

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: 17-FEB-2023 TIME: 0430 HOURS

2. OPERATOR: Cox Operating, L.L.C.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K cost of repair will exceed 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: G01083

AREA: WD LATITUDE:

BLOCK: 73 LONGITUDE:

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO. 759
- OTHER

5. PLATFORM: A-TWR

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 _____

POLLUTION

FIRE

EXPLOSION

LWC HISTORIC BLOWOUT

UNDERGROUND

SURFACE

DEVERTER

SURFACE EQUIPMENT FAILURE OR PROCEDURES

10. WATER DEPTH: 168 FT.

11. DISTANCE FROM SHORE: 17 MI.

12. WIND DIRECTION: NW
SPEED: 35 M.P.H.

13. CURRENT DIRECTION:
SPEED: M.P.H.

14. SEA STATE: 8 FT.

15. PICTURES TAKEN:

16. STATEMENT TAKEN:

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

17. INVESTIGATION FINDINGS:

INCIDENT SUMMARY:

On 17 February 2023, a gas leak occurred at a production platform owned and operated by Cox Operating, LLC (Cox). West Delta (WD) 73 consists of four structures joined together by catwalks, 73Q, 73D, 73AT, and 73A. The gas leak was discovered on a 12-inch gas pipeline riser, approximately 5-7 feet above the water line, on the WD 73AT structure. The platform's Emergency Shutdown System (ESD) was activated, and all personnel on board (POB) mustered upwind of the leak on the quarters structure (73Q).

SEQUENCE OF EVENTS:

On 17 February 2023, at approximately 0315 hours, platform operators observed a gas leak approximately 5-7 feet above the water line from a 12 inch gas pipeline, pipeline segment number (PSN) 759, located on the WD 73AT platform. The ESD was pulled, shutting down the entire facility including electrical power, and sounding the alarm for all personnel to report to their muster station. All 26 POB were accounted for and remained sheltered in place in the quarters building located upwind from the leak. The sea state at the time of the incident was around 5-8 foot seas with winds out of the North at 20 to 30 knots with gusts up to 40 knots. Due to weather conditions and the winds blowing the leaked gas away from the living quarters, WD 73Q, it was determined that sheltering inside WD 73Q was the safest option at the time.

At approximately 0330 to 0400 hours, a temporary means of communication was established and a call was made to Grand Isle (GI) 18A to bleed down the pipeline which was at around 1080 psi at the time of incident. PSN 759 is a 12 inch gas pipeline that runs to/from WD 73AT to GI 18A and is an estimated 98,285 feet in length. Cox activated their emergency response plan, notifying their partnership with Forefront Emergency Management (FEM), who in turn, recommended placing Clean Gulf Associates (CGA) on standby.

At 0435 hours, the National Response Center (NRC) was notified, and a report was issued (NRC#1360214). At 0445 hours, FEM began notifications to multiple state and federal agencies. At 0548 hours, the Bureau of Safety and Environmental Enforcement (BSEE) New Orleans District (NOD) confirmed receipt of notification. At approximately 0630 hours as it became daylight, Cox reported that no sheens were observed from the quarters structure, where all POB remained in place. At 0650 hours, CGA placed a 95 foot skimming vessel, motor vessel (M/V) Breton Island, on standby in Venice, LA. At 0722 hours, a helicopter left its base in Houma, LA enroute to WD 73 for overflight observations.

At 0804 hours, overflight operations observed a very light and nonrecoverable sheen emanating from the AT platform. The sheen was reported being roughly 2.56 miles long and 300 feet in width with 50% coverage and a silvery color. CGA's M/V Brenton Island remained on standby due to weather/sea conditions and no observable recoverable product. At 0830 hours, the diesel generator at the "D" platform was started. Two production operators remained on station with portable gas detectors for continuous monitoring, rotating personnel every 2 hours.

