

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: 22-JAN-2018 TIME: 2330 HOURS

2. OPERATOR: Anadarko Petroleum Corporation

REPRESENTATIVE:  
TELEPHONE:

CONTRACTOR: DIAMOND M DRILLING

REPRESENTATIVE:  
TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING
- 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: 8. OPERATION:

4. LEASE: G06894

AREA: VK LATITUDE: 29.08361111  
BLOCK: 915 LONGITUDE: -87.95194444

5. PLATFORM:

RIG NAME: DIAMOND OCEAN BLACKHAWK

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

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

9. CAUSE:

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

- 10. WATER DEPTH: 3564 FT.
- 11. DISTANCE FROM SHORE: 133 MI.
- 12. WIND DIRECTION: WNW  
SPEED: 15 M.P.H.
- 13. CURRENT DIRECTION: SE  
SPEED: 1 M.P.H.
- 14. SEA STATE: 3 FT.
- 15. PICTURES TAKEN:
- 16. STATEMENT TAKEN:

17. INVESTIGATION FINDINGS:

**For Public Release**

On 22-Jan-2018 at approximately 2330 onboard the drillship Diamond Ocean Blackhawk, 80 barrels of Synthetic Oil-Based Mud (SOBM) was inadvertently discharged into Gulf of Mexico waters. The 11.8 ppg SOBM had a base oil content of 57.5%. This incident occurred while the rig crew was flushing the Coriolis Meter, which is a third party Mud Monitoring System.

After turning the mixing pump on and pumping was initiated, involved personnel noticed no returns to the mud pits. All pumping was stopped. After further investigation, it was discovered that the shakers were never turned on. This allowed the SOBM to flow over the shakers to the cuttings auger and cuttings dryer, and then down to the cuttings overboard discharge line and into the Gulf of Mexico.

The BSEE New Orleans District conducted an onsite investigation and reviewed documentation provided, including an unsigned Job Safety Analysis (JSA) worksheet for "Back flushing FLAG system with mixing pumps." Step 4 of this JSA stated the following: "Ensure personnel are in place (Shaker hand in shakers, and Dryer hand at unit), and all lines are lined up. Ensure shakers are on before turning the mixing pump on." The BSEE investigator was unable to confirm or deny that the JSA was ever reviewed prior to beginning this operation.

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

**Failure to Follow Procedures - The shakers were not turned on before starting the mixing pump (Step 4 of JSA).**

**Inadequate Hazard Analysis - There was no indication that the JSA was reviewed prior to beginning the operation.**

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

**The cuttings overboard discharge line was open during this operation. Had the valve been closed no SOBM enters GOM waters.**

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

**None**

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

**The BSEE New Orleans District makes no recommendations to the Office of Incident Investigation.**

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

E-100 (W) 30 CFR 250.300

After reviewing all documentation (JSA and witness statements), the operator failed to prevent unauthorized discharge of pollutants into Gulf of Mexico waters.

G-110 (W) 30 CFR 250.107(a)

After further investigation, BSEE investigator determined the Lessee did not perform all operations in a safe and workmanlike manner for the preservation and conservation of property and the environment.

This resulted in 80-barrels of 11.8 ppg Synthetic Oil Base Mud to be released into Gulf of Mexico waters.

25. DATE OF ONSITE INVESTIGATION:

**25-JAN-2018**

28. ACCIDENT CLASSIFICATION:

26. INVESTIGATION TEAM MEMBERS:

**Earl Roy /**

29. ACCIDENT INVESTIGATION  
PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**David Trocquet**

27. OPERATOR REPORT ON FILE:

APPROVED

DATE:

**26-MAR-2018**