

## Surveyor Killed in ATV Turnover in Wyoming

---

### SUMMARY

A 22 year old male seismic surveyor died from the injuries he received when the All Terrain Vehicle (ATV) he was operating over-turned, pinning him underneath the vehicle. The victim was alone, attempting to drive the vehicle through a wash-out and a steep embankment in a remote area inside an Indian reservation. He had apparently attempted to turn the vehicle at a sharp angle to cross a gully, placing the vehicle in a severe side-lean. The vehicle overturned, pinning him underneath, face down.

The incident occurred on New Year's Day and there was no work required for that day. Employees could volunteer to come in on that day to conduct general maintenance tasks. At approximately 45 minutes after the victim had last been seen, an attempt was made to contact him by radio, with no response. Following continued radio attempts, the supervisor initiated a search, with the body being located three hours after the victim had last been seen. Searchers tried to find a pulse and could not. They drove to the nearest house and called 911. Blood analysis determined significant levels of both amphetamine and cannabinoid, and a bag of suspected controlled substance was found on the body.

Employers may be able to minimize the potential for occurrence of this type of incident through the following precautions:

- **Enforce operator safety practices on all company machines and equipment**
- **Enforce use of apropos personal protective equipment for all employees at all times**
- **Establish and enforce company policies regarding the use of alcohol and controlled substance within the workplace.**

### INTRODUCTION

On a Sunday morning, January 1, 1995, a seismic survey crew worker was at work on voluntary assignment, conducting general maintenance activities by operating an all-terrain vehicle at a remote location inside an Indian reservation. While there was no company requirement for work on that day (it being both a Sunday and New Year's Day), workers were allowed to volunteer for general maintenance tasks. The victim had volunteered to work on that day and arrived at the company shop prior to leaving for the oil field.

Because of the cold temperatures, the ATVs were difficult to start and to keep running. As a result, the victim did not begin his field maintenance activities until an hour and 45 minutes after the work day began. His duty was to change out seven batteries at specific line and station numbers, and he drove the 6-wheeled ATV from the staging area toward the first numbered station on the line.

Approximately 45 minutes after the victim had left the staging area, his supervisor attempted to contact him by radio and received no response. Over the next 30 minutes, the supervisor continued his attempts at radio contact, and then drove to a field shop where he reported to his supervisor that the victim was not responding. He then began a visual search, followed by a call to other crew members to conduct an in-depth search.

The victim was found three hours after he had last been seen at the staging area, underneath the overturned ATV with the bar of the ATV storage rack resting on his neck. Attempts to locate a pulse were unsuccessful and crew members called 911 for assistance.

## **INVESTIGATION**

Through a reciprocal notification agreement with the Director of the Occupational Safety and Health Division of the Department of Employment, the WY- Wyoming FACE Project was notified of the incident on January 3, 1995. Reports were requested and received from local law enforcement and coroner's offices, and an investigation was conducted.

After leaving the staging area, the victim had not proceeded to the station assigned, but had driven his ATV into an area where there was a 6' deep by 20' wide wash-out adjacent to a steep hill. He apparently had tried to cross the washout by turning the vehicle at a sharp angle, placing it in a severe unbalance from which it overturned. The area was barren with scrub brush and patches of snow in shaded areas. It was difficult to determine a reason for the victim to have attempted to cross at that point, as there were safer and easier paths nearby. He had also removed the hard hat that he was wearing when last seen at the staging area, and had replaced it with a baseball cap.

When the victim was discovered, he was lying face-down under the overturned vehicle with the bar of the storage rack on the back of the ATV resting on his neck. All seven of the batteries that the victim was to have taken to specific stations were at the scene along with the radio that the victim had been given to communicate with his supervisor. The batteries were tied to the rack on the ATV and were on the uphill side of the vehicle at the time of the rollover, which would have tended to balance rather than contribute to the overturning of the ATV. His hard hat had been found earlier between the staging area and his first scheduled stop.

