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

For Public Release

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: **24-FEB-2023** TIME: **1115** HOURS

2. OPERATOR: **Shell Offshore Inc.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Helmerich & Payne**
   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: **G07963**
   AREA: **MC** LATITUDE:
   BLOCK: **807** LONGITUDE:

5. PLATFORM: **A-Mars TLP**
   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)		
[X] LTA (>3 days)	**0**	**1**
[ ] 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
- [ ] DRILLING
- [ ] WORKOVER
- [X] 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: **2933** FT.
11. DISTANCE FROM SHORE: **52** 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:

INCIDENT SUMMARY:

On 24 February 2023, an incident occurred at Mississippi Canyon (MC) 807, Platform A. MC 807A (Mars) is a Tension Leg Platform owned and operated by Shell Offshore Inc. (Shell). The incident occurred when the Injured Person (IP) was utilizing a manual hack saw to cut a combination wrench shorter, to install a hydraulic line on the Pipe Handling Machine (PHM). An onsite medic provided first aid treatment to the IP, but determined further treatment was needed at an onshore medical facility.

SEQUENCE OF EVENTS:

On 24 February 2023 at approximately 1115 hours, a Mechanic (the Injured Person (IP)) and an Electrician were attempting to install a hydraulic line on the PHM when they determined the combination wrench being used was too long to access the fitting needing to be tightened. The IP then decided to modify the combination wrench by using a manual hack saw to cut the wrench shorter in size. The wrench was then placed into a vise to stabilize it while the cut was made. As the IP cut through the final section of the wrench, the IP's weight shifted and caused his hand to come down onto the freshly cut sharp edge of the wrench, resulting in a laceration between the ring and little finger. The IP reported to and was initially treated by the onsite medic, but it was determined further treatment was needed at an onshore medical facility.

At 1556 hours, the IP was sent onshore to the heliport in Houma, LA. From there, the IP drove to a medical facility in Morgan City, LA. The IP received sutures at the medical facility and was released back to duty; however, the IP did not return offshore. Shell stated that there were no available flights going to MC 807A on 25 February 2023, so the IP stayed in a hotel in Morgan City, LA. On 26 February 2023 at 0830 hours, the IP boarded a regularly scheduled crew change helicopter at Houma and arrived back to the Mars platform at 0920 hours.

BSEE INVESTIGATION:

On 7 March 2023 at 0850 hours, Shell submitted a report to the Bureau of Safety and Environmental Enforcement (BSEE) notifying of an incident that occurred at MC 807A. The report briefly described that events that transpired on 24 February 2023 involving a mechanic employed by Helmerich & Payne, Inc. (H&P) and provided photos of the glove, vise, and wrench.

On 28 March 2023, per BSEE's request, Shell provided the Incident Investigation Report completed by H&P and an office investigation was conducted. The IP has been employed with H&P for 25 years and 10 months and has held the position of Mechanic for 11 years and 5 months. The incident occurred on the IP's 4th day of a 21 day work cycle. The IP and an H&P Electrician were tasked with changing a hydraulic fitting on the lower PHM drive. According to documents and photos provided, the location of the fitting was in a tight and restrictive area of the PHM, preventing the combination wrench being used to access to the fitting in order to properly tighten. Reports provided stated that the Electrician advised the IP that a smaller wrench was needed. The IP made a decision to alter the wrench instead of attempting to locate a close radius hand tool. There was no discussion with the supervisor about modifying the wrench or obtaining the proper tool. The reports also stated that the IP did not discuss altering the combination wrench with the electrician coworker. The IP was wearing gloves at the time of the incident; however, they were not cut resistant.

On 31 March 2023, BSEE New Orleans District Accident Investigator (AI) obtained and reviewed documentation provided by Shell.

CONCLUSIONS:

The IP's decision to modify the wrench was not discussed with supervisor or with coworker, nor was an attempt made to reach out to other work groups to see if a close radius wrench was available for use. H&P's Job Safety Analysis (JSA) states at the top, "If during the task new exposures are recognized which are not covered in the JSA, STOP the job, reassess the risks, and revise the JSA.". BSEE's investigation finds lack of supervision to be a probable cause leading up to the incident. Pre-job safety and operation meeting proves to be inadequate by not ensuring the correct tools for the job task were gathered. Once it was determined that a shorter wrench was needed, the job should have been stopped, the risks should have been reassessed, and a revision to the JSA should have been made with the supervisor's approval.

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

• Supervision – No or inadequate pre-job safety and operation meeting: IP did not discuss cutting the wrench with coworker or supervisor.
• Supervision – Not providing adequate tools or equipment for tasks: JSA lists "Gather tools needed for job" as step 2, but the correct tool for the job task was not obtained.

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

• Human Performance Error – Rushing to get job complete: IP made the decision to modify the wrench instead of obtaining the right tool for the job.
• Human Performance Error – Improper hand placement: IP's hand placement while making the cut to the wrench is a contributing cause to the incident.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED: NATURE OF DAMAGE:

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: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G110: DOES THE LESSEE PERFORM ALL OPERATIONS IN A SAFE AND WORKMANLIKE MANNER AND PROVIDE FOR THE PRESERVATION AND CONSERVATION OF PROPERTY AND THE ENVIRONMENT?

On 24 February 2023, an unsafe and unworkmanlike operation resulted in an injury. The injured person (IP) was attempting to install a hydraulic line on the pipe handling machine (PHM) when it was determined that the combination wrench being used was too long.

The IP then placed the wrench in a vise and used a manual hack saw to cut the wrench shorter. In doing so, the IP's hand came down onto the freshly cut sharp edge, resulting in a laceration that required sutures. This incident could have been prevented had the IP acquired the right tools to complete the job task.

25. DATE OF ONSITE INVESTIGATION:

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:
David Trocquet

APPROVED DATE: **20-JUL-2023**