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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **21-SEP-2023** TIME: **1505** HOURS
2. OPERATOR: **Arena Offshore, LP**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR:
   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: **G05052**
   AREA: **SP** LATITUDE:
   BLOCK: **83** LONGITUDE:

5. PLATFORM: **A**
   RIG NAME:

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)		
[ ] RW/JT (>3 days)		
[ ] FATALITY		
[X] Other Injury	**0**	**1**

Medical Treatment

- [ ] 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] DECOMMISSIONING
     - [X] PA [ ] PIPELINE [ ] SITE CLEARANCE
     - [ ] TA [ ] PLATFORM
   - [X] OTHER **Plug & Abandonment Operations**

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: **467** FT.
11. DISTANCE FROM SHORE: **13** 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:

INCIDENT SUMMARY:

On 21 September 2023, an incident occurred on South Pass (SP) block 83, Platform "A". SP 83 A is an unmanned and shut-in production platform owned and operated by Arena Offshore, LP (Arena). The incident occurred when the Injured Person (IP) was assisting two other operators who were reinstalling a Pipeline Intervention Gadget (PIG) launcher cap back onto the gas pipeline PIG launcher (KZZ-602). During this process, the three-person crew rotated the cap onto the PIG launcher and mistakenly thought the cap was securely threaded. As they lessened their hold on the cap, it began to fall and the sharp edge of the lever arm shaft penetrated the IP's cut-resistant gloves. This caused a laceration to the IP's right hand. The IP was transported to an onshore medical facility where the injury was assessed and treated.

SEQUENCE OF EVENTS:

On 21 September 2023, at approximately 1505 hours, a three-person crew removed the 12 in PIG launcher cap from KZZ-602, which was located on the cellar deck of the platform for pipeline flushing operations. During the removal of the cap, the lever arm assembly that assists in positioning the cap on and off the launcher became damaged. This forced the crew to have to manually lift the cap back into place for reinstallation. According to the report provided by Arena, when the three-person crew made their initial attempt to position the cap back onto the PIG launcher, they rotated the cap and mistakenly believed that a few threads had connected, which would have secured the cap onto the PIG launcher. At this time, they lessened their hold on the cap which caused it to fall. The IP was holding onto the lever arm shaft from the center of the cap which contained sharp edges. As the IP moved his hand away to let the cap fall, the sharp edge of the lever arm shaft penetrated his cut-resistant gloves and caused a laceration to the IP's right hand.

At approximately 1510 hours, the IP reported the injury to the Health Safety and Environment (HSE) Technician on location. The IP and HSE Technician removed the IP's glove and evaluated the injury. They then boarded the marine vessel Sea Service 1 and reported the injury to the Project Consultant who then initiated Arena's reporting requirements. The IP's wound was cleaned and bandaged, and arrangements were made to transport the IP from the facility to an onshore medical facility for further evaluation.

At approximately 1657 hours, the IP departed SP 83 A via helicopter enroute to Houma-Terrebonne airport (KHUM). The IP arrived at KHUM at approximately 1730 hours, was met by a River Rental Tools, Inc (RRT) HSE manager, and transported to Occupation Medical Services in Houma, LA. The IP's injury was assessed and treated with eleven sutures. The IP was released to return to work without any restrictions.

BSEE INVESTIGATION:

On 21 September 2023 at 1640 hours, BSEE received an initial report of an injury at SP 83 A, requiring evacuation. The report stated that an individual suffered an inter laceration injury to their right index finger while manually reapplying the cap of a PIG launcher. The person was evacuated by helicopter to receive medical attention at an onshore medical facility.

On 2 October 2023, the BSEE Accident Investigator (AI) received the final report from Arena regarding the incident that occurred on 21 September 2023. According to the

report, the Job Safety Analysis (JSA) did not include sequential steps or guidance on how to prevent corrosion from seizing the cap onto the PIG launcher. This made the cap difficult to remove and resulted in the injury. The JSA also lacked guidance on how to eliminate or establish safety measures to prevent personnel from coming into contact with sharp edges. While the JSA recognized the hazard of "falling tools or objects" and provided recommendations to reduce the hazard, the guidance to "secure to prevent dropping and causing injury or damage" was not followed. The contractor's tool house did not have equipment such as a chain hoist available, and the need for one was not identified before the project mobilization. Additionally, personnel and leadership involved in the task failed to use the Stop Work Authority (SWA) when they recognized that equipment was not available. They did not halt the task until equipment or repairs could be afforded to secure the cap from becoming a dropped object. The JSA was not updated once the davit/swing arm was broken, which increased the challenges of the task and risk to personnel. The JSA was also missing a revision to identify a manual handling approach for lifting, holding, and threading the cap onto the PIG launcher.

CONCLUSIONS:

According to the investigation conducted by the BSEE AI, they agree with the findings provided by Arena. The investigation revealed that the JSA should have included steps or guidance for corrosion seizing the cap, which would have helped to elevate the difficulty of removal and eliminate or establish control measures to prevent contact or shield personnel from sharp edges. It was also found that SWA should have been utilized once personnel recognized that the equipment to secure the cap from becoming a dropped object was not available on site. Furthermore, the JSA should have been updated once the davit/swing arm was identified to be broken, which would have helped to elevate the risk to personnel and impose additional challenges.

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

• Human Performance Error – Not aware of hazards: The pig launcher cap was not secured to prevent it from falling in the event of a manual handling mishap during re-installation.

• Human Performance Error – Inattention to task: Personnel were collectively focused on the reinstallation of the pig launcher and did not thoroughly evaluate the severity of the risk involved.

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

• Human Performance Error – Inattention to task: following the removal, and prior to re-installation, the sharp edges of the shaft of the pig launcher cap were not mitigated prior to performing the job, which would have shielded personnel from contact.

• Communication – Inadequate communication: Lack of verbal communication and preparedness between the three workers before two of the three released their grip/hold.

20. LIST THE ADDITIONAL INFORMATION:

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

NATURE OF DAMAGE: **N/A**

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans 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:

25. DATE OF ONSITE INVESTIGATION:

28. ACCIDENT CLASSIFICATION:

26. Investigation Team Members/Panel Members:

Nathan Bradley /

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

27. OPERATOR REPORT ON FILE:

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED DATE: **26-JAN-2024**