Searchers moved the ATV off of the victim and attempted to find a pulse. Finding none, they contacted emergency responders by telephone at the nearest residence. Law enforcement officers were at the scene approximately 40 minutes after notification. At that time, co-workers and ambulance personnel had moved both the body and the vehicle from their initial positions.

A bag of suspected controlled substance was found on the victim's body, and chemical analysis showed positive traces of methamphetamine, amphetamine, and cannabinoid in the blood. Levels were suggestive of chronic drug abuse and recent use of marijuana. Co-worker interviews revealed that the victim was known to have used marijuana on occasion. The company has written policy which forbids the use of illegal drugs on the job. The victim had signed a document five months earlier, stating that he had read and understood that policy.

The victim had worked for the company for over 5 months and had operated the ATV for much of that time without incident. He was referred to by supervisors and co-workers as a good employee who

followed company policies and was receptive to those policies that enhanced the safety of the working environment. He was seen as competent in the operation of the ATV and had, in the past, successfully driven over more extreme terrains than the one he was on at the time of the incident.

## **CAUSE OF DEATH**

The Medical Examiner listed the cause of death as mechanical asphyxiation due to compression of chest as a result of 6 wheel ATV accident.

## **RECOMMENDATIONS/DISCUSSION**

This incident could have been prevented by adherence to company policy and personal concern for safe work practices. The victim was apparently under the influence of controlled substances prior to and at the time of the incident. Considering his alleged competence with the ATV and his usual concern for both safety and caution, his behavior at the time of the incident was a primary contributor to the circumstance that took his life. Perhaps due to the fact that he had volunteered to work on a holiday, the victim was not properly prepared for a safe work environment.

While this company appears to have initiated and enforced safety precautions properly, there is a constant need for update and emphasis on maintaining a safe working environment. Even though workers are competent on the machinery they use daily, there is the potential for mis-use through familiarity, over-confidence, or physical and emotional changes in the employee. Periodic reminders of the dangers inherent in machine operation are to the advantage of both the company and its employees.

This company appeared to institute and enforce regulations regarding the use of personal protective equipment, and those who were employed apparently understood the company's emphasis on use of such equipment. The victim waited until he was out of site of his supervisor before discarding his protective gear and changing to a less-protective baseball cap, which is indicative of the fact that, even in his condition of drug use, he was inhibited by the stress placed by the company on safety practices.

Management and supervisory personnel should be aware of the warning signs of alcohol and drug abuse, and employees should be encouraged to see assistance for abuse problems that might lessen the safety factors of the environment in which they work. Often, even when company officials are not aware of drug abuse in the work environment, co-workers are aware of it. Co-workers should be made to understand that reporting such abuse among their peers will not cause firing so much as initiate assistance programs that will help the abuser find alternative means of dealing with problems that are less intrusive to the safety of the workplace. Most communities have active drug-abuse programs and many companies find them a good resource for their employees safety and personal benefit.

---

## **FATAL ACCIDENT CIRCUMSTANCES AND EPIDEMIOLOGY ( Wyoming FACE ) PROJECT**

The National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR), performs Fatal Accident Circumstances and Epidemiology ( Wyoming FACE ) investigations when a participating state reports an occupational fatality and requests technical assistance. The goal of these evaluations is to prevent fatal work injuries in the future by studying the working environment, the worker, the task the worker was performing, the tools the worker was using, the energy exchange resulting in fatal injury, and the role of management in controlling how these factors interact.

States participating in this study include: Kentucky, Maryland, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

NIOSH Funded/State-based Wyoming FACE Projects providing surveillance and intervention capabilities to show a measurable reduction in workplace fatalities include: Alaska, California, Colorado, Indiana, Iowa, Kentucky, Massachusetts, Maryland, Minnesota, Missouri, Nebraska, New Jersey, Wisconsin and Wyoming.

---

Additional information regarding this report is available from:

Wyoming Occupational Fatality Analysis Program  
522 Hathaway Building - 2300 Capitol Avenue  
Cheyenne, WY 82002  
(307) 777-5439

**Please use information listed on the Contact Sheet on the NIOSH FACE web site to contact [In-house FACE program personnel](#) regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.**