

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

# ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **01-MAY-2011** TIME: **1100** HOURS

2. OPERATOR: **Merit Energy Company, LLC**  
REPRESENTATIVE: **Signe, Lloyd**  
TELEPHONE: **(337) 262-8192**  
CONTRACTOR:  
REPRESENTATIVE: **Moneaux, Jared**  
TELEPHONE: **(337) 892-3346**

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING DEVICE
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER **Fire from Condensate Release**

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

6. OPERATION:

4. LEASE: **G04453**  
AREA: **EI** LATITUDE:  
BLOCK: **240** LONGITUDE:

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

5. PLATFORM: **A**  
RIG NAME:

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

8. CAUSE:

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

- EQUIPMENT FAILURE
- HUMAN ERROR
- EXTERNAL DAMAGE
- SLIP/TRIP/FALL
- WEATHER RELATED
- LEAK
- UPSET H2O TREATING
- OVERBOARD DRILLING FLUID
- OTHER \_\_\_\_\_

- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

LWC  HISTORIC BLOWOUT  
 UNDERGROUND  
 SURFACE  
 DEVERTER  
 SURFACE EQUIPMENT FAILURE OR PROCEDURES

9. WATER DEPTH: **139** FT.

10. DISTANCE FROM SHORE: **42** 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:

On 01 May 2011 at approximately 1100 hours, a contract rigger (CR) received first degree burns on his face, arms, and wrist due to a fire igniting when a plumber's plug released from a 2-inch line, causing condensate to ignite during welding operations. The CR was assisting the welder in installing a new section of 2-inch piping and flange connection. The fuel gas scrubber, compressor suction scrubbers, and the water coalescer that dumped hydrocarbons to the condensate return tank (MBJ 1802) were still connected and flowing at the time of the incident. The vessels were isolated from the condensate return tank by the closing of a manual block valve. The condensate return tank (MBJ 1802) and incoming pumps were placed out-of-service and bled down free of all pressure and fluids prior to welding operations. The block valves were not locked or flagged to indicate which block valves were in the closed position. A plumber's plug was installed in the 2-inch piping which was located directly over the welding operations. The welder and the CR were conducting welding operations on and above the pipe rack and cable tray located 13.5 feet from the deck.

Fire resistant tarps were used to cover the pipe rack, cable tray, and a pipeline located 5 feet from welding operations. During welding operations, pressure and condensate accumulated upstream of the plumber's plug from a leaking block valve, causing the plug to eject from the 2-inch line. Condensate came in contact with the welding operations, igniting a flash fire that caused first degree burns to the CR's right wrist, arms, and face. The CR was flown to Abbeville General Hospital where he was treated for his injuries.

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

By allowing the facility to stay online and only isolating the piping with a block valve, hydrocarbons were allowed to accumulate in the 2-inch piping upstream of the plumber's plug. A needle valve located near the condensate return tank (MBJ 1802) and upstream of the plumber's plug could have been utilized to prevent any pressure accumulation.

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

Prior to installing the plumber's plug, personnel failed to adequately assess the area for all possible hazards as per Merit Energy Company, LLC policies as follows:

- \*Welding and Burning Procedure - Welding and burning operations shall not be conducted on an OCS platform or structure until the "Welding and Burning Safety Checklist" specified in the Welding and Burning Safe Practices and Procedures Plan is completed.
- \*Checklist of Operations Procedures Simultaneous Production and Major Construction Operations - The wellhead master valve shall be closed, and the process train depressured anytime burning and/or welding is performed in the immediate vicinity of the wellhead(s) and/or pressured equipment or piping.
- \*Lock Out/Tag Out Plan was not utilized.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

**None**

NATURE OF DAMAGE:

**N/A**

ESTIMATED AMOUNT (TOTAL):

**\$**

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

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

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

**INC G-110 is issued to document that Merit Energy Company, LLC did not perform all operations in a safe and workmanlike manner. During welding operations, a contract welder was burned due to a plumber's plug being blown out of the pipe. Procedures were not addressed to prevent the accumulation of pressure or hydrocarbons. The Lock Out/Tag Out Procedure was not properly followed.**

25. DATE OF ONSITE INVESTIGATION:

**02-MAY-2011**

26. ONSITE TEAM MEMBERS:

**Tom Basey / Robert Ranney / Wade Guillotte /**

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**Elliott S. Smith**

APPROVED

DATE: **16-JUN-2011**

# FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: **Welding operations**

2. TYPE OF FUEL:
- GAS
  - OIL
  - DIESEL
  - CONDENSATE
  - HYDRAULIC
  - OTHER

3. FUEL SOURCE: **Leaking valve from condensate tank**

4. WERE PRECAUTIONS OR ACTIONS TAKEN TO ISOLATE  
KNOWN SOURCES OF IGNITION PRIOR TO THE ACCIDENT ? **YES**

5. TYPE OF FIREFIGHTING EQUIPMENT UTILIZED:
- HANDHELD
  - WHEELED UNIT
  - FIXED CHEMICAL
  - FIXED WATER
  - NONE
  - OTHER

