## 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:  | STRUCTURAL DAMAGE                |
|    | 08-JAN-2015 TIME: 2040 HOURS   | CRANE                            |
|    |  | OTHER LIFTING DEVICE             |
| 2. | OPERATOR: BP Exploration & Production Inc.                                 | DAMAGED/DISABLED SAFETY SYS.     |
|    | REPRESENTATIVE:  | INCIDENT >\$25K                  |
|    | TELEPHONE:   | H2S/15MIN./20PPM                 |
|    | CONTRACTOR: TRANSOCEAN OIL INC   | REQUIRED MUSTER                  |
|    | REPRESENTATIVE:  | SHUTDOWN FROM GAS RELEASE        |
|    | TELEPHONE:   | OTHER                            |
|    |  |                                  |
| 3. | OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT: | 6. OPERATION:                    |
|    |  | ☐ PRODUCTION                     |
|    |  | DRILLING                         |
| 4. | LEASE: <b>G15607</b>   | WORKOVER                         |
|    | AREA: GC LATITUDE:   | X COMPLETION                     |
|    | BLOCK: 743 LONGITUDE: -  | HELICOPTER                       |
|    |  | MOTOR VESSEL                     |
| 5. | PLATFORM:  | PIPELINE SEGMENT NO.             |
|    | RIG NAME: T.O. DEVELOPMENT DRILLER III                                     | OTHER                            |
| 6. | ACTIVITY: EXPLORATION (POE)  | 8. CAUSE:                        |
|    | X DEVELOPMENT/PRODUCTION   | П                                |
|    | (DOCD/POD)   | EQUIPMENT FAILURE  X HUMAN ERROR |
| 7. | TYPE:  | EXTERNAL DAMAGE -                |
|    | HISTORIC INJURY-   | SLIP/TRIP/FALL-                  |
|    | X REQUIRED EVACUATION 1-   | WEATHER RELATED                  |
|    | LTA (1-3 days)   | LEAK                             |
|    | x LTA (>3 days 1   | UPSET H2O TREATING               |
|    | RW/JT (1-3 days)   | OVERBOARD DRILLING FLUID         |
|    | RW/JT (>3 days)  | OTHER                            |
|    | Other Injury-  | _                                |
|    |  | 9. WATER DEPTH: 5414 FT.         |
|    | FATALITY POLLUTION   |                                  |
|    | FIRE   | 10. DISTANCE FROM SHORE: 130 MI. |
|    | EXPLOSION  |                                  |
|    | L EXPLOSION  | 11. WIND DIRECTION: -            |
|    | LWC- HISTORIC BLOWOUT  | SPEED: 12 M.P.H.                 |
|    | UNDERGROUND  |                                  |
|    | SURFACE  | 12. CURRENT DIRECTION:           |
|    | DEVERTER   | SPEED: M.P.H.                    |
|    | SURFACE EQUIPMENT FAILURE OR PROCEDURES                                    | 51 BD . PI.F.II.                 |
|    | COLLISION   HISTORIC   >\$25K   <=\$25K                                    | 13 SEA STATE: <b>3</b> FT        |

MMS - FORM 2010 PAGE: 1 OF 4

EV2010R 08-APR-2015-

On January 8, 2015, a Floorhand was injured when his left leg was caught between the ZBack Guide Arm (ZGA) and a handrail, while transporting drill pipe on the rig floor.

At the time of the incident, the rig was performing completion operations on BP's DC-321 well, located in Green Canyon block 743. The Drill Crew had just finished pressure testing the Blow Out Preventers (BOP) and was in the process of pulling drill pipe out of the hole and storing them in the aft side fingerboards. Although a written risk assessment was done prior to performing the job, crew members failed to address the hazard associated with body positioning in relation to moving equipment. The Floorhand, the Injured Party (IP), was in charge of running the Iron Roughneck and the Assistant Driller (AD) was in charge of running the ZGA. The Iron Roughneck is a piece of equipment used on the drill floor to screw or unscrew the stands of drill pipe as it is being run into or pulled out of the hole. Once the pipe has been disconnected, the ZGA is used to transport the drill pipe from well center to the pipe racks to be stored.

After pulling 12 stands of drill pipe from the well, the aft pipe rack became full and the crew had to reposition themselves to begin transfering pipe to the forward side pipe rack. The IP positioned himself between the aft side pipe rack and the ZGA. This position allowed the IP to stay out of the ZGA's way as it moved back and forth, while maintaining good visuals of the Iron Roughneck and fingerboards of the forward pipe rack.

The 13th stand of drill pipe was pulled from the well and transported to the forward side pipe rack via the ZGA. As the AD placed the pipe into the pipe rack, the IP was unscrewing stand 14 and ensuring the fingerboard latches were lowering into position properly. While looking up at the fingerboards, the IP inadvertently placed his left foot on the bottom rung of the handrail that guarded the ZGA. The handrail installed around the ZGA was put into place to protect personnel from walking into the skid pan located along the tracks of the ZGA. Although this served as a proper barricade for the open hole, it failed to provide a sufficient barrier to prevent employees from coming in contact with the moving equipment. As the ZGA was skidded back to well center, the roller adjustment bolt located on the bottom of the ZGA came into contact with the IP's boot and pulled his left foot and leg in between the ZGA and the handrail.

The job was immediately stopped and the crew members assisted in removing the IP's leg from in between the ZGA and the handrail. The work area was cleared for further investigation and the IP was carried to the Medic's clinic on board the vessel for evaluation. After consulting with onshore medical support, the decision was made to dispatch a MEDEVAC helicopter to transport the IP onshore for further medical treatment. It was later determined that the IP had sustained a laceration and fracture to his lower left leg. He is expected to be out of work for approximately eight weeks.

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

Poor Body Placement: The IP failed to recognize that placing his foot on the bottom rung of the handrail put him in harm's way.

MMS - FORM 2010 PAGE: 2 OF 4-

- 19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:
  - Although a written risk assessment was done prior to performing the job, crew members failed to address the hazard associated with body positioning in relation to moving equipment.
  - The handrail installed around the ZGA was an inadequate barrier for protecting personnel from the moving equipment.
- 20. LIST THE ADDITIONAL INFORMATION:

The following corrective actions have been taken following the incident:

- Expanded metal has been added to the handrails to prevent any personnel from being able to inadvertently cross the barrier.
- The hazards associated with body placement have been added to the 'Written Risk Assessment' for future jobs.-
  - 21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

N/A-

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

Houma District has no recommendations for the 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:
- 26. ONSITE TEAM MEMBERS:-

James Richard /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan Domangue

MMS - FORM 2010 PAGE: 3 OF 4-

APPROVED

DATE: 26-FEB-2015 For Public Release