### UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE

GULF OF MEXICO REGION

#### **ACCIDENT INVESTIGATION REPORT**

	OCCURRED DATE: 19-NOV-2008 TIME: 0300 HOURS  OPERATOR: Tana Exploration Company LLC REPRESENTATIVE: Groth, Christine TELEPHONE: (281) 492-3247  CONTRACTOR: BAKER ATLAS WIRELINE REPRESENTATIVE: Wilson, Anthony TELEPHONE: (337) 501-2970	STRUCTURAL DAMAGE  CRANE  OTHER LIFTING DEVICE  DAMAGED/DISABLED SAFETY SYS.  INCIDENT >\$25K  H2S/15MIN./20PPM  REQUIRED MUSTER  SHUTDOWN FROM GAS RELEASE  OTHER
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
	LEASE: G26023  AREA: EI LATITUDE: BLOCK: 98 LONGITUDE:  PLATFORM: RIG NAME: HERCULES 251	PRODUCTION  X DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO.  X OTHER Wireline operations
6.	ACTIVITY: EXPLORATION(POE)	8. CAUSE:
7.	TYPE:    HISTORIC INJURY   X REQUIRED EVACUATION   1   LTA (1-3 days)   X LTA (>3 days   1   RW/JT (1-3 days)   RW/JT (>3 days)   RW/JT (~3 days)   RW/JT (~	X EQUIPMENT FAILURE  HUMAN ERROR  EXTERNAL DAMAGE  SLIP/TRIP/FALL  WEATHER RELATED  LEAK  UPSET H20 TREATING  OVERBOARD DRILLING FLUID  OTHER
	Other Injury	9. WATER DEPTH: 28 FT.
	FATALITY POLLUTION FIRE EXPLOSION	10. DISTANCE FROM SHORE: 20 MI.
	LWC HISTORIC BLOWOUT UNDERGROUND SURFACE	11. WIND DIRECTION: W SPEED: 12 M.P.H.
	DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	12. CURRENT DIRECTION: W SPEED: 6 M.P.H.
	COLLISION	13. SEA STATE: FT.

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#### 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

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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.

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No physical property 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** 

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OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER	x INJURY  FATALITY  WITNESS	
NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY:	STATE: TOTAL OFFSHORE EXPERIENCE:	YEA
BUSINESS ADDRESS: CITY: ZIP CODE:	STATE:	
OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE OTHER	INJURY FATALITY WITNESS	
X CONTRACTOR REPRESENTATIVE	FATALITY	YEA

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OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER	INJURY FATALITY  WITNESS	
NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY:	STATE: TOTAL OFFSHORE EXPERIENCE:	YE <i>I</i>
BUSINESS ADDRESS: CITY: ZIP CODE:	STATE:	
OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE OTHER	INJURY FATALITY WITNESS	
CONTRACTOR REPRESENTATIVE	FATALITY	YEA

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OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER	INJURY FATALITY WITNESS	
NAME:		
HOME ADDRESS:		
CITY:	STATE:	
WORK PHONE:	TOTAL OFFSHORE EXPERIENCE:	YE
EMPLOYED BY:		
BUSINESS ADDRESS:		
CITY:	STATE:	
ZIP CODE:  OPERATOR REPRESENTATIVE		
	FATALITY	
OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER  NAME:	FATALITY	
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OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER  NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY:	FATALITY  X WITNESS  STATE:	YI

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OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER	INJURY  FATALITY  WITNESS	
NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY: BUSINESS ADDRESS:	STATE: TOTAL OFFSHORE EXPERIENCE:	YEARS
CITY: ZIP CODE:	STATE:	
OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE  OTHER  NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY: BUSINESS ADDRESS: CITY: ZIP CODE:	INJURY FATALITY X WITNESS  STATE: TOTAL OFFSHORE EXPERIENCE:  STATE:	YEARS

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OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE X OTHER	INJURY FATALITY WITNESS	
NAME:		
HOME ADDRESS: CITY:	STATE:	
WORK PHONE:	TOTAL OFFSHORE EXPERIENCE:	YEARS
EMPLOYED BY:		
BUSINESS ADDRESS:		
CITY:	STATE:	
ZIP CODE:		

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