVITY.....	0.725	0.748	0.761

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

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

	INDEX SAMPLE 18666	INDEX SAMPLE 18716	INDEX SAMPLE 17961
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	ZAPATA	ZAPATA	ZAPATA
FIELD.....	BENAVIDEZ	ELISA	JENNINGS W
WELL NAME.....	CARMEN D. SANCHEZ NO. 1	SAN MARTIN NO. 2	JENNINGS NO. 54
API.....			
LOCATION.....	J. V. BORREGO GRANT, A-209	EL SOCORRO SUR., A-25	CERRITO BLANCO GRANT, A-73
OWNER.....	ENRON OIL & GAS CO.	KILLAM OIL CO.	PENNZOIL PRODUCING CO.
COMPLETED.....	87/10/09	87/02/06	85/07/07
SAMPLED.....	88/08/29	88/12/28	--/--/00
FORMATION.....	EOCE-WILCOX	EOCE-WILCOX	EOCE-QUEEN CITY
GEOLOGIC PROVINCE CODE...	220	220	220
DEPTH, FEET.....	9548	10708	4422
WELLHEAD PRESSURE, PSIG...	1400	7630	NOT GIVEN
OPEN FLOW, MCFD.....	18982	3500	1739
COMPONENT, MOLE PCT			
METHANE.....	94.4	87.7	90.4
ETHANE.....	2.2	6.2	4.3
PROPANE.....	0.4	3.1	1.8
N-BUTANE.....	0.0	0.7	0.5
ISOBUTANE.....	0.2	0.4	0.3
N-PENTANE.....	0.0	0.4	0.2
ISOPENTANE.....	0.0	0.0	0.2
CYCLOPENTANE.....	0.0	TRACE	0.1
HEXANES PLUS.....	0.0	0.2	0.3
NITROGEN.....	0.2	0.2	0.7
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.7	0.9	1.1
HELIUM.....	0.01	TRACE	TRACE
HEATING VALUE*.....	1010	1147	1103
SPECIFIC GRAVITY.....	0.598	0.657	0.637

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 769 SAMPLE 18094	INDEX 770 SAMPLE 18016	INDEX 771 SAMPLE 18710
STATE.....	TEXAS	UTAH	UTAH
COUNTY.....	ZAPATA	CARBON	EMERY
FIELD.....	NOT GIVEN	PETERS POINT	NOT GIVEN
WELL NAME.....	SAN FERNANDO NO.1	PETERS POINT NO. 14-9	TOLEDO-VUKASOVICH NO. 3
API.....			
LOCATION.....	J.V. BOREGO SUR., A-209	SEC. 14, T13S, R16E	SEC. 33, T19S, R12E
OWNER.....	TDC ENGINEERING, INC.	TEXACO INC.	TOLEDO MINING CO.
COMPLETED.....	85/02/12	81/09/10	84/--/00
SAMPLED.....	86/04/17	86/03/11	88/11/17
FORMATION.....	EOCE-WILCOX	EOCE-GREEN RIVER	TRIA-MOENKOPI
GEOLOGIC PROVINCE CODE.....	220	575	585
DEPTH, FEET.....	9618	2752	2184
WELLHEAD PRESSURE, PSIG.....	3500	NOT GIVEN	288
OPEN FLOW, MCFD.....	3681	60	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	95.6	96.6	1.5
ETHANE.....	1.3	0.5	0.5
PROPANE.....	0.1	0.2	0.2
N-BUTANE.....	0.1	0.1	0.0
ISOBUTANE.....	0.0	TRACE	0.2
N-PENTANE.....	0.1	0.1	0.0
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	TRACE	TRACE	0.0
HEXANES PLUS.....	0.1	0.1	0.0
NITROGEN.....	0.4	0.9	16.4
OXYGEN.....	0.1	TRACE	0.2
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.2	0.2	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.0	1.2	80.9
HELIUM.....	TRACE	0.01	0.08
HEATING VALUE*.....	1008	1006	39
SPECIFIC GRAVITY.....	0.588	0.579	1.420

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18447	INDEX SAMPLE 18722	INDEX SAMPLE 19002
STATE.....	UTAH	UTAH	UTAH
COUNTY.....	JUAB	SAN JUAN	SAN JUAN
FIELD.....	FISH SPRINGS	BOUNDARY BUTTE	BUG
WELL NAME.....	SPRING WATER SAMPLE	ENGLISH WN NO. 37	BUG NO. 16
API.....			43-373-30607
LOCATION.....	T11S, R14W	SEC. 22, T43S, R22E	SEC. 17, T36S, R26E
OWNER.....	CRAFTS, MARK	HONDO OIL & GAS CO.	WEXPRO CO.
COMPLETED.....	87/--/00	88/05/21	89/06/02
SAMPLED.....	87/09/25	89/01/10	90/08/00
FORMATION.....	NOT GIVEN	PENN-PARADOX	PENN-ISMAY
GEOLOGIC PROVINCE CODE.....	625	585	585
DEPTH, FEET.....	NOT GIVEN	4564	6176
WELLHEAD PRESSURE, PSIG.....	NOT GIVEN	270	1475
OPEN FLOW, MCFD.....	NOT GIVEN	1500	1427
COMPONENT, MOLE PCT			
METHANE.....	0.2	70.7	82.7
ETHANE.....	0.0	3.9	8.8
PROPANE.....	TRACE	1.5	3.1
N-BUTANE.....	0.0	0.3	1.0
ISOBUTANE.....	TRACE	0.4	0.2
N-PENTANE.....	0.0	0.0	0.2
ISOPENTANE.....	0.0	0.1	0.1
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.1
NITROGEN.....	93.2	17.8	3.8
OXYGEN.....	2.9	TRACE	0.1
ARGON.....	1.1	TRACE	0.0
HYDROGEN.....	0.0	0.1	TRACE
HYDROGEN SULFIDE**.....	TRACE	0.0	0.0
CARBON DIOXIDE.....	2.4	4.4	0.0
HELIUM.....	0.03	0.92	0.02
HEATING VALUE*.....	6	850	1131
SPECIFIC GRAVITY.....	0.989	0.712	0.670

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 775 SAMPLE 18890	INDEX 776 SAMPLE 18449	INDEX 777 SAMPLE 17965
STATE.....	UTAH	UTAH	UTAH
COUNTY.....	SAN JUAN	UINTAH	UINTAH
FIELD.....	NOT GIVEN	EVACUATION CREEK	ISLAND
WELL NAME.....	CABALLO UNIT NO. 2-9	EVACUATION CREEK-STATE-A NO1	RIVER BEND UNIT NO. 11-34B
API.....			
LOCATION.....	SEC. 9, T36S, R23E	SEC. 2, T12S, R25E	SEC. 34, T9S, R19E
OWNER.....	QUINTANA PETROLEUM CORP.	TXO PRODUCTION CORP.	CNG PRODUCING CO.
COMPLETED.....	88/06/23	85/11/19	85/10/10
SAMPLED.....	89/12/20	87/09/25	86/01/19
FORMATION.....	PENN-ISLAY	CRET-DAKOTA	EOCE-CHAPITA WELLS
GEOLOGIC PROVINCE CODE.....	585	575	575
DEPTH, FEET.....	6492	8107	5856
WELLHEAD PRESSURE, PSIG.....	1000	2800	400
OPEN FLOW, MCFD.....	100	3220	1028
COMPONENT, MOLE PCT			
METHANE.....	77.8	86.4	89.0
ETHANE.....	11.8	6.3	5.3
PROPANE.....	5.2	2.2	1.8
N-BUTANE.....	1.3	0.8	0.7
ISOBUTANE.....	0.9	0.3	0.3
N-PENTANE.....	0.2	0.7	0.6
ISOPENTANE.....	0.5	0.0	0.1
CYCLOPENTANE.....	0.0	0.2	0.2
HEXANES PLUS.....	0.3	0.5	0.7
NITROGEN.....	1.7	1.5	1.3
OXYGEN.....	0.1	0.1	TRACE
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.1	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	0.9	0.1
HELIUM.....	0.03	0.04	0.01
HEATING VALUE*.....	1257	1147	1150
SPECIFIC GRAVITY.....	0.728	0.670	0.655

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17928	INDEX SAMPLE 18977	INDEX SAMPLE 18283
STATE.....	UTAH	UTAH	UTAH
COUNTY.....	UINTAH	UINTAH	UINTAH
FIELD.....	NATURAL BUTTES	NATURAL BUTTES	ROCK
WELL NAME.....	RIVER BEND UNIT NO. 9-13E	COTTONWOOD FEDERAL NO. 1-20	FEDERAL "A" NO. 1
API.....		43-047-31875	
LOCATION.....	SEC. L3, T10S, R19E	SEC. 20, T9S, R21E	SEC. 12, T11S, R23E
OWNER.....	CNG PRODUCING CO.	ENRON OIL & GAS CO.	TXO PRODUCTION CORP.
COMPLETED.....	85/09/11	90/02/11	85/12/23
SAMPLED.....	85/12/11	90/06/09	86/12/23
FORMATION.....	EOCE-CHAPITA WELLS	EOCE-GREEN RIVER	EOCE-WASATCH
GEOLOGIC PROVINCE CODE...	575	575	575
DEPTH, FEET.....	5432	4526	4900
WELLHEAD PRESSURE, PSIG...	1900	1825	1600
OPEN FLOW, MCFD.....	2391	3600	800
COMPONENT, MOLE PCT			
METHANE.....	89.9	89.0	93.0
ETHANE.....	4.0	3.3	3.0
PROPANE.....	1.2	1.5	0.8
N-BUTANE.....	0.4	0.4	0.3
ISOBUTANE.....	0.3	0.2	0.2
N-PENTANE.....	0.4	0.0	0.1
ISOPENTANE.....	0.2	0.0	0.1
CYCLOPENTANE.....	0.5	0.0	TRACE
HEXANES PLUS.....	1.1	0.0	0.1
NITROGEN.....	1.7	4.0	1.2
OXYGEN.....	0.1	1.5	0.2
ARGON.....	0.0	0.1	TRACE
HYDROGEN.....	0.0	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.2	0.9
HELIUM.....	TRACE	0.02	TRACE
HEATING VALUE*.....	1138	1018	1047
SPECIFIC GRAVITY.....	0.655	0.621	0.605

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

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

	INDEX 781 SAMPLE 18678	INDEX 782 SAMPLE 18612	INDEX 783 SAMPLE 18930
STATE.....	VIRGINIA	VIRGINIA	WEST VIRGINIA
COUNTY.....	BUCHANAN	WISE	BARBOUR
FIELD.....	KEEN MOUNTAIN	NORA	BELINGTON
WELL NAME.....	CLINCH FIELD NO. 9	BANNER COAL CO. NO. P-348	FRI-109 FEE
API.....			
LOCATION.....	GRUNDY DIST., PATTERSON QUAD.	LIPPS DIST., COEBURN QUAD.	VALLEY DIST., BELINGTON QUAD
OWNER.....	ASHLAND EXPLORATION, INC.	PHILADELPHIA OIL CO.	FUEL RESOURCES, INC.
COMPLETED.....	87/05/29	88/01/27	89/--/00
SAMPLED.....	88/10/03	88/06/08	89/03/00
FORMATION.....	MISS-BIG LIME-BEREA	MISS-BEREA	DEVO-HAVERTY 1, 2, & 3-ELKS
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	4955	5077	5531
WELLHEAD PRESSURE, PSIG...	600	680	1250
OPEN FLOW, MCFD.....	5213	1425	888
COMPONENT, MOLE PCT			
METHANE.....	97.7	97.3	89.7
ETHANE.....	1.5	1.8	5.4
PROPANE.....	0.1	0.2	1.5
N-BUTANE.....	0.0	0.0	0.2
ISOBUTANE.....	TRACE	0.1	0.7
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	TRACE	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.5	0.5	1.6
OXYGEN.....	0.1	0.0	0.2
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.5
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	0.1
HELIUM.....	0.07	0.05	0.12
HEATING VALUE*.....	1018	1025	1080
SPECIFIC GRAVITY.....	0.566	0.569	0.617

