

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: 24-SEP-2014 TIME: 0600 HOURS

2. OPERATOR: Marubeni Oil & Gas (USA) Inc.

REPRESENTATIVE:

TELEPHONE: -

CONTRACTOR: -

REPRESENTATIVE: -

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING DEVICE
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER Inadvertent Discharge of SBM

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

6. OPERATION:

4. LEASE: G16698

AREA: GC LATITUDE:

BLOCK: 155 LONGITUDE: -

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO.
- OTHER Cleaning the Mud Pits

5. PLATFORM:

RIG NAME: NOBLE DRILLER

6. ACTIVITY:

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

8. CAUSE:

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

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

9. WATER DEPTH: 1939 FT.

10. DISTANCE FROM SHORE: MI.

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

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

13. SEA STATE: FT.

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

On September 24, 2014, approximately 150 barrels of Synthetic Based Mud (SBM) were discharged into the Gulf of Mexico while crews onboard the Noble Driller prepared the rig to take on completion fluid.

The Noble Driller had been contracted to Marubeni Oil and Gas Company and was tasked with drilling their MA002 well located in Green Canyon 155, lease #G16698. The crew onboard the Noble Driller had just finished drilling operations and were making preparations to move into the completion of the well. The rig had already unlatched the Blow Out Preventer (BOP) from the wellhead and was on stand-by in the "Safe Zone," an area designated by the operator to ensure that the rig is clear of all subsea infrastructures.

While the rig was on stand-by, the crew members were instructed to clean all lines and tanks on the vessel that had been previously filled with SBM. This cleaning process needed to be completed before the rig could take on completion fluids. At the same time, the Derrickman on tour was asked to transfer SBM from the portside four column tank to the active and reserve pits. The transfer of SBM into mud pit #3 was completed, and the Derrickman left the area to conduct other operations. When the Derrickman returned to the mud pits approximately an hour and a half after the transfer, he noticed that the level in pit #3 had dropped significantly. He immediately secured the master valves, which were left open for ongoing cleaning operations, and stopped the fluid loss. After verifying the SBM in all of the pits, it was determined that approximately 150 barrels of SBM had been released into offshore waters.

The investigation following the incident showed that a leaking dump valve on the #3 pit had allowed SBM to leak out of the pit. Since the master valves were in the open position due to cleaning operations, the SBM was being routed directly overboard after escaping the #3 dump valve. Because the pit was left unattended for an hour and a half, there was no one in the pit room to observe the steadily decreasing level. In addition, the Pit Volume Transmitter (PVT) Alarm was found to be set out of range. The PVT alarm is a device that is designed to warn the Driller if there is an unexpected gain or loss of fluid volume in the pits. The set points for the alarm had been set so far apart that the alarm was rendered inoperable.

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

- A leaking dump valve on the #3 pit allowed Synthetic Based Mud to slowly drain out of the pit.
- Due to ongoing cleaning operations at the time of the incident, the master valves for the pits were in the open position. This allowed the Synthetic Based Mud to flow into the gulf once it escaped past the leaking dump valve.

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

- Mud Pit #3 was left unattended for an extended period of time after the mud transfer was complete. Had the Derrickman stayed in the area long enough to confirm that all of the valves were holding, the discharge may have been stopped or greatly decreased.
- The Pit Volume Transmitter (PVT) alarm was inoperable. Although the transmitter was on, the set points had been moved so far out of range that they were unable to detect

the loss of fluid.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

N/A

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

**The Houma District has no recommendations for BSEE Region at this time.**

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

**E-100: On September 24, 2014, a misalignment with the valves for the mud pits resulted in approximately 150 barrels of Synthetic Oil Based Mud being released into the Gulf of Mexico.**

25. DATE OF ONSITE INVESTIGATION:

**25-SEP-2014**

26. ONSITE TEAM MEMBERS:

**James Richard / Robert Reeves /  
Troy Boudreaux / Clint Campo /**

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**Bryan Domangue**

APPROVED

DATE:

**18-DEC-2014**