

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

1. OCCURRED
 DATE: **03-DEC-2008** TIME: **1930** HOURS

2. OPERATOR: **Mariner Energy, Inc.**
 REPRESENTATIVE: **Dinger, Blaine**
 TELEPHONE: **(713) 954-5588**
 CONTRACTOR: **Rowan Drilling**
 REPRESENTATIVE: **Fletcher, Thomas**
 TELEPHONE: **(713) 422-4807**

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

4. LEASE:
 AREA: **SM** LATITUDE: **28.2158**
 BLOCK: **149** LONGITUDE: **-92.1244778**

5. PLATFORM:
 RIG NAME: **ROWAN JP BUSSELL**

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: **234** FT.

10. DISTANCE FROM SHORE: **74** MI.

11. WIND DIRECTION: **SW**
 SPEED: **13** M.P.H.

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

13. SEA STATE: **5** FT.

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

On December 3, 2008, at approximately 1930 hours, on the Mariner Energy, Inc.'s Lease OCS-G 02592, South Marsh Island Block 149 Platform D, utilizing the Rowan JP Bussell Rig, approximately 33 barrels (BBLs) of Zinc Bromide (ZnBr₂) and approximately 37 BBLs of a weighted blend of Calcium Bromide (CaBr₂) and Calcium Chloride (CaCl₂) was released into the Gulf of Mexico (GOM), resulting from an upset condition during completion operations for Well D-1 (OCS-G 16325). At the time of the pollution incident, the rig crew was pulling drill pipe hanging from the well's storm packer. As the drill pipe was pulled, the wellbore volume was displaced with weighted completion fluid. While tripping drill pipe out of the hole the mud engineer reported to the Driller and Offshore Installation Manager (OIM) a loss of completion fluid from tank #4. Neither the Driller nor the OIM observed fluid loss since there was no increase in fluids entering the trip tank. Regardless, they decided to divert flow to tanks #1, #2, and #6 (work tank). Subsequent to diverting the flow, a continual loss of fluid occurred from tank #6 while the trip tank's level remained normal (no gain or loss). Upon investigation, it was discovered that the lost fluid was being delivered to the pre-load tank #39 (25 BBL capacity) and overboard into the GOM through an open dump valve #4. The pre-load tank was believed to be isolated from the completion fluids, but the tank's closed suction line's butterfly valve (new valve) #2 leaked. This allowed the completion fluids to enter the pre-load tank. From the pre-load tank, the 25 BBLs of fluid was recovered and the approximately 70 BBLs of ZnBr₂, CaBr₂, and CaCl₂ completion fluid blend was lost overboard.

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

The faulty (leaking) new butterfly valve #2, located on the suction line manifold, resulted in the undesired flow of completion fluid into the GOM through the open pre-load tank #39. It is unclear from the investigation what exactly caused the failure of valve #2. According to the OIM, the entire system is new, but this particular valve may have been damaged due to weathering and inactivity since installation.

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

The open pre-load tank suction valve #3 allowed unrestricted flow into the pre-load tank #39. Likewise, the open pre-load tank overflow valve #4 provided no means of protection from an undesired release into the GOM.

20. LIST THE ADDITIONAL INFORMATION:

MMS recommends the following:

* Upon installation of any new equipment or system, a pressure test should be performed to verify all leaks are eliminated and the appropriate equipment, such as the leaking valve #2, function tested.

* If this operation is conducted in the future using the same equipment configuration, close valves #3, #4, and #5, in conjunction with valve #2, in order to add another level of protection. Also, utilize a lockout/tagout program to prevent the undesired manipulation of the aforementioned valves.

21. PROPERTY DAMAGED:

No physical property damage

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The MMS Lafayette District office makes no recommendations to the MMS Regional Office of Safety Management (OSM).

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

No violations observed during onsite investigation or during records review process.

25. DATE OF ONSITE INVESTIGATION:

08-DEC-2008

26. ONSITE TEAM MEMBERS:

**Douglas Frerich / Raymond Johnson
/ Gerald Gonzales /**

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED

DATE: **27-JAN-2009**

INJURY/FATALITY/WITNESS ATTACHMENT

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 :

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 :

POLLUTION ATTACHMENT

1. VOLUME: GAL 70 BBL
YARDS LONG YARDS WIDE

APPEARANCE:

2. TYPE OF HYDROCARBON RELEASED: OIL
 DIESEL
 CONDENSATE
 HYDRAULIC
 NATURAL GAS
 OTHER ZnBr, CaBr and CaCl Blend

3. SOURCE OF HYDROCARBON RELEASED: **No hydrocarbons released**

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**