

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: 03-MAR-2016 TIME: 1845 HOURS

2. OPERATOR: BP Exploration & Production Inc.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: Ensco Offshore Co.

REPRESENTATIVE:

TELEPHONE:

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

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

6. OPERATION:

4. LEASE: G09868

AREA: MC LATITUDE: 28.1905333
BLOCK: 778 LONGITUDE: -88.49524555

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO.
- OTHER

5. PLATFORM:

RIG NAME: THUNDER HORSE PDQ

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

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

9. WATER DEPTH: 6033 FT.

10. DISTANCE FROM SHORE: 60 MI.

11. WIND DIRECTION: W
SPEED: 14 M.P.H.

12. CURRENT DIRECTION: W
SPEED: 0 M.P.H.

13. SEA STATE: 0 FT.

The following incident occurred on 3-Mar-2016 at approximately 1845-hrs onboard the Thunderhorse PDQ while conducting a high pressure test on the Emergency Disconnect Package (EDP) and the Lower Riser Package (LRP). A leak on the annular co-flex hose connected to the tapered stress joint on the sub-sea production tree allowed approximately 10-barrels of 6.6 ppg, 100% Base oil into offshore waters.

The rig crew were pressure testing the EDP and LRP on the sub-sea production tree. After achieving a successful low pressure test of 250-psi on the above mentioned components, pressure was increased in an attempt to achieve a successful high pressure test (10,000-psi). At this point, a pressure drop was observed from the Core Function Panel (Control Panel). The pressure was then bled off for trouble-shooting. The ROV was already deployed and had begun to survey all sub-sea equipment associated with the pressure test. Initially no leak was observed, so the decision was made to re-apply pressure to the system in an attempt to pinpoint the problem. As pressure was applied, the ROV observed fluid (Base Oil) leaking from the annular co-flex hose on the tapered stress joint above the production tree. The operation was stopped and the leak ceased.

NOTE: It was stated that after the initial pressure drop and subsequent trouble-shooting, the ROV was approximately thirty-feet away from the discharge area. After flying higher in the water column the ROV then observed fluid leaking from the annular co-flex hose.

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

- 1) Failure of the annular co-flex hose.
- 2) The annular co-flex hose was unable to contain the test fluid (100% Base Oil) while conducting a high pressure test (10,000-psi) on the EDP and LRP.

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

- 1) The ROV was not in close proximity to the point of discharge during both attempts to pressure-up the system.
- 2) Had the ROV observed the discharge sooner, pumping on the system could have been stopped sooner, lessening the amount of Base oil discharged into offshore waters.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

10 BBLs of 6.6 ppg base oil

NATURE OF DAMAGE:

Released in the Gulf of Mexico

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ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans District makes no recommendations to the Office of Incident Investigation.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

E-100 (C) 250.300 (A) At the time of the Inspection/Investigation, it was determined that the operator did not prevent the unauthorized discharge of pollutants into offshore waters. This allowed approximately 10-barrels of 100% base oil to be released into offshore waters.

NOTE: The leak has been identified, but not yet corrected. (The leaking component is the Annulus co-flex line).

25. DATE OF ONSITE INVESTIGATION:

03-MAR-2016

26. ONSITE TEAM MEMBERS:

Earl Roy / Brennon Carriere / Shadi Sarhan /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED

DATE: 25-MAY-2016

POLLUTION ATTACHMENT

1. VOLUME: GAL 10 BBL
 YARDS LONG X YARDS WIDE

APPEARANCE: **LIGHT BROWN**

2. TYPE OF HYDROCARBON RELEASED: OIL
 DIESEL
 CONDENSATE
 HYDRAULIC
 NATURAL GAS
 OTHER Base Oil

3. SOURCE OF HYDROCARBON RELEASED: **Annulus Coflex 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**