ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED
   DATE: 13-JAN-2021 TIME: 2304 HOURS
   STRUCTURAL DAMAGE
   CRANE
   OTHER LIFTING
   DAMAGED/DISABLED SAFETY SYS.
   INCIDENT >$25K
   H2S/15MIN./20PPM
   REQUIRED MUSTER
   X SHUTDOWN FROM GAS RELEASE
   OTHER

2. OPERATOR: Shell Offshore Inc.
   REPRESENTATIVE:
   TELEPHONE:
   OTHER LIFTING
   DAMAGED/DISABLED SAFETY SYS.
   INCIDENT >$25K
   H2S/15MIN./20PPM
   REQUIRED MUSTER
   X SHUTDOWN FROM GAS RELEASE
   OTHER

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

4. LEASE: G05868
   AREA: MC LATITUDE:
   BLOCK: 809 LONGITUDE:
   PIPELINE SEGMENT NO.
   OTHER

5. PLATFORM: A-Ursa TLP
   RIG NAME:
   MOTOR VESSEL
   PILOT VESSEL
   HELICOPTER
   OTHER TELEPHONE:

6. ACTIVITY: EXPLORATION (POE)
   DEVELOPMENT/PRODUCTION (DOCD/POD)
   REQUIRED MUSTER
   X SHUTDOWN FROM GAS RELEASE
   OTHER

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)
   PATIALITY
   Other Injury

8. OPERATION:
   PRODUCTION
   DRILLING
   WORKOVER
   COMPLETION
   HELICOPTER
   MOTOR VESSEL
   OTHER TELEPHONE:

9. CAUSE:
   EQUIPMENT FAILURE
   HUMAN ERROR
   EXTERNAL DAMAGE
   SLIP/TRIP/FALL
   WEATHER RELATED
   LEAK
   UPSET H2O TREATING
   OVERBOARD DRILLING FLUID
   OTHER

10. WATER DEPTH: 3970 FT.
11. DISTANCE FROM SHORE: 62 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
   OTHER
INCIDENT SUMMARY:

On 13-January-2021 at approximately 2315 hrs, a gas release caused a muster on Mississippi Canyon (MC) 809 A - Ursa, owned and operated by Shell Offshore Inc (Shell). The gas leak led to a facility muster and emergency shut down (ESD). No equipment was damaged and no injuries occurred during this event.

SEQUENCE OF EVENTS:

At approximately 2315 hrs on 13-January-2021, the Control Room Operator (CRO) noticed a gas detection alarm below the 40% Lower Explosive Limit (LEL) near the suction of the Recycle Gas Compressor (RGC). The CRO initiated a fast-stop and blowdown of the RGC. Within minutes, four more gas detectors in the area alarmed. The CRO initiated an ESD and full platform muster. The Emergency Response Team (ERT) discovered the source of the leak was from the packing on the recycle valve labeled FCV-1053B.

After the gas pressure was bled down, the release was isolated. The Offshore Installation Manager (OIM) ordered personnel to stand down from the muster.

BSEE INVESTIGATION:

On 21-January-2021 at 1248 hours, the Bureau of Safety and Environmental Enforcement (BSEE) Accident Investigator (AI) received an email summarizing the incident. The AI requested and received a maintenance report of the RGC and pictures associated with the leak.

After reviewing the maintenance report and associated pictures, BSEE's AI concurs with Shell that the cause of the gas release was due to the packing failure of the recycle valve FCV-1053B. Valve packing is a sealant used to prevent leaks in valve stems. Gas detectors were in working order at the time of the incident and safety procedures were followed. The ESD functioned properly. The failed packing was removed from the recycling valve and new packing was installed. The valve was then tested, and no emissions were detected after the repair.

CONCLUSIONS:

Failed packing of the recycle valve resulted in gas leaking out and triggering an alarm. Gas detectors worked properly and the ESD functioned as designed.

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

Equipment Failure: Inoperable equipment - Failed packing in the recycle valve allowed gas to escape, which triggered the alarm.

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:
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 makes no recommendations to the Office of Incident Investigation.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

26. INVESTIGATION TEAM MEMBERS:
   Nathan Bradley /

27. OPERATOR REPORT ON FILE:

28. ACCIDENT CLASSIFICATION:

29. ACCIDENT INVESTIGATION PANEL FORMED: NO
   OCS REPORT:

30. DISTRICT SUPERVISOR:

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