UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **09-NOV-2009** TIME: **0643** HOURS

2. OPERATOR: **BP Exploration & Production Inc.**
   REPRESENTATIVE: **Sustala, Dennis**
   TELEPHONE: **(281) 366-0898**
   CONTRACTOR: **Transocean Offshore**
   REPRESENTATIVE: **Barber, Dennis**
   TELEPHONE: **(832) 587-6933**

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

4. LEASE: **G15607**
   AREA: **GC** LATITUDE:
   BLOCK: **743** LONGITUDE:

5. PLATFORM:
   RIG NAME: **GSF DEVELOPMENT DRILLER II**

6. ACTIVITY:
- [ ] EXPLORATION(POE)
- [X] 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.
- [X] INCIDENT >$25K **Service Loop**
- [ ] H2S/15MIN./20PPM
- [ ] REQUIRED MUSTER
- [ ] SHUTDOWN FROM GAS RELEASE
- [ ] OTHER

6. OPERATION:
- [ ] PRODUCTION
- [X] DRILLING
- [ ] WORKOVER
- [ ] COMPLETION
- [ ] HELICOPTER
- [ ] MOTOR VESSEL
- [ ] PIPELINE SEGMENT NO.
- [ ] OTHER

8. CAUSE:
- [ ] EQUIPMENT FAILURE
- [X] HUMAN ERROR
- [ ] EXTERNAL DAMAGE
- [ ] SLIP/TRIP/FALL
- [ ] WEATHER RELATED
- [ ] LEAK
- [ ] UPSET H2O TREATING
- [ ] OVERBOARD DRILLING FLUID
- [ ] OTHER _____

9. WATER DEPTH: **6824** FT.

10. DISTANCE FROM SHORE: **122** MI.

11. WIND DIRECTION: **NNW**
    SPEED: **35** M.P.H.

12. CURRENT DIRECTION: **NE**
    SPEED: **2** M.P.H.

13. SEA STATE: **11** FT.

17. INVESTIGATION FINDINGS:

On 09-Nov-2009 at 0643 hrs, the driller was tripping into the hole to place a RTTS packer that would be set to secure the well due to an approaching hurricane (Ida). While the driller was lifting the traveling block to get the next stand of pipe, the service loop became caught underneath the frac hose gooseneck which was located on the starboard forward leg of the derrick. Once the service loop was caught beneath the frac hose gooseneck, the service loop was pulled out of the top drive. This caused 20.5 feet of Signal/control service loop weighing 202.7 lbs to fall 100 feet to the drill floor. The service loop landed approximately 25 feet forward of the rotary table on the main side.

Prior to the incident, a job planning meeting was held and PROMPT Cards were reviewed and discussed. A dynamics drop inspection was conducted by a Floorhand and the Assistant Driller from 0100 to 0315 hours. Swinging hoses and the service loop that are within the derrick were identified as potential hazards due to strong rig motion and weather. The block was observed from all levels traveling in both directions and had no signs of potential service loop collisions or hang-ups. Also, during the tripping process, the restricted area access policy was monitored to ensure personnel were in their proper positions which ultimately kept personnel from being located in the area of the dropped object. Non-essential personnel were also kept off the rig floor.

Once the inspection was completed, the two Floorhands commenced their assigned task. One man was assigned as Spotter for the traveling path of the top drive/block and fingers on racking boards. The Spotter was additionally responsible for keeping the aft pipe rack free of mud by the use of a vacuum. The other Floorhand was stabbing the pipe into the stump and working the remote for the iron roughneck. Normal tripping operations had occurred for approximately 3 ½ hours when the Driller was lifting the block to get the next stand of pipe. He observed the Floorhand who was in place to stab the next stand of pipe when the Floorhand quickly evacuated the area. This alerted the Driller to immediately let-off the joystick and hit the E-stop. At the same time, he noticed the service loop falling to the forward side of the rig floor. Immediately following the incident, the drill floor was secured and a thorough derrick inspection was conducted for any collateral damage.

Although the weather conditions stayed fairly constant from the time of the derrick inspection until the time of the event, the rig's heave, pitch and roll increased throughout the day and overnight. The effects of the increased 2-1/2 to 3 inchces of heave and resulting service loop movement were not recognized to result in the service loop snag.

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

The weather conditions accounted for 2 1/2 to 3 inches of heave that was not recognized/planned to result in the service loop snagging beneath the frac hose gooseneck and eventually being pulled out of the top drive.

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

The dynamic drop monitoring was not effective since there was no specific monitoring of the swinging service loop.

20. LIST THE ADDITIONAL INFORMATION:

Subsequent to this incident, BP Exploration & Production Inc. developed the following corrective actions:
***When conducting dynamic drop inspections, BP rig personnel will anticipate all possible movements of the traveling equipment created by a change in weather.**
***BP will remove/rotate the engineer guard to prevent a catch point on the goose neck in the event weather is an issue.**
***BP will install service loop rings, as used on other rigs, which will bring all service loops into a combined unit or bundle.**
***BP will have dedicated personnel observe the traveling equipment when in abnormal weather conditions, and not just observing during periods of the loop current.**
***BP will develop a risk Assessment Task Specific Think Plan (TSTP) for traveling equipment during drilling operations in abnormal weather conditions.**
***In departmental and general safety meetings, crews will discuss this incident, and dynamic drop considerations during heavy weather.**

21. PROPERTY DAMAGED:

Both the electrical and hydraulic line terminations on the service loop were damaged. These lines were replaced.

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL): **$58,000**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

Due to the specific nature of this incident, the Houma District has no recommendations to report to the Regional Office.

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:

Casey Bisso /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE: **24-DEC-2009**