Wyo

FATALITY NARRATIVE
Leroy Fried
Cyclone Drilling, LLC
307811638/S08804

Date and Time of Accident: August 2, 2004 approximately 4:00 pm.

Notification: Sublette County Sheriff's Office reported the accident to Wyoming Workers' Safety Compliance Supervisor, Johnnie A. Hall, Jr., on August 2, 2004 at 6:23 pm. Tom Taylor, Safety Supervisor for Cyclone Drilling, Inc., also reported the fatality to Johnnie A. Hall, Jr. on August 2, 2004 at 8:02 pm.

The Investigation:

On August 2, 2004, Johnnie Hall, following notification of the accident/fatality, assigned Investigator Daniel S. Bulkley and John Watterson to the fatality investigation. On August 3, 2004, Investigators Bulkley and Watterson traveled to the accident site (North of Rock Springs, West of Highway 191, Boulder, WY) to meet with company personnel.

Prior to arrival at the site, the investigators reviewed the Fatality/Accident/Catastrophe Worksheet supplied by Wyoming Workers' Safety Compliance Supervisor, Johnnie Hall. Upon arrival at the site, the investigators provided the company representatives with the Employer Contact Sheet and conducted an opening conference. Once the Contact Sheets were completed by Cyclone Drilling, Inc. Safety Supervisor Tom Taylor and Ultra Resources, Inc. Drilling Consultant Gordon McKinney, an Opening Conference was conducted. The investigators briefly talked to personnel from Ultra Resources (Kevin Wright, George Ogden, Sam McClure, and Gordon McKinney) and Cyclone Drilling (Gary Anders, Henry Taylor, and Tom Taylor) about inspection procedures. After the briefing, investigators went out with site personnel and performed a preliminary visual walkaround inspection of the accident site. A video was also taken of the scene. Still photographs were taken during the walkaround by investigator Watterson. Tom Taylor informed investigators that company personnel had preserved the accident site prior to the investigators' arrival/preliminary inspection.

Once the walkaround was completed, three employee interviews were conducted; two others were performed later due to employees not being on location during the investigation. There were two witnesses (Monte McDowall and Gary Anders) that actually were on the rig floor and observed Leroy Fried, the deceased, get struck.

After the preliminary information was gathered, the site was released back to Cyclone Drilling, Inc. personnel. The investigators proceeded to Pinedale to meet with the Sheriff's Office Investigator K.C. Lehr and Coroner Donald R. Schooley. A Medical Examiner's Report from the Sublette County Coroner's Office was obtained along with the Pinedale Medical Clinic medical intake and care provided information to aid in the investigation. The Sublette County Sheriff's Office provided copies of their incident reports and other information they gathered.

Additional Information:

Deceased: Leroy Fried

Occupation: Floor Hand

Employer: Cyclone Drilling, Inc
P.O. Box 908
Gillette, WY 82717

Accident Site: Rig #19 west of Highway 191, located north of Rock Springs, west of Boulder, WY.

Personnel Present at the Time of the Accident:

Name	Firm	Job Title
Monte McDowall	Cyclone Drilling, Inc.	Driller
Gary Anders	Cyclone Drilling, Inc.	Tool Pusher
Jeff McCormack	Cyclone Drilling, Inc.	Driller
Jackie Nelson	Cyclone Drilling, Inc.	Motor Man
Christopher McAdams	Cyclone Drilling, Inc.	Chain Hand
William Ehn	Cyclone Drilling, Inc.	Floor Hand
Scott Powers	Cyclone Drilling, Inc.	Floor Hand
George Ogden	Ultra Resources, Inc.	Drilling Supt.

Personnel Interviewed during the Investigation:

Name	Firm	Job Title
Monte McDowall	Cyclone Drilling, Inc.	Driller
Gary Anders	Cyclone Drilling, Inc.	Tool Pusher
Jeff McCormack	Cyclone Drilling, Inc.	Driller
Jackie Nelson	Cyclone Drilling, Inc.	Motor Man
Christopher McAdams	Cyclone Drilling, Inc.	Chain Hand

Note: William Ehn, Scott Powers, and George Ogden were not interviewed because they did not observe the accident (based on information gathered and interviews).

