

WY₂

**Douglas James 'Doug' Shymanski
Cyclone Drilling, Inc.
307818575/S06705**

Date and Time of Accident: December 12, 2005, approximately 3:00 pm.

Notification: Tom Taylor, Safety Superintendent for Cyclone Drilling, Inc., (Cyclone) reported the accident to Johnnie Hall, Compliance Supervisor, Wyoming Workers' Safety (WWS) on Monday, December 12, 2005, at 4:17 pm. The jobsite had been shutdown pending arrival of OSHA Investigators.

The Investigation:

On Tuesday, December 13, 2005, following notification of the accident, Investigators Janet Cutler and John Watterson from Wyoming Workers' Safety traveled to the accident site (War bonnet Well #9B-10D, in the north Jonah Field) outside of Big Piney, WY. The accident occurred on Cyclone Drilling Rig 18. Telephone contact was made with Tom Taylor, Safety Superintendent for Cyclone, and arrangements made to meet at the intersection of WY Highways 191 and 351 to lead Investigators to the rig site.

At the rig, Investigators met Tom Taylor, Safety Superintendent, Pat Mitchell, Tool Pusher (Rig 18), Russ Reid, Tool Pusher (Rig 18), and Robert Lowery, Chief Pilot, all with Cyclone Drilling, Inc. Also present were Dave Ault, Drilling Superintendent, Kevin Wright, HSE Manager, Wendy Boman, Drilling/Completion Technician all with Ultra Resources, Inc. Dean Cook, an independent consultant for Ultra Resources, Inc., and Gordon Williams, Service Operator for Smith Services were also present. An opening conference was conducted with all of the individuals listed above. A site survey was conducted including photographs and video taken of the accident scene.

Several interviews were conducted at the rig site. Following the accident, four of the floor hands left the site and arrangements were made for telephone interviews to be conducted with them.

Independent rig inspectors, Eagle Outfitters, contracted by Ultra Resources inspected the accident site. A crane was brought to the site so the damaged mechanical equipment could be changed out. Investigators took the fast line sheave and the cut ends of the drill line into custody as evidence.

Emergency responders were the ambulance service from Big Piney, WY, and the Sublette County Sheriff's Department. The Sublette County Coroner relied on information contained in the Sheriff's report. Arrangements were made to obtain copies of all reports, including photographs and video.

An initial closing conference was conducted with Tom Taylor, Colan Hulse and Kevin Herman all with Cyclone Drilling at the rig site outside Big Piney, WY on Wednesday, December 14, 2005. Dean Cook, the independent consultant for Ultra Resources was also present.

Deceased: Douglas James 'Doug' Shymanski

Occupation: Driller

Employer: Cyclone Drilling, Inc.

Accident Site: Rig 18, Warbonnet Well 9B-10D in the North Jonah Field, outside Big Piney, WY (N 42°34'756" W 109°42'039")

Employees Present at the Time of the Accident

Name	Firm	Job Title
Pat Mitchell	Cyclone Drilling, Inc.	Tool Pusher
Doug Shymanski	Cyclone Drilling, Inc.	Driller
Dean Cook	Ultra Resources, Inc.	Drilling Consultant
Gordon Williams	Smith Services	Fishing Hand
Rob Young	Cyclone Drilling, Inc.	Derrick Hand
Mark Dockter	Cyclone Drilling, Inc.	Chain Hand / Fireman
Bobby Rossin	Cyclone Drilling, Inc.	Motor Hand
Victor Flores	Cyclone Drilling, Inc.	Floor Hand

Employees Interviewed during the Investigation

Name	Firm	Job Title
Pat Mitchell	Cyclone Drilling, Inc.	Tool Pusher
Dean Cook	Ultra Resources, Inc.	Drilling Consultant
Gordon Williams	Smith Services	Fishing Hand
Rob Young	Cyclone Drilling, Inc.	Derrick Hand
Mark Dockter	Cyclone Drilling, Inc.	Chain Hand / Fireman
Bobby Rossin	Cyclone Drilling, Inc.	Motor Hand
Victor Flores	Cyclone Drilling, Inc.	Floor Hand
D. Todd Cook	Cyclone Drilling, Inc.	Pit Hand
Karl Hopp	Cyclone Drilling, Inc.	Derrick Hand
Doug Wassberg	Cyclone Drilling, Inc.	Driller
Charlie Harter	Cyclone Drilling, Inc.	Floor Hand
Tim Phillips	Cyclone Drilling, Inc.	Former Employee (Derrick Hand)
Corbin Moudy	Cyclone Drilling, Inc.	Former Employee (Driller)
Bob Sleeth	George's Rig Service	Rig Mechanic
Tom Taylor	Cyclone Drilling, Inc.	Safety Superintendent
Colan Hulse	Cyclone Drilling, Inc.	Drilling Superintendent
Arlie Ruger	Cyclone Drilling, Inc.	Tool Pusher
Levi C. George	Cyclone Drilling, Inc.	Driller
Charles Braun	Cyclone Drilling, Inc.	Former Employee (Derrick Hand)
Kevin Seavolt	Cyclone Drilling, Inc.	Former Employee (Derrick Hand)

Events leading up to the Accident

Cyclone Drilling, Inc. is an oil and gas well drilling contractor headquartered in Gillette, WY. According to the web site, James Hladky, founder and president, founded the company in 1975 and is a "hands-on manager . . . personally overseeing drilling operations, upgrades and the implementation of new equipment" (Exhibit A). They have approximately 25 drilling rigs operating in the western United States and over 500 employees.

The crews work seven days on and seven off. They work two 12-hour tours. The daylight shift starts at 6:30 am and the evening shift at 6:30 pm. Rig 18 started drilling at the location where the accident occurred on October 17, 2005.

According to Dean Cook, independent consultant or company man for Ultra Resources, Inc. (Ultra), the crew had encountered many problems on this hole. A drill bit came apart in the hole the first part of December. They had lost circulation, and in addition, there had been problems with the rig freezing.

Dean says the day of the accident the crew finished tripping in the hole at approximately 8:00 am. They slipped and cut 105 feet of drill line. It was a scheduled cut and there were no problems with it. It took approximately one hour to cut the line. After cutting the line, they continued tripping in the hole, which was a normal trip in. They got to the bottom of the hole (11,278 feet), picked up the kelly and milled on the broken drill bit. Dean estimates they milled on the broken bit until approximately 2:30 pm.

At about 2:30 pm, the kelly was set back and they started to pull pipe. Dean says they spent about 30 minutes working the pipe. It had always been tight coming off the bottom of this hole but Dean says the maximum pull on the weight indicator was 373,000 pounds. The first stand was pulled all the way up and they began coming back down.

Doug Shymanski, the driller, was working the brake handle. Pat Mitchell, the tool pusher was right next to him. Gordon Williams, the fisherman for Smith Services, was standing behind Doug's left shoulder and Dean Cook, the company man, was behind his right shoulder. All four were watching the weight indicator.

Although Doug was running the rig, Pat, the tool pusher, says he was making the calls, coaching Doug through the tight pull. Pat says they had worked through the tight spot and were in a free zone.

