U.S. Department of Labor
Occupational Safety and Health Administ

Inspection Narrative

Fri Feb 3, 2006 10:33am

Inspection Nr.	309550408
Opt. Case Number	410

Establishment Name	American Casing & Equipment		
Legal Entity		Type of Business	Oil Well Servicing

Additional Citation Mailing Addresses

Organized Employee Groups

Authorized Employee Representatives

Employer Representatives Contacted

Name	Title	Function	Walk Around?
Steve Larvick	President	I O C	N
Mike Kornkven	Sales/dispatcher	I O C	N
Larry Shreve	Safety Consultant	I O C	N

Other Persons Contacted

Entry	01/30/06		First Closing Conference	02/02/06	
Opening Conference	01/30/06		Second Closing Conference		
Walkaround	01/30/06		Exit	02/02/06	
			Case Closed		

Penalty Reduction Factors

Size	60	Good Faith	0	History	10

Followup Inspection?		Reason	

Coverage Information/Additional Comments

CSHO Signature		Date	

SAFETY NARRATIVE

Inspection Number	309550408

COVERAGE INFORMATION Fatality

NATURE AND SCOPE

Check Applicable Boxes and Explain Findings:

	Complaint Items
	Referral Items
	Accident Investigation Summary & Findings
	LEP
X	Planned Inspection

NATURE AND SCOPE – UNUSUAL CIRCUMSTANCES (Mark X and explain all that apply:)

X	None
	Denial of entry (see denial memo)
	Delays in conducting the inspection
	Strikes
	Jurisdictional Issues
	Trade Secrets
	Other

Comments:

American Casing & Equipment is an oil well casing contractor typically hired to case in a well. On January 29th, 2006 American Casing & Equipment was working on Pioneer Oil Rig "Ormiston Unit #1 Rig #40" located 3 miles east and 4 miles south of Flaxton, ND on County Road 15. They had cased in the well and were running 4" drill pipe into the hole. The procedure being used at the time involved several employees from American Casing and Pioneer Drilling. American Casing had employees on the ground rigging up the 4" pipe with a sling to the draw works. The draw works is operated by the Driller (Pioneer Employee). Once the pipe was elevated into the derrick, an "elevator" clamp was attached to the top end of the pipe. The employee responsible for attaching the elevator is an American Casing employee called a "Stabber". The stabber works from a temporary platform in the derrick called a stabbing board (approximately 30-35 feet above the rig floor) and is required to be tied off with a

personal fall arrest system (full body harness and lanyard). The stabber removes the wire rope sling and attaches the elevator which is lowered by the Driller working on the rig floor, directly below the Stabber. Hand signals and verbal commands are used for communication between the Stabber and the Driller. Also on the rig floor, another American Casing employee attaches the power tongs used to spin the pipe and thread it into the pipe already in the hole. This is called "making up". Once the pipe is made up, it's lowered into the well hole and the process repeats.

On the day of the accident this process was in action and several joints of pipe had been made up and run down hole.

The accident details are included in the "inspection summary" section of this report.

OPENING CONFERENCE NOTES:

A standard opening conference was held with the owner of American Casing and Equipment, Steve Larvick. Also present were, Mike Kornkven (Sales Manager), Larry Shreve (Safety Consultant) · _ I introduced myself and presented my credentials. I explained the investigation process including recorded interviews and the use of camera/video equipment as a means of documenting the investigation. I requested various documents including OSHA 300 information, the accident investigation report including employee/witness statements, the written safety and health program, and job hazard analysis. The investigation was allowed to continue.

