

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

1. OCCURRED

DATE: **06-MAY-2008** TIME: **2230** HOURS

2. OPERATOR:

**Mariner Energy, Inc.**  
 REPRESENTATIVE: **Martino, Angie**  
 TELEPHONE: **(713) 954-3804**  
 CONTRACTOR: **Pride Offshore**  
 REPRESENTATIVE: **Smith, Larry**  
 TELEPHONE: **(713) 361-4326**

- 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:

**G02319**

AREA: **EI** LATITUDE: **28.18437158**  
 BLOCK: **342** LONGITUDE: **-91.50669244**

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

5. PLATFORM:

**C**

RIG NAME: **BLAKE INTERNATIONAL**

6. ACTIVITY:

- EXPLORATION(POE)
- DEVELOPMENT/PRODUCTION (DOC/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
- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

- EQUIPMENT FAILURE
- HUMAN ERROR
- EXTERNAL DAMAGE
- SLIP/TRIP/FALL
- WEATHER RELATED
- LEAK
- UPSET H2O TREATING
- OVERBOARD DRILLING FLUID
- OTHER Unknown Shallow Gas Zone

- LWC  HISTORIC BLOWOUT
- UNDERGROUND
  - SURFACE
  - DEVERTER
  - SURFACE EQUIPMENT FAILURE OR PROCEDURES
- COLLISION  HISTORIC  >\$25K  <=\$25K

9. WATER DEPTH: **287** FT.
10. DISTANCE FROM SHORE: **90** MI.
11. WIND DIRECTION: **SSE**  
 SPEED: **18** M.P.H.
12. CURRENT DIRECTION: **NNW**  
 SPEED: **1** M.P.H.
13. SEA STATE: **5** FT.

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

On May 6, 2008 at 2230 hours, while drilling a 17-1/2 inch hole at 1679 feet with 9.1 ppg gel mud, the Derrick Man (DM) called out over the loud speaker system for the Driller to open the diverter valves due to the influx of gumbo (soil that becomes sticky and nonporous when wet). The Driller instructed the Assistant Driller (AD) to open the diverter valves. The diverter valves were opened for approximately 5 seconds and then closed. After closing the diverter valves, the Driller looked in the bell nipple to discover that drilling mud had already backed up to the flow line. The Driller notified the Toolpusher (TP) that the well appeared to be flowing. The TP and Company Man (CM) immediately went to the rig floor and verified that the well was flowing. The TP then diverted the well through the north and west diverter lines. The TP sounded the alarms and shut-in production operations on the platform. The TP instructed the DM to have all seawater available at the mud pits. After about 30 seconds of diverting, gas reached the surface. Approximately 100 bbls of 9.1 ppg gel mud was pumped, and a decision was then made to switch the active system to 8.6 ppg seawater pumping at 21 bbls per minute. Returns from the diverter lines ceased after pumping 125 bbls of seawater. The Crane Operator (CO) called and notified the M/V Irene B of the situation, and informed them of plans to evacuate the platform. The TP went below the rig floor to check for breaching or gas coming up around the platform, but there were no signs of breaching. Roll call was taken and the CO began to backload 34 non-essential personnel onto the boat, with 19 personnel remaining on the platform. After pumping 1800 bbls of seawater, returns were observed coming from the 26 inch x 18-5/8 inch annulus. The pumps were shut down and flow was monitored at wellhead. A slight flow was observed for 10 minutes before the flow stopped. The rig pumped an additional 200 bbls of 12.5 ppg mud, with no returns observed from the well or the 26 inch x 18-5/8 inch annulus. Due to the sea state, the M/V Irene B brought the 34 personnel back to the rig on May 7, 2008 at 0500 hours. After daylight, an additional 25 bbls of 12.5 ppg mud was pumped down the drill pipe. A TIW valve was installed in the drill string, and the well was monitored until Schlumberger's arrival to conduct a noise and temperature log survey.

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

The probable cause of the incident is Mariner drilling into an unknown shallow gas zone.