The Accident

At approximately 3:00 pm on December 12, 2005, the drill line on Cyclone Drilling, Inc., Rig 18 was cut apart by a failed fast line sheave causing the traveling block, hook, and elevators all to come crashing down to the rig floor.

Dean Cook had been expecting a hotshot truck to bring out some tools. About three o'clock, he wondered if it was there yet and turned to go check. He doesn't remember if he'd made it all the way to the doghouse when he heard the snap or boom. He saw Pat

and Gordon heading for the doghouse. He says the entire rig rattled and banged for about 15 seconds.

Pat didn't know what had happened when he heard the "bam" but he knew something was seriously wrong. He says he yelled really loud to "run". He turned and ran into the doghouse. He ran into the back of Dean and pushed him in.

Gordon was still standing behind Doug's left shoulder when he heard the boom. He took off running for the doghouse.

Everyone made it to safety except for the driller, Doug Shymanski. He was half way in the doghouse door when the drill line struck him. It sliced him open from the base of his neck, down the middle of his back, to his lower back. At a glance, Dean could tell it was bad. He says Doug was laid open from his neck to his lower back. Dean took off his coat and put it over Doug, to try to cover the wound.

Pat Mitchell, the tool pusher, recalls that when he got into the doghouse, he turned around to look back out on the rig floor. He saw the elevators slam into the rotary table and the blocks hit the floor. He remembers flinching when the blocks hit the floor. He then looked down and saw Doug at his feet. Pat says he went into shock after that, as he had seen his only brother killed on a rig. He ran down the stairs to the Cyclone trailer.

The individuals around the brake handle did not realize the crew was all on the rig floor, or up in the derrick, at the time of the accident but they had all been in position, ready to pull pipe. Mark Dockter, the chain hand, Bobby Rossin, the motor hand, and Victor Flores, the new floor hand were all standing in the corner by the V-door, behind the air tugger.

Robert Young, the derrick hand, was in the derrick on the monkey board. He was hunkered down back in the corner on the driller's side. This is where he positions himself when they pull strong weights, to be away from the drill line. He remembers the blocks came by him twice before the drill line was cut. The third time the blocks came back up to the level of the monkey board is when the line snapped and the blocks dropped. The drill line whipped through the derrick. Robert hid back in the corner, trying to save himself. He couldn't see what was going on down on the rig floor but he heard the blocks hit the floor.

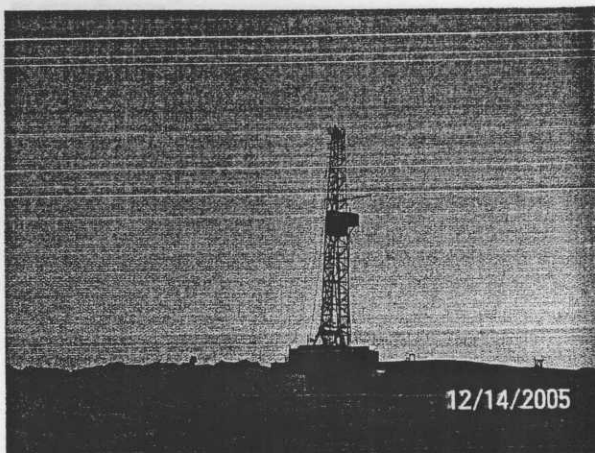
Mark Dockter, the chain hand, backed into the corner of the rig floor when he heard the drill line separate. He watched as the traveling blocks fell to the rig floor. Out of the corner of his eye, he saw Doug fall as he was trying to get into the doghouse and as the blocks hit the rig floor. Mark looked up and saw Robert up in the derrick. He could see Robert was still moving. He looked over and saw Doug. He ran over to Doug and saw he was severely cut on his back. Based on the severity of the injury, Mark knew there wasn't anything anyone could do for Doug. He turned and went out the V-door to the back of the rig.

Up in the derrick, Robert Young was pretty shook up. He waited for everything to stop moving. When it did, he got up and unfastened his safety line for the board. He walked over to the ladder and chained off to come down the derrick. When he got to the bottom, there was no one on the rig floor except for the figure lying on the rig floor, covered with

coats and a blanket. Robert asked who it was and was told it was Doug. He tried to talk to him but he was unconscious. Robert figured Doug was dead from the look of the wound.

Dean was unable to catch Pat to try to calm him down. He asked Gordon, the fisherman, to stay with the body. Dean ran to his office trailer and called Wendy Boman, Drilling/Completion Technician, at the Ultra office in Pinedale. He also woke his son, who was sleeping in the trailer at the time of the accident, to assist with telephone coverage.

Wendy Boman placed the emergency call. The 911 call was processed at 14:59 (2:59 pm). A deputy sheriff was the first on the scene. The ambulance, dispatched out of Marbleton/Big Piney, arrived approximately 5 minutes later at 15:25 (3:25 pm). Doug was pronounced dead at the scene. The cause of death was attributed to major trauma and the resulting loss of blood.



Cyclone Drilling, Inc. - Rig 18



Examining the dropped blocks on the rig floor. Dean Cook is standing with his back to the heater, facing the weight indicator at the driller's console.

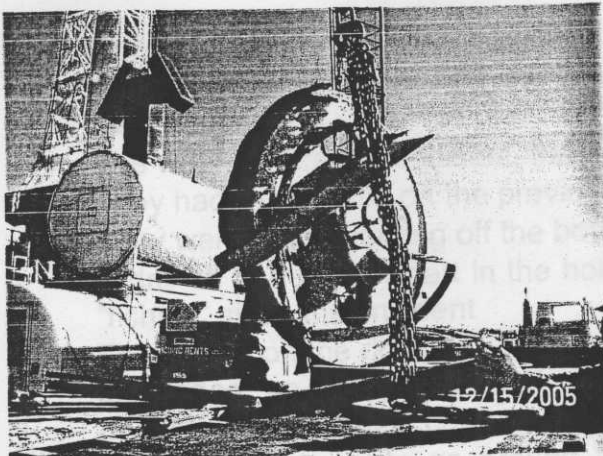


Ultra Resources, Inc. is the well owner

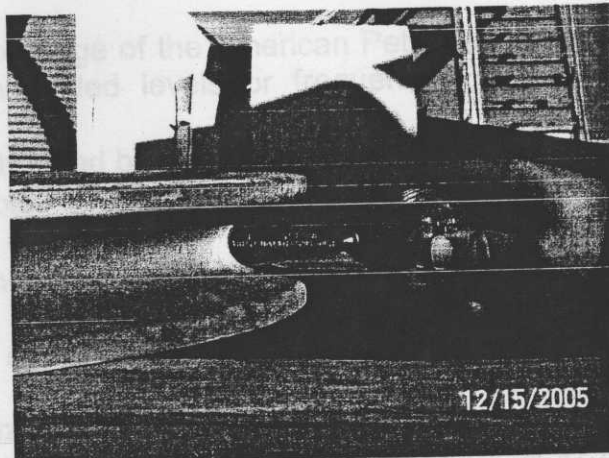


The piping to the heater created a trip hazard between the driller's console and the doghouse.

