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: **31-MAR-2013** TIME: **0655** HOURS

2. OPERATOR: **BP Exploration & Production Inc.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Seadrill Limited**
   REPRESENTATIVE:
   TELEPHONE:

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

4. LEASE: **G25792**
   AREA: **KC** LATITUDE:
   BLOCK: **292** LONGITUDE:

5. PLATFORM:
   RIG NAME: **SEADRILL WEST SIRIUS**

6. ACTIVITY:
- [X] EXPLORATION(POE)
- [ ] 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
- [ ] 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: **6031** FT.

10. DISTANCE FROM SHORE: **191** MI.

11. WIND DIRECTION: **ESE**
    SPEED: **9** M.P.H.

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

13. SEA STATE: FT.

17. INVESTIGATION FINDINGS:-

At approximately 0700 hours on 31 March 2013, a Seadrill Americas Inc. (Seadrill) Lead Roughneck sustained a finger injury on board the Seadrill West Sirius semi-submersible rig while conducting drilling operations for BP Exploration & Production Inc. (BP) at Keathley Canyon Block 292.

On 31 March 2013, a Seadrill Lead Roughneck inspected the Well Center Iron Roughneck (WC-IR) and decided that the dies needed to be replaced. Prior to removing the dies, the power to the WC-IR was isolated by pushing in the E-Stop button. The Lead Roughneck assisted by another Roughneck, began removing the dies from the die carriers; however, a problem was encountered when attempting to remove the off-driller side due a stripped carrier bottom bolt. The job was stopped and a 4-Point Check was performed by the Roughnecks. It was decided that the dies would be removed from the carriers with a hammer and chisel which required the Driller to place the WC-IR in the closed position.

The Driller energized and closed the WC-IR and then isolated it again by pushing the E-Stop button. The Lead Roughneck removed the die retainer bolts and tapped the dies out of the carriers. When the Lead Roughneck was removing the #5 back die, it contacted the pipe position sensor and could not be removed. Therefore, the Driller re-energized the WC-IR in order to change the position of the #5 back die away from the pipe position sensor. As the WC-IR was opening and the #5 back die cleared the pipe position sensor, the Lead Roughneck's right index finger became trapped between the die and frame of the WC-IR. His finger was released when enough torque was applied to the #5 back die forcing it out of its carrier. The Lead Roughneck informed the Driller that he had pinched his index finger and was going to see the Rig Medic for medical treatment. However, the Lead Roughneck passed out on the Main Deck breezeway when he was met by the BP Well Site Leader (WSL). The BP WSL caught the Lead Roughneck as he was passing out and summoned for help over the public address system.

The Safety Officer and Medic responded to the scene, loaded the Lead Roughneck onto a backboard, and transported him to the rig hospital for medical treatment. A doctor was contacted using the Telemedicine system for evaluation and treated for the Lead Roughneck's finger injury. Following medical treatment at the rig, the Lead Roughneck was evacuated to University of Texas Medical Branch (UTMB) at Galveston, Texas for further medical evaluation and treatment. The UTMB doctor diagnosed the Lead Roughneck to have sustained a fractured finger; therefore, he was released for specialist care treatment.

On 31 March 2013, Seadrill issued a Flash Alert - Finger Injury While Changing Iron Roughneck Dies to all its rigs as part of their continuous improvement monitoring system.

As stated in the Seadrill Top-Set report, the probable cause of the accident was attributed to the Lead Roughneck deciding to remove the #5 back die from the WC-IR while it was energized and moving into the open position.

According to the Seadrill Top-Set report, the contributing causes of the accident are as follows: 1) Driller did not complete the energy isolation process; 2) safety training for hands off moving equipment was not adhered to; 3) the 4-Point Check rules were not complete; 4) all the hazards for this type of operation were not identified;
5) the Lead Roughneck and the Driller did not communicate on the job status; 6) the Roughnecks changed the routine job process of replacing IR dies; 7) routine IR maintenance task did not have written procedures; and 8) inadequate supervision by drill floor Supervisors.

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

According to the Seadrill Top-Set report, the contributing causes of the accident are as follows: 1) Driller did not complete the energy isolation process; 2) safety training for hands off moving equipment was not adhered to; 3) the 4-point check rules were not complete; 4) all the hazards for this type of operation were not identified; 5) the Lead Roughneck and the Driller did not communicate on the job status; 6) the Roughnecks changed the routine job process of replacing IR dies; 7) routine IR maintenance task did not have written procedures; and 8) inadequate supervision by drill floor Supervisors.

21. PROPERTY DAMAGED:	NATURE OF DAMAGE:
No property was damaged during this accident.	**None**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE Lafayette District makes no recommendations to the Office of Safety Management.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

Based on the accident investigation findings, a G-110 Incident of Noncompliance (INC) was issued to document that the operator failed to protect health, safety and the environment by performing operations in an unsafe and unworkmanlike manner. On 31 March 2013, the operator failed to provide adequate supervision when changing out dies on a WC-IR that resulted in a Seadrill Roughneck sustaining a fractured finger.

25. DATE OF ONSITE INVESTIGATION:

26. ONSITE TEAM MEMBERS:-

Troy Naquin /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED DATE: **03-JUL-2013**