

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED

DATE: **20-DEC-2013** TIME: **0300** HOURS

2. OPERATOR: **Walter Oil & Gas Corporation**
REPRESENTATIVE:
TELEPHONE:
CONTRACTOR:
REPRESENTATIVE:
TELEPHONE:

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

4. LEASE: **G32224**
AREA: **ST** LATITUDE:
BLOCK: **285** LONGITUDE:

5. PLATFORM:
RIG NAME: **ROWAN GORILLA IV**

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: **375** FT.

10. DISTANCE FROM SHORE: **58** MI.

11. WIND DIRECTION: **E**
SPEED: **1** M.P.H.

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

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

17. INVESTIGATION FINDINGS: -

On December 20, 2013 the drill crew of the Rowan Gorilla IV encountered a shallow gas pocket while drilling with their diverter. The rig was forced to use their diverter system after a loss of well control, causing approximately 400 barrels of water-based mud to be discharged from the well into the Gulf of Mexico.

Rowan was conducting drilling operations on the 001 well for Walter Oil and Gas and was located at South Timbalier Block 285. The incident occurred while the drill crew was drilling the 22 inch hole section in preparation to set the 18 inch surface liner. The crew had successfully set and cemented the 22 inch conductor casing at 1,809 feet. After the diverter system had been installed and all of the required testing had been completed, the drill crew was prepared to begin drilling the next section of the well.

On December 18, 2013 the rig drilled out of the 22 inch casing shoe, located at 1,850 feet, and performed a successful formation integrity test (FIT) to achieve an 11.7ppg equivalent mud weight (EMW). The following day, December 19, 2013, the crew continued drilling new formation with a 9.7ppg mud weight and began fighting high volumes of cuttings coming from the well and sticking to the shaker screens. The crew drilled to a depth of 2,009 feet having to adjust pump rates and change shaker screens several times as a result of the cuttings. The drill crew continued moving forward taking surveys and pumping 50 barrel sweeps at every connection.

On December 20, 2013 the crew continued drilling ahead while getting full returns with a high volume of cuttings. At a depth of approximately 2,043 feet, the rig was getting back about 130 units of gas causing the mud weight to be cut from 9.7ppg to 9.6ppg. The decision was made to increase the weight of the mud to 9.9ppg and continue drilling. At a depth of about 2,234 feet, the crew noticed a small flow from the well as they were getting ready to make up another connection. The mud weight was increased again from a 9.9ppg to a 10.1ppg and the well stopped flowing. The crew continued to drill for another couple of hours until they reached about 2,293 feet. It was noted in the reports from the facility that during this time they were getting back about 170 units of gas and the mud was being cut from a 10.1ppg to a 9.5ppg. It was at this time, at approximately 2,293 feet, that a 10 percent increase in flow was observed and the well was determined to be flowing.

The diverter was shut in and 200 barrels of water-based mud was circulated out of the port side diverter line while the mud weight was being increased in the pits to 10.5ppg. After circulating, the pumps were stopped and the well checked for flow. The well was still flowing and another 200 barrels of mud had to be circulated through the diverter while the mud weight was once again increased to a 10.6ppg. The annular was opened and the diverter line was closed while the crew continued weighting up the mud and circulating it down the well. The crew continued the process several times in an attempt to stop minor increases in the trip tank and small amounts of gas breakout. On December 23, 2013, with an 11.8ppg mud weight, the well was finally static and fully under control. As a result of the incident, the 18 inch liner was set shallow at a depth of 2,300 feet. The original permitted depth of the 18 inch liner was 3,400 feet

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

The rig encountered a shallow gas pocket while drilling without having a heavy enough mud weight in the well.

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

20. LIST THE ADDITIONAL INFORMATION:

The approved permit for the 001 well cautioned Walter on possible shallow gas as per BSEE geological surveys. The possibility of shallow gas was discussed during Walter's Spud Meeting which took place on Dec. 1, 2013.

21. PROPERTY DAMAGED:

N/A

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Houma District has no recommendations at this time.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

N/A

25. DATE OF ONSITE INVESTIGATION:

24-DEC-2013

26. ONSITE TEAM MEMBERS:

James Richard /

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE:

16-JUN-2014