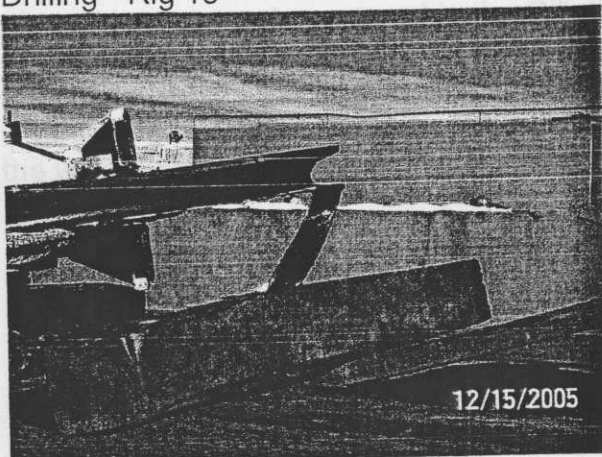
- A derrick hand reported the fast line sheave on Rig 18 was worn to the driller and tool pusher at the previous drilling location



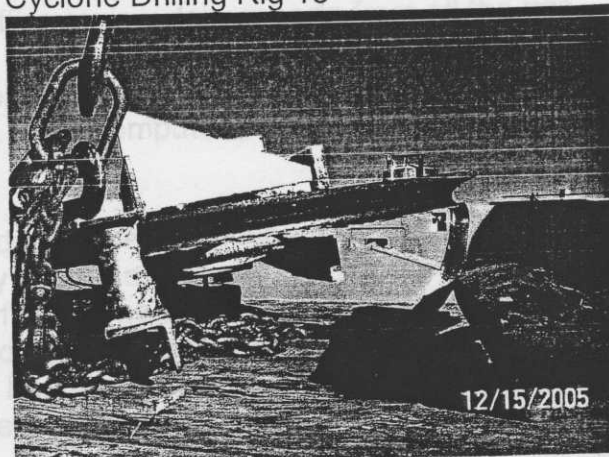
The failed fast line sheave from Cyclone Drilling - Rig 18



New fast line sheave to be installed on Cyclone Drilling Rig 18



The failed fast line sheave from Cyclone Drilling - Rig 18



The failed fast line sheave from Cyclone Drilling - Rig 18

Findings

- Doug Shymanski, the deceased, was 47 years old
- Doug worked for Cyclone Drilling, Inc. "off and on" since 1993
- Doug had worked on Cyclone Drilling rig numbers 2, 4, and 18
- He worked on Rig 18 for approximately 2-1/2 to 3 years
- Doug had over 25 years experience in the oil field
- Toxicology tests performed on Doug's blood and urine samples, following the accident, were positive for amphetamine, methamphetamine, and cannabinoids
- The fast line sheave on Cyclone Rig 18 was extremely fatigued
- The fast line sheave on Rig 18 failed due to a fatigue crack and cut the drill line causing the blocks to drop
- Cyclone Drilling had a nearly identical incident on Rig 6 occur November 2004 in which two employees were injured
- A derrick hand reported the fast line sheave on Rig 18 was worn to the driller and tool pusher at the previous drilling location

- Company personnel have very little knowledge of the American Petroleum Institute (API) guidelines regarding the recommended levels or frequencies of sheave inspections
- The week before the accident, the weather had been extremely cold (-35° F)
- They had been stuck on the previous hole
- They were "tight" coming off the bottom of this hole
- A drill bit had come apart in the hole the first part of December and they had been "fishing" since that incident
- The heater on the rig floor was located directly across from the weight indicator and positioned so that it blocked direct access from the driller's console to the doghouse. The piping created a trip hazard across the path to the doghouse
- Driller would have to go around the heater in order to access the route to the doghouse
- Management personnel in the Gillette office review daily reports from all the rigs

Interviews conducted with the tool pusher, company man and fisherman all concur as to what was going on at the time of the incident. The computer printout from the rig verifies the weight that was being pulled (Exhibit B).

The rig crew was distraught following the accident. The tool pusher and the company man had left the rig floor. The tool pusher was very upset and did not seem to be making sense to the crew. They knew their coworker, and friend was dead and there was nothing they could do for him. The chain hand, motor hand, derrick hand and new floor hand said their good-byes to Doug, collected their gear and headed back to the man camp. Telephone interviews were conducted with all of them later in the week.

Todd Cook is the son of Ultra's company hand, Dean Cook. Todd is employed by Cyclone. He is the pit hand on the crew opposite of the accident crew. He was asleep, in the Ultra trailer, at the time of the accident. He heard about the accident when his father woke him to have him assist with telephone coverage.

Later in the evening, after the accident, Todd was working around the pit with Karl Hopp, derrick hand, and Doug Wassberg, driller, both with Cyclone, both on the crew opposite the accident crew, when Karl mentioned to Todd and Doug that he felt bad about the accident. He felt he had neglected his job because he knew about the sheave. He had discussed with his driller, Doug Wassberg, to be careful about the sheave since they were doing heavier pulls as they were drilling deeper.

Todd shared this information with Dean, his father. Todd sensed that Karl wanted to tell Dean about it. Todd arranged for Karl to come over and have coffee with Dean, Doug and himself. Karl revealed what he knew about the sheave. He told Dean that a couple of months ago, Colan Hulse, the drilling superintendent for Cyclone Rig 18, had come out to the rig with a digital camera and Karl had gone up the derrick and taken photographs of the fast line sheave for Colan. Karl told Dean, Todd and Doug that the drilling line was riding way to the pit side, that it was not riding in the center of the sheave.

When Investigators' asked Dean what he thought happened, he admits that initially he was "stumped". He then heard that Cyclone knew about the fast line sheave being worn. He

hoped Cyclone would be forthcoming with the information, but they weren't. Dean understood Karl to say he had reported to his superiors that the fast line sheave was cracked.

Karl Hopp says he knew the fast line sheave was worn. Karl says the wear to the sheave was first reported sometime during the summer. Tim Phillips, a derrick hand on the crew opposite of Karl, who was working days, first noticed it. He asked Karl to check it out. The drill line appeared to be riding to the pit side of the sheave. Karl believes, that in addition to himself, Tim reported the sheave to Pat Mitchell, the tool pusher, and Colan Hulse, the drilling superintendent.

Karl admits he is not good with dates and times. He believes it was sometime during the summer of 2005 when the worn sheave was first reported. He says he took photos of the sheave for the drilling superintendent. He doesn't know for sure whose camera it was; he assumed it was Colan's. He doesn't remember exactly when it was that he took the photos. Karl says no one asked for his input regarding the condition of the fast line sheave, or how the line was riding. Colan had left the rig site before Karl got down with the camera. Karl says he gave the camera to Pat Mitchell. He saw Colan come out later, take the camera and leave. Karl says to his knowledge, there was no special plan of action. A derrick hand, on the daylight shift, is supposed to grease the crown every other day. Karl had not worked days recently. He'd not seen the crown, or the fast line sheave, for a while.

The first Doug Wassberg, driller on the night crew who works with Karl, knew about the problem with the sheave was approximately five days before the accident. Karl warned Doug to be careful of the worn sheave with the heavy weights they were pulling. Karl told Doug that the Cyclone "higher ups" were aware of the problem. Doug and Karl assumed management would take care of it.