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

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

	INDEX SAMPLE 784 18830	INDEX SAMPLE 785 18821	INDEX SAMPLE 786 18528
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	BRAXTON	DODDRIDGE	DODDRIDGE
FIELD.....	SALT LICK	CENTRAL DISTRICT	MEATHOUSE FORK-BRISTOL
WELL NAME.....	CUNNINGHAM NO. 1	PERKINS NO. 14	DAVIS NO. 1
API.....			
LOCATION.....	ORLANDO QUAD.	CENTRAL DIST.	GREENERIAR DIST., BIG ISAAC QU
OWNER.....	BAKER, J. C. & SONS, INC.	EASTERN AMERICAN ENERGY CORP.	EXCEL ENERGY, INC.
COMPLETED.....	89/--/00	88/08/30	87/07/06
SAMPLED.....	89/08/03	89/07/06	88/03/02
FORMATION.....	DEVO-BENSON	DEVO-ALEXANDER-BENSON-RILEY	DEVO-ALEXANDER-BENSON
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	3993	5111	4968
WELLHEAD PRESSURE, PSIG...	1300	1650	1825
OPEN FLOW, MCFD.....	1000	1719	1200
COMPONENT, MOLE PCT			
METHANE.....	90.4	81.9	78.7
ETHANE.....	6.5	11.4	12.6
PROPANE.....	1.4	3.4	4.5
N-BUTANE.....	0.2	0.8	1.0
ISOBUTANE.....	0.4	0.5	0.8
N-PENTANE.....	0.0	0.2	0.2
ISOPENTANE.....	0.1	0.3	0.2
CYCLOPENTANE.....	0.0	0.0	TRACE
HEXANES PLUS.....	0.0	0.0	0.2
NITROGEN.....	0.8	1.2	1.4
OXYGEN.....	TRACE	0.0	0.1
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.2
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.2	0.1
HELIUM.....	0.06	0.08	0.07
HEATING VALUE*.....	1093	1187	1229
SPECIFIC GRAVITY.....	0.616	0.681	0.707

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 787 19059	INDEX SAMPLE 788 18909	INDEX SAMPLE 789 18764
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	DODDRIDGE	DODDRIDGE	GILMER
FIELD.....	NOT GIVEN	STRAIGHT FORK	DEKALB
WELL NAME.....	HINKLE NO. D-14	BRITON NO. 3	T. COLLINS NO. 1
API.....			
LOCATION.....	GREENBRIER DIST.	WEST UNION DIST., OXFORD QUAD	DEKALB DIST., TANNER QUAD.
OWNER.....	SHELDON & ASSOCIATES, INC.	EASTERN AMERICAN ENERGY CORP.	WACO OIL & GAS CO., INC.
COMPLETED.....	88/04/02	89/06/27	88/--/00
SAMPLED.....	90/10/00	90/01/29	89/03/01
FORMATION.....	DEVO-ELK-BALLTOWN-SPEECHLY	DEVO-ALEXANDER-RILEY-BRADFOR	DEVO-SHALE
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	3572	3221	5863
WELLHEAD PRESSURE, PSIG...	1550	1450	1265
OPEN FLOW, MCFD.....	300	2398	1639
COMPONENT, MOLE PCT			
METHANE.....	81.7	80.0	73.6
ETHANE.....	11.5	12.3	12.2
PROPANE.....	3.7	4.1	4.0
N-BUTANE.....	0.7	0.8	1.0
ISOBUTANE.....	0.5	0.7	0.6
N-PENTANE.....	0.2	0.1	0.1
ISOPENTANE.....	0.2	0.4	0.4
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.1	0.4	0.1
NITROGEN.....	1.2	0.9	4.9
OXYGEN.....	0.0	0.0	0.3
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.1	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.1	2.8
HELIUM.....	0.07	0.05	0.06
HEATING VALUE*.....	1190	1232	1146
SPECIFIC GRAVITY.....	0.682	0.704	0.740

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 790 SAMPLE 18242	INDEX 791 SAMPLE 18807	INDEX 792 SAMPLE 18990
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	GRANT	HARRISON	HARRISON
FIELD.....	DOLLY SODS E	BRIDGEPORT-PUENTY	JARVISVILLE
WELL NAME.....	WEIMER NO. 21477	FARIS NO. 3	REYNOLDS NO. 1
API.....			
LOCATION.....	LITTLE STAR RUN	SIMPSON DIST., ROSEMONT QUAD.	COAL DIST., WOLF SUMMIT QUAD
OWNER.....	COLUMBIA NATURAL RESOURCES, IN	PETROLEUM DEVELOPMENT CORP.	BOWIE, INC.
COMPLETED.....	86/07/11	88/--/--/00	90/--/--/00
SAMPLED.....	86/10/00	89/06/08	90/07/20
FORMATION.....	DEVO-ORISKANY	MISS-BEREA-INJUN, DEVO-FIFTH	DEVO-BALLTOWN-BENSON
GEOLOGIC PROVINCE CODE.....	160	160	160
DEPTH, FEET.....	NOT GIVEN	1322	3380
WELLHEAD PRESSURE, PSIG.....	3369	NOT GIVEN	NOT GIVEN
OPEN FLOW, MCFD.....	2500	1040	1300
COMPONENT, MOLE PCT			
METHANE.....	96.8	84.9	85.7
ETHANE.....	1.4	7.4	7.8
PROPANE.....	0.2	2.7	2.4
N-BUTANE.....	0.0	0.7	0.6
ISOBUTANE.....	0.2	0.7	0.3
N-PENTANE.....	0.0	0.1	0.1
ISOPENTANE.....	0.0	0.6	TRACE
CYCLOPENTANE.....	0.2	0.0	0.0
HEXANES PLUS.....	0.3	0.1	0.1
NITROGEN.....	0.6	2.6	2.8
OXYGEN.....	TRACE	0.1	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.2	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.0	0.0
HELIUM.....	0.04	0.14	0.06
HEATING VALUE*.....	1041	1146	1110
SPECIFIC GRAVITY.....	0.581	0.666	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 793 SAMPLE 18623	INDEX 794 SAMPLE 18641	INDEX 795 SAMPLE 18388
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	KANAWHA	KANAWHA	LEWIS
FIELD.....	INDIAN CREEK	LOW QUALITY GAS	ASPINALL-FINSTER
WELL NAME.....	BLUE CREEK COAL NO. 21096	BLUE CREEK COAL NO. 821143	MCDONALD NO. 2-A
API.....			
LOCATION.....	MALDEN DIST., QUICK QUAD.	MALDEN DIST., SLATE LICK HOLLO	COLLIN SETTLEMENT, PETERSON QU
OWNER.....	COLUMBIA NATURAL RESOURCES, IN	COLUMBIA NATURAL RESOURCES, IN	PETROLEUM RESOURCES, INC.
COMPLETED.....	87/09/10	87/11/16	85/09/14
SAMPLED.....	88/06/27	88/07/21	87/06/27
FORMATION.....	SILU-TUSCARORA	SILU-TUSCARORA	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	6891	6773	7595
WELLHEAD PRESSURE, PSIG...	1602	1549	2450
OPEN FLOW, MCFD.....	5280	22444	150
COMPONENT, MOLE PCT			
METHANE.....	28.7	26.0	90.6
ETHANE.....	0.3	0.3	5.3
PROPANE.....	TRACE	TRACE	1.0
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.3
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	5.0	4.3	1.1
OXYGEN.....	0.3	0.1	TRACE
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	65.5	69.1	1.6
HELIUM.....	0.15	0.14	0.04
HEATING VALUE*.....	296	269	1049
SPECIFIC GRAVITY.....	1.216	1.247	0.615

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

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

	INDEX SAMPLE 18662	INDEX SAMPLE 19060	INDEX SAMPLE 18848
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	LEWIS	LEWIS	MCDOWELL
FIELD.....	FREEMANS CREEK	WESTON-JANE LEW	MCKINLEY SCHOOL-HUFF CREEK
WELL NAME.....	PAUL LOSH ET AL NO. 2	HARRISON NO. D-20	PANTHER NO. A-22
API.....			
LOCATION.....	SEC. L, FREEMANS CREEK DIST.	HACKERS CREEK DIST.	SANDY RIVER DIST., IAEGER QUAD
OWNER.....	STONEWALL GAS CO.	SHELDON & ASSOCIATES, INC.	CABOT OIL & GAS CORP.
COMPLETED.....	87/--/00	88/10/20	88/10/16
SAMPLED.....	88/08/24	90/09/15	88/09/07
FORMATION.....	DEVO-ALEXANDER-BENSON	DEVO-BENSON-BALLTOWN	MISS-BEREA-BIG LIME
GEOLOGIC PROVINCE CODE.....	160	160	160
DEPTH, FEET.....	5964	4286	NOT GIVEN
WELLHEAD PRESSURE, PSIG.....	1725	NOT GIVEN	855
OPEN FLOW, MCFD.....	1200	1350	3100
COMPONENT, MOLE PCT			
METHANE.....	83.5	85.5	94.0
ETHANE.....	10.6	9.0	2.0
PROPANE.....	3.3	3.0	0.3
N-BUTANE.....	0.6	0.6	0.0
ISOBUTANE.....	0.4	0.3	0.1
N-PENTANE.....	0.4	0.3	0.0
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.2	0.1	0.0
NITROGEN.....	1.0	1.0	2.6
OXYGEN.....	0.1	0.0	1.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.0	0.0
HELIUM.....	0.06	0.07	0.09
HEATING VALUE*.....	1176	1157	998
SPECIFIC GRAVITY.....	0.670	0.656	0.584

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 799 SAMPLE 18849	INDEX 800 SAMPLE 18754	INDEX 801 SAMPLE 18425
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	MCDOWELL	MERCER	MINGO
FIELD.....	MCKINLEY SCHOOL-HUFF CREEK	NOT GIVEN	NOT GIVEN
WELL NAME.....	PANTHER NO. A-23	POCAHONTAS LAND CO. NO. 3102	NO. C-1
API.....			
LOCATION.....	SANDY RIVER DIST., PANTHER QUA	ROCK DIST., BRAMWELL QUAD.	RIGHT FORK OF TRACE CREEK
OWNER.....	CABOT OIL & GAS CORP.	CNG DEVELOPMENT CO.	SENECA-UPSHUR DEVELOPMENT CO.
COMPLETED.....	88/10/09	88/09/05	87/--/00
SAMPLED.....	89/09/07	89/02/21	87/08/14
FORMATION.....	MISS-BEREA-BIG LIME	MISS-WEIR	DEVO-BROWN SHALE
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	3760	4722	NOT GIVEN
WELLHEAD PRESSURE, PSIG...	865	830	NOT GIVEN
OPEN FLOW, MCFD.....	1774	3156	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	96.1	97.8	77.9
ETHANE.....	2.1	1.3	13.7
PROPANE.....	0.3	0.1	4.8
N-BUTANE.....	0.0	0.0	1.0
ISOBUTANE.....	0.1	TRACE	0.4
N-PENTANE.....	0.0	0.0	0.2
ISOPENTANE.....	0.0	0.1	0.3
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	1.2	0.5	1.3
OXYGEN.....	0.0	TRACE	TRACE
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	TRACE	0.4
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	TRACE	0.1
HELIUM.....	0.09	0.08	0.03
HEATING VALUE*.....	1024	1021	1227
SPECIFIC GRAVITY.....	0.575	0.566	0.705

