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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **26-JAN-2022** TIME: **0106** HOURS

2. OPERATOR: **BP Exploration & Production Inc.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Diamond Offshore**
   REPRESENTATIVE:
   TELEPHONE:

- [ ] STRUCTURAL DAMAGE
- [ ] CRANE
- [X] OTHER LIFTING **pipe skate**
- [ ] 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:
- [X] EXPLORATION(POE)
- [ ] 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:
- [ ] 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 26, 2022, an incident occurred onboard the Diamond Offshore Black Lion drillship working for BP Exploration and Production Inc. Drilling operations were being conducted at Green Canyon Block 825, OCS-G 09981, Well # 11. The Driller lifted a joint of drill pipe off the pipe skate and inadvertently opened the elevators allowing the drill pipe to fall approximately 33 feet back onto the drill pipe skate. No injuries were reported, and an onsite investigation was initiated. This incident had a high potential near miss.

At midnight on January 26, 2022, the auxiliary "C" drill crew came on tour after completing a briefing with the drill crew coming off tour. The "C" drill crew's assigned task was to pick up single joints of 6-5/8" drill pipe and make up stands to rack back in the derrick. A Job Safety Analyses (JSA) on "Picking up Tubulars from the Catwalk" and a site-specific procedure (SSP), "Pick up Tubulars from Pipe Catwalk" was reviewed and signed by all participating drill crew members involved in this operation. Work commenced picking up a single joint of 6-5/8" drill pipe with the Top Drive elevators once the pipe skate was positioned near the auxiliary rotary.

At approximately 00:50 hours, the "C" drill crew proceeded to make up the first stand of drill pipe and rack it back in the derrick with no issues. With a single joint of 6-5/8" drill pipe loaded on the pipe skate, the Skate Operator moved the skate forward in preparation for the Driller to latch the elevators and pick up the drill pipe. As the Driller hoisted the drill pipe 33 feet in the air with the Top Drive, he stopped to allow the Skate Operator to engage the tail arm to stabilize the drill pipe until it is placed in the rotary. During the pause in procedure, the Driller prepared for the next step, which was to open the pipe slips in the rotary. The Driller inadvertently clicked the wrong joystick and opened the drill pipe elevators, allowing the single joint of 6-5/8" drill pipe to drop approximately 33 feet back to the pipe skate. The Skate Operator was in position operating the skate approximately 4 feet away from where the drill pipe was dropped.

Due to Covid-19 pandemic protocols, the Bureau of Safety and Environmental Enforcement (BSEE) investigation team was not able to conduct an initial onsite investigation immediately and performed the onsite investigation at first opportunity on February 08, 2022. The investigation team was able to collect documentation, photos, and witness statements furnished by the operator at the team's request. The investigation team reviewed the documentation and noted:

The investigation team found a pre-tour meeting was held and a job plan for "Picking up Tubulars from the Catwalk" as well as a SSP "Pick up Tubulars from Pipe Catwalk" was reviewed and signed by all personnel involved in the operation on the auxiliary side of the drill floor.

As work commenced, the drill crew began the task of picking up single joints of 6-5/8" drill pipe, making up a stand and racking it back in the derrick. Each joint was approximately 42 feet long and weighing approximately 2,000 pounds. With one stand racked back, the Skate Operator positioned the skate near the auxiliary rotary with a single joint of 6-5/8" drill pipe ready to pick up with the Top Drive. When the elevators were latched, the Driller proceeded to raise the drill pipe and stopped at 33 feet for the Skate Operator to activate the tail arm, which is used to stabilize the drill pipe as it is positioned over the rotary. According to the SSP, opening the slips was the next step in the procedure which are kept in the closed position, acting as a hole cover over the rotary while picking up stands of pipe. During the pause, the Driller stated in his statement that he doubled clicked the left joystick instead of the right joystick, which inadvertently opened the elevators instead of the slips. The drill pipe dropped 33 feet, coming to rest diagonally across the skate approximately 4 feet from the skate operator.

The investigation team also noted that the software interlock, part of the Pipe Interlock Management System (PIMS), was not activated within the system prior to picking up the drill pipe off the skate. The Driller failed to activate the "Well Center Standbuilding" mode within the manufactures cyberbased system that allows the software interlock to function. During the initial installation, the software was not sufficiently commissioned, and the drill crew was not thoroughly trained on how to initiate, use and troubleshoot the system. Also, the mechanical failsafe pin inside the elevators was not activated. This pin is activated when the box end of the tool joint is sitting almost vertically in the elevator inserts. Once this pin is engaged, it is mechanically interlocked, and the elevators are unable to open even if the wrong joystick is activated. The elevators were still "Link Tilted" out, towards the pipe skate and the pipe was not vertical enough for the pin to activate. The pipe would have had to be 35 to 38 feet high for the pin to interlock on the elevators.

Diamond Offshore worked closely with the manufacturer to prevent this incident from reoccurring. A manufacturer's technician was brought on board the drillship to perform system tuning to ensure it is functioning as intended and provide further training for the drill crews on the operation of the PIMS software. In addition, the 2 joysticks on the Driller's chair will be studied to determine if they can be redesigned due to both joysticks are identical but perform different functions.

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

Human error: The Driller inadvertently opened the elevators instead of the slips, dropping the drill pipe.

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

Insufficient commissioning of PIMS software.
Lack of training for the drill crew on the cyberbased system.

20. LIST THE ADDITIONAL INFORMATION:

Possible redesign of joysticks on driller's chair

21. PROPERTY DAMAGED: **N/A**

NATURE OF DAMAGE: **N/A**

ESTIMATED AMOUNT (TOTAL): **$**

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:

08-FEB-2022

26. INVESTIGATION TEAM MEMBERS:

Tim Boudreaux / Chris Treland / Paul Reeves - Author /

27. OPERATOR REPORT ON FILE:

28. ACCIDENT CLASSIFICATION:

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

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