At approximately 0900 hours, Cox personnel reported that the sheen was not originating from the pipeline. According to Cox's report, since the ESD was activated, the slop oil tank (consisting of mostly water with some oil) continued to receive rainwater due to weather conditions and could not dump. This led to hydrocarbons escaping from the top of the tank and dripping down the side onto the platform.

On 18 February 2023 at 0015 hours, GI 18A confirmed the pipeline pressure for PSN 759 was at 0 psi, and at 0100 hours, WD 73AT also confirmed the pipeline pressure for PSN

759 was at 0 psi.

BSEE INVESTIGATION:

On 17 February 2023 at approximately 0448 hours, FEM left a voicemail notification to the BSEE NOD afterhours phone with a brief description of the incident that occurred at WD 73. BSEE confirmed receipt of notification at approximately 0548 hours. Due to unfavorable weather conditions, BSEE was unable to conduct an overflight or onsite investigation.

On 22 February 2023, the BSEE NOD Accident Investigator (AI) reviewed the Level 1 surveys for WD 73AT provided by Cox. The most recent Level 1 survey was completed on 15 February 2023 and showed no issues or damage to the PSN 759 riser or riser clamps and was given an "A" on coating rating and "Good" for structural rating. The AI also corresponded with BSEE Pipeline Section to see if any recent repairs or clamps have been made or installed to PSN 759. The BSEE Pipeline Section reported no recent repairs or concerns.

On 27 February 2023, the BSEE NOD AI with a BSEE Office of Incident Investigations Senior Investigator conducted an onsite investigation. During the onsite investigation, both investigators interviewed witnesses, took photographs, and collected documents including a Level 2 survey from December 2015. The Level 2 survey completed on 11 December 2015 inspected the Cathodic Potential (CP) and Riser/J-Tube. According to the survey report, CP readings were taken on the riser at the -10 foot level and at 10 foot intervals to the bottom with no areas of concern. The Riser/J-Tube survey showed the riser was cleaned and wrapped with Synthoglass at -15 feet, -107 feet, and 109 feet. According to the report, the diver was unable to repair damage at the waterline due to rough seas. The riser is concrete coated, and the damage noted was to the concrete coating. During the investigation, the NOD AI requested documentation referring to the pipeline repair. However, Cox could not provide documentation stating the repairs at the waterline were ever made.

In conclusion, BSEE's investigation determined that Cox failed to properly maintain PSN 759. This is supported by Cox's inability to provide documents showing the repairs at the waterline (noted in the 2015 Level 2 survey) were ever made. BSEE also identified an inadequate Level 1 survey that was conducted on 15 February 2023. During the survey, a drone was used to inspect PSN 759 and did not provide sufficient examination of the pipeline. Another contributing factor to the incident discovered in BSEE's investigation was the lack of use of an intelligent Pipeline Inspection Gauge (PIG) with technology capabilities of magnetic flux leakage (MFL), ultrasound, and/or calipers to measure the inside geometry of the pipeline. Using this type of PIG could have identified metal loss, corrosion, cracks, or any other contributing factors within the pipeline that lead up to the gas release.

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

- **Equipment Failure - Inadequate preventative maintenance:** Lessee failed to provide adequate preventative maintenance that could have identified and prevented the gas release.

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

- Management Systems - Environmental Control Program: Pipeline riser was not coated with protective lining at the riser hanger.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Pipeline Riser

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:

- L804: IS THE PIPELINE PROPERLY MAINTAINED AND USED FOR THE PURPOSE FOR WHICH THE ROW WAS GRANTED?

Pipeline segment number (PSN) 759 was not properly maintained, resulting in the gas leak incident that occurred on 17 February 2023 at the WD 73-AT platform.

25. DATE OF ONSITE INVESTIGATION:

28. ACCIDENT CLASSIFICATION:

26. Investigation Team Members/Panel Members:

29. ACCIDENT INVESTIGATION PANEL FORMED:

Nathan Bradley / Pierre Lanoix /
Forrest Temple /

NO

OCS REPORT:

27. OPERATOR REPORT ON FILE:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED

DATE:

20-JUL-2023