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 802 SAMPLE 18772	INDEX 803 SAMPLE 18414	INDEX 804 SAMPLE 19055
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	RALEIGH	RALEIGH	RANDOLPH
FIELD.....	BURNWELL S	NOT GIVEN	BOWDEN
WELL NAME.....	DOROTHY-SARITA NO. 16-ADS	NEW RIVER CO. NO. 1	C. J. KELLY NO. 3775
API.....			47-083-21093
LOCATION.....	W 81 27 30, S 37 57 30	TOWN DIST., BECKLEY QUAD.	BEVERLY DIST., BOWDEN QUAD
OWNER.....	PEAKE OPERATING CO.	ASHLAND EXPLORATION, INC.	CNG DEVELOPMENT CO.
COMPLETED.....	88/11/02	85/10/01	90/--/00
SAMPLED.....	89/03/22	87/07/28	90/11/16
FORMATION.....	DEVO-GORDON	SILU-TUSCARORA	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	3592	2111	8400
WELLHEAD PRESSURE, PSIG...	725	1200	2100
OPEN FLOW, MCFD.....	2320	1185	1100
COMPONENT, MOLE PCT			
METHANE.....	96.3	8.7	97.8
ETHANE.....	2.0	0.2	1.1
PROPANE.....	0.1	0.0	0.1
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	TRACE	0.0	TRACE
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.1	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.7	1.6	0.7
OXYGEN.....	0.0	0.1	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.6	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	89.4	0.3
HELIUM.....	0.03	0.08	0.05
HEATING VALUE*.....	1021	91	1014
SPECIFIC GRAVITY.....	0.568	1.433	0.567

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

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

	INDEX SAMPLE 19057	INDEX SAMPLE 18005	INDEX SAMPLE 17964
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	RANDOLPH	RANDOLPH	RANDOLPH
FIELD.....	BOWDEN	DRY FORK	WILDCAT
WELL NAME.....	J. M. COBERLY NO. 3570	L. HARMAN & T. TETER NO. 1	FEDERAL UNIT NO. 2
API.....			
LOCATION.....	BEVERLY DIST., BOWDEN QUAD	DRY FORK TWP.	DRY FORK DIST., WHITTAR QUAD.
OWNER.....	CNG DEVELOPMENT CO.	BEREA OIL & GAS CORP.	BEREA OIL & GAS CORP.
COMPLETED.....	90/--/00	83/10/24	84/03/26
SAMPLED.....	90/11/16	--/--/00	--/--/00
FORMATION.....	DEVO-CHERT	DEVO-ORISKANY	DEVO-ORISKANY
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	7191	6910	7436
WELLHEAD PRESSURE, PSIG...	2450	2666	2100
OPEN FLOW, MCFD.....	2000	5000	3700
COMPONENT, MOLE PCT			
METHANE.....	98.1	97.6	98.0
ETHANE.....	1.0	1.1	1.0
PROPANE.....	0.1	0.1	TRACE
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.5	0.6	0.8
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	TRACE	0.1	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.3	0.0
HELIUM.....	0.05	0.04	0.05
HEATING VALUE*.....	1016	1011	1011
SPECIFIC GRAVITY.....	0.565	0.566	0.563

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 18991	INDEX SAMPLE 18603	INDEX SAMPLE 18961
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	RITCHIE	RITCHIE	RITCHIE
FIELD.....	BEASON RUN	CLAY DIST.	LONG RUN WATERSHED
WELL NAME.....	TAYLOR NO. H-5	TAYLOR NO. 1	E. R. TAYLOR NO. 21
API.....			
LOCATION.....	CLAY DIST., PULLMAN QUAD	PULLMAN QUAD.	CLAY DIST.
OWNER.....	GAS SEARCH CORP.	HARTON ENERGY CORP.	EASTERN AMERICAN ENERGY CORP.
COMPLETED.....	89/--/00	87/--/00	90/--/00
SAMPLED.....	90/07/18	88/06/00	90/05/04
FORMATION.....	DEVO-RILEY	DEVO-RILEY	DEVO-ALEXANDER-WARREN
GEOLOGIC PROVINCE CODE...	160	160	160
DEPTH, FEET.....	4303	4155	3487
WELLHEAD PRESSURE, PSIG...	1600	1300	1600
OPEN FLOW, MCFD.....	2200	1500	2232
COMPONENT, MOLE PCT			
METHANE.....	81.2	77.7	76.6
ETHANE.....	9.8	10.8	11.7
PROPANE.....	3.3	3.9	5.8
N-BUTANE.....	0.7	1.0	0.0
ISOBUTANE.....	0.2	0.2	3.1
N-PENTANE.....	0.0	0.1	0.0
ISOPENTANE.....	0.1	0.4	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.0
NITROGEN.....	4.4	4.9	2.7
OXYGEN.....	0.1	0.9	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.0	0.1	0.0
HELIUM.....	0.08	0.07	0.06
HEATING VALUE*.....	1125	1144	1240
SPECIFIC GRAVITY.....	0.672	0.701	0.728

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 811 SAMPLE 18657	INDEX 812 SAMPLE 18889	INDEX 813 SAMPLE 18604
STATE.....	WEST VIRGINIA	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	RITCHIE	TYLER	WYOMING
FIELD.....	PULLMAN	CENTERVILLE	POCAHONTAS
WELL NAME.....	LANGFORD "B" NO. 83-2	CLARK NO. 1	POCAHONTAS LAND CO. NO. 1-63
API.....			
LOCATION.....	UNION DIST., PULLMAN QUAD.		
OWNER.....	BETT-RO, INC.		BARKERS RIDGE DIST., CRUMPLER
COMPLETED.....	87/10/30	89/07/19	CABOT OIL & GAS CORP.
SAMPLED.....	88/08/08	89/12/15	88/--/00
FORMATION.....	DEVO-SHALE	DEVO-BENSON-RILEY	88/05/18
GEOLOGIC PROVINCE CODE...	160	160	MISS-BIG LIME-WEIR
DEPTH, FEET.....	3424	4674	160
WELLHEAD PRESSURE, PSIG...	900	1600	2848
OPEN FLOW, MCFD.....	NOT GIVEN	1200	760
COMPONENT, MOLE PCT			1140
METHANE.....	78.9	80.2	97.8
ETHANE.....	12.4	11.1	1.3
PROPANE.....	5.4	4.4	0.1
N-BUTANE.....	0.9	1.1	0.0
ISOBUTANE.....	0.6	0.7	TRACE
N-PENTANE.....	0.1	0.3	0.0
ISOPENTANE.....	0.2	0.3	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.5	0.0
NITROGEN.....	1.3	1.3	0.6
OXYGEN.....	TRACE	TRACE	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.1
HELIUM.....	0.07	0.08	0.08
HEATING VALUE*.....	1227	1234	1016
SPECIFIC GRAVITY.....	0.705	0.709	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 814 SAMPLE 18250	INDEX 815 SAMPLE 18915	INDEX 816 SAMPLE 18509
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	BIG HORN	CAMPBELL	CAMPBELL
FIELD.....	FIVE MILE CREEK	OEDEKOVEN	WOOD W
WELL NAME.....	DOBIE CREEK NO. 20-6	PAL NO. 82-B	FEDERAL NO. 31-15
API.....			
LOCATION.....	SEC. 20, T49N, R93W	SEC. 19, T55N, R73W	SEC. 15, T51N, R68W
OWNER.....	TEXACO INC.	RESOURCE ENTERPRISES, INC.	PRENATALTA CORP.
COMPLETED.....	82/10/28	89/12/08	87/10/14
SAMPLED.....	86/11/05	90/02/08	88/01/11
FORMATION.....	CRET-MUDDY	EOCE-FORT UNION	CRET-DAKOTA
GEOLOGIC PROVINCE CODE.....	520	515	515
DEPTH, FEET.....	9958	406	5675
WELLHEAD PRESSURE, PSIG.....	1865	38	950
OPEN FLOW, MCFD.....	1500	860	1797
COMPONENT, MOLE PCT			
METHANE.....	75.6	93.5	97.4
ETHANE.....	13.7	0.0	0.7
PROPANE.....	5.3	TRACE	0.2
N-BUTANE.....	1.1	0.0	0.0
ISOBUTANE.....	1.5	0.0	0.1
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.4	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.3	0.0	0.0
NITROGEN.....	1.2	5.8	0.5
OXYGEN.....	0.2	0.2	0.0
ARGON.....	TRACE	0.1	0.0
HYDROGEN.....	0.2	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.3	0.9
HELIUM.....	0.01	TRACE	0.01
HEATING VALUE*.....	1269	948	1011
SPECIFIC GRAVITY.....	0.740	0.584	0.572

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 817 SAMPLE 18511	INDEX 818 SAMPLE 18871	INDEX 819 SAMPLE 18003
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	CARBON	CARBON	FREMONT
FIELD.....	CRESTON	SIBERIA RIDGE	BEAVER CREEK
WELL NAME.....	CRESTON NOSE UNIT NO. 1	SAMEDAN FEDERAL NO. 1-22	FORT UNION NO. 89
API.....			
LOCATION.....	SEC. 9, T18N, R92W	SEC. 22, T21N, R94W	SEC. 11, T33N, R96W
OWNER.....	AMOCO PRODUCTION CO.	SAMEDAN OIL CORP.	AMOCO PRODUCTION CO.
COMPLETED.....	85/11/19	89/--/00	85/04/18
SAMPLED.....	88/01/17	89/10/21	86/03/03
FORMATION.....	CRET-BLAIR	CRET-MESAVERDE	EOCE-FORT UNION
GEOLOGIC PROVINCE CODE.....	535	535	530
DEPTH, FEET.....	12364	NOT GIVEN	804
WELLHEAD PRESSURE, PSIG.....	7250	NOT GIVEN	312
OPEN FLOW, MCFD.....	2943	NOT GIVEN	1600
COMPONENT, MOLE PCT			
METHANE.....	89.8	87.6	95.5
ETHANE.....	6.0	6.0	1.9
PROPANE.....	1.9	2.3	0.3
N-BUTANE.....	0.3	0.6	0.1
ISOBUTANE.....	0.5	0.4	0.1
N-PENTANE.....	0.0	0.1	0.1
ISOPENTANE.....	0.1	0.6	0.1
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.1	0.0	0.2
NITROGEN.....	0.4	0.7	1.0
OXYGEN.....	0.0	0.2	TRACE
ARGON.....	0.1	TRACE	TRACE
HYDROGEN.....	0.1	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	1.5	0.5
HELIUM.....	TRACE	TRACE	0.02
HEATING VALUE*.....	1104	1115	1039
SPECIFIC GRAVITY.....	0.628	0.653	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 820 SAMPLE 19039	INDEX 821 SAMPLE 18616	INDEX 822 SAMPLE 19021
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	FREMONT	FREMONT	FREMONT
FIELD.....	LONG CREEK	SHELDON DOME	STEAMBOAT BUTTE
WELL NAME.....	HEANEY GOVERNMENT NO. 4	SHOSHONE-ARAPAHOE NO. 1	TRIBAL "A" NO. 1
API.....	49-013-21583		40-013-06327
LOCATION.....	SEC. 5, T31N, R94W	SEC. 16, T5N, R2W	SEC. 15, T3N, R1W
OWNER.....	WOLD OIL & GAS	TURNER, SMITH & ASSOCIATES	CHEVRON U.S.A., INC.
COMPLETED.....	90/07/28	85/09/20	86/05/06
SAMPLED.....	90/10/02	88/06/15	90/09/06
FORMATION.....	CRET-LAKOTA	CRET-MUDDY	CRET-FRONTIER
GEOLOGIC PROVINCE CODE.....	530	530	530
DEPTH, FEET.....	2737	3720	2387
WELLHEAD PRESSURE, PSIG.....	710	1390	400
OPEN FLOW, MCFD.....	1038	6000	1005
COMPONENT, MOLE PCT			
METHANE.....	91.1	89.6	92.2
ETHANE.....	1.9	5.1	3.2
PROPANE.....	0.5	2.0	1.4
N-BUTANE.....	0.3	0.1	0.6
ISOBUTANE.....	0.0	0.3	0.2
N-PENTANE.....	0.0	0.3	0.2
ISOPENTANE.....	0.1	0.1	0.2
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.1	0.1
NITROGEN.....	5.1	1.9	1.8
OXYGEN.....	0.7	TRACE	0.0
ARGON.....	0.1	0.0	0.0
HYDROGEN.....	TRACE	0.0	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.3	0.2
HELIUM.....	0.20	0.03	0.02
HEATING VALUE*.....	984	1092	1074
SPECIFIC GRAVITY.....	0.601	0.629	0.614

