UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT GULF OF MEXICO REGION

### ACCIDENT INVESTIGATION REPORT

		For Public Release
1.	OCCURRED DATE: 01-NOV-2012 TIME: 2135 HOURS	STRUCTURAL DAMAGE CRANE OTHER LIFTING DEVICE
2.	OPERATOR: Apache Corporation REPRESENTATIVE: TELEPHONE: CONTRACTOR: Hercules Offshore Drilling REPRESENTATIVE: TELEPHONE:	DAMAGED/DISABLED SAFETY SYS. INCIDENT >\$25K H2S/15MIN./20PPM REQUIRED MUSTER SHUTDOWN FROM GAS RELEASE OTHER Back Reaming Injury
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
4.	LEASE: G01201 AREA: SM LATITUDE: BLOCK: 69 LONGITUDE:	PRODUCTION X DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL
5.	PLATFORM: RIG NAME: HERCULES 264	PIPELINE SEGMENT NO. OTHER
	ACTIVITY: EXPLORATION (POE) DEVELOPMENT/PRODUCTION (DOCD/POD) TYPE: HISTORIC INJURY REQUIRED EVACUATION 1 LTA (1-3 days) LTA (>3 days 1 RW/JT (1-3 days) RW/JT (>3 days)	8. CAUSE: X EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER
	Dther Injury FATALITY	9. WATER DEPTH: 125 FT.
	POLLUTION FIRE EXPLOSION	10. DISTANCE FROM SHORE: 45 MI.
	LWC HISTORIC BLOWOUT UNDERGROUND SURFACE	11. WIND DIRECTION: <b>S</b> SPEED: <b>8</b> M.P.H.
	DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	12. CURRENT DIRECTION: SW SPEED: 5 M.P.H.
	COLLISION HISTORIC >\$25K <pre>&lt;=\$25K</pre>	13. SEA STATE: 2 FT.

EV2010R

#### 17. INVESTIGATION FINDINGS:

At approximately 21:30 hours on 01 November 2012, an accident occurred during drilling operations on the Hercules Offshore (Hercules) Rig 264 under contract to Apache Corporation (Apache). The Hercules 264 was situated at the surface location of South Marsh Island (SMI) Block 69; but drilling in subsurface location of SMI Block 58. The accident happened while breaking pipe connections during back reaming operations when a Hercules Floorhand operating the tongs was thrown approximately 8 feet across the rig floor striking the starboard air hoist. The Injured Person (IP) suffered a head laceration, skin abrasions and bruising to the back of his legs. The IP received first-aid care at the rig, but was evacuated for additional medical treatment to Our Lady of Lourdes Hospital located in Lafayette, Louisiana. The IP's head laceration was treated by closing up with surgical staples and he was released from the hospital on 02 November 2012.

Apache and Hercules determined that the primary cause of this incident was slippage of top drive dies that caused the compensator to pick up, turn the stand in the opposite direction with the tongs and throwing the Floorhand approximately 8 feet into the starboard air hoist where he sustained the injures.

An internal investigation conducted by Hercules identified the following contributing causes: 1) the Driller had assumed that the pipe connection had broken, 2) the Floorhand was unable to see if the saver sub had broken, and 3) the motion compensator picking up the stand prematurely due to reduced weight, spinning the pipe stand two full revolutions, snagging the Floorhand's legs in the snub line, and throwing him approximately 8 feet into the starboard air hoist.

A Job Safety Analysis (JSA) was completed; however, it did not include all job tasks for back reaming nor did it specifically address hazards that may occur if the top drive dies slipped when breaking a pipe connection. Hercules had no written maintenance program in place for inspecting, maintaining, or replacing the top drive dies; however, Hercules had a policy that required the top drive dies to be inspected once per tour. It should be noted that there are no industry standards in place governing top drive die inspection and maintenance.

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

Apache and Hercules determined that the primary cause of this incident was slippage of top drive dies that caused the compensator to pick up, turn the stand in the opposite direction with the tongs and throwing the Floorhand approximately 8 feet into the starboard air hoist where he sustained the injures.

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

An internal investigation conducted by Hercules identified the following contributing causes: 1) the Driller had assumed that the pipe connection had broken, 2) the Floorhand was unable to see if the saver sub had broken, and 3) the motion compensator picking up the stand prematurely due to reduced weight, spinning the pipe stand two full revolutions, snagging the Floorhand's legs in the snub line, and throwing him approximately 8 feet into the starboard air hoist.

A JSA was completed; however, it did not include all job tasks for back reaming nor did it specifically address hazards that may occur if the top drive dies slipped when breaking a connection. Hercules had no written maintenance program for inspecting, maintaining, or replacing the top drive dies; however, they had a policy that required the top drive dies to be inspected once per tour. It should be noted that currently there are no industry standards for top drive die inspection and maintenance.

### CORRECTIVE ACTIONS:

The JSA will be revised to address all critical job tasks and identify hazards when conducting back reaming operations. Hercules will implement a maintenance program for inspecting the top drive dies more frequently instead of once per tour. The Driller will visually verify that the saver sub has broken before attempting to back out with the top drive. The Driller will also monitor the weight of the top drive to prevent the compensator from prematurely picking up the stand before the saver sub is broken.

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

None

No property was damaged during this accident.

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE Lafayette District makes no recommendations for the Agency.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
- 25. DATE OF ONSITE INVESTIGATION:

02-NOV-2012

- 26. ONSITE TEAM MEMBERS: 29. ACCIDENT INVESTIGATION Jeremy Adams / Ernest Carmouche / Troy Naquin / OCS REPORT:
  - 30. DISTRICT SUPERVISOR:

Marty Rinaudo

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APPROVED DATE: 28-DEC-2012

# **INJURY/FATALITY/WITNESS ATTACHMENT**

<ul> <li>OPERATOR REPRESENTATIVE</li> <li>CONTRACTOR REPRESENTATIVE</li> <li>OTHER</li> </ul>	INJURY FATALITY X 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 Third Party Contract NAME: HOME ADDRESS: CITY:	cor INJURY FATALITY X WITNESS STATE:	
WORK PHONE: EMPLOYED BY: BUSINESS ADDRESS:	TOTAL OFFSHORE EXPERIENCE:	YEARS
CITY: ZIP CODE:	STATE:	

# INJURY/FATALITY/WITNESS ATTACHMENT

[ [2	OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE OTHER		INJURY FATALITY WITNESS	
_	NAME: HOME ADDRESS:			
C	CITY: STATE:		Ξ:	
V	WORK PHONE:	TOTAL OFFSHOR	E EXPERIENCE:	YEARS
	EMPLOYED BY: BUSINESS ADDRESS:			
C	CITY:		STATE:	
Σ	ZIP CODE:			

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