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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
DATE: **04-NOV-2006** TIME: **1100** HOURS

2. OPERATOR: **BP Exploration & Production Inc.**
REPRESENTATIVE: **Earl Lee**
TELEPHONE: **(713) 422-4309**
CONTRACTOR:
REPRESENTATIVE:
TELEPHONE:

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

4. LEASE: **G08831**
AREA: **MC** LATITUDE:
BLOCK: **566** LONGITUDE:

5. PLATFORM:
RIG NAME: **DIAMOND OCEAN CONFIDENCE**

6. ACTIVITY:
- [ ] EXPLORATION(POE)
- [X] 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
- [X] 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
- [X] DRILLING
- [ ] WORKOVER
- [ ] COMPLETION
- [ ] HELICOPTER
- [ ] MOTOR VESSEL
- [ ] PIPELINE SEGMENT NO.
- [ ] OTHER

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

9. WATER DEPTH: **6929** FT.

10. DISTANCE FROM SHORE: **71** MI.

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

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

13. SEA STATE: FT.

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

While drill crew was reverse circulating after cement job, mud losses were noticed on V-ICIS system. Valve alignment was checked in the shaker house and one valve was found to be partially open on shunt line for mud pits allowing 127 bbls of Synthetic Oil Base Mud (SOBM) to go overboard of which 55% or 70 bbls was oil base.

Findings:

1) A JSA had been reviewed prior to the cement job. The possibility of "reversing out" was not in the JSA.
2) The shaker hand had been in that position for 18 months. He thought he had closed the butterfly valve completely.
3) Rough seas had the pvt registering a +/- 15 barrel reading resulting in slow response time in recognizing losses to active system.
4) The valve had not been previously identified on the "OBM Overboard Discharge" list. The reverse out line is used so infrequently it had been overlooked.

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

1) Human error. Employee did not verify that the valve was shut.
2) The valve had not been previously identified as having the potential to result in an unplanned release of SOBM.

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

1) Possibility of reverse circulating was not addressed on the JSA.
2) High seas causing a slow response time in detecting a loss of fluid.

21. PROPERTY DAMAGED:

Drilling fluid

NATURE OF DAMAGE:

Loss of 127 bbls of SOBM overboard

ESTIMATED AMOUNT (TOTAL): **$25,400**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

No recommendations to MMS.

The New Orleans District concurs with the operator's recommendation to prevent recurrence.
1) Employee moved to Floorhand for further training.
2) Add valve to master list of SOBM Overboard Discharges. Valves on this list require PTW to open or close. Add long term lock valve.
3) Write a specific "Reverse Circulating" JSA
4) Review incident with all crews.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 Lessee did not perform operation in a safe and workmanlike manner while reverse circulating out. Employee failed to fully close an overboard valve causing SOBM to discharge into Gulf waters.

25. DATE OF ONSITE INVESTIGATION:

07-NOV-2006

26. ONSITE TEAM MEMBERS:

Perry Jennings / Justin Josey /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

Troy Trosclair

APPROVED

DATE: **04-JAN-2007**

POLLUTION ATTACHMENT

1. VOLUME: GAL **70** BBL

   YARDS LONG X YARDS WIDE

   APPEARANCE:

2. TYPE OF HYDROCARBON RELEASED:
   - [ ] OIL
   - [ ] DIESEL
   - [ ] CONDENSATE
   - [ ] HYDRAULIC
   - [ ] NATURAL GAS
   - [X] OTHER **127 bbls SOBM 55%/70 bbls oil**

3. SOURCE OF HYDROCARBON RELEASED: **Valve open on shunt line.**

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**