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: **18-FEB-2023** TIME: **2127** HOURS
2. OPERATOR: **BP Exploration & Production Inc.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Valaris**
   REPRESENTATIVE:
   TELEPHONE:

- [ ] STRUCTURAL DAMAGE
- [ ] CRANE
- [X] OTHER LIFTING **Dropped Drill Pipe**
- [ ] 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: **G09868**
   AREA: **MC** LATITUDE: **28.190859**
   BLOCK: **778** LONGITUDE: **-88.495519**

5. PLATFORM:
   RIG NAME: **THUNDER HORSE PDQ**

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

7. TYPE:
   INJURIES:
   - [ ] HISTORIC INJURY

	OPERATOR	CONTRACTOR
[X] REQUIRED EVACUATION	**0**	**1**
[ ] LTA (1-3 days)		
[ ] LTA (>3 days)		
[X] RW/JT (1-3 days)	**0**	**1**
[ ] 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
   - [ ] DRILLING
   - [ ] WORKOVER
   - [ ] COMPLETION
   - [ ] HELICOPTER
   - [ ] MOTOR VESSEL
   - [ ] PIPELINE SEGMENT NO.
   - [X] OTHER **P&A**

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: **6035** FT.
11. DISTANCE FROM SHORE: **65** MI.
12. WIND DIRECTION: **ENE**
    SPEED: **8** M.P.H.
13. CURRENT DIRECTION: **WNW**
    SPEED: **0** M.P.H.
14. SEA STATE: **5** FT.
15. PICTURES TAKEN:
16. STATEMENT TAKEN:

INCIDENT SUMMARY:

On February 18, 2023, at 21:27 hours, BP Exploration and Production (BP) incurred an incident on board the Thunderhorse PDQ Platform while performing abandonment operations on the TA004 well located at Mississippi Canyon Block (MC) 778. The incident involved dropping a stand of drill pipe across the rig floor and injuring one person. BP reported the incident to the Bureau of Safety and Environmental Enforcement (BSEE) New Orleans District (NOD).

SEQUENCE OF EVENTS:

At 21:27 hours, on February 18, 2023, while pulling out of the hole (POOH) with the 13th stand of 4-1/2 inch drill pipe, the Driller set the weight of the string on the slips and lowered the BX4 elevator position to clear the shoulder of the tool joint. A Floor Hand used an Iron Rough Neck to break and spin out the connection before the Assistant Driller (AD) could get the Pipe Racking System (PRS) back into position and grab the 13th stand of 4-1/2 inch drill pipe. The Driller functioned the elevators to the open position. This resulted in the stand of pipe falling towards the port side of the rig floor and coming to rest on top of the hoist of the auxiliary PRS that was parked in the home position. Although the red zone was clear at the time of the event, the stand of pipe fell across the yellow zone of the rig floor within close proximity of the three Floor Hands. After realizing that the stand of pipe was falling, the three Floor Hands began to evacuate the area with one Floor Hand slipping on the deck. After the area was secure, one Floor Hand reported to the Tool Pusher that he felt pain in his knee and hip because of slipping to the deck. The job was stopped and the area was secured. The injured Floor Hand reported to the Medic, was sent in for further evaluation, and did not return to the facility.

BSEE INVESTIGATION:

On February 13, 2023, during the BSEE monthly inspection, the BSEE inspector on location was notified about an incident that occurred on February 3, 2023. The inspector was informed that while breaking out the Side Entry Sub assembly with the Top Drive System, the actuator from the lo-torque valve (5 pounds) connected to the SES, fell approximately 17 feet to the rig floor landing within the Red Zone.

On February 19, 2023, a BP representative notified the NOD afterhours Engineer via phone of an injury on the MC 778 Thunderhorse platform. The BP representative gave minimal details to the afterhours Engineer on how serious the incident was at the time of the notification.

On February 20, 2023, the BSEE Office of Safety Management contacted BP’s compliance advisor requesting additional information, photos, and video of the area where the injury took place. Upon receiving the video of the rig floor, it showed the elevators opening before the PRS could secure the stand in the rotary, thereby allowing the stand in the rotary to fall across the rig floor. There were four Floor Hands on the drill floor at this time that tried to egress the area to avoid being hit by the falling pipe, resulting in one of them tripping, injuring his knee, and being evacuated the next day for medical evaluation.