Tim Phillips used to work for Cyclone Drilling. He worked for them "off and on" for a little over a year. His last position with Cyclone was as chain hand on Rig 6. He says he has over 30 years of experience in the oil field; he has done everything from being the "worm" to 17 years experience as a driller. He worked on Cyclone Rig 18 for approximately 2-1/2 months during the summer of 2005. He believes it was June and July of 2005. He worked as a chain hand and derrick hand on Rig 18. He recalls that Doug Shymanski was the driller and Pat Mitchell was the tool pusher.

The first time Tim greased the crown of Rig 18 on a daylight tour, he noticed the fast line sheave was worn. He says he looked at it very closely. He noticed one side was worn thin, the side where the drill line was riding. Tim says he did not take measurements but it was visibly worn. He says one side was approximately "one-third of what the other side was".

Tim has knowledge and experience of what to inspect on the fast line sheave. He worked on Cyclone Rig 6 in November of 2004 when the same thing happened. The fast line sheave failed, cut the drill line, the blocks dropped and two employees were injured. Tim had the opportunity to examine the failed sheave from Rig 6 when it was changed out.

Arlie Ruger, the tool pusher, showed him what the problem was and taught him what to look for.

Tim reported the worn sheave on Rig 18 to his driller, Doug Shymanski, the tool pusher, Pat Mitchell, and Karl Hopp, derrick hand on the opposite crew. He told them it should be checked thoroughly at the next "rig down". Tim did four more hitches as a derrick hand. He left Rig 18 and went back to work on Rig 6. He separated from the company following Doug's death. He says he can't work for Cyclone any longer, knowing what they knew and what they allowed to happen.

Charles "Levi" Harter works for Cyclone. He has worked for them for approximately one year. This is his only experience in the oil field. Before the oil patch, he performed railroad construction work. He spent some time on Cyclone Rig 18, down on "the Mesa" during the summer of 2005. He remembers that Pat Mitchell was the tool pusher, Doug Shymanski was drilling, Tim Phillips was derrick hand and Rick Burns the motor hand. He doesn't remember who the "worm" was.

Levi thinks it was 3-4 weeks after he started on Rig 18, around June of 2005, that Tim Phillips warned him to watch himself because things weren't right up on the crown, that things weren't safe. Levi doesn't remember exactly how Tim said it but the implication was that things weren't safe. He didn't fully understand what Tim was trying to tell him. He knew Doug and Tim had their differences and he wondered if what Tim was saying had something to do with that.

Tim left Rig 18 shortly after warning Levi about the problem with the sheave. Tim told Levi that he'd told both the driller and the pusher but Levi had the impression that Tim told him about the problem because he was concerned that nothing would get done about it.

Levi worked on the mesa until September 2005, when they completed the hole prior to the accident location. He said they were stuck on that hole. He says there was a lot of "jarring and pulling" going on. He is not aware of any of the sheaves being changed after that hole. He knows they ran new line but he doesn't remember anyone inspecting the sheaves before he left Rig 18.

Corbin Moudy can verify Tim's account of what happened on Rig 6 in November 2004. He is one of the two hands injured in that incident. Corbin estimates he's worked for Cyclone for about 20 years in various positions. His last 10 years with Cyclone, he was a driller. He spent about 5 years on Rig 6. Corbin has 25 years of experience in the oil field.

Corbin recalls that he'd been working on Rig 6 for about 5 days before the incident in November 2004. He worked 3 days as a hand when they became short a driller. He took the open driller's position. They were already rigged up at the well site. The second day of drilling, Corbin was coming out of the hole when he felt something funny, a little shake or vibration. He had his tool pusher, Arlie Ruger, take the handle. Arlie shifted it around, clutched it, and the drill line parted.

Corbin says it all happened very quickly. The line parted and the blocks came down. Fortunately, the blocks were only about 5-feet above the rig floor. Corbin got knocked

down. He managed to crawl underneath the motor shed. He suffered a broken arm. Another hand suffered a broken ankle (Exhibit C). According to Corbin, Cyclone had him back to work the next day, on light duty, on Rig 6 so they would not have to report a "loss time" accident.

According to Corbin, after the accident he found out that "apparently every hand on the rig knew before they raised the derrick that the sheave was bad". Corbin heard it had been reported to Mel Patton, a tool pusher. By choice, Corbin no longer works for Cyclone.

Following the initial closing conference, at approximately 1:00 pm on December 14, 2005, Tom Taylor, Safety Superintendent for Cyclone Drilling, left the accident site. He flew back to the Cyclone offices in Gillette, WY. Everyone at the rig site was still pretty shaken up. Everyone was concerned with the condition of the rest of the crown and the other sheaves.

Dean Cook was not happy that Cyclone had exposed not only their employees' lives but also his life, his son's, and countless other contractors' lives, knowingly, to the worn/fatigued/damaged fast line sheave. He did not trust the company, or the competency of their inspectors. He wanted the derrick to come down so the crown and all the sheaves could be thoroughly examined. Dean was not the only person who felt that way. Ultra Resources supported Dean.

What happened to Doug Shymanski scared Doug Wassberg, the driller on the opposite crew. The first he heard about the worn sheave was about five days before the accident, when Karl Hopp warned him about it. He never saw the sheave himself. He is not willing to second-guess what caused the accident, but he is not comfortable with the fact the company has not allowed him to see anything. He would feel better if the derrick was brought down so the crown could be properly examined.

Calvin McFarland is a tool pusher for Cyclone on Rig 14. He stopped by the rig site to offer moral support following the accident. When asked how he felt about working on a rig after that type of incident, he said he would not be comfortable until all the sheaves had been checked out.

For everyone's peace of mind, the OSHA Investigators wanted the derrick lowered so the crown could be examined. It was decided they were taking possession of the fast line sheave when it was brought down. A crane was needed to change out the sheave and/or lower the derrick. Following the closing conference on December 14, 2005, Investigators had business to conduct in Pinedale, WY. They asked to be contacted by cell phone when arrangements were made for a crane to be at the rig site and what the plan of action would be. They also informed rig personnel they would be at the rig site the following morning, December 15, 2005, at approximately 8:00 am.

Investigators received a voicemail message from Tom Taylor on John Watterson's cell phone at approximately 3:00 pm on December 14th. They understood Tom to say that Cyclone had arranged to have a crane at the rig site the following day to lower the derrick.

Investigators made arrangements to have a state vehicle available at the rig site to transport the fast line sheave.

The weather at the rig site was beautiful on Thursday December 15, 2005. It was clear, there was no wind, and it was not bitter cold. Cyclone had arranged for a crane to set up at the rig site to change out the fast line sheave. A breakdown in communications between the major stakeholders, Cyclone Drilling, Ultra Resources and WWS reached a pinnacle that day.

Dean Cook, the company man for Ultra Resources, and the OSHA Investigators understood that Cyclone was going to lower the derrick so the crown could be thoroughly examined. Patrick Hladky and Tom Taylor, management for Cyclone Drilling, were saying something else. Over the telephone, from Gillette, they were telling the OSHA Investigators that Cyclone was not willing to lower the derrick, that it was too unsafe.

