

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

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED

DATE: **03-JUL-2023** TIME: **1545** HOURS

2. OPERATOR: **Walter Oil & Gas Corporation**

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: **ISLAND OPERATORS CO. INC.**

REPRESENTATIVE:

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER **First Aid**

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR
 ON SITE AT TIME OF INCIDENT:

4. LEASE: **G22812**

AREA: **MP** LATITUDE:

BLOCK: **270** LONGITUDE:

5. PLATFORM: **B**

RIG NAME:

6. ACTIVITY: EXPLORATION(POE)
 DEVELOPMENT/PRODUCTION
 (DOCD/POD)

7. TYPE:

INJURIES:

HISTORIC INJURY

	OPERATOR	CONTRACTOR
<input checked="" type="checkbox"/> REQUIRED EVACUATION	1	
<input type="checkbox"/> LTA (1-3 days)		
<input type="checkbox"/> LTA (>3 days)		
<input checked="" type="checkbox"/> RW/JT (1-3 days)	1	
<input type="checkbox"/> RW/JT (>3 days)		
<input type="checkbox"/> FATALITY		
<input type="checkbox"/> 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
- 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
- OTHER **Supervision**

10. WATER DEPTH: **210** FT.

11. DISTANCE FROM SHORE: **31** 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 3 July 2023, an incident requiring evacuation occurred at Main Pass (MP) 270, Platform "B". MP 270 B is a production platform owned and operated by Walter Oil & Gas Corporation (WOG). The injured person (IP) was testing the Level Safety High/Low (LSHL) on the Glycol Reboiler when a blockage in the bridle occurred. As the IP cleared the obstruction, heated Triethylene Glycol drained out of the bridle and onto the IP, resulting in severe burns to the IP's abdomen, arms, and side. The IP was given treatment at an onshore medical facility and consequently released to Restricted Work (RW) duty for three days.

SEQUENCE OF EVENTS:

On 3 July 2023 at approximately 1545 hours, an "A" Operator (IP) employed by Island Operating Company (IOC) was performing monthly testing of the LSHL located on the Glycol Reboiler (EBC 2151), when the IP encountered a blockage within the bridle. As the IP cleared the blockage, heated Glycol drained out of the bridle and splashed onto the IP, resulting in severe 2nd degree burns to the IP's stomach, arms, and side. At approximately 1645 hours, the IP departed the platform on the loop helicopter and was flown to the onshore heliport. From there the IP drove his personal vehicle, accompanied by another crew member, to an onshore medical facility for evaluation. The IP was treated and released to RW duty and advised to avoid direct sunlight for the next three days.

BSEE INVESTIGATION:

On 3 July 2023, at 1729 hours, the Bureau of Safety and Environmental Enforcement (BSEE) received an email notification from WOG, that a IOC employee received a burn to the stomach while clearing a blockage on a LSHL bridle located on the Glycol Reboiler (EBC 2151), and was sent to Plaquemines Medical Center in Port Sulphur, LA for evaluation. BSEE received an email follow-up update of the incident on 5 July 2023 at 0809 hours from WOG. It was reported that the IP's burns were scrubbed and cleaned at the medical facility. The IP was advised to keep Neosporin on the burns and take ibuprofen as needed and given a release to return to work, but to avoid direct sunlight for the next three days. The IP remained onshore and was placed in the office doing administrative work for the remaining three days.

The BSEE Accident Investigator (AI) received and reviewed requested documents on 7 July 2023. Those documents include the Job Safety Analysis (JSA), Testing procedures, and Material Safety Data Sheet (MSDS) for Triethylene Glycol. The AI also received the "Operational Safety Alert" put out by WOG on 19 July 2023.

On 11 July 2023, BSEE received a picture of the IP's burns depicting a much more severe burn than suggested on initial notification. The IP suffered 2nd degree burns to the abdomen, side, and arms. Using the "rule of nines" method that is used by doctors and emergency medical providers to estimate what percentage of a person's body is burned, the IP sustained 2nd degree burns to an estimated 27 percent of the body, categorizing this as a severe incident.

Further investigation determined that the IP did follow the proper testing procedures provided by IOC. However, the possibility of being splashed by heated Glycol was overlooked. The JSA acknowledged the presence of a hazardous substance but missed the section of the JSA form "Other Hazards" and the possible obstacle of having to "manage potential blocked or plugged equipment". The IP was wearing Personal Protective

Equipment (PPE) at the time of the incident, and though it was adequate for working with ambient temperature liquids, it was not suitable for working with the 350°F Glycol.

CONCLUSIONS:

The IP followed IOC's testing procedures, but the possibility of encountering hot Glycol from the Glycol Reboiler was overlooked. It was also determined that the PPE worn by the IP was inadequate and should have provided protection for chemical risk and hot liquid (thermal) risk. WOG sent out an Operational Safety Alert (OSA-2023-014) on 19 July 2023, to all employees and contractors working on WOG facilities. The title of the OSA was "Preventing Hot Liquid and Chemical Injuries" and described the lessons that were learned from the glycol burn incident. The safety alert also highlighted the proper PPE that should be worn when working with hot liquids and chemicals to raise awareness to all personnel working on WOG facilities to be aware of the hazards they could be exposed to and the steps to take in order to mitigate the risk.

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

- Human Performance Error - Not aware of hazards: IP overlooked the thermal hazards associated with working with hot liquids and chemicals.

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

- Supervision - Not ensuring the use of proper PPE: IP should have had on PPE that was in accordance with the MSDS for Triethylene Glycol as well as protection from the thermal risk of the hot Glycol.

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: 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:

01-NOV-2023