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 823 SAMPLE 18210	INDEX 824 SAMPLE 18239	INDEX 825 SAMPLE 18286
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	LINCOLN	LINCOLN	NATRONA
FIELD.....	COLLETTE CREEK	WHISKEY BUTTE	FRENCHIE DRAW
WELL NAME.....	ROAD HOLLOW UNIT NO. 12	WHISKEY BUTTE FEDERAL NO.1-8	GRAHAM UNIT NO. 21
API.....			
LOCATION.....	SEC. 36, T21N, R119W	SEC. 8, T20N, R112W	SEC. 22, T37N, R89W
OWNER.....	EXXON CO., U.S.A.	AMOCO PRODUCTION CO.	EXXON CO., U.S.A.
COMPLETED.....	86/02/10	85/04/01	85/07/09
SAMPLED.....	86/08/28	86/10/29	87/01/12
FORMATION.....	ORDO-BIGHORN	CRET-FRONTIER	EOCE-FORT UNION L
GEOLOGIC PROVINCE CODE.....	535	535	530
DEPTH, FEET.....	13273	11211	10196
WELLHEAD PRESSURE, PSIG.....	2590	4272	3050
OPEN FLOW, MCFD.....	500	1200	2041
COMPONENT, MOLE PCT			
METHANE.....	79.4	81.3	93.0
ETHANE.....	10.1	11.4	2.7
PROPANE.....	4.1	3.7	0.7
N-BUTANE.....	1.1	0.7	TRACE
ISOBUTANE.....	0.7	0.7	0.4
N-PENTANE.....	0.5	0.2	0.0
ISOPENTANE.....	0.2	0.2	0.0
CYCLOPENTANE.....	0.2	0.1	TRACE
HEXANES PLUS.....	0.5	0.2	0.1
NITROGEN.....	2.2	0.8	0.4
OXYGEN.....	TRACE	0.1	0.1
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	0.7	2.6
HELIUM.....	0.04	0.01	TRACE
HEATING VALUE*.....	1216	1202	1027
SPECIFIC GRAVITY.....	0.720	0.695	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 826 SAMPLE 18646	INDEX 827 SAMPLE 17930	INDEX 828 SAMPLE 18847
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	NATRONA	NATRONA	SUBLETTE
FIELD.....	NOT GIVEN	TEPEE FLATS	BIG PINEY
WELL NAME.....	WILDHORSE BUTTE NO. 28-1	TEPEE FLATS NO. 18-1	NORTH LABARGE NO. 44-34
API.....			
LOCATION.....	SEC. 28, T35N, R87W	SEC. 18, T37N, R86W	SEC. 34, T28N, R113W
OWNER.....	STANDARD OIL PRODUCTION CO.	MONCRIEF OIL CO.	ENRON OIL & GAS CO.
COMPLETED.....	85/08/02	85/03/29	89/05/20
SAMPLED.....	88/07/20	85/12/09	89/08/22
FORMATION.....	CRET-MUDDY	CRET-LAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE.....	530	530	535
DEPTH, FEET.....	14050	19386	7900
WELLHEAD PRESSURE, PSIG.....	5800	11652	1870
OPEN FLOW, MCFD.....	3400	5000	1890
COMPONENT, MOLE PCT			
METHANE.....	94.7	95.8	89.6
ETHANE.....	2.5	0.3	5.1
PROPANE.....	0.6	TRACE	2.1
N-BUTANE.....	0.0	0.0	0.2
ISOBUTANE.....	0.2	0.0	0.6
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.1
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.6	1.1	1.2
OXYGEN.....	0.1	0.1	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.4	2.7	1.2
HELIUM.....	0.01	0.01	0.02
HEATING VALUE*.....	1025	976	1084
SPECIFIC GRAVITY.....	0.591	0.587	0.631

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 829 SAMPLE 18929	INDEX 830 SAMPLE 18454	INDEX 831 SAMPLE 18652
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	SUBLETTE	SWEETWATER	SWEETWATER
FIELD.....	MIDDLE PINEY	BLUE FOREST	JAMES CREEK
WELL NAME.....	MIDDLE PINEY NO. 20-11	BLUE FOREST NO. 32-1	BRITZ FEDERAL NO. 1-31
API.....			
LOCATION.....	SEC. 11, T29N, R113W	SEC. 1, T24N, R111W	SEC. 31, T15N, R103W
OWNER.....	ENRON OIL & GAS CO.	ITR PETROLEUM, INC.	AJAX ISLAND PETROLEUM, INC.
COMPLETED.....	89/08/15	87/06/09	84/08/17
SAMPLED.....	90/03/01	87/10/02	88/08/01
FORMATION.....	CRET-MESAVERDE	CRET-DAKOTA	CRET-DAKOTA
GEOLOGIC PROVINCE CODE...	535	535	535
DEPTH, FEET.....	2605	10826	5276
WELLHEAD PRESSURE, PSIG...	1050	4308	491
OPEN FLOW, MCFD.....	1300	10758	1870
COMPONENT, MOLE PCT			
METHANE.....	85.2	84.1	82.9
ETHANE.....	7.8	7.5	4.4
PROPANE.....	2.5	4.3	2.5
N-BUTANE.....	0.4	1.2	0.7
ISOBUTANE.....	1.1	0.6	0.5
N-PENTANE.....	0.0	0.3	0.4
ISOPENTANE.....	TRACE	0.0	0.1
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.5	0.2	0.2
NITROGEN.....	0.0	1.0	6.9
OXYGEN.....	0.0	TRACE	0.8
ARGON.....	TRACE	0.1	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE**.....	0.0	TRACE	0.0
CARBON DIOXIDE.....	2.3	0.5	0.5
HELIUM.....	0.01	0.01	0.06
HEATING VALUE*.....	1148	1186	1058
SPECIFIC GRAVITY.....	0.677	0.684	0.672

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 832 SAMPLE 18493	INDEX 833 SAMPLE 18526	INDEX 834 SAMPLE 18379
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	SWEETWATER	SWEETWATER	SWEETWATER
FIELD.....	LINCOLN ROAD	LINCOLN ROAD	MARIANNE
WELL NAME.....	GOVT. CE BREHM NO. 1	LINCOLN ROAD NO. 2-9	MADEX-FEDERAL NO. 18-1
API.....			
LOCATION.....	SEC. 3, T24N, R111W	SEC. 9, T24N, R111W	SEC. 18, T20N, R102W
OWNER.....	TEXACO INC.	THERMAL EXPLORATION, INC.	BURTON-HAWKS, INC.
COMPLETED.....	87/03/12	87/01/27	80/04/14
SAMPLED.....	87/12/02	88/02/29	87/06/17
FORMATION.....	CRET-DAKOTA C	CRET-DAKOTA	CRET-FRONTIER
GEOLOGIC PROVINCE CODE...	535	535	535
DEPTH, FEET.....	10536	10544	5549
WELLHEAD PRESSURE, PSIG...	4093	4100	1100
OPEN FLOW, MCFT.....	7300	10000	275
COMPONENT, MOLE PCT			
METHANE.....	86.3	77.4	94.6
ETHANE.....	6.4	7.6	2.2
PROPANE.....	3.3	6.1	0.7
N-BUTANE.....	0.8	3.1	0.0
ISOBUTANE.....	0.4	1.7	0.3
N-PENTANE.....	0.3	0.7	0.0
ISOPENTANE.....	0.1	1.4	TRACE
CYCLOPENTANE.....	0.1	0.0	TRACE
HEXANES PLUS.....	0.2	0.5	0.1
NITROGEN.....	1.0	0.9	1.6
OXYGEN.....	0.1	0.0	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.0	0.2	TRACE
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	0.3	0.3
HELIUM.....	0.01	0.01	0.02
HEATING VALUE*.....	1150	1358	1035
SPECIFIC GRAVITY.....	0.666	0.786	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 835 SAMPLE 18141	INDEX 836 SAMPLE 19024	INDEX 837 SAMPLE 18869
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	SWEETWATER	SWEETWATER	SWEETWATER
FIELD.....	MONUMENT BUTTE	PINE CANYON	SIBERIA RIDGE
WELL NAME.....	FEDERAL NO. 21-29	PINE CANYON NO. 10-34	DANNO NO. 1-24
API.....		49-037-22693	
LOCATION.....	SEC. 29, T25N, R110W	SEC. 34, T23N, R103W	SEC. 24, T21N, R94W
OWNER.....	FUEL RESOURCES DEVELOPMENT CO.	PACIFIC ENTERPRISES OIL CO. (U.	SAMEDAN OIL CORP.
COMPLETED.....	85/08/04	90/05/08	89/--/00
SAMPLED.....	86/07/02	90/09/10	89/10/21
FORMATION.....	CRET-DAKOTA	JURA-MORRISON	CRET-MESAVERDE
GEOLOGIC PROVINCE CODE...	535	535	535
DEPTH, FEET.....	10788	8610	NOT GIVEN
WELLHEAD PRESSURE, PSIG....	4100	2550	NOT GIVEN
OPEN FLOW, MCFD.....	10300	1600	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	74.9	95.3	86.8
ETHANE.....	6.5	2.2	5.8
PROPANE.....	4.2	0.7	2.3
N-BUTANE.....	1.4	0.0	0.5
ISOBUTANE.....	1.2	0.2	0.4
N-PENTANE.....	1.0	0.0	0.3
ISOPENTANE.....	3.2	0.1	0.4
CYCLOPENTANE.....	1.6	0.0	0.1
HEXANES PLUS.....	4.4	0.0	0.8
NITROGEN.....	1.0	1.2	0.3
OXYGEN.....	TRACE	0.1	0.1
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	TRACE	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.4	0.2	2.1
HELIUM.....	0.01	0.02	TRACE
HEATING VALUE*.....	1537	1032	1147
SPECIFIC GRAVITY.....	0.893	0.584	0.676