JD Danni, the WY OSHA Program Manager, had other business to conduct in Gillette on Thursday so he arranged to meet with Patrick and Tom to clarify the situation. JD met with them at their office in Gillette. Dave Ault, Drilling Superintendent for Ultra Resources, was included in the discussion via the telephone. Patrick told them he was concerned about the safety of lowering the derrick with two cranes. He said he wanted to change out the damaged fast line sheave, re-string the drilling line, and then use the rig itself to lower the derrick. While Dave Ault was still on the telephone, Patrick gave both OSHA and Ultra the impression that Cyclone's plan was to lower the derrick so the crown could be properly examined and any necessary repairs performed. Everyone was onboard with the plan.

Following the meeting, as JD was preparing to say good-bye and leave the Cyclone offices, he reiterated the plan to Patrick, to ensure he communicated the outcome of the meeting correctly to the OSHA Investigators at the accident site. At that point, Patrick changed the plan. He said he wasn't sure it would be necessary to lower the derrick. He felt that once the fast line sheave was changed out and the drill line re-strung, Cyclone personnel could check the crown sheave for any problems and after they changed out the traveling block, they could continue drilling.

The OSHA Program Manager was not comfortable with the revised plan but felt he needed to defer to the expertise of the employer. He reminded Cyclone management that they were liable for the maintenance, condition and operation of the equipment.

The OSHA Program Manager communicated the revised plan to the OSHA Investigators at the rig site. Things were at a standstill at the rig site. Dean Cook and Ultra Resources were not onboard with Cyclone's revised plan of not bringing the crown down to be inspected. It became a showdown between Cyclone Drilling and Ultra Resources. OSHA Investigators left the rig site at approximately 9:00 am on Friday, December 16, 2005. The stalemate was still on and nothing had occurred at that time.

Tom Taylor, Safety Superintendent for Cyclone, called Johnnie Hall, Compliance Supervisor for WWS at his home on Saturday, December 17, 2005, to inform him that the derrick was being brought down so the crown could be removed, taken into a machine shop and thoroughly examined.

Members of the rig crew involved in the accident were all interviewed Friday, December 16, 2005. Three of the interviews were conducted by telephone and one was conducted in-person.

Mark Dockter, the chain hand on duty at the time of the accident, had worked on Rig 18 for approximately six months. Mark worked with Doug Shymanski as driller and Pat Mitchell as tool pusher the entire time he was on Rig 18. Mark had worked with Pat 22 years ago in the oil field when Pat had been his driller.

Mark was with the crew for rig up. He says rig up went smooth but says Pat had been on edge for about two weeks before the accident. Mark says the rig was falling apart and things needed to be fixed. He felt Pat was on edge because of the problems on the rig. Mark says Doug took a lot of initiative and fixed things the company wouldn't. He lists the steam heater in the cellar, the cathead, and the hydromatic, as examples. Mark says Doug would stay after shift and put in extra time to repair things.

Mark recalls that each time they started the trip the pipe was really tight. He says it acted like it was stuck in the hole so they would have to work it up and down to release it to get the trip going. He says that on the day of the accident, it was extraordinarily tight; he says the tension was tremendous. Mark was standing by the air tugger with Victor, the new floor hand. He remembers commenting, "What are they trying to do, stretch the pipe in two?"

Victor Flores was the new floor hand. He had worked for Cyclone a total of six days. Three days on Rig 2 and three days on Rig 18. Victor thought that working on Rig 18 was going to be decent, "a step up" from what he'd been working on. He thought it looked like "nice iron".

Victor's perception of Pat, the tool pusher, was that he was impatient. Victor says, "He was always running around, wanting us to hurry up and do this, hurry up and do that" but never giving us enough time to get anything done. Victor recalls that the day of the accident Pat was really impatient.

Victor verifies that he, Mark, and Bobby, the motor hand, were standing behind the air tugger, by the V-door. He also says the pipe was pulling tight but they kept working it up and down. He says at one point a floor hand walked over behind the driller's console, behind the heater, to see how much weight was being pulled. He says they were pulling between 350-375,000 pounds. Victor says the conversation between him, Mark, and Bobby included comments such as, "This is nuts, dude. We shouldn't be pulling this kind of weight. They should call an oil truck out here, get this s--t pumped full of oil or something, to try to pull it loose but there's no way we should be pulling this kind of weight, something's going to happen".

Victor remembers seeing the pipe work free. He saw it pulled up past the third joint. He knew they would be lowering the pipe because he knew they were going to try to work it. As soon as the pipe pulled free, Victor says Doug throttled up a little bit. He says when it was throttled up, the pipe jumped. Victor watched the stand of pipe being worked up and down in the hole. He saw it jump and thought maybe the jars were going off when he

heard something go "ping". He watched everything come falling! He heard someone yell, "Oh s--t!" and everyone took off running.

Victor saw the drill line hit Doug in the back and saw Doug hit the rig floor. He could tell it was bad. He says the crew started coming out of the doghouse to see how things were on the rig floor. They saw Doug split open.

Victor ran down to the pusher's shack. The pusher directed him to go check on everyone; to make sure everyone was okay. Victor did that. He and the crew talked and decided they didn't want to be anywhere around. They had all witnessed something very traumatic and they wanted to be as far away from it as possible. They grabbed their stuff and left.

Robert Young, the derrick hand on duty at the time of the accident had worked on Rig 18 for three months. He says things had been going smooth on the accident location until the crew came back from days off. When the crew returned to the rig, it had frozen and the drill bit had broken in the hole, so they were fishing.

Robert recalls that earlier in the day, before the accident, the crew had slipped the drill line and performed a rig service. Robert says the rig service included greasing the block but not the crown. Robert had never seen the crown or the fast line sheave.

When Robert got down from the derrick, following the incident, he took his harness off. He was shaking so bad he could hardly move. He tried to pull himself together. He went downstairs to talk to the tool pusher. Pat asked him if Doug had "crowned out". Robert was confused as to why Pat asked him, since Pat had been right there when it happened and would have known they didn't "crown out".

Robert and the other hands gathered back by the boiler. They didn't know what they should do. They knew Doug was dead. The crew was all in shock. Robert says no one asked how anyone else was doing. Robert had been up in the derrick but no one thought to ask how he was doing. Robert had known Doug for 14 years. He'd been a neighbor, a good friend and good driller. Robert said his last goodbye to Doug.

The accident crew headed back to camp. They talked to the relief crew. Robert went over to a friend's house for dinner and then headed to Gillette.

When interviewed from his home in Gillette, on the Friday following the incident, Robert believed he was still employed by Cyclone but he had not heard from anyone with the company. No one had contacted him to see if he was okay or how he was doing. He was disappointed with how Cyclone was handling the situation.

