

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: 11-DEC-2014 TIME: 0813 HOURS

2. OPERATOR: Shell Offshore Inc.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: -

REPRESENTATIVE:

TELEPHONE:

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

4. LEASE: G17001

AREA: WR LATITUDE:

BLOCK: 508 LONGITUDE: -

5. PLATFORM:

RIG NAME: NOBLE JIM DAY

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: 9560 FT.

10. DISTANCE FROM SHORE: 186 MI.

11. WIND DIRECTION: N -
SPEED: 1 M.P.H.

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

13. SEA STATE: 1 FT.

On December 11, 2014, the Noble Jim Day unintentionally discharged 142 barrels of Synthetic Oil Based Mud (SBM) into the waters of the Gulf of Mexico. The accidental discharge was due to a valve misalignment during cleaning operations of the mud pits.

The active mud pits were being cleaned in preparation of taking on Brine. After Pit #1 had been cleaned, a soap pill was pumped into Pit #2 to assist with the cleaning. Around 05:00 hours, the keys for Pit #2's overboard dump valves were issued to the on-tour Derrickman by the Assistant Rig Manager, but no entry was made into the rig's Lock-out/Tag-out log book. The Mud Engineer initiated a static sheen test to insure the fluid was safe to discharge overboard, and the crew began changing out personnel in preparation of crew change later during the day. During the transition, the keys for Pit #2's dump valves were passed on again to the oncoming Derrickman. Again, no entries were entered into the rig's Lock-out/Tag-out log book to account for who had the keys to the valves. No pre-tour safety meeting was held for the new crew members, but crew members stated that they had job specific handovers at the job sites with their reliefs.

After completing the required test and permits, the Derrickman notified the Assistant Driller (AD) that he was ready to proceed with the job. Although a JSA was done prior to starting the job, the crew members failed to identify any environmental hazards associated with cleaning the pits. After it was determined safe to do so, the Derrickman discharged the contents of Pit #2 overboard through the dump valves between 07:40 and 07:50 hours. The Derrickman proceeded to rearrange the valves of the pits back to their normal position. A lack of knowledge on proper valve alignment, poor communication between the crew members, and poor labeling of the valves, led the Derrickman to misalign the valves and ultimately created a pathway for hydrocarbons to be discharged into the Gulf of Mexico. In addition, the operators report showed that the drawings that were available to the Derrickman at the time of the incident did not accurately show the installation of the valves. Although it is unknown if these drawings were used, this too could have led to more confusion in the valve alignment.

Upon coming on tour, the AD had set the Pit Volume Totalizer (PVT) to 5 barrels. This alarm would notify the crew if the volume in the pits fluctuated by more than 5 barrels. Once the 5 barrel mark had been reached, the PVT alarm sounded and the AD contacted the Derrickman to notify him of their losses. The crew proceeded to secure the pits and correct the misaligned valves. The total time to secure all valves was approximately five minutes, in which an estimated 142 barrels of SBM had been lost overboard.

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

1) Human Error: Failure of personnel to properly align the valves going to and leading from the multiple pits led to confusion and ultimately the discharge of SBM into the Gulf of Mexico.

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

1) Crew members failed to maintain Lock-out/Tag-out logs as keys were distributed from one personnel to another.

- 2) The JSA failed to identify the environmental hazards associated with the job. -
- 3) Poor Communication: Radio communication was not utilized while opening the dump valves. -
- 4) Poor Labeling: Piping and valves were not clearly labeled. -
- 5) Drawings of the sump system did not accurately reflect the installation. -
- 6) Training: Poor understanding of proper alignment for cleaning operation. -

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

N/A

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

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

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

An E-100 was issued following this incident:

"On December 11, 2014 approximately 142 barrels of Synthetic Oil Based Mud (SOBM) was unintentionally discharged into the Gulf of Mexico during cleaning operations."

25. DATE OF ONSITE INVESTIGATION:

16-JAN-2015

26. ONSITE TEAM MEMBERS:

Josh Ladner / James Richard /

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan Domangue

APPROVED
DATE:

06-MAR-2015

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