

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: **14-FEB-2015** TIME: **2330** HOURS

2. OPERATOR: **Petrobras America Inc.**

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: **Vantage Drilling -**

REPRESENTATIVE:

TELEPHONE:

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

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

6. OPERATION:

4. LEASE: **G16997**

AREA: **WR** LATITUDE:

BLOCK: **469** LONGITUDE: -

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

5. PLATFORM:

RIG NAME: **VANTAGE TITANIUM EXPLORER**

6. ACTIVITY:

- EXPLORATION (POE)
- DEVELOPMENT/PRODUCTION (DOCD/POD)

8. CAUSE:

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

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

9. WATER DEPTH: **8835** FT.

10. DISTANCE FROM SHORE: **170** MI.

11. WIND DIRECTION: **N -**  
SPEED: **1** M.P.H.

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

13. SEA STATE: **3** FT.

COLLISION  HISTORIC  >\$25K  <=\$25K

On February 14, 2015, an actuator plate from the rigs Inside Blow-Out Preventer (IBOP), located on the rig's top drive, fell approximately 140 feet to the rig floor.

At the time of the incident, the rig was in the process of drilling a well for Petrobras America and located in Walker Ridge block 469. The rig crew had drilled out of the 16 inch casing shoe and just finished making a connection when the bolts of an IBOP actuator plate were sheared, allowing it to fall to the rig floor. All operations on the rig floor were put on hold so that the drill crew could perform an inspection of the top drive and determine what had caused the incident to occur. Following their inspection, the drill crew noted that the actuator plate appeared to be coming into contact with the actuator arm during rotation of the drill pipe. The Driller pulled the Bottom Hole Assembly (BHA) into the 16 inch casing shoe and secured the drill pipe with a drill string safety valve. The actuator plate and bolts were replaced, and the IBOP actuator plates and lever arms were painted white to monitor for further contact during drilling operations. As the crew continued to monitor the equipment closely, it was observed that contact between the actuator plates and the lever arms was still occurring. Drilling operations were suspended once again until MHWirth/Aker, the manufacturer of the equipment, could determine the proper corrective actions to eliminate the problem.

MHWirth/Aker sent their technical advisors offshore to the facility to evaluate the cause of the bolts shearing off of the actuator plates. After inspection, the technical advisors stated that the tolerances between the actuator plates and the lever arms were too tight, allowing the plates and arms to come into contact with each other while drilling or rotating the drill pipe. The large amount of force caused by this contact was enough to shear the bolts and allow the plate to fall.

MHWirth/Aker's recommended action to correct this issue was to machine grind the areas which were at risk of impact on the plates and the lever arms. Once these modifications were done to MHWirth/Aker's satisfaction, a new Certificate of Compliance was issued to the operator stating that the equipment was fit for service.

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

The tight tolerances between the actuator plates and lever arms were allowing impact to occur during drilling operations.

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

N/A

20. LIST THE ADDITIONAL INFORMATION:

Further investigation revealed this to be a problem with all like equipment by MHWirth, and BSEE notified all rigs which had the same equipment and had them make the appropriate corrections.

**N/A**

**N/A**

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

**The Houma District has no recommendations for BSEE Region 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:

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

26. ONSITE TEAM MEMBERS:

**James Richard /**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**Bryan Domangue**

APPROVED

DATE: **03-APR-2015**