

UNITED STATES DEPARTMENT OF THE INTERIOR
 MINERALS MANAGEMENT SERVICE
 GULF OF MEXICO REGION
ACCIDENT INVESTIGATION REPORT

1. OCCURRED
 DATE: 19-NOV-2008 TIME: 0300 HOURS

2. OPERATOR: Tana Exploration Company LLC
 REPRESENTATIVE: Groth, Christine
 TELEPHONE: (281) 492-3247
 CONTRACTOR: BAKER ATLAS WIRELINE
 REPRESENTATIVE: Wilson, Anthony
 TELEPHONE: (337) 501-2970

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR
 ON SITE AT TIME OF INCIDENT:

4. LEASE: G26023
 AREA: EI LATITUDE:
 BLOCK: 98 LONGITUDE:

5. PLATFORM:
 RIG NAME: HERCULES 251

6. ACTIVITY: EXPLORATION (POE)
 DEVELOPMENT/PRODUCTION
 (DOCD/POD)

7. TYPE:
 HISTORIC INJURY
 REQUIRED EVACUATION 1
 LTA (1-3 days)
 LTA (>3 days) 1
 RW/JT (1-3 days)
 RW/JT (>3 days)
 Other Injury

FATALITY
 POLLUTION
 FIRE
 EXPLOSION

LWC HISTORIC BLOWOUT
 UNDERGROUND
 SURFACE
 DEVERTER
 SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION HISTORIC >\$25K <=\$25K

STRUCTURAL DAMAGE
 CRANE
 OTHER LIFTING DEVICE
 DAMAGED/DISABLED SAFETY SYS.
 INCIDENT >\$25K
 H2S/15MIN./20PPM
 REQUIRED MUSTER
 SHUTDOWN FROM GAS RELEASE
 OTHER

6. OPERATION:

PRODUCTION
 DRILLING
 WORKOVER
 COMPLETION
 HELICOPTER
 MOTOR VESSEL
 PIPELINE SEGMENT NO.
 OTHER Wireline operations

8. CAUSE:

EQUIPMENT FAILURE
 HUMAN ERROR
 EXTERNAL DAMAGE
 SLIP/TRIP/FALL
 WEATHER RELATED
 LEAK
 UPSET H2O TREATING
 OVERBOARD DRILLING FLUID
 OTHER _____

9. WATER DEPTH: 28 FT.

10. DISTANCE FROM SHORE: 20 MI.

11. WIND DIRECTION: W
 SPEED: 12 M.P.H.

12. CURRENT DIRECTION: W
 SPEED: 6 M.P.H.

13. SEA STATE: FT.

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

On November 19, 2008, at approximately 0300 hours, on Tana Exploration Company, LLC's Lease OCS-G 26023, Eugene Island Block 98, Hercules Rig 251, a Contract Wireline Operator (CWO) was struck on the right hand by a falling Packoff Assembly (PA) while guiding a wireline fishing tool string from the lubricator's side door inlet. At the time of the incident the CWO was suspended in a riding belt approximately 35 feet above the rig floor. Subsequent to severing stuck drill pipe, the severing tool and PA were approximately 45 feet above the drill floor, and exposed from the lubricator's side entry sub to verify that the severing tool successfully fired. Subsequent to the CWO unscrewing the PA from the lubricator's side entry sub and guiding the PA approximately 10 feet out of the side entry sub using his right hand, the tool string made contact with the top drive causing the PA to strike the CWO's right hand. The wireline was then stripped from the pulling tool's head at the rope socket resulting in the severing tool and PA to fall to the rig floor. As a result of the incident the CWO's right index finger was crushed with lacerations, the right little finger had tissue damage from the base to the middle of the finger, and the upper portion of the right thumb was amputated leaving a small area of skin attached to the amputated section. The CWO was administered immediate first aid by dressing the wound, an Intravenous Injection (IV) was started, and Morphine administered prior to the CWO being helicopter evacuated to the Teche Regional Medical Center in Morgan City, LA.

Update: As of December 10, 2008, the injured CWO has not returned to work, and is being treated by a hand specialist in Baton Rouge. The right hand little finger has been amputated, and the thumb and index fingers now have pins installed.

18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

The failed wireline rope socket, and resulting released wireline tool string, was possibly stressed beyond equipment design as a result of multiple impacts with the top drive and shock from the severing tool's downhole explosion.

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

The close proximity of the upper wireline pulley to the rig top drive caused entanglement and impact problems throughout the wireline operation. This resulted in unnecessary stress to the wireline equipment; e.g., sheaves, wireline, rope socket, etc.

20. LIST THE ADDITIONAL INFORMATION:

Wireline Standards Operating Procedures (SOPs) should be discussed during the Job Safety Analysis (JSA), and followed by all personnel throughout the wireline operation. All equipment should be installed and operated so as not to exceed design criteria. Special attention should be made to pinch points, impact points, friction, and any other unnecessary stresses that could possibly fatigue the equipment beyond its design limitations. Lastly, contingency procedures, including Stop Work Authority (SWA), should be in place to compensate for faulty or inadequate safety systems, devices, or unsafe conditions; e.g., undesired impact of wireline equipment with top

drive, insufficient equipment necessary to make the operation safe (an additional pup joint to allow adequate clearance from the top drive), periodic inspection of fatigued wireline, rope, sheaves, sockets, etc.

21. PROPERTY DAMAGED:

No physical property damage

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The MMS Lafayette District office makes no recommendations to the MMS Regional Office of Safety Management (OSM).

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

INC G-110 is issued "After the Fact" to document that Tana Exploration Company, LLC failed to protect health, safety, and the environment by not performing operations in a safe and workmanlike manner as follows:

Tana Exploration Company, LLC failed to ensure that wireline operations were conducted in a safe manner to protect the equipment and employees by preventing the wireline equipment from colliding on multiple occasions with the rig's top drive. These collisions could have resulted in undue stress to the wireline equipment, and eventually a severe injury. At least one employee reported this unsafe condition to a company representative. The concerned employee suggested installing an additional pup joint to extend the length of the lubricator, thus making the job safer. However, since an appropriate onsite pup joint was not available for installation, the employee's concerns were dismissed and operations were continued.

Tana Exploration Company, LLC is advised to submit a letter of explanation addressing the aforementioned INC, and its plans for eliminating future incidents of this nature to the MMS Lafayette District Manager.

25. DATE OF ONSITE INVESTIGATION:

19-NOV-2008

26. ONSITE TEAM MEMBERS:

Douglas Frerich / Mark Shuff /
Jason Abshire /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED

DATE: 21-JAN-2008

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

CONTRACTOR REPRESENTATIVE

OTHER _____

INJURY

FATALITY

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

OPERATOR REPRESENTATIVE

CONTRACTOR REPRESENTATIVE

OTHER _____

INJURY

FATALITY

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

CONTRACTOR REPRESENTATIVE

OTHER _____

INJURY

FATALITY

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

OPERATOR REPRESENTATIVE

CONTRACTOR REPRESENTATIVE

OTHER _____

INJURY

FATALITY

WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME :

HOME ADDRESS :

CITY :

STATE :

WORK PHONE :

TOTAL OFFSHORE EXPERIENCE :

YEARS

EMPLOYED BY :

BUSINESS ADDRESS :

CITY :

STATE :

ZIP CODE :