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H2S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 838 SAMPLE 18870	INDEX 839 SAMPLE 19037	INDEX 840 SAMPLE 18834
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	SWEETWATER	SWEETWATER	SWEETWATER
FIELD.....	SIBERIA RIDGE	SWAN	TEN MILE DRAW
WELL NAME.....	MICELLI FEDERAL NO. 1-14	RICH-STATE NO. 32-36	UPRR 3-5 NO. 1
API.....		49-037-22643	
LOCATION.....	SEC. 14, T21N, R94W	SEC. 36, T24N, R111W	SEC. 5, T20N, R99W
OWNER.....	SAMEDAN OIL CORP.	PRESIDIO ENERGY, INC.	UNION PACIFIC RESOURCES CO.
COMPLETED.....	88/06/08	89/10/31	88/12/06
SAMPLED.....	89/10/21	90/09/19	89/08/07
FORMATION.....	CRET-MESAVERDE	CRET-FRONTIER	CRET-ALMOND UA-5
GEOLOGIC PROVINCE CODE...	535	535	535
DEPTH, FEET.....	10487	10242	3904
WELLHEAD PRESSURE, PSIG....	985	4700	1261
OPEN FLOW, MCFD.....	1000	2414	2057
COMPONENT, MOLE PCT			
METHANE.....	88.8	89.5	86.0
ETHANE.....	5.5	5.5	6.1
PROPANE.....	2.2	1.5	3.9
N-BUTANE.....	0.4	0.3	0.4
ISOBUTANE.....	0.5	0.0	1.4
N-PENTANE.....	0.0	0.1	0.0
ISOPENTANE.....	0.1	0.1	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.3	0.1	0.0
NITROGEN.....	0.2	2.6	1.1
OXYGEN.....	0.1	0.2	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	TRACE	0.5
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.9	0.3	0.6
HELIUM.....	TRACE	0.01	0.01
HEATING VALUE*.....	1106	1064	1142
SPECIFIC GRAVITY.....	0.646	0.620	0.658

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX SAMPLE 17982	INDEX SAMPLE 18969	INDEX SAMPLE 18501
STATE.....	WYOMING	WYOMING	WYOMING
COUNTY.....	SWEETWATER	UINTA	UINTA
FIELD.....	TRAIL CREEK	CHURCH BUTTES	LUCKEY DITCH
WELL NAME.....	UNIT NO. 12	CHURCH BUTTES UNIT NO. 66	TAYLOR RANCH NO. 33-3
API.....		49-041-20805	
LOCATION.....	SEC. 16, T13N, R100W	SEC. 20, T17N, R112W	SEC. 3, T12N, R114W
OWNER.....	WEXPRO CO.	WEXPRO CO.	MAXUS EXPLORATION CO.
COMPLETED.....	85/10/31	90/02/11	87/03/14
SAMPLED.....	86/02/05	90/05/24	87/12/00
FORMATION.....	CRET-ERICSON	CRET-FRONTIER	CRET-DAKOTA
GEOLOGIC PROVINCE CODE.....	535	535	535
DEPTH, FEET.....	6897	12296	14376
WELLHEAD PRESSURE, PSIG.....	1650	NOT GIVEN	4300
OPEN FLOW, MCFD.....	4925	1535	1116
COMPONENT, MOLE PCT			
METHANE.....	86.5	80.9	78.0
ETHANE.....	7.0	10.5	7.6
PROPANE.....	2.6	3.9	2.8
N-BUTANE.....	0.8	0.0	0.5
ISOBUTANE.....	0.3	2.1	0.7
N-PENTANE.....	0.3	0.0	0.0
ISOPENTANE.....	0.2	0.0	0.1
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.3	0.0	0.1
NITROGEN.....	0.2	0.0	6.9
OXYGEN.....	TRACE	0.0	1.7
ARGON.....	TRACE	0.0	0.1
HYDROGEN.....	TRACE	TRACE	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.5	2.5	1.4
HELIUM.....	TRACE	0.01	0.02
HEATING VALUE*.....	1147	1181	1049
SPECIFIC GRAVITY.....	0.665	0.702	0.694

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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

	INDEX 844 SAMPLE 18093	
STATE.....	WYOMING	
COUNTY.....	UINTA	
FIELD.....	NOT GIVEN	
WELL NAME.....	TAYLOR FEDERAL NO. 35-14	
API.....		
LOCATION.....	SEC. 34, T13N, R114W	
OWNER.....	AMERICAN QUASAR PETROLEUM CO.	
COMPLETED.....	84/10/11	
SAMPLED.....	86/--/00	
FORMATION.....	CRET-DAKOTA	
GEOLOGIC PROVINCE CODE...	535	
DEPTH, FEET.....	14244	
WELLHEAD PRESSURE, PSIG...	2620	
OPEN FLOW, MCFD.....	2100	
COMPONENT, MOLE PCT		
METHANE.....	85.6	-----
ETHANE.....	7.2	-----
PROPANE.....	2.6	-----
N-BUTANE.....	0.9	-----
ISOBUTANE.....	0.3	-----
N-PENTANE.....	0.4	-----
ISOPENTANE.....	0.1	-----
CYCLOPENTANE.....	0.1	-----
HEXANES PLUS.....	0.3	-----
NITROGEN.....	1.1	-----
OXYGEN.....	0.1	-----
ARGON.....	TRACE	-----
HYDROGEN.....	0.2	-----
HYDROGEN SULFIDE**.....	0.0	-----
CARBON DIOXIDE.....	1.2	-----
HELIUM.....	0.02	-----
HEATING VALUE*.....	1145	-----
SPECIFIC GRAVITY.....	0.669	-----

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18057	INDEX SAMPLE 18800	INDEX SAMPLE 18054
STATE.....	ALABAMA	ALABAMA	ALABAMA
COUNTY.....	HALE	MOBILE	PICKENS
FIELD.....	GULF COAST AREA	CHUNCHULA	GULF COAST AREA
LOCATION.....	2-18, 1-24 IN.	PLANT OUTLET AFTER PROCESSING	2-24 IN.
OWNER.....	SOUTHERN NATURAL GAS CO.	UNOCAL CORP.	SOUTHERN NATURAL GAS CO.
SAMPLED.....	86/04/04	89/05/22	86/04/03
FORMATION.....	NOT GIVEN	JURA-SMACKOVER	NOT GIVEN
GEOLOGIC PROVINCE CODE...	210	210	200
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	995	540	750
FLOW, MCFD.....	480000	40000	300000
COMPONENT, MOLE PCT			
METHANE.....	97.1	62.6	95.5
ETHANE.....	1.3	8.2	2.3
PROPANE.....	0.2	1.7	0.5
N-BUTANE.....	0.1	0.0	0.2
ISOBUTANE.....	TRACE	0.4	0.1
N-PENTANE.....	0.1	0.0	0.2
ISOPENTANE.....	0.0	0.1	TRACE
CYCLOPENTANE.....	0.1	0.0	0.1
HEXANES PLUS.....	0.2	0.0	0.2
NITROGEN.....	0.3	26.8	0.8
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.1	TRACE
HYDROGEN.....	0.2	0.0	0.2
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.0	TRACE
HELIUM.....	TRACE	0.06	0.02
HEATING VALUE*	1034	845	1055
SPECIFIC GRAVITY.....	0.579	0.732	0.589

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18055	INDEX SAMPLE 19029	INDEX SAMPLE 19027
STATE.....	ALABAMA	ARKANSAS	ARKANSAS
COUNTY.....	PICKENS	FRANKLIN	FRANKLIN
FIELD.....	GULF COAST AREA	BATSON	LONE ELM
LOCATION.....	1-22 IN.	10" INLET- BATSON	8" INLET- LONE ELM
OWNER.....	SOUTHERN NATURAL GAS CO.	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.
SAMPLED.....	86/04/05	90/09/17	90/09/17
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE..	200	345	345
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	500	235	238
FLOW, MCFD.....	350000	10000	1500
COMPONENT, MOLE PCT			
METHANE.....	96.2	98.8	97.8
ETHANE.....	1.6	0.1	1.0
PROPANE.....	0.3	0.1	0.2
N-BUTANE.....	0.1	0.0	0.0
ISOBUTANE.....	0.0	0.0	0.0
N-PENTANE.....	0.1	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.0	0.0
NITROGEN.....	0.7	0.8	0.7
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.0	TRACE	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.1	0.2
HELIUM.....	0.01	0.09	0.07
HEATING VALUE*.....	1033	1005	1014
SPECIFIC GRAVITY.....	0.584	0.560	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 19030	INDEX SAMPLE 19028	INDEX SAMPLE 18041
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	FRANKLIN	FRANKLIN	HOT SPRING
FIELD.....	ROCK CREEK	WHITE OAK	GULF COAST AREA
LOCATION.....	4" INLET- ROCK CREEK	6" INLET- WHITE OAK	24 IN. SUCTION
OWNER.....	ARKANSAS WESTERN GAS CO.	ARKANSAS WESTERN GAS CO.	TEXAS EASTERN GAS PIPELINE CO.
SAMPLED.....	90/09/17	90/09/17	86/04/01
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	345	345	400
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	100	238	763
FLOW, MCFD.....	2000	50000	100000
COMPONENT, MOLE PCT			
METHANE.....	98.0	98.2	90.3
ETHANE.....	1.0	0.9	3.6
PROPANE.....	0.2	0.2	0.8
N-BUTANE.....	0.0	0.0	0.4
ISOBUTANE.....	0.0	0.0	0.1
N-PENTANE.....	0.0	0.0	0.3
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.3
NITROGEN.....	0.6	0.4	2.3
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.1	0.0	0.2
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.0	0.3	1.7
HELIUM.....	0.08	0.07	0.01
HEATING VALUE*	1016	1015	1049
SPECIFIC GRAVITY.....	0.564	0.564	0.628

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 10 18042	INDEX SAMPLE 11 18043	INDEX SAMPLE 12 18045
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	HOT SPRING	HOT SPRING	LINCOLN
FIELD.....	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION.....	3-36 IN SUCTION	1-30 IN SUCTION	24 IN.
OWNER.....	NATURAL GAS PIPELINE CO. OF AM	NATURAL GAS PIPELINE CO. OF AM	MISSISSIPPI RIVER TRANSMISSION
SAMPLED.....	86/04/01	86/04/01	86/04/01
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	400	400	240
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	700	700	633
FLOW, MCFD.....	850000	550000	125000
COMPONENT, MOLE PCT			
METHANE.....	94.7	94.7	91.7
ETHANE.....	2.3	2.2	4.0
PROPANE.....	0.4	0.5	0.8
N-BUTANE.....	0.2	0.2	0.3
ISOBUTANE.....	TRACE	TRACE	0.1
N-PENTANE.....	0.1	0.2	0.2
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	TRACE	0.1	TRACE
HEXANES PLUS.....	0.2	0.3	0.2
NITROGEN.....	0.5	0.4	0.7
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.0	TRACE
HYDROGEN.....	0.2	0.2	0.2
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.4	1.3	1.8
HELIUM.....	TRACE	TRACE	0.02
HEATING VALUE*.....	1033	1047	1054
SPECIFIC GRAVITY.....	0.594	0.600	0.616

