

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

**ACCIDENT INVESTIGATION REPORT**

1. OCCURRED

DATE: **04-AUG-2009** TIME: **1130** HOURS

2. OPERATOR: **Cobalt International Energy, L.P.**

REPRESENTATIVE: **Rachal, Erin**

TELEPHONE: **(281) 578-3388**

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

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

4. LEASE: **G32536**

AREA: **GC** LATITUDE: **27.115**  
BLOCK: **858** LONGITUDE: **-90.846667**

5. PLATFORM:

RIG NAME: **GSF DEVELOPMENT DRILLER I**

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 Unexpected Gas Break-out

9. WATER DEPTH: **5641** FT.

10. DISTANCE FROM SHORE: **110** MI.

11. WIND DIRECTION: **ESE**  
SPEED: **6** M.P.H.

12. CURRENT DIRECTION: **ESE**  
SPEED: **1** M.P.H.

13. SEA STATE: **1** FT.

17. INVESTIGATION FINDINGS:

While drilling the 21 inch hole section with a mud weight of 9.0 ppg, a kick was taken at xxxx and the well was shut-in on the annular preventer. The well was then killed with 10.1 ppg Kill Weight Mud (KWM) with the drill string becoming stuck, worked free by jarring, then stripped up to xxxx ft where the well was Circulated and Conditioned (C&C) with the KWM. The drill string was stripped in the hole to xxxx, xxxx, xxxx and xxxx ft with the well C&C using the KWM at each depth. Cuttings where encounterd, the mud weight increased to 10.3 ppg and the annular preventer opened with the well determined to be static. The drill string was pulled into the 22 inch Conductor Casing shoe at xxxx feet while the well was C&C. The drill string was then run to xxxx ft where the well was checked for flow and found to be static, then to xxxx ft where the hole was C&C before being washed and reamed to xxxx ft. When the fill from bottoms-up was approximately xxxx ft from surface, gas started to rapidly break out of the mud, the diverter was closed and returns were routed to the riser mud degasser. The surge from the gas breaking out of the mud pushed the mud up and out the mud degasser's vent line. The riser volume dropped approximately 68 feet (decrease of 180 barrels or 37 psi), with no additional open hole influx observed. The drill sting assembly consisted of an 18-1/8 inch bit with a 21 inch underreamer, with the underreamer located 95 ft above the bit. The well was killed through the underreamer since the bit was stuck in the hole, but once the drill string was unstuck all subsequent C&C of the hole occurred through both the bit and underreamer. Subsequent to tallying the mud volume, approximately 5 barrels could not be accounted for and was believed to be lost overboard.

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

Gas break-out is believed to have been occurred from the bottom 13 feet of hole fill when the well was C&C at approximately xxxx feet, even though the well bore was C&C multiple times with the well determined to be static.

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

Mud paramaters insufficient to control the gas influx.

20. LIST THE ADDITIONAL INFORMATION:

The mud contained 62% base oil for approximately 3.1 bbls of pollutant material.

21. PROPERTY DAMAGED:

None.

NATURE OF DAMAGE:

None.

ESTIMATED AMOUNT (TOTAL):

\$

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

Due to the nature of this event, the Houma District has not recommendations to the GOMR Office.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

26. ONSITE TEAM MEMBERS:

**Ben Coco /**

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**Bryan A. Domangue**

APPROVED

DATE: **21-OCT-2009**

# POLLUTION ATTACHMENT

1. VOLUME: GAL 5 BBL  
YARDS LONG X YARDS WIDE

APPEARANCE: **RAINBOW SHEEN**

2. TYPE OF HYDROCARBON RELEASED:  OIL  
 DIESEL  
 CONDENSATE  
 HYDRAULIC  
 NATURAL GAS  
 OTHER synthetic based mud

3. SOURCE OF HYDROCARBON RELEASED: **Mud-Gas Seperator Vent Line**

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**