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: 16-MAY-2013  TIME: 2215  HOURS

2. OPERATOR: Shell Offshore Inc.
   REPRESENTATIVE: TELEPHONE:
   CONTRACTOR: NOBLE DRILLING (U.S.) INC.
   REPRESENTATIVE: TELEPHONE:

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

4. LEASE: G07957
   AREA: MC
   BLOCK: 762
   LATITUDE:
   LONGITUDE:

5. PLATFORM:
   RIG NAME: NOBLE BULLY I

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

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

9. WATER DEPTH: 3140 FT.

10. DISTANCE FROM SHORE: 47 MI.

11. WIND DIRECTION: E
    SPEED: 17 M.P.H.

12. CURRENT DIRECTION: S
    SPEED: 7 M.P.H.

13. SEA STATE: FT.
17. INVESTIGATION FINDINGS:

On 16-May-2013 at 2215 hours, the primary sealing element for the riser slip joint failed due to a loss of air pressure. As a result 20.8 barrels of 12.8 pound per gallon synthetic based mud (SBM) was spilled into the moon pool.

The operation at the time of the incident was fluffing cement tanks in preparation for a cement squeeze job. During this operation the rig service air, not able to keep up with the air demand, dropped to about 40 psi allowing the sealing element in the slip joint to relax. While engine control room personnel were responding to the low rig air alarm, it was noticed that the slip joint was leaking SBM into the moon pool. Once all air compressors were online and full rig air was restored, the sealing element engaged stopping the leak.

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

1) Low rig air pressure allowed the primary sealing element in the slip joint to relax.

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

1) Rig air compressors not in the correct alignment allowed the air pressure to fall.
2) No check valve installed to trap sealing pressure on the primary sealing element in the event air pressure is lost.

20. LIST THE ADDITIONAL INFORMATION:

Rig air compressor #2 was online but was unable to handle the amount of air needed to fluff the cement tanks. Air compressor #1 did not come online due to the control switch being in the local or hand position. Air compressor #3, assigned as the lag compressor, failed to start due to improper settings.

The Spill was contained in the moon pool and no sheen was observed around the ship.
21. PROPERTY DAMAGED:

None

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans District makes no recommendations to the Agency.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

E-100: Issued on 16-May-2013, the rig service air to the primary slip joint packer dropped below sealing pressure which resulted in a 20.8 barrel spill of 12.8 pound per gallon synthetic based mud.

25. DATE OF ONSITE INVESTIGATION:

20-MAY-2013

26. ONSITE TEAM MEMBERS:

Michael Sonnier

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED DATE: 19-MAR-2014
OPERATOR REPRESENTATIVE  INJURY
CONTRACTOR REPRESENTATIVE  FATALITY
OTHER  WITNESS

NAME:
HOME ADDRESS:
CITY:  STATE:
WORK PHONE:  TOTAL OFFSHORE EXPERIENCE:  YEARS

EMPLOYED BY:
BUSINESS ADDRESS:
CITY:  STATE:
ZIP CODE:

X OPERATOR REPRESENTATIVE  INJURY
X CONTRACTOR REPRESENTATIVE  FATALITY
X OTHER  WITNESS

NAME:
HOME ADDRESS:
CITY:  STATE:
WORK PHONE:  TOTAL OFFSHORE EXPERIENCE:  YEARS

EMPLOYED BY:
BUSINESS ADDRESS:
CITY:  STATE:
ZIP CODE:
1. VOLUME: 20.8 GAL - BBL

YARDS LONG X YARDS WIDE -

APPEARANCE:

2. TYPE OF HYDROCARBON RELEASED: ☑ OIL
☐ DIESEL
☐ CONDENSATE
☐ HYDRAULIC
☐ NATURAL GAS
☐ OTHER [Synthetic Based Mud]

3. SOURCE OF HYDROCARBON RELEASED: SBM leaked from between the packer and the inner barrel of the slip joint.

4. WERE SAMPLES TAKEN? NO

5. WAS CLEANUP EQUIPMENT ACTIVATED? NO

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

6. ESTIMATED RECOVERY: 0 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