Mark Dockter also returned home to Gillette believing he was still employed by Cyclone. On Thursday December 15, 2005, he had not received his Christmas bonus yet. He'd been told he was entitled to a \$500 bonus. He contacted Pat Mitchell who told him he needed to go by the Cyclone office. Mark did that. Cyclone asked him to complete an accident report, which he did. According to Mark, the accident report consisted of putting his statement down on a yellow legal pad. He was then asked to do a "pee" test, which Mark says he agreed to. Mark says he tried to urinate in Tom's office but was unable to do

so. He asked for something to drink. Tom escorted Mark to the company break room so he could drink some water and coffee. While he was sitting in the break room, Mark says an older man, whom he'd never met before, came into the room. According to Mark the man asked, "Is this one of those son's of bitches who left the rig floor?" Mark's automatic response was to stand up and respond with "F--k you"! At that point Mark says the individual raised his arm, threatening to strike him. Mark discovered he was dealing with James Hladky, President of Cyclone Drilling, Inc. Mark was told he was fired and directed to leave the office. He too was disappointed with the treatment he received from Cyclone.

Cyclone management left JD Danni, OSHA Program Manager, with a different impression of that episode that occurred in their office earlier that day. They told JD one of the rig hands from the accident crew had been in the office earlier. They wanted the rig hand to provide an accident report and a urine specimen for a drug test. They said he was unable to urinate, indicating he was unwilling to. When they asked him why he left the accident site, the discussion became heated and involved cursing. The situation escalated and they had to ask him to leave the office.

Pat Mitchell, the tool pusher for Cyclone Drilling on Rig 18 at the time of the accident, has worked for Cyclone for approximately three and a half years this stint. He has worked for them twice before. He had been the tool pusher on Rig 18 for about a year at the time of the accident. He has approximately two and a half years experience as a tool pusher.

The tool pusher is the rig manager, and as such, is responsible for purchasing supplies, performing rig repairs, hiring and training the crew and payroll. He is on the rig 24 hours a day and oversees two crews.

Pat remembers they had problems on the previous location. They'd got stuck, fished and had to re-drill the bottom section. Pat verifies that Tim Phillips, a derrick hand, reported to him that the fast line sheave appeared to be "worn" on the previous location. Pat did not inspect the sheave while the derrick was up. Pat says he notified his superior, Colan Hulse, the drilling superintendent, about the worn sheave before the rig move.

Pat says Colan came out when the derrick was down and inspected it, including all the sheaves. Pat says he helped Colan perform the inspection but says he has no specific training on inspecting sheaves.

Pat remembers that photos were taken of the fast line sheave on Rig 18 but doesn't remember exactly when it was. Pat never saw the photos. He doesn't know whose camera it was. Pat says he doesn't remember being there when the photos were taken. He assumes it was Colan who wanted the photos taken but doesn't know for sure. Karl Hopp told Pat he had taken pictures of the sheave but Pat never saw the photos. He doesn't know what happened to the photos.

According to Pat, Colan told Pat, following the inspection of the fast line sheave that, "He [Colan] didn't see any movement in the sheaves and the bearings appeared to be good. He didn't see any excessive wear". Colan told Pat that the sheaves looked good. There was no specific plan of action with regards to the fast line sheave.

Pat had worked with Tim Phillips, the derrick hand who reported the worn sheave, over the years. Pat considered Tim to be an undependable, or unreliable worker, so he didn't really value his opinion. He did not disregard what Tim reported to him about the sheave though. Pat reported the sheave to Colan, his drilling superintendent. Pat trusts Colan's opinion. According to Pat, Colan has worked in a machine shop where he had built and rebuilt crowns.

Pat is not familiar with the API guidelines. He does not know the recommended levels of inspections for the crowns and sheaves, or the frequencies. He is not sure who in the company knows the API guidelines.

When asked about the heater, Pat said it is set up and plumbed in for use during the winter months. He confirmed that the piping for the heater runs across the walkway between the rig floor and the door to the doghouse.

Colan Hulse is the drilling superintendent for Cyclone Drilling's Rig 18. Colan oversees eight rigs operating in southwest Wyoming. He has been employed by Cyclone for seven years. Colan has 22 years experience in the oil field. He was a driller and tool pusher for Cyclone before being promoted to drilling superintendent.

Colan feels he has a good understanding of how drilling rigs work. He has experience working in a machine shop that services rigs. He has torn crowns apart and put them back together again.

Colan claims nothing was reported to him regarding the condition of the fast line sheave on Rig 18 prior to the accident. He says he inspected the crown when the rig was down for a rig move on October 15, 2005 (Exhibit D). Colan says he tries to inspect each of the rigs he is responsible for when the rig is moved. Colan claims he examined the fast line sheave. According to Colan, one of the things he looks for is side-to-side play. He says he tried to move the sheaves but couldn't detect any movement. Colan says he examined the groove where the drill line rides but didn't detect any sign of abnormal wear. The crown had just been painted so it may have been hard to detect wear due to the fresh paint. Colan's plan, following the inspection he performed on the crown when it was on the ground, was to raise the derrick and check it when it was in the air.

Colan traveled to the rig site after the derrick had been raised and had some photos taken of the fast line sheave. He doesn't remember the exact date, but believes it was within a week of the derrick being raised at the accident location. Colan did not climb the derrick to examine the sheave himself. Karl Hopp, the derrick hand on-duty, offered to take the photos for Colan. Colan says the line appeared to be riding right in the photos. He could not see any signs of wear. Colan deleted the photos from his digital camera. He did not have anyone else review the photos. He did not ask for any input from the derrick hands who were servicing the crown. No specific plan of action was developed. Colan says he told Pat to have them "keep an eye" on the crown. According to Colan, the crown and fast line sheave are greased every other day.

Colan says he knew about the problems the rig had been having at the accident location. He knew they had been fishing, that it was tight coming off the bottom and he was aware

of the weight they were pulling. He knew they had been stuck on the previous location and believes they pulled comparable weight on the previous hole. He was out-of-town the week before the accident, so he did not know the weather had been extremely cold (minus 35 degrees F) in the Big Piney area (Exhibit E).

Colan says he has no knowledge of the API recommended inspection guidelines, the levels of inspection, or the frequencies. He says he only knows what a machine shop does when it inspects a crown. He is not aware of Cyclone having any guidelines regarding the level, or frequencies of inspections for a crown or fast line sheave. He said the expectation is that the derrick hands look at the crown and the sheaves when they grease it, which is suppose to be every other day. He said the driller is expected to train the derrick hand on what to look for when servicing/inspecting the crown and sheaves.

Colan said he heard about the incident on Rig 6 that occurred in November 2004. He heard, "they pulled a line in two and stuff" but he doesn't remember how he heard about it. He thinks he heard about it from discussion with the office, but according to Colan, there was nothing in writing, no company directive, nothing provided to the tool pushers.

On November 15, 2005, Ultra Resources, Inc., retained the services of Eagle Outfitters, an independent rig inspection service to conduct a safety inspection of Cyclone Rig 18. At that time, Nick Kury, indicates in section F, line 28, that "all sheaves in good condition – secured with secondary retention" (Exhibit F) according to industry standards. On the same inspection form, Nick also noted, "rig looks real good!!"

