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

**ACCIDENT INVESTIGATION REPORT** 

# For Public Release

1.	DATE: 20-AUG-2022 TIME: 1007 HOURS	TRUCTURAL DAMAGE RANE
2.	OPERATOR:DREPRESENTATIVE:ITELEPHONE:HCONTRACTOR:XREPRESENTATIVE:S	THER LIFTING AMAGED/DISABLED SAFETY SYS. NCIDENT >\$25K 2S/15MIN./20PPM EQUIRED MUSTER HUTDOWN FROM GAS RELEASE THER
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	8. OPERATION:
4.	LEASE: G05868 AREA: MC LATITUDE: 28.15402604 BLOCK: 809 LONGITUDE: -89.10355357	DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL
5.	PLATFORM: A-Ursa TLP RIG NAME:	MOTOR VESSESPIPELINE SEGMENT NO.XOTHERSuspended Operation
6.	ACTIVITY: EXPLORATION(POE) DEVELOPMENT/PRODUCTION (DOCD/POD)	9. CAUSE:
7.	TYPE: INJURIES: HISTORIC INJURY OPERATOR CONTRACTO REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days) RW/JT (1-3 days) RW/JT (>3 days)	X EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER
	FATALITY Other Injury	
	POLLUTION	11. DISTANCE FROM SHORE: 62 MI.
	X FIRE   EXPLOSION	12. WIND DIRECTION: SPEED: M.P.H.
	LWC HISTORIC BLOWOUT UNDERGROUND SURFACE	13. CURRENT DIRECTION: SPEED: M.P.H.
	DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	14. SEA STATE: FT. 15. PICTURES TAKEN:
		16. STATEMENT TAKEN:

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#### INCIDENT SUMMARY:

On 20 August 2022, an incident requiring muster occurred on the Mississippi Canyon (MC) 809 A - "Ursa". Ursa is a Tension Leg Platform (TLP) owned and operated by Shell Offshore Inc. (Shell) operating 62 miles offshore in 3970 feet of water. A worker entered into a Safe Welding Area (SWA) and noticed a small flame emanating from an unattended oxygen/acetylene cutting torch. The flame was quickly extinguished using a nearby portable fire extinguisher, and the area was secured. Out of an abundance of caution, the control room activated the general alarm causing a full muster and a Fire Team was dispatched to the scene. No flame, smoke or damage was observed by the Fire Team at the scene. There were no injuries or pollution as a result of this incident.

### SEQUENCE OF EVENTS:

On 20 August 2022 at 1007 hours, a worker entered into the SWA and observed a small flame emanating from an unattended oxygen/acetylene cutting torch hanging from the bulkhead. The worker immediately notified the Control Room who then sounded the General Alarm for full muster and assembly of the Incident Command System (ICS) team. Simultaneously, the worker grabbed a nearby portable fire extinguisher located inside the SWA and extinguished the flame, securing the area. The Fire Team was dispatched to the scene, but did not observe any flame, smoke, or damage. Meanwhile, the remaining platform workers reported to their assigned muster station. A fire watch was designated and posted in the SWA to monitor and ensure no reoccurring flames appeared. All personnel at the muster station were given the "all clear" and returned to their duties.

## BSEE INVESTIGATION:

On 20 August 2022 at approximately 1500 hours, the Bureau of Safety and Environmental Enforcement (BSEE) received notification on the incident with photos provided.

On 22 September 2022, Shell provided additional documentation and a root cause analysis to the BSEE New Orleans District office.

According to reports and documentation obtained by a BSEE Accident Investigator (AI), it was discovered that a construction crew was working in the SWA shortly before 0900 hours. During this time, construction crews were utilizing a cutting torch to cut a patch plate to size to be installed on a blast wall. Shortly after the cutting commenced, construction personnel decided to use a plasma cutter in lieu of the cutting torch. Reports stated that the cutting torch and hoses were then rolled up and stored on a bracket hung on the wall. Speculations suggest that a spark from the plasma cutter (while in use) ignited the acetylene side of the cutting torch resulting in a small flame. The estimated time the flame burned before being discovered by another worker at 1007 hours was approximately 1 hour. No damage, pollution, or injuries occurred from this incident.

## CONCLUSIONS:

The BSEE New Orleans District office determined that the torch bottle valves were not closed when finished with use, the torch lines were not depressurized, and the acetylene valve on the torch itself was not fully closed tight. As a result, sparks from the plasma cutter came into contact with the torch head, and igniting a small flame from the acetylene side of the torch.

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Shell's corrective action to prevent future incidents of the same nature include closing torch bottle valves when NOT in use, depressurizing torch lines after bottle valves are closed, and checking equipment before work to ensure connections are tight. In addition, Shell also reiterated that personnel utilizing the SWA should be mindful of where the sparks are being directed, what is in the area, and how the spark direction could affect items in the area.

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

• Human Performance Error - Inattention to task: Torch was stored away without closing the bottle valves, depressurizing the lines, and ensuring the torch head valves were fully tightened.

• Human Performance Error - Not aware of hazards: While workers were utilizing the plasma cutter, sparks came into contact with the torch head causing the acetylene gas leaking from the torch to ignite.

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

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

# N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

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

25. DATE OF ONSITE INVESTIGATION: 28. ACCIDENT CLASSIFICATION:

20-AUG-2022

26. INVESTIGATION TEAM MEMBERS:

Nathan Bradley

27. OPERATOR REPORT ON FILE:

- 29. ACCIDENT INVESTIGATION PANEL FORMED: NO OCS REPORT:
- 30. DISTRICT SUPERVISOR: David Trocquet

APPROVED DATE: 30-SEP-2022

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