

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

For Public Release

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **12-OCT-2024** TIME: **0540** HOURS

2. OPERATOR: **LLOG Exploration Offshore, L.L.C.**

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: **NOBLE DRILLING (U.S.) INC.**

REPRESENTATIVE: TELEPHONE:

- ☐ STRUCTURAL DAMAGE
☐ CRANE
☒ OTHER LIFTING **Hydraracker**
☐ 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: **G36103**

AREA: **AC** LATITUDE:

BLOCK: **337** LONGITUDE:

5. PLATFORM:

RIG NAME: **NOBLE VALIANT**

6. ACTIVITY: ☒ EXPLORATION(POE)

☐ DEVELOPMENT/PRODUCTION (DOCD/POD)

☐ DECOMMISSIONING

8. OPERATION:

- ☐ PRODUCTION ☐ TEMP ABAND
☒ DRILLING ☐ PERM ABAND
☐ WORKOVER ☐ DECOM PIPELINE
☐ COMPLETION ☐ DECOM FACILITY
☐ HELICOPTER ☐ SITE CLEARANCE
☐ MOTOR VESSEL
☐ PIPELINE SEGMENT NO.
☐ OTHER

7. TYPE:

INJURIES:

☐ HISTORIC INJURY

☒ REQUIRED EVACUATION

☐ LTA (1-3 days)

☒ LTA (>3 days)

☐ RW/JT (1-3 days)

☐ RW/JT (>3 days)

☐ FATALITY

☐ Other Injury

OPERATOR

CONTRACTOR

0

1

0

1

9. CAUSE:

- ☐ EQUIPMENT FAILURE
☒ HUMAN ERROR
☐ EXTERNAL DAMAGE
☐ SLIP/TRIP/FALL
☐ WEATHER RELATED
☐ LEAK
☐ UPSET H2O TREATING
☐ OVERBOARD DRILLING FLUID
☒ OTHER **Policy Violation**

10. WATER DEPTH: **4428** FT.

11. DISTANCE FROM SHORE: **70** 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:

☐ POLLUTION

☐ FIRE

☐ EXPLOSION

LWC ☐ HISTORIC BLOWOUT

☐ UNDERGROUND

☐ SURFACE

☐ DEVERTER

☐ SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION

☐ HISTORIC

☐ >\$25K

☐ <=\$25K

On October 12, 2024, an incident with injury occurred onboard the Noble Valiant under contract with LLOG Exploration Offshore during drilling operations at Alaminos Canyon block 337, OCSG-36103, Well 001. During tripping in the hole with the bottomhole assembly a Derrickman (a drilling crew member assigned as an observer in the derrick) was injured by the Pipe Racking System (PRS) while on the upper fingerboards when attempting to secure a malfunctioning fingerboard latch into the open position with a piece of rope.

Prior to the incident, the third outermost latch of row 16 on the upper fingerboard was malfunctioning in the closed (latch down) position, prohibiting the Assistant Driller (AD) from retrieving the selected stand of pipe in that row. After multiple attempts by the AD to mitigate the issue using a pull-tension-and-lift technique the AD asked, via radio, if there was a way to tie up the latch permanently in the open position to reduce the risks associated with the previously mention method, to which the IP responded, via radio, that he would find some rope and tie it up. During this time, the IP positioned himself over the handrail located in the derrick, outside of the designated safe-observation area, and onto the upper fingerboards without the proper work permits. For approximately 10 minutes, the IP continued observing the status of the latches and relaying "latches up/latches down" to the AD, as per his primary duties, while at the same time attempting to tie the latch into the open position.

As he was working to secure the latch, the PRS, operating in automatic mode, initiated a move to retrieve a stand of pipe located in the same row but behind the IP. As the PRS arms extended, the IP was caught in between the stand of pipe and the upper PRS arm and became pinned. The IP began yelling loudly for help which was heard by the coworkers on the rig floor, who immediately communicated to the AD to shut down the PRS. The IP was not able to relay his own distress call over the radio. The AD engaged the Emergency Stop system, shutting off power to all rig floor equipment. The AD took manual control of the PRS and withdrew the upper PRS arm, freeing the IP who was then able to untie himself and egress to the handrail where he was assisted out of the derrick by responding rig crewmen and the medic.

The IP was taken to the ships hospital while a medivac aircraft was dispatched. The IP was flown to UTMB-Galveston where he was treated for his injuries.

BSEE Investigation:

BSEE Investigators collected information pertaining to the incident including video of the incident, photographs of the work area, pipe tripping operations procedures, fingerboard latch maintenance and repair procedures, working at heights policies, zone management system documentation, witness statements, and preliminary incident reports. A site visit was conducted on October 28, 2024, and investigators interviewed witnesses to the incident, as well as the ship's Captain/OIM and the Lessee's onsite safety representative who did not witness the incident. BSEE Investigators completed a walk-through of the rig floor, drill shack, and derrick to gather firsthand observations of the area and collect additional photographic evidence.

The BSEE investigation showed that leading up to the incident the crew had only been experiencing malfunctions on a single fingerboard latch. During these malfunctions, the third outermost latch on row 16 of upper fingerboard would not open when required in order to move pipe stands into or out of the pipe rack. The BSEE investigation found that the AD had employed a pull-tension-and-lift method to assist latch, wherein the drill pipe was pulled slightly against the latch and then raise the pipe, using the tension to help lift the latch. According to statements, after multiple iterations of using this tension-lift method, the driller called the Derrickman (IP) to ask about tying the finger up permanently for the remainder of the tripping operation. Although

the specific mode of failure varies, the failure of fingerboard latches to operate properly is a known issue throughout the industry, and has caused, or contributed to, multiple incidents prior to this incident.

