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-JAN-2013** TIME: **0200** HOURS

2. OPERATOR: **Petrobras America Inc.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR:
   REPRESENTATIVE:
   TELEPHONE:

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

4. LEASE: **G16987**
   AREA: **WR** LATITUDE:
   BLOCK: **425** LONGITUDE:

5. PLATFORM:
   RIG NAME: **VANTAGE TITANIUM EXPLORER**

6. ACTIVITY:
- [ ] EXPLORATION(POE)
- [X] DEVELOPMENT/PRODUCTION (DOCD/POD)

7. TYPE:
- [ ] HISTORIC INJURY
- [X] REQUIRED EVACUATION 1
- [ ] LTA (1-3 days)
- [X] LTA (>3 days 1
- [ ] 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
- [X] OTHER Multiple Bodily Injuries

X Multiple Bodily Injuries

6. OPERATION:
- [ ] PRODUCTION
- [X] 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: **8843** FT.

10. DISTANCE FROM SHORE: MI.

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

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

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

17. INVESTIGATION FINDINGS:-

On January 15, 2013, while performing work on the Vantage Titanium Explorer, an employee was struck on the left leg by a high pressure hydraulic hose and in the upper left body and chest area by hydraulic fluid under pressure. After being struck by the hydraulic hose and fluid, the employee was thrown against the rig's Spider and Gimbal Assembly located behind him and then onto the deck.

At the time of the accident, the rig crew was in the process of hooking up the Spider and Gimbal in preparation to pull the Blowout Preventers (BOPs) off bottom. No Risk Assessment or Job Safety Analysis (JSA) was performed prior to starting this portion of the job. The drill crew on tour at the time of the accident had just come back on tour after only being off for 6 hours due to a 'short change' taking place. A short change is a method used to arrange personnel for crew change purposes. The crew then began preparing to pull the BOP stack in order to inspect a suspect leak in the ring gasket located between the BOPs and the wellhead. The Assistant Driller instructed the Floorman, Injured Person (IP), to connect the hydraulic hoses leading from the Spider to the Hydraulic Manifold. It was observed at this time that the high pressure connection fittings that usually remain on the manifold had been removed. After inquiring as to why the fittings had been removed, it was found that they were removed due to the fittings protruding into the walkway between the Driller's Cabin and the Rotary Table, causing a hazard to the employees as they passed through that area. The drill crew contacted both the Subsea and Mechanical Department to see about getting some new fittings to install on the manifold. While the Mechanical Department was trying to locate the proper fittings, the crew found that there were several similar fittings located on one of the workbenches on the drill floor. Unaware that the fittings on the workbench were actually for the high pressure wash-down unit, the drill crew proceeded to make up the connections to the hydraulic hose. Crew members failed to notice that the fittings used did not have the same type of threads on them as the hydraulic hose they were connecting them to. When the Chief Mechanic arrived to the rig floor, the fittings had already been made up and no one double checked the connections to ensure that the proper fittings had been used to replace the ones that were missing. Everything was thought to be fine and the drill crew proceeded to connect the hoses from the manifold to the Spider. Once the hoses were in place, the IP began trying to open the hydraulic pressure valve in order to send supply fluid to the equipment. After some difficulty with opening the valve, the IP positioned himself in front of the manifold to get a better grip and began pulling the valve handle with both hands as he tried to get it open. By placing himself directly in front of the connections and hose, the IP put himself in a dangerous position. When the valve finally opened and hydraulic pressure entered the hose, the threads on the fitting failed and the employee was struck by the hydraulic hose and fluid. The force of the blow threw the IP approximately 4-5 feet into the Spider behind him.

The on-site Medic was mobilized immediately after the accident to attend to the IP. He was taken to the on-site medical clinic and the Medevac Helicopter was phoned in at around 02:21 hours. Medevac arrived on location and transported the IP to Terrebonne General Hospital in Houma, Louisiana. The IP was later transferred to Oschner Hospital in New Orleans, Louisiana for further treatment and evaluation. The IP was released from the hospital on January 25, 2013 with a full recovery expected.

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

Drill Crew installed an incorrect type of high pressure fittings onto the Hydraulic Manifold which allowed the hydraulic hose to blow off once pressure was applied.

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

1) Neither a Risk Assessment nor a JSA were done prior to starting the job. This would have identified the hazards to be encountered when dealing with high pressure.

2) Poor House Keeping: The practice of leaving several different types of high pressure fittings lying around the drill floor led to confusion and contributed in the use of the incorrect fittings.

3) Fatigue may have been a contributing factor to the accident. The accident occurred after a short change had taken place between crews. The crew on tour at the time of the accident had just starting working a 12 hour shift after only 6 hours off. The IP had gotten off tour at 18:00 and came back on tour at 24:00.

20. LIST THE ADDITIONAL INFORMATION:

The extent of the IP's injuries according to the operator:

-Bruised Kidney-
-Bruised Spleen-
-Fractures to both his tibia and fibula-
-Bruising and fracturing to his ribs-
-Stains on his body where he was struck by the hydraulic fluid-

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: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

A G-110 was issued as follows: On January 15, 2013, at approximately 02:00 hours an employee was injured after being struck on his left leg by a high pressure hydraulic hose and in the upper body and chest area by hydraulic fluid. The accident occurred due to the use of an incorrect fitting installed on the supply line of the Hydraulic Manifold. Once pressure was applied to the hose the connection failed and the hose was blown free, striking the Floorman and throwing him back against the Spider on the rig floor.

25. DATE OF ONSITE INVESTIGATION:

15-JAN-2013

26. ONSITE TEAM MEMBERS:-

29. ACCIDENT INVESTIGATION PANEL FORMED: **NO**

James Richard / Troy Boudreaux / Jeramie Liner /

OCS REPORT: -

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED DATE: **10-JUL-2013**

INJURY/FATALITY/WITNESS ATTACHMENT

☐	OPERATOR REPRESENTATIVE	☒	INJURY
☒	CONTRACTOR REPRESENTATIVE	☐	FATALITY
☐	OTHER _____	☐	WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE: