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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **28-MAR-2024** TIME: **2200** HOURS
2. OPERATOR: **BOE Exploration & Production LLC**
   REPRESENTATIVE:
   TELEPHONE: CONTRACTOR:
   Transocean Offshore
   REPRESENTATIVE: TELEPHONE:

- [ ] STRUCTURAL DAMAGE
- [ ] CRANE
- [ ] OTHER LIFTING
- [ ] 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: **G31938**
   AREA: **WR** LATITUDE:
   BLOCK: **51** LONGITUDE:

5. PLATFORM:
   RIG NAME: **T.O. DEEPWATER ATLAS**

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)		
[ ] RW/JT (1-3 days)		
[X] RW/JT (>3 days)	**0**	**1**
[ ] 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.
   - [ ] DECOMMISSIONING
     - [ ] PA [ ] PIPELINE [ ] SITE CLEARANCE
     - [ ] TA [ ] PLATFORM
   - [ ] OTHER

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

10. WATER DEPTH: **5845** FT.
11. DISTANCE FROM SHORE: **154** 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 March 28, 2024, an incident occurred on the drillship Transocean Deepwater Atlas, which was working under contract for Beacon Offshore Energy, LLC. Drilling operations were being conducted at Walker Ridge Block 51, OCS-G31938, Well SA007. The Transocean Subsea Superintendent (IP) was performing Blow Out Preventer (BOP) maintenance from the BOP work platform and fell approximately nine feet through an open hole to the lower level. The IP injured his knee and suffered abrasions on his right shin from the fall. IP was examined by the onboard medic and then evacuated to an onshore medical facility for further treatment. The area was secured to prevent further access.

On the night of March 28, 2024, maintenance of the Subsea BOP was scheduled to take place. A BOP work platform, consisting of an upper and lower level, with guardrails, needed to be installed on the subsea BOP. A lifting team was utilized to move the work platform into position. During the pre-lift check, a loose piece of grating covering the hole for the access ladder on the work platform was found damaged and determined to be a potential dropped object. The hinge securing the hatch cover to the work platform separated. The damaged hatch cover was removed, work platform was lifted, and installed on the subsea BOP. Access to the open hole was not prevented.

At approximately 2200 hours, the IP transitioned from working on the subsea BOP itself to the upper level of the work platform and was unaware of the open hole. Although the IP was wearing a safety harness, he was not tied off. The IP moved from forward to aft on the BOP work platform while operating the gantry crane with a remote-control box and fell approximately nine feet through the open hole. During the fall, the remote-control box was dropped outside of the work platform and fell approximately 40 feet to the next deck below. The remote-control box dimensions are 10.5” x 8” x 7.5” and weighs 7.45 lbs.

The IP landed on his feet, felt pain in his left knee and right shin and was unable to put weight on his left leg. The IP’s call for help was heard by a technician and he responded to the scene. The technician found the IP face down on the lower level of the work platform. The technician helped the IP sit up and radioed for back up. The subsea supervisor assigned to the rig heard the radio call while working in his office and proceeded to the subsea BOP. The job was stopped and personnel were called to assist the IP off of the work platform. The IP was evaluated by the rig medic, and he was sent in on a helicopter to an onshore medical facility for further evaluation. The area was made secure, and an onsite investigation was initiated by Transocean. Permanent grating was installed over the open hole and the access ladder was removed to prevent reoccurrence of this incident.

The Bureau of Safety and Environmental Enforcement (BSEE) Houma District office was notified orally and a written report was submitted in eWell within 15 days. The BSEE Houma District inspectors (inspectors) were able to collect some documents and pictures related to the incident from the operator and contractor prior to the onsite investigation. A BSEE onsite investigation was conducted on April 3,2024, additional pictures were taken, and documents obtained.

The hatch cover, 2’ 8.75” x 2’ 5.5” x 1”, was damaged and a possible dropped object but was not properly secured because the hinge connecting the hatch cover to the work platform separated. Instead, it was removed by a roustabout on the lifting team without clear communication of the needed corrective action. The open hole was not communicated to all personnel involved in the job. Measurements from the lower deck to the upper deck were provided by Transocean.

The inspectors requested the Job Safety Analysis (JSA) for the subsea BOP maintenance job task, but it could not be provided. Although a Hazard Identification Prompt Card was documented, it did not identify the open hole. Procedures were available but did not have hazard identification, hazard mitigations or a place for signatures for

personnel performing the work.

The IP failed to address the no drop tool policy addressed in the procedures for "Working at Heights on BOP / Related Equipment or in Subsea areas". Transocean removed the ladders leading up to the level where the open hole was located. New grating was installed over the hole where the IP fell to ensure the safety of the work platform and prevent further incidents.

Upon reviewing pictures, documents, witness statements, and Transocean's investigation report, BSEE concluded that removing the hatch cover creating an open hole without a barrier in place was the leading cause of the incident. Failure to communicate the open hole led the IP to believe he could enter the work platform without tying off his harness. The design of the work platform hatch cover led to a possible dropped object anytime it was lifted because it was not secured. If a job task hazard analysis was completed the open hole would have been recognized as a hazard and mitigations would have been put in place.

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

Communication – Instructions not understood - The roustabout on the lifting team did not communicate the open hole to all members of the Subsea BOP team after removing the damaged hatch cover.

Human Performance Error - Failure to implement corrective actions for missing hatch cover.

Equipment Failure – Flawed Equipment Design - Poor design of the hinge connecting the hatch cover to the work platform. The hinge separated from the hatch cover causing the hatch cover to become a possible dropped object.

Human Performance Error - Failure to put barriers in place prior to removal of hatch cover.

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

Work Environment – PPE - Failure to tie off fall protection.

Management Systems – No Hazards analysis - The IP failed to conduct a proper hazard assessment to identify the open hole prior to conducting BOP maintenance.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED: NATURE OF DAMAGE:

N/A **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: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 Does the lessee perform all operations in a safe and workmanlike manner and provide for the preservation and conservation of property and the environment?

No fall protection
Removing damaged hatch cover without a barricade in place
Not following company procedures

25. DATE OF ONSITE INVESTIGATION:

03-MAR-2024

26. Investigation Team Members/Panel Members:

27. OPERATOR REPORT ON FILE:

28. ACCIDENT CLASSIFICATION:

29. ACCIDENT INVESTIGATION PANEL FORMED:
NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Amy Pellegrin

APPROVED DATE: **29-MAY-2024**