The BSEE investigation revealed that neither Noble nor LLOG have a written policy addressing working outside of the barricaded walkway in the derrick itself (safe observation area), including policies that specifically prohibit personnel from working directly on the fingerboards during pipe tripping operations. Although Noble's Personnel Zone Management system requires the development of go/no-go zones during tripping operations, and a diagram of these go/no-go zones to be posted throughout the rig, at the time of the incident these zones did not incorporate areas in the derrick. Instead, personnel working in the derrick, outside of the barricade, did so through a working-at-heights permit.

Through interviews of rig leadership, BSEE investigators discovered it is Noble's practice to use the working-at-heights permit to shut down tripping operations when personnel are working directly on the fingerboards; however, the investigation also revealed that the violation of this safe-work practice appears to be a normal occurrence when dealing with stuck fingerboard latches. During interviews, crew members indicated that it is normal for the observer to reposition onto the fingerboards during pipe tripping operations to manually hold open malfunctioning latches while the PRS retrieves stands of pipe. This work practice contradicts the stated policy which disallows people working on the upper fingerboard with moving equipment.

During the investigation, BSEE Investigators discovered that a Closed-Circuit Television Camera (CCTV) camera was positioned to observe movements of the upper PRS arm during pipe tripping operations, and that the CCTV monitor was active and accessible to all personnel inside the drill shack during the duration of the operation. When the PRS is positioned to retrieve pipe stands from the pipe rack, this camera conveys a clear view of the upper fingerboards. According to crew statements during interviews, the CCTV monitor is only actively monitored during certain portions of tripping pipe, and would not have been actively monitored by either the driller or AD as the PRS arm, in automatic mode, was moving in to retrieve a stand of pipe. Additionally, according to crew statements, none of the 5 personnel in the drill shack saw the IP on the CCTV monitors, nor did any of the workers on the drill floor visually observe the IP on the fingerboards during tripping operations in the moments leading up to the incident.

While reviewing the CCTV footage of the incident, BSEE Investigators were able to determine that the IP had been working on the upper fingerboards for approximately 10 minutes prior to his injury. During this time, the IP was observed working next to the moving PRS arm for at least 5 evolutions of stand retrieval. Although the IP appeared to be tied-off during most of this work, it was observed on the footage that he had untied himself at least once and was moving under the extending PRS arm, less than 5-feet from the edge of the upper fingerboard, which is approximately 110 feet above the rig floor. Although the IP was observed wearing, and intermittently using, tie off equipment, the investigation revealed there was no working from heights permit issued during this operation.

BSEE Investigators also noted an additional observation in the investigation. During multiple evolutions of stand retrieval, multiple workers were observed, through the use of CCTV footage, on the rig floor working around moving equipment, outside of the designated safe-zones, during tripping operations. This is a violation of Noble's Personnel Zone Management system for the rig floor.

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

Policy Violation: During the operation, the IP repositioned himself from the safe observation area and onto the upper fingerboards to help mitigate the failure of the fingerboard latch. In doing so, the IP did not have the proper working-at-heights permit which would have informed all other rig workers to his location and would have shut down operations of the PRS while he was on the fingerboards, as per Noble's stated safe-work practices.

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

Situational Awareness: There was a lack of situational awareness by multiple parties.

1) As he was working on the malfunctioning latch, the IP lost focus on the PRS movements and was taken by surprise as the arm extended towards him. 2) Although the CCTV footage of the upper fingerboards was visible on the display monitor during the entire operation, all five crew member in the drill shack either failed to recognize the existing hazard, failed to recognize that having a worker on the fingerboards during operations was a hazard, or failed to stop work after recognizing that the hazard. 3) For the 10 minutes prior to the accident, the rig floor crew members either failed to look up and recognize the hazard, failed to recognize that having a worker on the fingerboards was a hazard, or failed to stop work after recognizing the hazard.

20. LIST THE ADDITIONAL INFORMATION:

The Lake Jackson District has no additional information to provide.

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

None

None

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake Jackson District has no recommendations.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 (S):

On October 12th, 2024, an incident involving injury occurred. The investigation concluded that the Lessee failed to perform all operations in a safe and workmanlike manner in the following ways.

1) While working as an observer in the derrick, a drilling crew member was found to be working on the upper fingerboards, outside of the designated safe-observation area, while the ships Pipe Racking System was operating. The worker was caught in the line of fire between the upper arm of the Hydraracker and a stand of pipe and was pinned between the two, causing injury.

2) During the investigation inspectors also observed, through CCTV coverage, multiple workers violating safe-zone policies by moving freely across the rig floor through areas with moving equipment.

25. DATE OF ONSITE INVESTIGATION:

28-OCT-2024

28. ACCIDENT CLASSIFICATION:

MINOR

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26. Investigation Team Members/Panel Members:

29. ACCIDENT INVESTIGATION PANEL FORMED:

NO

27. OPERATOR REPORT ON FILE:

OCS REPORT:

30. DISTRICT SUPERVISOR:

Stephen Martinez

APPROVED

DATE:

13-FEB-2025