General Company Information: Cyclone Drilling, Inc. business office is located at 5800 Mohan Road, Gillette, Wyoming, telephone number (307) 682-4161; fax number (307) 682-3158.

Events leading up to the Accident:

Leroy Fried (deceased) was a Floor Hand for Cyclone Drilling, Inc. Leroy had only worked for the company for approximately 16 days before the accident. Leroy had received various forms of training from the company. He received tongs use training on July 18, 2004, scrubbing training on July 19, 2004, swinging pipe training on July 21, 2004, and the company's basic awareness training on July 29, 2004. The basic awareness training covered basic issues associated with working on oil rigs, bloodborne pathogens, hazard communication, fall protection, basic B.O.P., first aid, confined space, respirators, lockout/tagout, and forklift training. After his training, he was assigned to rig # 19 as a Floor Hand.

The weather on the day of the accident, August 2, 2004, was sunny, cool, and a little windy. Weather conditions were not a factor in this accident. When the accident occurred, employees were rigging up, lifting the derrick into place.

The job that employees were performing prior to the accident occurring consisted of moving the rig to the new drilling location. They had begun setting up the rig. Once the rig had been put together and all equipment was in place, drilling was to begin. They had just moved the rig to the new location and had started performing an initial pick (lifting the derrick approximately 3 – 5 feet off the ground). Gary Anders, Tool Pusher, had performed a walkaround inspection checking with employees at different positions to ensure everything was ready and there were no problems prior to lifting the derrick into place on the rig floor. Once Gary had performed the checks with employees and had performed his inspections, he started lifting the derrick and that's when the accident occurred.

The Accident:

On Monday, August 2, 2004, Leroy Fried was standing on the front part of the rig floor under the derrick checking cables inside the derrick when the spanner beam (bolster/support beam) was torn from the A legs and fell down striking him. The beam was said to have bounced when it hit the rig floor and then hit Leroy. There was no advanced warning (unusual noises) letting the employees know that the beam was coming down from the A legs or that there was something wrong. Leroy Fried, Gary Anders, and Monte McDowall were working on the rig floor when the accident occurred. The derrick had only been lifted approximately 6 – 10 feet off the ground when the accident occurred. There were two employees (Jackie Nelson and Christopher McAdams) on the ground checking the derrick while it was being lifted into place. None of the employees on the ground had seen the spanner beam (bolster/support beam) break loose from the A legs. Most employees stated they heard a noise and looked up and saw the spanner beam (bolster/support beam) fall or bounce. Some employees stated they saw the deceased thrown up in the air and fall back to the rig floor.

No one at the time of the accident knew for sure how serious Leroy was injured. They tried not to move him and stop the bleeding until the ambulance arrived. They also helped the ambulance crew with taking care of Leroy and they helped get him down off the rig floor.

The accident occurred at approximately 4:00 p.m. The Pinedale Medical Clinic ambulance was dispatched from Pinedale on August 2, 2004 at 4:10 p.m. and arrived at 4:25 p.m. It should be noted that Air Idaho Rescue was on their way to provide Flight for Life to Idaho Falls prior to the patient, Leroy Fried, being transported to the Pinedale Medical Clinic. Due to location, it was decided that Leroy would be taken to the Pinedale Medical Clinic instead and then Air Idaho Rescue would fly Leroy to Idaho Falls for treatment. The ambulance crew initially found Leroy lying on the rig floor, awake and alert. He was aware that he'd been injured but did not remember the accident. The ambulance crew reported that Leroy had several lacerations, obvious open fracture of the right arm and right femur deformity. They thought Leroy was struck by the spanner beam (bolster/support beam) across the thoracic/abdominal area.

Leroy received treatment enroute by the ambulance crew and at Pinedale Medical Clinic for his injuries until he passed away at the Pinedale Medical Clinic, 619 East Hennick, Pinedale, WY. Dr. Alexios C. Constantinides pronounced Leroy dead on August 2, 2004 at 6:11 pm. Leroy had lacerations to the right side of his head and his left femur, contusions to both his right and left abdominal area, and deformities to his right upper arm and femur. The body was released to the Sublette County Coroner, Donald Schooley, and Dr. Mark Downing Woodard performed an autopsy on August 3, 2004.