When OSHA personnel asked Nick about the inspection he performed on November 15, 2005, Nick admits he did not climb the derrick. He uses high-powered binoculars to observe the sheaves from the ground. He feels he is able to obtain a fairly accurate read on the sheaves using this technique. He checks for any wobble, indicating a loose bearing, how the line is riding, and how much "meat" is on the sides of the grooves of the sheave. Nick clarified to the OSHA Investigator that his inspection does not cover the crown sheaves or the fast line sheave. He says he looked at the tong sheaves, air hoist sheaves and survey sheaves. Nick also explained that his "rig looks real good" comment was intended in the context of a Cyclone rig.

On November 16, 2005, Colan Hulse, drilling superintendent for Cyclone, performed an inspection of Rig 18. He used the IADC Drilling Rig Safety Inspection checklist. Section VIII covers the "derrick, derrick board area & crown area". Colan notes no deficiencies in that section during his inspection (Exhibit G).

Tom Taylor is the Safety Superintendent for Cyclone Drilling. He has been employed by Cyclone for nine years. He started as a tool pusher on Rig 9. In the company chain-of-command the drilling superintendents report to Tom and he reports to Henry Taylor, Operations Manager, and Patrick Hladky, Contracts Manager.

Tom says he is involved in the daily rig operations. He participates in the morning meeting to review daily rig reports. All the rigs fax a daily report to the Gillette office. Tom, Henry Taylor and Zeke Ratcliff, a drilling superintendent, review the rig reports. Tom feels that if a rig is having a problem, management immediately addresses it.

The first Tom heard about the problem with the fast line sheave on Rig 18 was the day of the accident. He heard about the accident from Patrick Hladky, after Pat Mitchell called the office to report it. Following the accident, Tom heard that other employees had reported the worn fast line sheave on Rig 18. Tom had not heard about the worn sheave being reported prior to the accident.

Tom knew of the incident on Rig 6, which occurred in November 2004. He investigated the accident (Exhibit H). He describes the incident on Rig 6 by saying the fast line sheave split, that the lip peeled away. Tom says there was company-wide communication following the November incident. He says a telephone call was made to every tool pusher, instructing the derrick hands to be sure to check the sheaves when greasing the crown and to inform Gillette if there were any signs of excessive wear. Tom says a memo was distributed. When first interviewed he was unable to find a copy of the memo but has since provided one (Exhibit I). None of the employees interviewed from Rig 18, from the drilling superintendent down, remembered hearing anything official about what had happened on Rig 6.

When interviewed, Tom knew the scope and frequency of a Level IV inspection, per the API guidelines, but was not familiar with the other levels of inspections or recommended frequencies. According to Tom, a derrick hand is suppose to be trained to inspect the crown and sheaves. The derrick hand is to report any problems to the driller, who reports to the tool pusher, who reports to the drilling superintendent. The only inspection Tom is aware of being performed on the crown of Rig 18 is the one Colan performed the middle of October 2005.

When asked if Cyclone has any guidelines for when a sheave should be taken out of service, Tom said there aren't any.

Charles Braun was a derrick hand on Rig 18 through December 2005. Charles believes he worked two hitches with Doug Shymanski as his driller. Charles says that during his two hitches, he only greased the fast line sheave once. He says normally, when he is working derricks, he likes to grease the crown at least three times a week but during that time Charles says, "They were tripping all the time", indicating the derrick hands were not given enough time to conduct a proper inspection.

When asked about the responsibilities of the derrick hand, Charles says they are suppose to check the pins, make sure the pins are all in place. Grease the crown once a week. Go to the top of the derrick and check the sheaves and grease them. He says you look for cracks in the girts and the sheaves. Charles says you can't really tell if there is wear in the crown unless you have the derrick laid over and you're unstrung from it, so the drill line is not on it. Charles says a lot of times they no longer unstring the derrick during a rig move because they are moving so close. He says they move the derrick in one piece with all the in field moves they are making.

Charles says it wasn't the sheaves on Rig 18 that concerned him; it was the blocks. He says the blocks seemed to be tilted. He says they had set the intermediate casing and

when they came out of the hole with that casing, they were dragging the hard band on the drill pipe.

Levi "Chuck" George is a driller for Cyclone. He has approximately 3 years experience with Cyclone. Most of his time has been spent on Rig 18. Chuck says no one reported any concerns to him about the sheaves. He says a "funny" noise was reported to him. He says he reported the noise to Pat Mitchell, the tool pusher and to Dean, the company hand. They told him it was because of the casing rubbing on the hard band of the drill pipe.

Although Chuck had been drilling for Cyclone for some months before the fatal accident, he says he never heard anything about the incident that had occurred on Rig 6 in November 2004. He says that following Doug's fatal accident, he heard rumors that Cyclone had a similar incident occur on Rig 6 but it was never substantiated. He says that all the memos he saw regarding sheave inspections were following the fatal accident on Rig 18.

Chuck says that following the fatal accident, they've been good about shutting the rig down long enough for the derrick hand to perform an inspection!

According to Cyclone's payroll records, Kevin Seavolt worked the derrick on Rig 18 on December 1st, 2nd, 3rd, and 4th of 2005. Kevin estimates he has approximately five years experience working derricks. Kevin says as soon as he saw "the main sheave that comes up off the spool, that comes up to the crown" he could tell that the line was riding to one side of the sheave. Kevin says he reported to his driller, Howard Wines, that the cable appeared to be riding to one side of the sheave, instead of in the bowl like it was suppose to be. Kevin says the paint was worn off on one side, so it definitely appeared to be wearing.

When Kevin reported the problem with the sheave to his driller, the driller's response was, "They already know". Kevin was told that the head mechanic had come out and looked at it. Kevin did not realize Cyclone does not have a "head mechanic" and he never met Colan Hulse, the drilling superintendent. We don't know who Howard was referring to as the "head mechanic".

Bob Sleeth is an independent oilrig mechanic. He works for George's Rig Service. He has worked with Cyclone since the mid-70's, when the company was founded. He has provided mechanical services for them, on a contractual basis, through the years. Bob says he made the decision not to perform overhead work for Cyclone approximately two years ago. He made the decision because he says they wanted him to do everything their way. Bob says that Jim Hladky, the president of Cyclone, would ask him to certify things he was not comfortable certifying. Bob will not certify a piece of equipment that is not in the proper condition.

American Petroleum Institute (API)

According to SourceWatch, an encyclopedia of people, issues and groups shaping the public agenda, the American Petroleum Institute (API), based in Washington, D.C., is a

major research institute . . . committed to using the best available scientific, economic and legal analysis to guide and support its policy positions. The Institute's work is member-driven and offers companies, large and small, the opportunity to participate in shaping API programs and policy priorities. API represents more than 400 members involved in all aspects of the oil and natural gas industry (Exhibit J).

The API has been the petroleum industry's US national trade association for over 76 years, releasing its first standard in 1923. The API has over 900 published standards, which serve as a basis for quality programs covering a variety of topics. They also publish recommended practices, research reports and various specifications.