EVALUATION OF EMPLOYER'S OVERALL SAFETY AND HEALTH PROGRAM

General Industry:

X	Yes		No Employer has a Safety & Health Program
X	Yes		No Written
	Yes	X	No Copy Attached

Evaluation of Safety and Health Program
(0=Nonexistent 1=Inadequate 2=Average 3=Above average)

	Written S&H Program
	Communication to Employees
	Enforcement
	Safety Training Program
	Health Training Program
	Accident Investigation Performed
	Preventive Action Taken

INSPECTION SUMMARY:

On January 29th, 2006, American Casing & Equipment was working on Pioneer Rig; "Ormiston #1 Rig #40". American Casing & Equipment was not a sub-contractor on this site. The well is owned by Denali Oil. Denali hired Pioneer Drilling to drill the well and also had an independent contract (copy included in case file) with American Casing & Equipment.

As described in the "comment" section above; On the day of the accident, American Casing & Equipment was assisting in running 4 inch drill pipe into the hole. The events leading up to the accident were apparently as follows:

A joint of 4 inch drill piped was hoisted up the derrick with a wire rope sling. The pipe was lowered to where the stabber was standing so could remove the sling and attach the elevator clamp. The American Casing & Equipment employee on the rig floor attached the power thongs and began spinning the pipe to thread it into the existing string of pipe down hole. When the pipe started spinning, the top end was whipping around as if the pipe were bent. When the Driller lowered the elevator clamp, it landed on top of the pipe and was thrown into the head of the Stabber. The elevator is an extremely heavy device with weights sometimes exceeding 900 lbs. The stabber was tied off and did not fall from the stabbing board. It is uncertain whether the elevator or the 4 inch pipe struck the stabber in the head.

Burke County Sheriff's Department responded to the 911 call and the victim was pronounced dead on site.

I conducted and recorded several interviews. Recorded interviews included the following:

In the course of obtaining other relevant information, I have spoken with:

Through the interviews and other investigative correspondences, it was discovered that several actions could have been taken to avoid this accident. Many casing companies throughout the United States do not use a "Stabber" in the derrick when stabbing casing or drill pipe. A common practice in the industry is to attach the elevator clamp to the pipe or casing on the rig floor or mouse hole and hoist the pipe with the elevator. This system or procedure eliminates the need for an employee working from an elevated platform in the derrick. American Casing and Equipment was aware of this system and elected not to utilize it.

Another "Stabberless" system would be to use mechanical and programmable logic controllers (PLC). This is a technology that has been in use since the mid 1990's. This system runs casing and pipe into the well hole using computer controlled mechanical and hydraulic equipment thus reducing the need for exposed employees on the rig floor and in the derrick. In reviewing the system requirements and speaking with manufacturers, this system may not have been feasible on Pioneer Rig #40 because of it's small size and limited space on the rig floor. Other concerns with economic feasibility were present as well. Even so, American Casing and Equipment had not explored the possibility of utilizing such technology.

A third option that was feasible and accepted would have been for American Casing and Equipment to develop written procedures and a thorough employee training program. This accident could have been prevented with a procedure that required the elevator clamp to be secured prior to spinning the pipe with the power tongs. The victim had been performing the tasks as a "stabber" for 2-3 days. All training was on the job training. The victim was not experienced enough to recognize and adequately react to the "stack out". Better procedures, better employees training, and better communications (i.e. pre job safety meetings and job hazard analysis reviews) may have prevented this unfortunate accident.

CLOSING CONFERENCE NOTES:

A standard closing conference was held with Steve Larvick via telephone. I explained the employers' rights and obligations following an OSHA investigation. We addressed the hazards identified and I explained Section 5(a)(1) of the OSH Act. I address some acceptable and feasible means of abatement and we discussed time frames for accomplishment. The closing conference was then concluded.

Were any unusual circumstances encountered such as, but not limited to, abatement problems, expected contest and/or negative employer attitude? If yes, explain below.

	Yes	X	No

19. Closing Conference Checklist ("x" as appropriate)

	No Violations Observed
	Gave Copy Employer Rights
X	Reviewed Hazards & Standards
X	Discuss Employer Rights/Obligations
X	Encouraged Informal Conference
	Offered Abatement Assistance
	Discussed Consultation Programs
	Employer/Employee Questionnaires

Closing Conference Held with Employee Representative

	Jointly		Separately