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 19032	INDEX SAMPLE 19031	INDEX SAMPLE 19033
STATE.....	ARKANSAS	ARKANSAS	ARKANSAS
COUNTY.....	LOGAN	LOGAN	POPE
FIELD.....	CECIL & KNOXVILLE	E. OK-WILBURTON RED OAK, AR	KNOXVILLE
LOCATION.....	BT-1 INLET	24"/30" INLET- 0 & 010 LINES	6" INLET
OWNER.....	ARKLA ENERGY RESOURCES	ARKLA ENERGY RESOURCES	ARKLA ENERGY RESOURCES
SAMPLED.....	90/09/18	90/09/18	90/09/18
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	345	345	345
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	680	700	125
FLOW, MCFD.....	30000	800000	1000
COMPONENT, MOLE PCT			
METHANE.....	97.8	96.1	98.1
ETHANE.....	1.0	1.4	0.9
PROPANE.....	0.2	0.4	0.2
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.0	0.1	0.0
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	0.0
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.4	0.6	0.5
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	TRACE	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	1.4	0.3
HELIUM.....	0.08	0.03	0.06
HEATING VALUE*	1013	1010	1014
SPECIFIC GRAVITY.....	0.568	0.582	0.565

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 17574	INDEX SAMPLE 18655	INDEX SAMPLE 18549
STATE.....	CALIFORNIA	COLORADO	LOUISIANA
COUNTY.....	KINGS	LA PLATA	ACADIA
FIELD.....	TULARE LAKE	IGNACIO	ROANOKE, HIGH ISLAND OCS
LOCATION.....	SEC. 17, T22S, R20E	8 IN.	16 IN. INLET
OWNER.....	SHELL CALIFORNIA PROD., INC.	WESTERN GAS SUPPLY CO.	TEXAS GAS TRANSMISSION CORP.
SAMPLED.....	85/01/19	88/08/05	88/03/08
FORMATION.....	MIOC-TEMBLOR	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	745	580	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	NOT GIVEN	580	825
FLOW, MCFD.....	500	28000	175000
COMPONENT, MOLE PCT			
METHANE.....	72.3	92.2	93.7
ETHANE.....	10.6	3.1	3.1
PROPANE.....	8.6	1.0	1.1
N-BUTANE.....	3.2	0.2	0.3
ISOBUTANE.....	1.8	0.2	0.5
N-PENTANE.....	0.7	0.1	0.0
ISOPENTANE.....	1.0	0.1	0.0
CYCLOPENTANE.....	0.2	0.0	0.1
HEXANES PLUS.....	0.6	0.1	0.4
NITROGEN.....	0.5	0.1	0.1
OXYGEN.....	0.1	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	TRACE	0.0	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	3.0	0.8
HELIUM.....	TRACE	0.01	TRACE
HEATING VALUE*	1425	1041	1080
SPECIFIC GRAVITY.....	0.825	0.620	0.611

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18553	INDEX SAMPLE 18554	INDEX SAMPLE 18531
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	BEAUREGARD	BEAUREGARD	CAMERON
FIELD.....	OFFSHORE-CAMERON W	TIMBALIER S, SHIP SHOAL	LA-OCS, CAMERON BLK.
LOCATION.....	20, 24, 2-30 IN. INLET	20 & 30 IN. INLET	30 IN. INLET
OWNER.....	TRUNKLINE GAS CO.	TRUNKLINE GAS CO.	TEXAS EASTERN GAS PIPELINE CO.
SAMPLED.....	88/03/09	88/03/09	88/03/01
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	220	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	689	689	735
FLOW, MCFD.....	99000	503000	615000
COMPONENT, MOLE PCT			
METHANE.....	96.7	96.9	97.3
ETHANE.....	1.7	1.7	1.4
PROPANE.....	0.4	0.4	0.6
N-BUTANE.....	0.0	0.0	0.0
ISOBUTANE.....	0.2	0.2	0.4
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	TRACE	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.2	0.2	0.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.6	0.7	0.2
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1030	1028	1040
SPECIFIC GRAVITY.....	0.578	0.576	0.576

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18544	INDEX SAMPLE 18545	INDEX SAMPLE 18543
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	LAFOURCHE	LAFOURCHE	LAFOURCHE
FIELD.....	GRAND ISLE, BLKS. 47 & 48	MUSKRAT AREA-OFFSHORE	TIMBALIER AREA S
LOCATION.....	16 IN. INLET	36 IN. INLET	20 IN. INLET
OWNER.....	TENNECO GAS TRANSPORTATION CO.	TENNECO GAS TRANSPORTATION CO.	TENNECO GAS TRANSPORTATION CO.
SAMPLED.....	88/03/03	88/03/03	88/03/03
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	220	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	750	750	900
FLOW, MCFD.....	15000	1000000	50000
COMPONENT, MOLE PCT			
METHANE.....	92.8	96.7	97.2
ETHANE.....	3.4	1.7	1.2
PROPANE.....	1.6	0.7	0.5
N-BUTANE.....	0.4	0.1	0.2
ISOBUTANE.....	0.6	0.3	0.2
N-PENTANE.....	0.2	0.0	0.0
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	0.1	0.0	0.0
HEXANES PLUS.....	0.2	0.1	0.1
NITROGEN.....	0.2	0.2	0.3
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	TRACE
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.2	0.3
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*	1100	1046	1037
SPECIFIC GRAVITY.....	0.619	0.581	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18546	INDEX SAMPLE 18548	INDEX SAMPLE 18547
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	PLAQUEMINES	ST. HELENA	ST. LANDRY
FIELD.....	SOUTH PASS-OFFSHORE	MARSH ISLAND S BLK. 57	BAYOU SALE LINE (INLAND)
LOCATION.....	26 IN. INLET	36 IN. INLET	30 IN. INLET
OWNER.....	TENNECO GAS TRANSPORTATION CO.	UNITED GAS PIPELINE CO.	UNITED GAS PIPELINE CO.
SAMPLED.....	88/03/04	88/03/07	88/03/07
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	600	660	840
FLOW, MCFD.....	250000	200000	280000
COMPONENT, MOLE PCT			
METHANE.....	96.3	96.6	97.8
ETHANE.....	1.7	1.5	1.2
PROPANE.....	0.8	0.4	0.4
N-BUTANE.....	0.1	0.1	0.0
ISOBUTANE.....	0.3	0.2	0.2
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.2	0.1	TRACE
CYCLOPENTANE.....	0.0	0.0	0.0
HEXANES PLUS.....	0.0	0.0	0.0
NITROGEN.....	0.2	0.5	0.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	TRACE	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.7	0.3
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*	1050	1027	1029
SPECIFIC GRAVITY.....	0.585	0.580	0.570

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18540	INDEX SAMPLE 18532	INDEX SAMPLE 18539
STATE.....	LOUISIANA	LOUISIANA	LOUISIANA
PARISH.....	ST. MARY	VERMILION	VERMILION
FIELD.....	MARSH ISLAND, EUGENE ISLAND	EUGENE ISLAND W & CAMERON S	OFFSHORE-FROM SEA ROBIN SYS.
LOCATION.....	30 IN. INLET	36 IN. INLET	36 IN. INLET
OWNER.....	ANR PIPELINE CO.	COLUMBIA GULF TRANSMISSION CO.	UNITED GAS PIPELINE CO.
SAMPLED.....	88/03/02	88/03/01	88/03/02
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	700	775	900
FLOW, MCFD.....	850000	920000	431000
COMPONENT, MOLE PCT			
METHANE.....	96.3	95.9	95.2
ETHANE.....	1.8	2.1	2.5
PROPANE.....	0.7	0.7	1.1
N-BUTANE.....	0.1	0.1	0.2
ISOBUTANE.....	0.4	0.3	0.4
N-PENTANE.....	0.0	0.0	0.0
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	TRACE	TRACE	0.0
HEXANES PLUS.....	0.2	0.2	0.2
NITROGEN.....	0.1	0.2	0.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.4	0.3
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1057	1055	1070
SPECIFIC GRAVITY.....	0.587	0.589	0.595

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18538	INDEX SAMPLE 18047	INDEX SAMPLE 18052
STATE.....	LOUISIANA	MISSISSIPPI	MISSISSIPPI
PARISH.....	VERMILION	BOLIVAR	CALHOUN
FIELD.....	VERMILION BLKS. 23, 26, 27, 28	GULF COAST AREA	GULF COAST AREA
LOCATION.....	16 & 18 IN. COMMON	26, 30, 36 IN. LINES	2-30 & 1-36 IN.
OWNER.....	TRUNKLINE GAS CO.	TRUNKLINE GAS CO.	COLUMBIA GULF TRANSMISSION CO.
SAMPLED.....	88/03/02	86/04/02	86/04/03
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	220	240	200
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	905	778	666
FLOW, MCFD.....	103700	807000	1925000
COMPONENT, MOLE PCT			
METHANE.....	91.2	94.2	96.5
ETHANE.....	3.3	2.7	1.7
PROPANE.....	1.4	0.8	0.2
N-BUTANE.....	0.3	0.2	0.1
ISOBUTANE.....	0.4	0.1	0.0
N-PENTANE.....	0.5	0.1	0.1
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.2	TRACE	TRACE
HEXANES PLUS.....	0.5	0.2	0.1
NITROGEN.....	0.1	0.4	0.3
OXYGEN.....	0.0	0.1	0.1
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.2	0.2
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	2.1	1.1	0.7
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*	1099	1049	1027
SPECIFIC GRAVITY.....	0.642	0.600	0.578

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18048	INDEX SAMPLE 18050	INDEX SAMPLE 18053
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	COAHOMA	GRENADA	LOWNDES
FIELD.....	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION.....	2-26, 1-30, 1-36 IN. LINES	30"	1-30 & 1-36 IN. SUCTION
OWNER.....	TEXAS GAS TRANSMISSION CORP.	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.
SAMPLED.....	86/04/02	86/04/02	86/04/03
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	240	200	200
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	750	841	750
FLOW, MCFD.....	1930000	144000	900000
COMPONENT, MOLE PCT			
METHANE.....	95.2	96.8	97.4
ETHANE.....	2.4	1.4	1.5
PROPANE.....	0.2	0.3	0.1
N-BUTANE.....	0.1	0.2	TRACE
ISOBUTANE.....	0.0	0.0	TRACE
N-PENTANE.....	0.1	0.2	TRACE
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	TRACE	TRACE	TRACE
HEXANES PLUS.....	0.1	0.1	TRACE
NITROGEN.....	0.6	0.2	0.3
OXYGEN.....	TRACE	0.0	TRACE
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.2	0.2	0.2
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.2	0.6	0.4
HELIUM.....	0.01	TRACE	TRACE
HEATING VALUE*	1026	1035	1017
SPECIFIC GRAVITY.....	0.588	0.579	0.566

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18051	INDEX SAMPLE 18049	INDEX SAMPLE 18058
STATE.....	MISSISSIPPI	MISSISSIPPI	MISSISSIPPI
COUNTY.....	MONROE	PANOLA	PERRY
FIELD.....	GULF COAST AREA	GULF COAST AREA	GULF COAST AREA
LOCATION.....	2-30 & 1-36 IN.	1-26, 1-24, 2-30 IN.	24 & 30 IN.
OWNER.....	TEXAS EASTERN GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.	FLORIDA GAS TRANSMISSION CO.
SAMPLED.....	86/04/03	86/04/02	86/04/07
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	200	200	210
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	773	551	975
FLOW, MCFD.....	1629300	558000	740000
COMPONENT, MOLE PCT			
METHANE.....	96.6	95.3	95.0
ETHANE.....	1.9	2.2	2.1
PROPANE.....	0.4	0.5	0.5
N-BUTANE.....	0.2	0.2	0.2
ISOBUTANE.....	0.0	TRACE	0.1
N-PENTANE.....	0.1	0.2	0.3
ISOPENTANE.....	0.0	TRACE	0.0
CYCLOPENTANE.....	TRACE	TRACE	0.2
HEXANES PLUS.....	0.1	0.1	0.5
NITROGEN.....	0.3	0.4	0.3
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.2	0.2
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	1.0	0.7
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*	1040	1039	1070
SPECIFIC GRAVITY.....	0.574	0.591	0.604