The API recommended practice 8B, Seventh Edition, March 2002, titled "Recommended Practice for Procedures for Inspections, Maintenance, Repair and Remanufacture of Hoisting Equipment" covers crown block sheaves and bearings along with several other items of hoisting equipment (Exhibit K). Chapter Five addresses Inspection and Maintenance. Section 5.1.1 "Criteria" states "Inspection and maintenance are closely linked. Inspection and maintenance actions may be initiated based on, but not limited to, one or more of the following criteria:

- Specific time intervals;
- Measurable wear limits;
- Load cycle accumulation;
- Non-performance of equipment;
- Environment;
- Experience (history);
- Regulatory requirements

General information listed in Section 5.3.1 states "The existence of cracks can indicate severe deterioration and impending failure. Their detection, identification and evaluation require accurate inspection methods.

Prompt attention is then required either to remove the equipment from service immediately or to provide appropriate service and/or repair.

Caution shall be exercised to take into account the increased susceptibility to brittle fracture of many steels when operating at low temperatures".

The following is cited from the above referenced publication:

5.3.2 Inspection categories

5.3.2.2 Category I - This category involves observing the equipment during operation for indications of inadequate performance. When in use, equipment shall be visually inspected on a daily basis for cracks, loose fits or connections, elongation of parts, and other signs of wear, corrosion or overloading. Any equipment found to show cracks, excessive wear, etc., shall be removed from service for further examination. The equipment shall be visually inspected by a person knowledgeable in that equipment and its function.

- 5.3.2.3 Category II - This is Category I inspection plus further inspection for corrosion, deformation, loose or missing components, deterioration, proper lubrication, visible external cracks, and adjustment.
- 5.3.2.4 Category III - This is Category II inspection plus further inspection, which should include NDT of critical areas and may involve some disassembly to access specific components and to identify wear that exceeds the manufacturer's allowable tolerances.
- 5.3.2.5 Category IV - This is Category III inspection plus further inspection for which the equipment is disassembled to the extent necessary to conduct NDT of all primary-load-carrying components as defined by manufacturer.

Equipment shall be:

- Disassembled in a suitably-equipped facility to the extent necessary to permit full inspection of all primary-load-carrying components and other components that are critical to the equipment;
 - Inspected for excessive wear, cracks, flaws and deformations.
- 5.3.3.1 Periodic Inspection - The user/owner of the equipment should develop schedules of inspection based on experience, the manufacturer's recommendations, and one or more of the following factors:
- Environment;
 - Load cycles;
 - Regulatory requirements;
 - Operating

WWS had the failed fast line sheave, which had been removed from Cyclone Drilling, Inc., Rig 18, examined by Dr. Dennis Coon, Ph.D., Professor of Mechanical Engineering at the University of Wyoming in Laramie, WY. Dr. Coon examined the sheave and provided a written report containing the examination results and a preliminary engineering analysis. A copy of the report is contained in this file (Exhibit L).

Coon notes that, "basically, the cable entered the sheave off center and slid down the failed flange as the flange positioned the cable in the root. Over time the action of the cable sliding down the failed flange reduced the flange thickness due to wear. The result of the cyclic force during sheave rotation was fatigue cracking of the failed flange. Failure of the sheave occurred when a fatigue crack became critical and propagated through the thickness of the flange. ***The preliminary engineering analysis suggests that monitoring the thickness of the flange to remove the flange from service prior to the onset of fatigue would be the safest approach***" (emphasis added).

Part E of Dr. Coon's report is the Summary of Preliminary Engineering Analysis. It reads as follows:

- Wear of the flange will result in increased stress in the root due to the change in thickness associated with wear.

- A preliminary fatigue model suggests that fatigue is a very serious concern once wear has reduced the flange thickness to less than 80% of its original value.
- For flange thickness less than 80% of the original flange thickness, the combination of fatigue and bend stress increase due to the thickness reduction makes predicting the fatigue response very risky.
- This failure process should be addressed as a wear issue. It is very important to understand that once wear has resulted in a thickness reduction of more than 20% of the original flange thickness, the fatigue reliability of the sheave is questionable.

Analysis & Conclusions

The experienced derrick hands who reported the sheave said it was visibly worn. Tim Phillips says the worn side of the flange appeared to be only one-third the thickness of the other side. Karl Hopp, who took the photos for Colan Hulse, said no one asked for his input but says the sheave was "visibly worn".

Kevin Seavolt, an experienced derrick hand, reported wear on the fast line sheave to his driller sometime around the first of December 2005. He was told, "They know".

Tim Phillips gained his knowledge of what to look for when inspecting a fast line sheave from practical, hands-on experience when the company had a similar failure approximately 12 months earlier. Cyclone was fortunate the incident in November of 2004 did not result in any fatalities but the company did not take sufficient measures to ensure there was not a reoccurrence.

Following the incident in 2004, Cyclone employees responsible for performing sheave maintenance and inspections were not provided any additional training in what to look for when inspecting the crown and sheaves. The employer did not develop or implement any guidelines regarding sheave inspections or guidelines as to when a sheave should be removed from service.

Although the crown and fast line sheave on Rig 18 had been subjected to some critical tasks (i.e. jarring, pulling on stuck pipes and/or operating at extreme low temperatures) and Cyclone management was aware of this, no additional inspections were conducted.

According to the engineering analysis performed on the fast line sheave removed from Cyclone Drilling Rig 18 following the fatal accident, the sheave was beyond worn; it was extremely fatigued. In the summary of the preliminary engineering analysis, Dr. Coon says, "It is very important to understand that once wear has resulted in a thickness reduction of more than 20% of the original flange thickness, the fatigue reliability of the sheave is questionable".

The API states, "The existence of cracks can indicate severe deterioration and impending failure. Their detection, identification and evaluation require accurate inspection methods".

The API has published guidelines recommending four levels of inspections, as well as, recommended frequencies.

Although Cyclone Drilling, Inc. is a drilling contractor that has been in business for over thirty years, company personnel have very little knowledge of the API guidelines, which is the industry standard. The company has not trained their personnel to conduct accurate inspections that meet industry standards. They did not provide the derrick hands time to conduct an accurate inspection nor did they adequately address concerns when problems with the fast line sheave were reported.

Recommendations

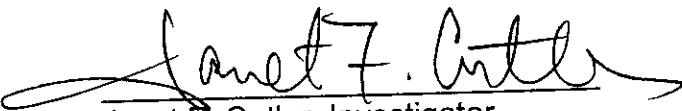
- All employees should be briefed on the facts and circumstances of this fatal accident
- Cyclone Drilling needs to implement a program of inspecting the crown and sheaves in accordance with the API guidelines
- Cyclone needs to implement a means of training personnel responsible for sheave inspections as to what to look for
- Cyclone needs to develop and implement a program of when to take a sheave out-of-service when it is worn and prior to fatigue leading to a catastrophic event
- Cyclone needs to develop and implement procedures to ensure that information on rig accidents, near misses, and equipment failures is shared with company personnel as necessary to ensure appropriate preventative action is taken
- Equipment (i.e. heater piping) should not be positioned where it restricts a route of exit in case of emergency

This report, together with its incorporated findings and resultant items for correction, 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.

The above investigation and findings of the accident occurring to:

Douglas James 'Doug' Shymanski
Gillette, WY 82716
Campbell County, State of Wyoming

Is set down and attested to this date.


Janet F. Cutler, Investigator

Dec 11, 2006
Date