UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **23-JAN-2022** TIME: **0140** HOURS
2. OPERATOR: **BP Exploration & Production Inc.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Diamond Offshore**
   REPRESENTATIVE:
   TELEPHONE:

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

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

4. LEASE: **G09981**
   AREA: **GC** LATITUDE:
   BLOCK: **825** LONGITUDE:

5. PLATFORM:
   RIG NAME: **DIAMOND OCEAN BLACKLION**

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

7. TYPE:
   INJURIES:
- [ ] HISTORIC INJURY

	OPERATOR	CONTRACTOR
[ ] REQUIRED EVACUATION		
[ ] LTA (1-3 days)		
[ ] LTA (>3 days)		
[ ] RW/JT (1-3 days)		
[ ] RW/JT (>3 days)		
[ ] FATALITY		
[ ] Other Injury		

- [ ] POLLUTION
- [ ] FIRE
- [ ] EXPLOSION

LWC
- [ ] HISTORIC BLOWOUT
- [ ] UNDERGROUND
- [ ] SURFACE
- [ ] DEVERTER
- [ ] SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION [ ] HISTORIC [ ] >$25K [ ] <=$25K

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

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

10. WATER DEPTH: **4958** FT.
11. DISTANCE FROM SHORE: **117** MI.
12. WIND DIRECTION:
    SPEED: M.P.H.
13. CURRENT DIRECTION:
    SPEED: M.P.H.
14. SEA STATE: FT.
15. PICTURES TAKEN:
16. STATEMENT TAKEN:

17. INVESTIGATION FINDINGS:

On January 23, 2022, a dropped object incident occurred on board the Diamond Offshore Black Lion under contract for BP Exploration & Production. Drilling operations were being conducted at Green Canyon Block 826, OCS-G 09982, Well # 11. The Assistant Driller (AD) was racking back a stand of drill pipe when it struck the finger latch. The latch broke off and fell approximately 101 feet to the drill floor. No injuries were reported, and an onsite investigation was initiated. This incident had a high severity dropped object potential.

On the morning of January 23, 2022, the drill crew came on tour with the task to pull the 6-5/8 inch drill pipe out of the wellbore to replace the bottom hole assembly. A pre-tour safety meeting was held, and the drill crew discussed the Operational Work Order Details document "Pulling out of the hole".

After all documents were reviewed and signed by the drill crew, the operation began with pulling the drill pipe out of the hole on the main side of the drill floor. Using the elevators hanging from the top drive, the Driller pulled one stand of drill pipe and broke the connection in the rotary. The AD used the Hydra-racker to rack the stand back in the auxiliary fingerboard, while the Finger Watch looked up to confirm the finger latch was in the open position. This process continued for several stands, with no issues reported. The AD proceeded to rack another stand of drill pipe back when the stand contacted the finger latch, breaking it off, allowing it to free fall 101 feet to the drill floor. Red Zone Management was in place and no personnel were in the Red Zone where the finger latch landed. A Stop Work Authority was utilized, and an investigation was initiated.

Due to Covid-19 pandemic protocols, the Bureau of Safety and Environmental Enforcement (BSEE) investigation team was unable to conduct an initial onsite investigation at the time of this incident. However, the investigation team was able to collect documentation and pictures furnished by the operator at the team's request. The investigation team reviewed the documentation and noted:

A pre-tour Toolbox Talk was held and an Operational Work Order Details document about tripping pipe, was reviewed and signed by all personnel involved in the operation on the drill floor.

As work commenced, the drill crew proceeded to pull out of the hole with 6-5/8" drill pipe on the main side of the drill floor. A Finger Watch was in place on the drill floor to look up and confirm that the finger latch was in the open position before the AD would rack a stand back in the derrick. The Finger Watch was shown by his assigned mentor what to look for when performing his job, as this was his first hitch offshore. The Finger Watch looked up and confirmed incorrectly that the fingers were open on the row where the stand was to be placed. As the AD proceeded to rack the stand back in the auxiliary fingerboard, contact was made with the closed finger latch. The 5-pound finger latch and secondary retention safety cable broke off with both falling approximately 101 feet to the drill floor.

The investigation revealed that the drill crew did not follow procedure in reviewing the Site-Specific Plan (SSP) Trip Out of Hole, which states that a flagger in the derrick should confirm all intended fingers in the designated row are fully open before racking the pipe back. The Finger Watch was placed on the drill floor level due to a shortage of personnel for this job. Poor visibility due to nighttime operations and no clear view of individual latch fingers from his position on the rig floor hampered the finger watch's ability to determine if the finger latch was fully opened. Also, the latch system was disabled due to inaccurate data transmitted back to the AD's monitor in the drillers shack. This system provided the status of each latch and the AD had the ability to open or close the latch when racking back stands in the derrick.

Diamond has since added a second secondary retention to the opposite side of the fingerboard aiding in preventing the latch from dropping if the pipe inadvertently contacts closed fingers on the fingerboard. Also, Diamond is installing a National Oilwell Varco (NOV) secondary retention safety wire and another latch system on a trial basis as an alternative to the current finger latches and latch cylinders. Diamond reviewed the incident with all the crews and discussed following the SSP for the job being performed. If the SSP cannot be followed, proper mitigations must be put in place before proceeding forward with the operation.

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

1) Drill crew did not follow proper procedure in reviewing Sight Specific Plan (SSP) prior to starting the operation. No Flagger in the derrick.
2) Ineffective secondary retention.
3) The latch system was inoperable due to faulty data.

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

n/a

20. LIST THE ADDITIONAL INFORMATION:

n/a

21. PROPERTY DAMAGED: **Finger latch**

NATURE OF DAMAGE: **Broken**

ESTIMATED AMOUNT (TOTAL): **$950**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

BSEE Houma District has no recommendations for the Office of Incident Investigations 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. INVESTIGATION TEAM MEMBERS:

Robert P Reeves (Author) /

27. OPERATOR REPORT ON FILE:

28. ACCIDENT CLASSIFICATION:

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

OCS REPORT:

30. DISTRICT SUPERVISOR: **Amy Pellegrin**

APPROVED
DATE: **23-MAY-2022**