Findings:

- Leroy Fried, the deceased, was forty-nine year old white male.
- Leroy Fried was working as a Floor Hand for Cyclone Drilling, Inc.; he was assigned to Rig # 19.
- All employees were performing tasks within the scope of their normal job responsibilities when the accident occurred.
- Leroy was working in the same location where others have performed similar work during routine rigging up operations.
- Leroy Fried was working on top of the rig floor under the derrick checking cables in the derrick when he was struck by the spanner beam (bolster/support beam).
- Pin was not in place on one side of the A legs at the time of the investigation; pin was never found.
- Tool Pusher stated all pins were in place prior to the start of rigging up.
- Bolts from the spanner beam (bolster/support beam) were sheared off when the beam was pulled from the A legs.
- Weather conditions did not create hazards that led to accident, only slightly windy, sunny, and cool at the time of the accident.
- Bolts that attached the spanner beam to the A legs broke. Analysis of the bolts showed they were the proper bolts for the application and failed due to being overstressed.

Analysis & Conclusions:

The setup of this particular site concerning the erection of the derrick was going smoothly prior to the accident. Nothing indicated any problems with the A legs, bolts, or pins prior to the accident. Company personnel indicated the deceased was working in their customary location for raising the derrick. All other employees were either working at different locations helping with

the lifting of the derrick or were working behind or under the rig floor when the spanner beam (bolster/support beam) broke loose and struck Leroy.

There are some items that may have contributed to the accident, and the possible scenarios are as follows:

Scenario 1: Some component or part on the derrick or A legs failed causing the bolts on the spanner beam to break from being overstressed. There was significant damage to the A legs and derrick, so determining what may have failed was not possible.

Scenario 2: One of the pins attaching the derrick to the A leg was not in place at the time of the investigation. It either fell out or broke during the raising of the derrick, or it was never installed. The pin was never found.

The above listed scenarios do not reflect this agency's belief in any particular sequence. Some interviews/comments support one scenario and some interviews/comments support the other. The employer said that Rig #19's derrick and A legs were thoroughly inspected prior to putting the rig into service. The paint was sandblasted off so that the welds could be inspected. The braces, girts, legs, etc were inspected for damage. This rig had been set up and torn down approximately six times before the accident. With regard to the missing pin, the tool pusher said that he saw the pin in place during his inspection just prior to the accident. He indicated the pins are something he always checks. It will never be known just what exactly happened to cause the spanner beam (bolster/support beam) to break loose. However, there are specific safety actions that may prevent this from occurring in the future. See "Recommendations" for specific details.

Recommendations:

- Brief all employees on the facts and circumstances of this fatal mishap.
- Brief/retrain all employees on rigging up procedures, especially covering not working under derrick during lifting and inspection procedures.
- Brief employees on the hazards identified during the investigation.
- Company procure copies of API Recommended Practice 4G, "Recommended Practice for Use and Procedures for Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures" and API Specification 4F, "Specification for Drilling and Well Servicing Structures.
- Company immediately institute the four inspection categories and follow inspection frequencies outlined in API Recommended Practice 4G, "Recommended Practice for Use and Procedures for Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures" for all drilling rigs owned to help prevent future derrick failures.
- Any deficiencies found during these inspections be immediately identified to appropriate maintenance personnel and approved repairs be performed in accordance with API

Recommended Practice 4G, "Recommended Practice for Use and Procedures for Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures" and API Specification 4F, "Specification for Drilling and Well Servicing Structures.

- Ensure site management personnel enforce the requirements of Wyoming's Rules & Regulations for Oil & Gas Well Drilling and the API Recommended Practice 4G, "Recommended Practice for Use and Procedures for Inspection, Maintenance, and Repair of Drilling and Well Servicing Structures" and API Specification 4F, "Specification for Drilling and Well Servicing Structures.

This report, together with its incorporated findings relate specifically to this particular incident. It is noted that "Recommendations" may not include all existing hazards. The employer and employees continue to have the responsibility for inspection and investigation towards compliance with safe operating practices as outlined in the applicable rules and regulations and nationally recognized industry organizations.

The above investigation and findings of the accident occurring to:

Leroy Fried
1481 Evelyn #6
Riverton, WY 82501

Is set down and attested to this date.

Daniel S Bulkley

Daniel S. Bulkley, Investigator

1/20/05
Date

John L Watterson

John Watterson, Investigator

1/24/05
Date