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18046	INDEX SAMPLE 18266	INDEX SAMPLE 18654
STATE.....	MISSISSIPPI	NEW MEXICO	NEW MEXICO
COUNTY.....	WASHINGTON	CHAVES	MCKINLEY
FIELD.....	GULF COAST AREA	PERMIAN BASIN AREA	FOUR CORNERS AREA
LOCATION.....	2-30 IN. & 1-36 IN. LINES	30 IN. INLET	18 IN. & 20 IN.
OWNER.....	ANR PRODUCTION CO.	EL PASO NATURAL GAS CO.	GAS CO. OF NEW MEXICO
SAMPLED.....	86/04/02	86/11/20	88/08/02
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	210	430	580
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	750	615	420
FLOW, MCFD.....	780000	280000	50000
COMPONENT, MOLE PCT			
METHANE.....	97.1	90.8	87.9
ETHANE.....	1.3	4.4	8.8
PROPANE.....	0.2	0.9	2.0
N-BUTANE.....	0.1	0.0	0.1
ISOBUTANE.....	0.0	0.3	0.2
N-PENTANE.....	0.2	0.0	0.0
ISOPENTANE.....	0.0	0.0	TRACE
CYCLOPENTANE.....	TRACE	0.0	0.0
HEXANES PLUS.....	0.1	0.0	0.0
NITROGEN.....	0.2	2.5	0.5
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	TRACE	TRACE	0.0
HYDROGEN.....	0.2	0.5	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.5	0.6	0.5
HELIUM.....	TRACE	0.05	0.04
HEATING VALUE*.....	1030	1034	1111
SPECIFIC GRAVITY.....	0.575	0.603	0.629

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18583	INDEX SAMPLE 18584	INDEX SAMPLE 17733
STATE.....	NEW MEXICO	NEW MEXICO	NEW MEXICO
COUNTY.....	MCKINLEY	MCKINLEY	SAN JUAN
FIELD.....	SAN JUAN BASIN	SAN JUAN BASIN	BEAUTIFUL MOUNTAIN
LOCATION.....	2-24 IN. LINES, B PLANT	34 IN., A PLANT, FROM CHACO	GAS WELL NO. 2-5
OWNER.....	EL PASO NATURAL GAS CO.	EL PASO NATURAL GAS CO.	NAVAJO REFINED HELIUM CO., INC
SAMPLED.....	88/04/19	88/04/19	85/07/01
FORMATION.....	NOT GIVEN	NOT GIVEN	MISS---
GEOLOGIC PROVINCE CODE...	580	580	580
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	800	800	680
FLOW, MCFD.....	370000	370000	NOT GIVEN
COMPONENT, MOLE PCT			
METHANE.....	90.9	93.2	2.0
ETHANE.....	5.5	4.4	0.2
PROPANE.....	1.1	0.6	0.2
N-BUTANE.....	0.2	0.0	0.2
ISOBUTANE.....	TRACE	TRACE	0.1
N-PENTANE.....	0.0	0.0	0.2
ISOPENTANE.....	0.1	0.0	TRACE
CYCLOPENTANE.....	0.0	0.0	0.1
HEXANES PLUS.....	0.0	0.0	0.3
NITROGEN.....	2.0	0.3	89.4
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	TRACE	TRACE	0.9
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	1.5	0.7
HELIUM.....	0.02	0.02	5.60
HEATING VALUE*.....	1057	1038	67
SPECIFIC GRAVITY.....	0.607	0.598	0.934

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 17734	INDEX SAMPLE 17971	INDEX SAMPLE 18408
STATE.....	NEW MEXICO	NEW MEXICO	OHIO
COUNTY.....	SAN JUAN	SAN JUAN	TUSCARAWAS
FIELD.....	BEAUTIFUL MOUNTAIN	BEAUTIFUL MOUNTAIN	SOUTHERN OHIO FIELDS
LOCATION.....	GAS WELL NO. 2-5	NOT GIVEN	24 IN. DISCHARGE
OWNER.....	NAVAJO REFINED HELIUM CO., INC	NAVAJO REFINED HELIUM CO., INC	EAST OHIO GAS CO.
SAMPLED.....	85/07/01	86/01/27	87/07/21
FORMATION.....	PERM-ORGAN ROCK	MISS---	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	580	580	160
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	680	645	620
FLOW, MCFD.....	NOT GIVEN	40000	60000
COMPONENT, MOLE PCT			
METHANE.....	3.6	10.9	83.1
ETHANE.....	0.4	1.8	6.6
PROPANE.....	0.2	1.5	2.5
N-BUTANE.....	0.2	1.0	0.8
ISOBUTANE.....	TRACE	0.3	0.5
N-PENTANE.....	0.1	0.6	0.6
ISOPENTANE.....	TRACE	0.1	0.0
CYCLOPENTANE.....	TRACE	0.1	0.2
HEXANES PLUS.....	0.2	0.5	0.7
NITROGEN.....	90.2	79.3	4.5
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.8	0.6	0.0
HYDROGEN.....	TRACE	TRACE	0.3
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	TRACE	0.5	TRACE
HELIUM.....	4.12	2.78	0.13
HEATING VALUE*.....	70	285	1139
SPECIFIC GRAVITY.....	0.929	0.951	0.682

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX 49 SAMPLE 19026	INDEX 50 SAMPLE 18441	INDEX 51 SAMPLE 18442
STATE.....	OKLAHOMA	PENNSYLVANIA	PENNSYLVANIA
COUNTY.....	CREEK	ARMSTRONG	INDIANA
FIELD.....	CENTRAL & WESTERN OKLAHOMA	INDIANA, LOCAL PRODUCTION	ROCHESTER MILLS/ELK RUN
LOCATION.....	24" INLET	12 IN SUCTION	8 IN DISCHARGE
OWNER.....	OKLAHOMA NATURAL GAS CO.	PEOPLES NATURAL GAS CO.	CONSOLIDATED GAS SUPPLY CORP.
SAMPLED.....	90/09/12	87/09/17	87/09/17
FORMATION.....	NOT GIVEN	DEVO-BRADFORD U	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	355	160	160
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	520	90	600
FLOW, MCFD.....	125000	10000	14000
COMPONENT, MOLE PCT			
METHANE.....	93.8	94.3	95.0
ETHANE.....	3.0	3.3	3.0
PROPANE.....	0.6	0.5	0.3
N-BUTANE.....	0.0	0.3	0.3
ISOBUTANE.....	0.1	0.0	0.0
N-PENTANE.....	0.0	0.4	0.4
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	0.1	0.1
HEXANES PLUS.....	0.0	0.2	0.2
NITROGEN.....	2.3	0.7	0.5
OXYGEN.....	0.0	TRACE	0.0
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	TRACE	TRACE	0.1
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.1	0.1	0.1
HELIUM.....	0.05	0.08	0.07
HEATING VALUE*.....	1023	1066	1062
SPECIFIC GRAVITY.....	0.587	0.597	0.592

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18743	INDEX SAMPLE 18738	INDEX SAMPLE 18745
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	CALHOUN	JACKSON	NUECES
LOCATION.....	OFFSHORE 75%-S TEX FLDs 25%	SOUTH TEXAS FIELDS	FREEER AREA
OWNER.....	20 IN. INLET	18 IN. INLET	12 IN. MAGNOLIA CITY LINE
SAMPLED.....	FLORIDA GAS TRANSMISSION CO.	TRUNKLINE GAS CO.	TENNESSEE GAS PIPELINE CO.
FORMATION.....	89/02/03	89/02/02	89/02/07
GEOLOGIC PROVINCE CODE...	NOT GIVEN	NOT GIVEN	NOT GIVEN
DEPTH, FEET.....	220	220	220
PRESSURE, PSIG.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
FLOW, MCFD.....	915	532	450
COMPONENT, MOLE PCT	185000	240000	20000
METHANE.....	94.4	93.5	90.6
ETHANE.....	2.3	3.5	4.6
PROPANE.....	0.6	0.8	1.5
N-BUTANE.....	0.2	0.1	0.4
ISOBUTANE.....	0.2	0.3	0.3
N-PENTANE.....	0.5	0.0	0.3
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.2	TRACE	0.1
HEXANES PLUS.....	0.6	0.2	0.4
NITROGEN.....	0.2	0.1	0.1
OXYGEN.....	TRACE	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.7	1.4	1.5
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*	1088	1059	1106
SPECIFIC GRAVITY.....	0.614	0.607	0.638

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18746	INDEX SAMPLE 18747	INDEX SAMPLE 18744
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	NUECES	NUECES	NUECES
FIELD.....	ROBSTOWN AREA	SOUTH TEXAS FIELDS	ZAPATA & WEBB COUNTY FIELDS
LOCATION.....	18 IN. WARDNER LINE	26 IN. SAN SALVADOR LINE	26 IN.
OWNER.....	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.	NATURAL GAS PIPELINE CO. OF AM
SAMPLED.....	89/02/07	89/02/07	89/02/07
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	220	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	450	450	600
FLOW, MCFD.....	45000	250000	400000
COMPONENT, MOLE PCT			
METHANE.....	99.0	93.9	91.2
ETHANE.....	0.6	3.5	2.6
PROPANE.....	TRACE	0.8	0.6
N-BUTANE.....	0.0	0.3	0.3
ISOBUTANE.....	TRACE	TRACE	0.3
N-PENTANE.....	0.0	0.4	0.8
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.0	TRACE	0.4
HEXANES PLUS.....	0.0	0.2	1.1
NITROGEN.....	0.1	0.2	0.0
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	0.0	TRACE
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.2	0.5	2.5
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1017	1077	1118
SPECIFIC GRAVITY.....	0.560	0.605	0.659

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18261	INDEX SAMPLE 18740	INDEX SAMPLE 18741
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	PECOS	VICTORIA	VICTORIA
FIELD.....	PERMIAN BASIN AREA	SOUTH TEXAS FIELDS	SOUTH TEXAS FIELDS
LOCATION.....	36 IN. OUTLET	30 IN. SUCTION	24 IN. SUCTION
OWNER.....	OASIS PIPE LINE CO.	TENNESSEE GAS PIPELINE CO.	TENNESSEE GAS PIPELINE CO.
SAMPLED.....	86/11/18	89/02/05	89/02/03
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	430	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	900	600	NOT GIVEN
FLOW, MCFD.....	101700	188000	133000
COMPONENT, MOLE PCT			
METHANE.....	88.6	94.9	95.4
ETHANE.....	5.4	2.7	2.6
PROPANE.....	1.9	0.5	0.5
N-BUTANE.....	0.3	0.3	0.2
ISOBUTANE.....	0.4	0.0	0.1
N-PENTANE.....	0.0	0.3	0.0
ISOPENTANE.....	0.2	0.0	0.0
CYCLOPENTANE.....	0.0	0.1	0.0
HEXANES PLUS.....	0.0	0.2	0.2
NITROGEN.....	1.8	0.1	0.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.6	0.0	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.8	0.9	0.9
HELIUM.....	0.07	TRACE	TRACE
HEATING VALUE*	1078	1058	1045
SPECIFIC GRAVITY.....	0.627	0.599	0.590

