

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: **15-MAY-2013** TIME: **0240** HOURS

2. OPERATOR: **Anadarko Petroleum Corporation**

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: **Blake Drilling and Workover Com**

REPRESENTATIVE:

TELEPHONE:

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

4. LEASE: **G18402**

AREA: **GC** LATITUDE:

BLOCK: **608** LONGITUDE:

5. PLATFORM: **A (TLP MARCO POL**

RIG NAME: **BLAKE 1007**

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 **Traveling Block/ Top Drive**
- 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: **4300** FT.

10. DISTANCE FROM SHORE: **144** MI.

11. WIND DIRECTION:  
SPEED: M.P.H.

12. CURRENT DIRECTION:  
SPEED: M.P.H.

13. SEA STATE: FT.

17. INVESTIGATION FINDINGS:

On 15 May 2013, an incident occurred at GC. 608 on the Blake 1007 while under contract with Anadarko Petroleum Corporation. The drill crew was in the process of pulling drill pipe out of the hole when the Driller lost all brake functionality of the top drive system. The loss of brakes caused the drill line to come unspooled and allowed the top drive to fall to the drill floor.

At the time of the incident the drill crew had just pulled and racked back a joint of drill pipe and was in the process of slacking off on the top drive to latch onto another joint of pipe. As the Driller tried to apply the brake to stop the traveling assembly, the brake handle went to the drill floor and the brakes were rendered useless. The Driller yelled out to the rest of the drill crew that he had lost brakes and told everyone to get out of the way. The drill line snapped and came out of the fast line sheave at the crown of the derrick and the cable fell to the rig floor. The top drive and traveling block came to rest on the rig floor and stayed in the vertical position.

After an investigation of the incident, it was found that the loss of brakes on the top drive was due to a 'Brake Band Pin' backing out of position. The pin is designed to hold the brake bands in place which are essential to the operation of the brakes. The Brake Band Pin was able to move out of position after the cotter pin that holds it in place was sheared off. The operator stated that the cotter pin in use at the time was a 3/16 inch pin. According to the manufacturer's drawings, it should have been a 1/4 inch cotter pin in use to hold the brake band pin in place. The operator's report also stated that the 3/16 inch cotter pin installed at the time of the incident had been reused. There were no personnel injured and no pollution as a result of the incident.

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

The operator failed to install the proper size safety cotter pin into the brake band pin as per manufacturer's instructions.

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

In addition to using the wrong size cotter pin, the operators report stated: "The 3/16 cotter pins that were in the brake band pins had been re-used." If this is the case, the cotter pin that was used could have already been worn out, increasing the chances of a failure.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

Damage to the drill line, the drill spool, and brakes.

NATURE OF DAMAGE:

Most of the sustained damage was due to the drill line breaking and coming unspooled.

ESTIMATED AMOUNT (TOTAL): \$104,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

BSEE has no recommendations at this time.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

A G-111 was issued after the incident that states:

"On May 15, 2013, the brakes for the draw works on the Blake 1007 failed, causing the top drive and the traveling block to fall to the rig floor. The cause of the accident was due to a safety cotter pin that broke off, allowing the Brake Band Pin to move out of place. An investigation of the incident showed that the wrong size safety cotter pin had been installed in the Brake Band Pin. The manufacture's drawings call for a 1/4 inch cotter pin and the operator was using a 3/16 inch cotter pin."

25. DATE OF ONSITE INVESTIGATION:

17-MAY-2013

26. ONSITE TEAM MEMBERS:

Jeramie Liner / Josh Ladner / James Richard /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE: 04-NOV-2013