

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

1. OCCURRED

DATE: **09-FEB-2007** TIME: **0800** HOURS

2. OPERATOR:

Hess Corporation

REPRESENTATIVE: **David Zaunbrecher**

TELEPHONE: **(713) 609-4089**

CONTRACTOR: **Diamond Offshore Drilling, Inc**

REPRESENTATIVE: **Richard Powell**

TELEPHONE: **(713) 609-5188**

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

4. LEASE:

G26313

AREA: **GC** LATITUDE:

BLOCK: **468** LONGITUDE:

5. PLATFORM:

RIG NAME: **DIAMOND OCEAN BARONESS**

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 Leaking Riser Flex Joint

9. WATER DEPTH: **3400** FT.

10. DISTANCE FROM SHORE: **114** MI.

11. WIND DIRECTION: **SW**
SPEED: **6** M.P.H.

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

13. SEA STATE: **2** FT.

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

On the morning of February 9, 2007 the well had drilled to feet when a slight drilling break was encountered. Drilling was stopped and the bit was picked up off of bottom to check for flow and the well was not flowing. Due to over pull when picking up off of bottom it was decided to circulate bottoms up. Within a short time tar was noted in the mud returns. The drill pipe and bottom hole assembly (BHA) were pulled back into the base of the salt zone at feet to circulate the hole clean and evaluate drilling ahead thru the tar. While circulating at about 8:00 o'clock in the morning the mud engineer noticed that the pits were losing synthetic based drilling fluids (SBM). The rig jumped the ROV to check the riser and blow out preventers (BOPs) for possible loss of SBM. The ROV found a 5 to 10 foot long stream of SBM flowing out of a weep hole in the Lower Marine Riser Package (LMRP) at the riser flex joint. The leak was discovered around 10:30 and the well was immediately shut in at the BOPs using the annular. The level in the riser dropped 10 feet before stabilized and the leak stopped. The last time the riser and BOPs were inspected by the ROV was at 6:00 o'clock that morning and no pollution was noted.

The SBM loss was based on the loss in the pits on the rig. Some of the loss could have occurred down hole into the rubble zone just below the base of the salt which is normal for this depth and location. The weep hole was later identified as a test port. The test port of the Flex Joint is used by the manufacturer for factory acceptance testing and is typically not a field serviced item. is the manufacturer of the flex joint, this design has been around for many years and this is the first known failure of this type.

The drill pipe was isolated by setting two Cast Iron Bridge Plugs (CIBPs) at approximately feet. The drill pipe was hung off in the middle pipe rams. A back-off of the drill pipe was made at the BOP stack. At this time another release of SBM occurred from the fluid that was in the drill pipe above the BOP stack. The estimated volume of this release was 43 bbls. The drill pipe that was above the BOP stack was pulled out of the hole. The riser was then displaced of remaining mud with seawater. After determining how much mud was in the riser initially, and comparing that to the volume recovered, the estimate of total 14.9 ppg SBM lost was estimated to be 862 bbls (53% base oil or 457 bbls of base oil).

The riser was then pulled, the Flex Joint was replaced, the LMRP was serviced and the riser package was re-run. The riser was then displaced back to mud. The drill pipe was screwed back in and the middle pipe rams were opened. The heavy-weight drill pipe was perforated above the CIBPs from . The well was circulated clean from this depth. The drill pipe and BHA were pulled out of the hole for replacement of the perforated joint of heavy-weight drill pipe and then normal operations resumed.

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

Cause of the leak was the failure of the threaded plug that was installed into the test port by the manufacturer of the Flex Joint after it was tested in the shop.

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

The tar in the fluid system could have created internal pressures in the flex joint that possible caused the threaded plug to fail.

20. LIST THE ADDITIONAL INFORMATION:

The Flex Joint is at Oil States shop in Arlington, Texas where it will be disassembled and inspected. Diamond Offshore Drilling, Inc. will have representation present during the process and will keep Hess and the MMS Houma District office informed of the results.

21. PROPERTY DAMAGED:
Riser flex joint was replaced.

NATURE OF DAMAGE:
Leaking test port.

ESTIMATED AMOUNT (TOTAL): **\$100,000**

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:
Due to the specific nature of this mechanical failure of the riser flex joint test plug, the Houma District has no recommendations to the Regional Office.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **NO**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

14-FEB-2007

26. ONSITE TEAM MEMBERS:
Jerry Freeman / John McCarroll /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:
Michael J. Saucier

APPROVED

DATE: **09-APR-2007**

POLLUTION ATTACHMENT

1. VOLUME: GAL 457 BBL
YARDS LONG X YARDS WIDE

APPEARANCE:

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

3. SOURCE OF HYDROCARBON RELEASED: **Flex Joint Riser**

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**