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

1. OCCURRED
   DATE: 28-JAN-2008 TIME: 1300 HOURS

2. OPERATOR: BHP Billiton Petroleum (GOM) Inc.
   REPRESENTATIVE: Watson, Sarah
   TELEPHONE: (713) 599-6248

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

4. LEASE: G21810
   AREA: GC LATITUDE:
   BLOCK: 652 LONGITUDE:

5. PLATFORM:
   RIG NAME: GSF C.R. LUIGS

6. ACTIVITY: X 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

   □ HISTORIC BLOWOUT
   □ UNDERGROUND
   □ SURFACE
   □ DEVERTER
   □ SURFACE EQUIPMENT FAILURE OR PROCEDURES

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

8. CAUSE:
   □ EQUIPMENT FAILURE
   □ HUMAN ERROR
   □ EXTERNAL DAMAGE
   □ SLIP/TRIP/FALL
   □ WEATHER RELATED
   □ LEAK
   □ UPSET H2O TREATING
   □ OVERBOARD DRILLING FLUID
   X OVERBOARD DRILLING FLUID

9. WATER DEPTH: 4326 FT.

10. DISTANCE FROM SHORE: 123 MI.

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

12. CURRENT DIRECTION: E
    SPEED: 1 M.P.H.

13. SEA STATE: 2 FT.
17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

At approximately 1220 hours, while casing was being run in the well, the Derrickman was in the process of emptying water from the mixing tanks in the sack room through an overboard drain line in order to repair a leaking pipe. As the casing was run it was being filled with mud through the mud mix line. Mud losses were observed while running the casing, which is typical. Once the casing was set in the slips the mud losses continued, which is not typical.

The mud pit room was contacted and reported that no change was made to the valve line-up for the mud system. The slip joint was checked for leakage and none was found. When checking the GOM waters for signs of Synthetic Base Mud (SBM) discharge, it was discovered that it was coming from the water drain line for the mixing tanks located on the port side of the rig. At 1300 hours, the pipe was isolated and the discharge ceased. It was calculated that 56 barrels of SBM was lost. The fluid was 58 percent synthetic base oil which equates to approximately 32.5 barrels of pollutant material.

It was later discovered that during this time the cementer had opened another valve on the drain line for the mixing tanks in order to drain them of water but neglected to close a valve on the quick fill line used to fill the casing with mud while being run. The tanks were being drained in preparation for a cement job on the casing being run. The quick fill line connects to the drain line for the mixing tank and allowed mud to enter the overboard drain line spilling into GOM waters.

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

Incorrect valve position on the piping used to fill the casing allowed mud to enter from the mud mix line into the cement unit's piping that was being flushed.

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

The valve that allowed mud to enter was left in the open position from a previous job. The valve was not put back into its previous closed position.

20. LIST THE ADDITIONAL INFORMATION:

The drain line valve for the cementing equipment is locked closed and is now part of Transocean's Permit-to-Work process. The valves on the line from the mud line to the cementing equipment are locked closed and overseen by the Qtec Engineer, the onboard containment specialist.

The valve register for the rig was updated and a hazard analysis was performed on all containment valves that are locked in position.

Future Job Safety Analysis's (JSA's) will include proper valve position and conformation checks on valves.
21. PROPERTY DAMAGED:  No damage to property.
22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:
   Due to the nature of this incident, the Houma District has no recommendations at this time.
23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES
24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
   An Incident of Non-Compliance, E-100, for pollution was written for this incident.
26. ONSITE TEAM MEMBERS: /
29. ACCIDENT INVESTIGATION PANEL FORMED: NO
   OCS REPORT:
30. DISTRICT SUPERVISOR:
   Bryan A. Domangue
   APPROVED
   DATE: 21-APR-2008
1. VOLUME: GAL 56 BBL

YARDS LONG X YARDS WIDE

APPEARANCE:

2. TYPE OF HYDROCARBON RELEASED: ☐ OIL
☐ DIESEL
☐ CONDENSATE
☐ HYDRAULIC
☐ NATURAL GAS
☒ OTHER Low toxicity SBM

3. SOURCE OF HYDROCARBON RELEASED: Cement Unit Overboard Drain

4. WERE SAMPLES TAKEN? NO

5. WAS CLEANUP EQUIPMENT ACTIVATED? NO

   IF SO, TYPE: ☐ SKIMMER
☐ CONTAINMENT BOOM
☐ ABSORPTION EQUIPMENT
☐ DISPERSANTS
☐ OTHER

6. ESTIMATED RECOVERY: GAL BBL

7. RESPONSE TIME: HOURS

8. IS THE POLLUTION IN THE PROXIMITY OF AN ENVIRONMENTALLY SENSITIVE AREA (CLASS I)? NO

9. HAS REGION OIL SPILL TASK FORCE BEEN NOTIFIED? NO

10. CONTACTED SHORE: NO IF YES, WHERE:

11. WERE ANY LIVE ANIMALS OBSERVED NEAR: NO

12. WERE ANY OILED OR DEAD ANIMALS OBSERVED NEAR SPILL: NO