

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

1. OCCURRED

DATE: 14-JAN-2005 TIME: 0430 HOURS

2. OPERATOR: Shell Offshore Inc.

REPRESENTATIVE: Jim Enlow

TELEPHONE: (504) 728-8041

3. LEASE: G18537

AREA: AT LATITUDE:

BLOCK: 267 LONGITUDE:

4. PLATFORM:

RIG NAME T.O. DEEPWATER NAUTILUS

5. ACTIVITY: EXPLORATION (POE)

DEVELOPMENT/PRODUCTION
(DOCD/POD)

6. TYPE: FIRE

EXPLOSION

BLOWOUT

COLLISION

INJURY NO. _____

FATALITY NO. _____

POLLUTION

OTHER _____

7. OPERATION: PRODUCTION

DRILLING

WORKOVER

COMPLETION

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: 3341 FT.

10. DISTANCE FROM SHORE: 88 MI.

11. WIND DIRECTION: S

SPEED: 46 M.P.H.

12. CURRENT DIRECTION: E

SPEED: 1 M.P.H.

13. SEA STATE: 10 FT.

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

Jim Enlow

CITY: New Orleans

STATE: LA

TELEPHONE: (504) 728-8041

CONTRACTOR: Transocean Offshore

CONTRACTOR REPRESENTATIVE/
SUPERVISOR ON SITE AT TIME OF INCIDENT:

John Hamilton

CITY: Houston

STATE: TX

TELEPHONE: (713) 232-8451

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

Prior to the incident on Jan. 14, 2005 at 1:30 am, the rig drill crew was transferring Internal Olefin Base Oil (IOBO) from the work boat C Legend to Deepwater Nautilus. The (IOBO) was pumped to pits # 1, 2, & 3. After the transfer of the (IOBO) was completed the drill crew changed the alignment to pump (IOBO) to a column tank and started pumping the (IOBO) to the column tank. At 04:00 am the pump man checked the levels to pit # 1, 2, and 3. He discovered the # 2 pit to be almost empty. All transfer operations were shut down and the remaining 6" of (IOBO) in the # 2 pit was pumped to another pit to examine the dump valve in the bottom of the # 2 pit. After examining the pit, the dump valve was in the closed position and a lock-out tag was in place on the valve. After cleaning the pit and examination of the dump valve a 2.5' length of 3/8" diameter rope was found wrapped around the stem of the dump valve across the seat of the valve preventing the O-ring to seal off. This allowed 157 bbl's of (IOBO) to be discharged into gulf waters.

Prior to pumping operations the dump valve seal ring on # 2 pit was inspected, closed and locked-out. As a secondary precaution, gel mud packing was placed around the valve to prevent leaks.

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

A small piece of rope (2.5' length by 3/8" diameter) was lodged under the dump valve preventing a proper seal of the valve's o-ring, resulting in a leak path.

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

- a. Prior to pumping operations the pre-inspection of the valve was not properly preformed.
- b. There was a lack in valve inspection procedures to insure that the valve would close and seal properly.
- c. There was no post watch of the pits during (OIBO) pumping operations to insure that leakage would not occur.
- d. The gel mud packing used to seal the valve did not accomplish the task as it was intended.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Internal Olefin Base Oil
Lost Overboard

ESTIMATED AMOUNT (TOTAL): \$27,190

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The New Orleans District concurs with Shell's recommendations to prevent recurrence as follows:

1. Use Silicon sealant instead of "gel" as a secondary safeguard on dump valves. This will ensure that a more detail inspection is performed due to cleaning of valve required to make silicon adhere.
2. Test dump valve seals by partially filling tanks with water prior to bringing on drilling fluids.
3. Limit/discontinue use of rope in pits. Find alternate material if hose securing or volume measuring device in needed.
4. Post watch stander to visually monitor pits during and directly after transfer, until such time it is verified that there are no leaks.
5. Monitor all pits (not just the active) electronically with audible warning settings activated both at the rig floor and the mud logger building.
6. Communicate with Driller and Mud logger when transfer of fluid is complete to confirm that alarms are set.
7. Modify drilling fluid/ mud pit procedures to include all of above along with a laminated checklist to ensure compliance.

No Recommendations to MMS

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

E-100 (W) 30 CFR 250.300(a) Polluting offshore waters with 156 bbl SOBM

25. DATE OF ONSITE INVESTIGATION:

14-JAN-2005

26. ONSITE TEAM MEMBERS:

Perry Jennings / Randy Josey /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Troy Trosclair

APPROVED

DATE: 08-MAR-2005