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

Drilled the 13-3/8 inch surface casing hole section with a 17-1/2 inch bit and a mud weight of 9.1 ppg gel mud, allowed too large a gas influx into the well bore while imposing additional hydrostatic pressure on the 18-5/8 inch conductor shoe.

20. LIST THE ADDITIONAL INFORMATION:

After receiving approval to cement the open hole section below the 18-5/8 inch conductor casing, Mariner submitted an Application to Bypass the well bore which included drilling a 12-1/4 inch pilot hole section with 9.5 ppg mud to the surface casing point (Original hole was drilled with a 17-1/2 inch bit and 9.1 ppg mud). Once reaching the surface casing point and circulating bottoms up, a 17-1/2 inch hole opener would be run, and the hole conditioned to run the 13-3/8 inch casing. Additionally, in Mariner's submitted Application to Bypass, the Directional Plan for Well C-17 was revised to avoid the area of concern. The Application to Bypass was approved, the well successfully drilled, and 13-3/8 inch

casing was run and cemented.

21. PROPERTY DAMAGED:

**None**

NATURE OF DAMAGE:

**NA**

ESTIMATED AMOUNT (TOTAL):

**\$**

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

**The Lafayette District has no recommendations to the regional office.**

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

**NA**

25. DATE OF ONSITE INVESTIGATION:

**07-MAY-2008**

26. ONSITE TEAM MEMBERS:

**Marty Rinaudo / Johnny Serrette /**

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**Elliott S. Smith**

APPROVED

DATE: **19-AUG-2008**

# BLOWOUT ATTACHMENT

1. WELL NAME: **C017** WELL NO.: **177104162500** LEASE: **G02319**
2. OPERATION:  DRILLING  COMPLETION  
 WORKOVER  PRODUCTION
3. SIMULTANEOUS OPERATIONS IN PROGRESS? **YES**
4. FLUID TYPE: **WATER BASE MUD** WEIGHT: **9.1** PPG
5. BOP STACK CONFIGURATION: SIZE: IN  
PRESS RATING: PSI
6. BOP STACK - LAST TEST DATE PRIOR TO INCIDENT: PRESSURE: PSI
7. LAST CASING STRING SET: FT SIZE: IN
8. SIZE OF DRILLING/WORKOVER STRING IN HOLE: **5** IN
9. KICK SIZE: BBLs
10. FLUID KILL WEIGHT: **12.5** PPG
11. INITIAL S.I.C.P.: PSI
12. S.I.D.P./W.S.P.: PSI
13. PRIOR HOLE PROBLEMS? **NO**
14. WELL CONTROL EQUIPMENT INITIALLY ACTIVATED:
- |                                     |  |
|-------------------------------------|--|
| <input type="checkbox"/> ANNULAR BO | <input type="checkbox"/> SCSSV                                   |
| <input type="checkbox"/> PIPE       | <input type="checkbox"/> SSV                                     |
| <input type="checkbox"/> BLIND      | <input checked="" type="checkbox"/> OTHER <u>Diverter System</u> |
| <input type="checkbox"/> BLIND SHEA |  |
15. EVACUATION: **YES**

- 
- |   |   |
|---|---|
| 16. DIVERTER SYSTEM VALVE SIZE: <b>10.25</b><br>LINE SIZE: <b>10</b><br><input type="checkbox"/> SINGLE SPOOL<br><input checked="" type="checkbox"/> DUAL SPOOL | 21. SSSV TYPE:<br><br>DATE LAST TESTED:                                       |
| 17. WAS WELL DIVERTED? <b>YES</b>   | 22. TREE: ON <input type="checkbox"/> OFF <input checked="" type="checkbox"/> |
| 18. BOTTOM HOLE ASSEMBLY:<br><b>Steerable BHA</b>   | 23. SURFACE SAFETY<br>EQUIPMENT IN SERVICE? <b>NO</b>                         |
| 19. DRILLING DEPTH: TVD MD  | 24. WELL TD: TVD MD   |
| 20. DATE LAST FORMATION INTEGRITY TEST:   | 25. OPEN PERF?  |