On March 1, 2023, the BSEE NOD Accident Investigator, a BSEE NOD Well Operations Inspector, and a BSEE Office of Incident Investigations (OII) Coordinator performed an on-site investigation. The on-site investigation included gathering documentation, conducting interviews, and taking photographs of relevant equipment and the incident scene. During the interviews, BSEE was informed the Driller had a similar incident on January 3, 2023. The incident involved the Driller inadvertently opening the elevator,

resulting in a stand of drill pipe being released before the Floor Hands could unscrew the stand of pipe with the Iron Rough Neck. The BSEE Investigation Team walked down the egress route in the Red Zone and found the slippery surface where the Injured Person fell. Prior to the incident, one of the witnesses stated that the elevator was having trouble opening up. Furthermore, the witness was told that once they got out of the hole, an effort would be made to see what was causing the problem. Witnesses also stated right before the incident, one of the experienced Floor Hands was showing two short service employees (SSE) how to operate the Iron Rough Neck. The video from the rig floor shows three Floor Hands running across the rig floor Red Zone nearly being crushed by the stand of drill pipe and one rig Floor Hand (flagger) standing clear of the falling pipe. With the weight and force of the stand of drill pipe falling, this could have resulted in multiple fatalities.

After the BSEE Investigation Team completed the onsite investigation, they briefed the NOD District Manager (DM) of a number of safety culture issues noted during the interviews. On March 3, 2023, the NOD DM requested an in-person meeting with BP and Valaris in the NOD office to discuss the MC 778 Thunderhorse PDQ safety culture involving several incidents that could have been serious events.

CONCLUSION:

BSEE concludes that the incident occurred due to the Driller not following the Work Instructions for Tripping Operations – Pull Out of Hole (POOH) No. WI-TH-DR-OPS-096, which states Failure to confirm the PRS is holding the drill string before unlatching the elevators will result in dropping stand and injuring personnel.

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

• Human error: The Driller was not following the Work Instructions for Tripping Operations Pull Out of Hole (POOH) No. WI-TH-DR-OPS-096 and inadvertently opened the pipe elevators before the PRS was attached to the 4-1/2 inch drill pipe.

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

• Poor communications between the Driller and the AD - the Driller did not confirm with the AD that the PRS had secured the stand of pipe before opening the elevators.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

1) main side lower man rider cover 2) Auxiliary PRS guide roller 3) air hose on air slip manifold 4) box end of drill pipe stand in the rotary

NATURE OF DAMAGE:

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

BSEE New Orleans District has no recommendations for the Office of Incident Investigations at this time.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

PINC Number: G-110 Enforcement Action: Shut in Authority: 30 CFR 250.107

DOES THE LESSEE PERFORM ALL OPERATIONS IN A SAFE AND WORKMANLIKE MANNER AND PROVIDE FOR THE PRESERVATION AND CONSERVATION OF PROPERTY AND THE ENVIRONMENT?

During the investigation it was discovered that the Driller was not following the Work Instructions for Tripping Operations – Pull Out of Hole (POOH) No. WI-TH-DR-OPS-096, which states Failure to confirm the Pipe Racking System (PRS) is holding the drill string before unlatching the elevators will result in dropping stand and injuring personnel. Due to the driller functioning the elevators to the open position before the Pipe Racking System (PRS) could secure the stand in the rotary allowed the stand in the rotary to fall across rig floor. There were four floor hands on the drill floor at this time that aggressively tried to egress the area to avoid being hit by the falling pipe, one of them were injured and sent in for medical evaluation.

25. DATE OF ONSITE INVESTIGATION:

26. Investigation Team Members/Panel Members:

Frank Musacchia / Jason Schollian / Pierre Lanoix /

27. OPERATOR REPORT ON FILE:

28. ACCIDENT CLASSIFICATION:

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED DATE: **19-JUL-2023**