

# ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **10-MAY-2023** TIME: **0933** HOURS

2. OPERATOR: **Equinor USA E&P Inc.**

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:

8. OPERATION:

4. LEASE: **G16661**

AREA: **MC** LATITUDE:

BLOCK: **941** LONGITUDE:

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO.
- OTHER

5. PLATFORM: **A(Mirage/Titan)**

RIG NAME:

6. ACTIVITY:

- EXPLORATION(POE)
- DEVELOPMENT/PRODUCTION  
(DOCD/POD)

9. CAUSE:

7. TYPE:

INJURIES:

HISTORIC INJURY

OPERATOR CONTRACTOR

REQUIRED EVACUATION

LTA (1-3 days)

LTA (>3 days)

RW/JT (1-3 days)

RW/JT (>3 days)

FATALITY

Other Injury

- EQUIPMENT FAILURE
- HUMAN ERROR
- EXTERNAL DAMAGE
- SLIP/TRIP/FALL
- WEATHER RELATED
- LEAK
- UPSET H2O TREATING
- OVERBOARD DRILLING FLUID
- OTHER **hydrocarbon release**

POLLUTION

FIRE

EXPLOSION

LWC  HISTORIC BLOWOUT

UNDERGROUND

SURFACE

DEVERTER

SURFACE EQUIPMENT FAILURE OR PROCEDURES

10. WATER DEPTH: **4050** FT.

11. DISTANCE FROM SHORE: **63** 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:

COLLISION  HISTORIC  >\$25K  <=\$25K

**INCIDENT SUMMARY:**

On 10 May 2023, an incident occurred at Mississippi Canyon (MC) 941, Platform A. MC 941 A (Titan) is a spar platform owned and operated by Equinor USA E&P Inc. (Equinor). The incident occurred while removing a header equalization line during a scheduled shut-in. Two workers were sprayed with a small amount of hydrocarbon fluid as they were removing bolts from a flange on the header equalization line. As a result, the escaping hydrocarbons activated a nearby gas detector and sounded the platform alarm for personnel to report to their muster station. No injuries, pollution, or damage to equipment occurred from this incident.

**SEQUENCE OF EVENTS:**

On 10 May 2023, at approximately 0930 hours, two workers employed by Grand Isle Shipyards (GIS) were working to demo the 2 inch Well Equalization Header line and install a blind flange. As the workers loosened the last bolt, trapped pressure within the line escaped and sprayed the two workers in the face with a small amount of hydrocarbon fluid. The release activated a nearby gas detector at 0933 hours, sounding the platform alarm for all personnel to report to their muster station. At 0934 hours, the Equinor Control Room Operator (CRO) radioed that gas detector ASH 0500 located near the Headers had been tripped. The Equinor Production Supervisor and Day Lead Operator responded to the area of the suspected gas leak at approximately 0936 hours to assess the leak, and at 0939 hours the Production Supervisor radioed to the Incident Command that no gas leak has been detected. By 0940 hours, full accountability of all personnel was reported at the muster station. The "all clear" was given at 0941 hours and the Equinor Offshore Installation Manager (OIM) ordered all personnel to stand down from their emergency and muster stations but maintain a safety stand-down.

After the "all clear" was given, the two workers showered, and reported to the sickbay. The workers were examined individually by the medic and a medical control physician who conducted an evaluation via telemedicine webcam. Both workers were cleared by the medic and physician of any injury and released back to full duty without any restrictions.

**BSEE INVESTIGATION:**

On 16 May 2023, Equinor submitted a report to the Bureau of Safety and Environmental Enforcement (BSEE) notifying of an incident that occurred at MC 941 A. The report briefly described the events that transpired on 10 May 2023 involving two GIS workers during a scheduled shut-in.

On 17 May 2023, per BSEE's request, Equinor provided the Job Safety Environmental Analysis (JSEA), drawings, photos, witness statements, and other related documents to the BSEE Accident Investigator (AI) and an office investigation was conducted. After reviewing all documents pertaining to the incident, the AI determined that the Well Equalization Header line the workers were working on was isolated, but the possibility of residual fluids contained in the dog leg bend above the flange was overlooked. As a result, trapped pressure was released when the workers loosened the bolts holding the flange together. Both workers were wearing safety glasses and face shields at the time of the incident, which likely prevented the workers from being injured when the hydrocarbons released near their face. Despite the presence of a nearby Eyewash/Shower station, the workers opted to clean the hydrocarbons off their face shields and hard hats using the eyewash bottles that were within reach.

CONCLUSIONS:

BSEE's investigation found that the possibility of residual fluids and/or trapped pressure in the dog leg bend above the flange was overlooked. Platform personnel did complete a Simple Isolation Certificate prior to the work being done. This entailed of personnel going over drawings and identifying isolation points as well as designated personnel physically verifying the isolation points. Equinor's plan forward is they will review isolations to look for any possibility of hydrocarbon release from doglegs or dead-legs due to residual fluid static pressure remaining after lockout/tagout is completed, even if zero pressure is indicated on the gauge.

To ensure personnel safety, Equinor implemented engineering controls for residual fluids or static pressure release. Even if the gauge indicates zero pressure, it is important to review isolations for potential hydrocarbon release from dog-legs or dead-legs. Utilizing appropriate engineering controls is crucial for personnel safety.

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

- Human performance Error - Not aware of hazards: The possibility of residual fluids and/or trapped pressure in the dog leg bend above the flange was overlooked

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

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

N/A

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:

25. DATE OF ONSITE INVESTIGATION:

28. ACCIDENT CLASSIFICATION: *For Public Release*

26. Investigation Team Members/Panel Members:

**Nathan Bradley /**

27. OPERATOR REPORT ON FILE:

29. ACCIDENT INVESTIGATION PANEL FORMED:

**NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**David Trocquet**

APPROVED

DATE:

**03-AUG-2023**