

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: 19-APR-2013 TIME: 0030 HOURS

2. OPERATOR: BP Exploration & Production Inc.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: -

REPRESENTATIVE:

TELEPHONE:

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

4. LEASE: G25780

AREA: KC LATITUDE: 26.863003 -  
BLOCK: 93 LONGITUDE: -93.659507 -

5. PLATFORM:

RIG NAME: SEADRILL WEST CAPRICORN

6. ACTIVITY:

EXPLORATION (POE)  
 DEVELOPMENT/PRODUCTION  
(DOCD/POD)

7. TYPE:

HISTORIC INJURY -  
 REQUIRED EVACUATION  
 LTA (1-3 days)  
 LTA (>3 days)  
 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

8. CAUSE:

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

9. WATER DEPTH: 4860 FT.

10. DISTANCE FROM SHORE: 172 MI.

11. WIND DIRECTION: -  
SPEED: M.P.H.

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

13. SEA STATE: FT.

At the time of accident, Lessee was drilling on bottom. Lessee had problems with Mud Pump #1. They isolated Mud Pump #1 and brought Mud Pump #4. Mud Pump #4 was lined up on the boost line with the pop off valve set at 3400 psi. Mud Pump #1 was set at 5300 psi. Driller noticed he was losing pumping pressure and called to the pit room. Shakerhand took the call and was told by the Driller to go check the pump room. He said he noticed the pop off sensor was red and reported back to Driller. Then the Shakerhand was told to check pop off Tanks where he discovered that they had spilled an estimated 50 bbls of (approximately 36.5 bbls of base oil) Synthetic Oil Based Mud (SOBM) through the top hatch.

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

The pop off valve on Mud Pump #4 was set at 3400 psi and not reset to 5300 psi. The hatch was not checked to make sure it was properly secured. It was also mentioned that the pneumatic pumps did not kick in to pump down mud and was further investigated by the rig crew. Rig crew found the suction valve was closed. No audio or visual alarm sounded.

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

1. Hatch on Pop Off Tank was not properly secured.
2. The Pop off was not set back to normal pressure while drilling.
3. The Valve to the Pneumatic pumps was closed.

## 20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

ESTIMATED AMOUNT (TOTAL): \$

## 22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

**Make Thorough walk down of valve alignment**

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

## 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

**E-100 Facility Shut-In 250.300(a) -**

During the time of the investigation, it was found that operator failed to prevent unauthorized discharge of pollutants into offshore waters in the following way: -

On 4-19-2013, while drilling, Mud Pump #4 was brought online. After 5 minutes of

operation the pump pressure had not reached expected valve. The pump was shut down and inspected. It was found that the relief valve on the mud pump had discharged into overflow tank. The hatch on the overflow tank was not secured which caused a release of 50 bbls. of Synthetic Oil Base Mud into offshore waters.

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**G-111 Facility Shut-In 250.107**

During the time of the investigation, it was discovered Lessee failed to maintain all equipment in a safe condition to provide for the protection of the lease and associated facilities in the following ways:

While drilling, Mud Pump #4 was lined up on the boost line with the pop off valve set at 3400 psi. Mud Pumps 1,2, and 3, were lined up on the stand pipe with pop off valves set at 5300 psi. Prior to the incident, mud pump #1 was taken offline to repair a swab, and replaced with mud pump #4. Mud pump #4 pop off valve was not reset to 5300 psi when it was moved to the stand pipe.

During drilling operations the mud pumps were pressured up to 4000 psi which caused the pop off on mud pump #4 to activate sending Synthetic Oil Base Mud (SOBM) to the mud overflow tank in the moon pool. The hatch on the overflow tank was not secured properly which allowed SOBM to overflow the tank into moon pool area consequently creating an unauthorized discharge of 50 bbls. SOBM into offshore waters.

Prior to the incident, Lessee failed to follow the documented procedures which address alignment of the pneumatic pumps, valves, and security of the overflow tanks. The pneumatic pumps for the overflow tanks were out of service and failed to operate during drilling operations due to the air valves being in the closed position.

25. DATE OF ONSITE INVESTIGATION:

23-APR-2013

26. ONSITE TEAM MEMBERS:

Oscar Torres / Jim Ozoral / Joe Trevino /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

John McCarroll

APPROVED

DATE: 26-NOV-2013