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18742	INDEX SAMPLE 18739	INDEX SAMPLE 18748
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	VICTORIA	VICTORIA	WEBB
FIELD.....	SOUTH TEXAS FIELDS	SOUTH TEXAS-LAREDO AREA	S TEXAS Flds. - THOMPSONVILLE
LOCATION.....	24 IN. INLET	18 IN. INLET	20 IN. INLET
OWNER.....	TENNESSEE GAS PIPELINE CO.	HOUSTON PIPE LINE CO.	VALERO TRANSMISSION CO.
SAMPLED.....	89/02/03	89/02/03	89/02/07
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	220	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	600	350	870
FLOW, MCFD.....	133000	52000	120000
COMPONENT, MOLE PCT			
METHANE.....	94.8	88.3	93.5
ETHANE.....	2.6	5.4	2.6
PROPANE.....	0.7	1.6	0.6
N-BUTANE.....	0.2	0.5	0.2
ISOBUTANE.....	0.5	0.4	0.0
N-PENTANE.....	0.0	0.2	0.3
ISOPENTANE.....	0.0	0.1	0.0
CYCLOPENTANE.....	0.2	0.1	0.1
HEXANES PLUS.....	0.2	0.3	0.2
NITROGEN.....	0.1	0.2	0.1
OXYGEN.....	0.0	0.0	0.0
ARGON.....	0.0	0.0	0.0
HYDROGEN.....	0.0	0.0	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.9	2.8	2.5
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*.....	1060	1101	1039
SPECIFIC GRAVITY.....	0.600	0.657	0.612

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 64 18735	INDEX SAMPLE 65 18737	INDEX SAMPLE 66 18736
STATE.....	TEXAS	TEXAS	TEXAS
COUNTY.....	WHARTON	WHARTON	WHARTON
FIELD.....	OFFSHORE-MARKUM	OFFSHORE-TEXAS	SOUTH TEXAS FIELDS
LOCATION.....	30 IN. INLET MARKUM	14 IN. INLET	26 IN. INLET
OWNER.....	TRANSCONTINENTAL GAS PIPE LINE	TRANSCONTINENTAL GAS PIPE LINE	TRANSCONTINENTAL GAS PIPE LINE
SAMPLED.....	89/02/02	89/02/02	89/02/02
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE...	220	220	220
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	784	784	705
FLOW, MCFD.....	255000	120000	220000
COMPONENT, MOLE PCT			
METHANE.....	94.5	94.3	92.4
ETHANE.....	2.0	2.1	2.4
PROPANE.....	0.5	0.5	0.8
N-BUTANE.....	0.1	0.2	0.5
ISOBUTANE.....	0.4	0.1	0.5
N-PENTANE.....	0.0	0.3	0.6
ISOPENTANE.....	0.0	0.0	0.0
CYCLOPENTANE.....	0.1	0.1	0.2
HEXANES PLUS.....	0.4	0.3	0.7
NITROGEN.....	0.3	0.4	0.3
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	TRACE	0.0
HYDROGEN.....	0.0	TRACE	0.0
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.6	1.7	1.7
HELIUM.....	TRACE	TRACE	TRACE
HEATING VALUE*	1051	1049	1101
SPECIFIC GRAVITY.....	0.607	0.608	0.639

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18656	INDEX SAMPLE 18407	INDEX SAMPLE 18405
STATE.....	UTAH	WEST VIRGINIA	WEST VIRGINIA
COUNTY.....	SAN JUAN	KANAWHA	SUMMERS
FIELD.....	NWP MAINLINE	SO. CENTRAL WEST VA. FIELDS	EASTERN KENTUCKY FIELDS
LOCATION.....	26 IN.	24 IN. DISCHARGE	20 IN. DISCHARGE
OWNER.....	NORTHWEST PIPELINE CORP.	COLUMBIA GAS TRANSMISSION CORP	COLUMBIA GAS TRANSMISSION CORP
SAMPLED.....	88/08/05	87/07/17	87/07/17
FORMATION.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
GEOLOGIC PROVINCE CODE.....	585	160	160
DEPTH, FEET.....	NOT GIVEN	NOT GIVEN	NOT GIVEN
PRESSURE, PSIG.....	765	550	174
FLOW, MCFD.....	265000	32000	79000
COMPONENT, MOLE PCT			
METHANE.....	90.3	80.8	86.3
ETHANE.....	5.5	10.7	10.0
PROPANE.....	1.4	4.3	1.5
N-BUTANE.....	0.2	1.2	0.2
ISOBUTANE.....	0.3	0.6	0.2
N-PENTANE.....	0.0	0.3	0.0
ISOPENTANE.....	0.0	0.2	0.1
CYCLOPENTANE.....	0.1	0.1	0.0
HEXANES PLUS.....	0.0	0.4	0.0
NITROGEN.....	2.0	1.0	1.1
OXYGEN.....	0.0	0.0	TRACE
ARGON.....	0.0	TRACE	TRACE
HYDROGEN.....	0.0	0.4	0.5
HYDROGEN SULFIDE.....	0.0	0.0	0.0
CARBON DIOXIDE.....	0.3	0.1	TRACE
HELIUM.....	0.02	0.06	0.06
HEATING VALUE*.....	1067	1227	1112
SPECIFIC GRAVITY.....	0.615	0.701	0.630

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 2. - SAMPLES FROM PIPELINES IN THE UNITED STATES

	INDEX SAMPLE 18406	
STATE.....	WEST VIRGINIA	
COUNTY.....	WAYNE	
FIELD.....	EASTERN KY & SW W. VA FIELDS	
LOCATION.....	20 IN. DISCHARGE	
OWNER.....	COLUMBIA GAS TRANSMISSION CORP	
SAMPLED.....	87/07/15	
FORMATION.....	NOT GIVEN	
GEOLOGIC PROVINCE CODE...	160	
DEPTH, FEET.....	NOT GIVEN	
PRESSURE, PSIG.....	320	
FLOW, MCFD.....	97000	
COMPONENT, MOLE PCT		
METHANE.....	79.9	---
ETHANE.....	12.6	---
PROPANE.....	4.3	---
N-BUTANE.....	0.8	---
ISOBUTANE.....	0.5	---
N-PENTANE.....	0.0	---
ISOPENTANE.....	0.3	---
CYCLOPENTANE.....	0.0	---
HEXANES PLUS.....	0.0	---
NITROGEN.....	1.2	---
OXYGEN.....	0.0	---
ARGON.....	TRACE	---
HYDROGEN.....	0.5	---
HYDROGEN SULFIDE.....	0.0	---
CARBON DIOXIDE.....	TRACE	---
HELIUM.....	0.05	---
HEATING VALUE*.....	1201	---
SPECIFIC GRAVITY.....	0.686	---

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX 1 SAMPLE 18305	INDEX 2 SAMPLE 18306	INDEX 3 SAMPLE 18307
COUNTRY.....	CANADA	CANADA	CANADA
STATE OR PROVINCE.....	NOVA SCOTIA	NOVA SCOTIA	NOVA SCOTIA
FIELD.....	GLENELG	GLENELG	GLENELG
WELL NAME.....	GLENELG NO. N-49	GLENELG NO. N-49 ZONE 1	GLENELG NO. N-49 ZONE 2
LOCATION.....	43D 38'59"N 60D 07'02"W OFFSHO	43D 38'59"N 60D 07'02"W OFFSHO	43D 38'59"N 60D 07'02"W OFFSHO
OWNER.....	SHELL CANADA, LTD.	SHELL CANADA, LTD.	SHELL CANADA, LTD.
COMPLETED.....	86/08/04	86/08/04	86/08/04
SAMPLED.....	87/02/00	87/02/00	87/02/00
FORMATION.....	CRET-MISSISSAUGA	CRET-MISSISSAUGA	CRET-MISSISSAUGA
GEOLOGIC PROVINCE CODE...	000	000	000
DEPTH, FEET.....	11802	11802	11404
WELLHEAD PRESSURE, PSIG...	4400	4400	4400
MCFD.....	100000	100000	100000
MOLE PCT			
METHANE.....	85.0	89.6	91.0
ETHANE.....	3.8	4.6	4.3
PROPANE.....	1.5	1.9	1.6
N-BUTANE.....	0.2	0.4	0.3
ISOBUTANE.....	0.4	0.3	0.2
N-PENTANE.....	0.0	0.1	0.1
ISOPENTANE.....	0.1	0.1	0.2
CYCLOPENTANE.....	0.1	TRACE	0.0
HEXANES PLUS.....	0.1	0.1	0.1
NITROGEN.....	5.6	0.5	0.5
OXYGEN.....	1.4	0.1	TRACE
ARGON.....	0.1	TRACE	TRACE
HYDROGEN.....	TRACE	0.1	0.1
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.6	2.3	1.6
HELIUM.....	0.01	0.01	0.01
HEATING VALUE*.....	1001	1077	1075
SPECIFIC GRAVITY.....	0.650	0.638	0.625

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

TABLE 3. - SAMPLES FROM GAS AND OIL WELLS IN FOREIGN COUNTRIES

	INDEX SAMPLE 18308	INDEX SAMPLE 18309	INDEX SAMPLE 18585
COUNTRY.....	CANADA	CANADA	SPAIN
STATE OR PROVINCE.....	NOVA SCOTIA	NOVA SCOTIA	OFFSHORE
FIELD.....	GLENELG	PANUKE	GAVIOTA
WELL NAME.....	GLENELG NO. N-49 ZONE 3	PANUKE NO. B-90	GAVIOTA
LOCATION.....	43D 38'59"N 60D 07'02"W OFFSHO	43D 49'11"N 60D 42'34"W OFFSHO	CANTABRIAN SEA (VISCAYA)
OWNER.....	SHELL CANADA, LTD.	SHELL CANADA, LTD.	REPSOL EXP., S.A./ELF AQUITAIN
COMPLETED.....	86/08/04	86/09/24	85/03/00
SAMPLED.....	87/02/00	87/02/00	88/03/00
FORMATION.....	CRET-MISSISSAUGA	CRET-MISSISSAUGA	CRET-GAVIOTA
GEOLOGIC PROVINCE CODE...	000	000	000
DEPTH, FEET.....	11134	7525	8200
WELLHEAD PRESSURE, PSIG...	4400	600	3100
OPEN FLOW, MCFD.....	100000	400	34000
COMPONENT, MOLE PCT			
METHANE.....	91.1	77.9	86.1
ETHANE.....	4.2	2.0	5.6
PROPANE.....	1.5	4.6	1.9
N-BUTANE.....	0.3	3.2	0.3
ISOBUTANE.....	0.2	3.1	0.4
N-PENTANE.....	0.1	1.0	0.0
ISOPENTANE.....	0.1	1.1	0.2
CYCLOPENTANE.....	0.1	TRACE	0.0
HEXANES PLUS.....	0.1	0.5	0.0
NITROGEN.....	0.6	3.8	4.1
OXYGEN.....	0.1	0.1	0.0
ARGON.....	TRACE	TRACE	TRACE
HYDROGEN.....	0.1	0.1	0.0
HYDROGEN SULFIDE**.....	0.0	0.0	0.0
CARBON DIOXIDE.....	1.7	2.7	1.3
HELIUM.....	0.01	0.02	0.03
HEATING VALUE*.....	1072	1272	1055
SPECIFIC GRAVITY.....	0.626	0.802	0.646

* CALCULATED GROSS BTU PER CU FT, DRY, AT 60 DEGREES FAHRENHEIT AND 30 INCHES OF MERCURY

** DUE TO THE ABSORPTION OF H₂S DURING SAMPLING, THE REPORTED RESULTS MAY NOT BE RELIABLE

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