

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: 29-SEP-2010 TIME: 1845 HOURS

2. OPERATOR: Forest Oil Corporation

REPRESENTATIVE: Lopez, Barbara

TELEPHONE: (713) 358-8658

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

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

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

6. OPERATION:

4. LEASE: G17232

AREA: EB LATITUDE: 27.820654
BLOCK: 164 LONGITUDE: -94.356931

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

5. PLATFORM:
RIG NAME:

6. ACTIVITY: EXPLORATION (POE)
 DEVELOPMENT/PRODUCTION
(DOCD/POD)

8. CAUSE:

7. TYPE:
- HISTORIC INJURY
 - REQUIRED EVACUATION
 - LTA (1-3 days)
 - LTA (>3 days)
 - RW/JT (1-3 days)
 - RW/JT (>3 days)
 - Other Injury

- EQUIPMENT FAILURE
- HUMAN ERROR
- EXTERNAL DAMAGE
- SLIP/TRIP/FALL
- WEATHER RELATED
- LEAK
- UPSET H2O TREATING
- OVERBOARD DRILLING FLUID
- OTHER 9-5/8" x 13-3/8" annulus

- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

- LWC
- HISTORIC BLOWOUT
 - UNDERGROUND
 - SURFACE
 - DEVERTER
 - SURFACE EQUIPMENT FAILURE OR PROCEDURES

9. WATER DEPTH: 494 FT.
10. DISTANCE FROM SHORE: 96 MI.
11. WIND DIRECTION:
SPEED: M.P.H.
12. CURRENT DIRECTION:
SPEED: M.P.H.
13. SEA STATE: FT.

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

17. INVESTIGATION FINDINGS:

Mariner Energy Resources (Mariner) was on location to complete abandonment of the subject subsea well which was Temporarily Abandoned (TA'd) in 1997 without being completed or produced. On 29 September 2010 at 1845 hours, approximately 6 hours after the 9-5/8", 13-3/8" and 20" casings were cut 15 feet Below the Mud Line (BML), fluids were observed leaking from the two 3" low pressure ports on the 30" wellhead. A rainbow sheen was later observed and estimated to be just over a barrel, with the citing reported to the NRC, BOEMRE and the USCG at 2035 hours, 2046 hours and 2056 hours, respectively. O'Brian's, Clean Gulf Associates and oil spill Fast Response Units were immediately mobilized. The flow diminished daily until only slight bubbling was observed, when on 4 October 2010, Mariner installed a pollution dome over the well to collect any further leakage.

On 6 October 2010, Mariner initiated operations to secure the wellbore using dynamically positioned well intervention vessels. A cement retainer was set in the 13-3/8" casing and 30 barrels of cement were pumped below the cement retainer to isolate the 9-5/8" x 13-3/8" annulus; no bubbling or fluid leak was noted after the cement pumping operation. A cement stinger was then run and 47 feet of cement plug was set in the 13-3/8" x 20" annulus. A cement plug was then pumped in the 20" casing on top of the 13-3/8" casing stub with the Top of Cement (TOC) at 23 feet BML, with an additional five (5) barrels of cement pumped to bring the TOC to 12 feet BML. The 9-5/8" casing hanger, seal assembly and stub were cut and pulled using the well intervention vessel Ross Candies. On 11 October 2010, with no flow being observed, the vessels were released. Monitoring continued weekly until the 20" and 30" casings were cut 7 feet BML, the wellhead was recovered by the Q4000 and on 22 October 2010, final site clearance was completed.

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

When the 9-5/8" x 13-3/8" casing strings were cut, a small volume of gas and liquid hydrocarbons trapped in this annulus was released and migrated to the Gulf waters.

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

The primary casing cement operations performed during drilling were the only annuli barriers. Additional remedial annular plugs being set during the initial TA could have acted as additional barriers to prevent annular flow through possible cement channeling.

20. LIST THE ADDITIONAL INFORMATION:

The subject well was drilled by Forest Oil Corporation (Forest) in 1997, but with insufficient reserves Forest TA'd the well this same year. In December 2005, Forest sold all Gulf of Mexico (GOM) interest to Mariner, but Mariner indicated they had no knowledge of the East Breaks #1 and #2 wells due to the lease being expired when they assumed the GOM assets from Forest.

21. PROPERTY DAMAGED:

None

NATURE OF DAMAGE:

None

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The Lake Jackson has no recommendations to prevent recurrence.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

E-100 issued for failure of operator to prevent pollution into offshore waters.

25. DATE OF ONSITE INVESTIGATION:

09-SEP-2010

26. ONSITE TEAM MEMBERS:

Bobby Carrillo /

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

John McCarroll

YES

APPROVED

DATE: **25-MAR-2011**

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 :

POLLUTION ATTACHMENT

1. VOLUME: GAL 6.5 BBL
YARDS LONG X YARDS WIDE

APPEARANCE: **SILVERY SHEEN**

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

3. SOURCE OF HYDROCARBON RELEASED: **Leaking TA Well**

4. WERE SAMPLES TAKEN? **NO**

5. WAS CLEANUP EQUIPMENT ACTIVATED? **YES**

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

6. ESTIMATED RECOVERY: 5 GAL BBL

7. RESPONSE TIME: 5 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**

