

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

For Public Release

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: 07-MAR-2025 TIME: 0815 HOURS

2. OPERATOR: W & T Offshore, Inc.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: Quality Process Services, L.L.C

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:

4. LEASE: G05537

AREA: SS LATITUDE:

BLOCK: 80 LONGITUDE:

5. PLATFORM: A

RIG NAME:

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

7. TYPE:

INJURIES:

☐ HISTORIC INJURY

☒ REQUIRED EVACUATION

☐ LTA (1-3 days)

☒ LTA (>3 days)

☐ RW/JT (1-3 days)

☐ RW/JT (>3 days)

☐ FATALITY

☐ Other Injury

OPERATOR

CONTRACTOR

1

1

1

1

☐ POLLUTION

☒ FIRE

☐ EXPLOSION

LWC ☐ HISTORIC BLOWOUT

☐ UNDERGROUND

☐ SURFACE

☐ DEVERTER

☐ SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION

☐ HISTORIC

☐ >\$25K

☐ <=\$25K

8. OPERATION:

- ☒ PRODUCTION ☐ TEMP ABAND
☐ DRILLING ☐ PERM ABAND
☐ WORKOVER ☐ DECOM PIPELINE
☐ COMPLETION ☐ DECOM FACILITY
☐ HELICOPTER ☐ SITE CLEARANCE
☐ MOTOR VESSEL
☐ PIPELINE SEGMENT NO.
☐ OTHER

9. CAUSE:

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

10. WATER DEPTH: 30 FT.

11. DISTANCE FROM SHORE: 20 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 March 7, 2025, W&T Offshore Inc. (W&T) notified the Bureau of Safety and Environmental Enforcement (BSEE) Houma District Office that a fire incident occurred at its production facility located at Ship Shoal Block 80 (SS 80), Platform A, Lease OCS-G05537. The fire resulted in the injury and evacuation of two personnel. W&T reported that while attempting to bring a pipeline pump online, the pump backfired resulting in a flash fire that injured the two persons. The facility was immediately shut-in and the remaining flame was extinguished. Both individuals were evacuated via crew change helicopter from the facility to Lady of the Sea Hospital, then transported to University Hospital Burn Unit for further treatment.

Sequence of events:

W&T reported to BSEE that at 8:15 on March 7, 2025, a W&T Mechanic (Mechanic) and Contractor Electrician (Electrician) were at SS 80 to attempt to bring Pipeline Pump #2- PAX-360 (Pipeline Pump #2) online. The Electrician was positioned by the start valve and the Mechanic was positioned near the magneto to see if it was turning. When the Electrician opened the start valve to supply fuel gas to Pipeline Pump #2's starter, a backfire noise was heard, and then a flash fire occurred.

Another W&T mechanic and a Danos production operator were present at SS 80 at the time of the incident. The mechanic was working on nearby Pipeline Pump #1- PAX-350 (Pipeline Pump #1) when he saw the flash fire and immediately went to notify the production operator to shut-in the facility. The two then grabbed a wheeled fire extinguisher unit and put out the remaining flame on the starter. They then assisted the two IP's in being transported away from the facility.

The flash fire caused burns to the head and hands of both the Mechanic and Electrician. Both individuals were flown in by helicopter, initially seen at a hospital emergency room, then transported to the burn center. Both the Mechanic and Electrician were released the same day on March 7, 2025, and have been attending periodic follow-up appointments with burn doctors. The Electrician was released to return to work on April 9, 2025, but the Mechanic was still receiving treatment per the last update from W&T.

BSEE Investigation:

At 9:15, on March 7, 2025, the BSEE Houma District received an immediate verbal notification from W&T that two IP's had been injured during a fire incident and were evacuated from SS 80. BSEE Investigators from the Houma District requested additional information regarding the incident. By close of business on March 7, 2025, BSEE Investigators began reviewing documents submitted by W&T such as pictures, witness statements, injury reports, and Job Safety Analysis (JSA).

On March 10, 2025, BSEE Investigators flew offshore in order to conduct an Incident Follow-Up (IF) Inspection at SS 80. The IF consisted of BSEE Investigators meeting and speaking with W&T management, interviewing offshore personnel who were present at the time of the incident, and taking pictures while conducting a physical, walk-through investigation of the area of the incident. Pipeline Pump #2 is driven by a natural gas engine with a pneumatic starter that uses platform fuel gas as the source media. The starter is manually engaged by a start valve. BSEE Investigators began to trace out fuel gas piping associated with Pipeline Pump #2 and it was discovered that both the fuel gas inlet and vent exhaust piping consisted of flexible hoses. W&T management, who were present for the purpose of their own internal investigation, commented to the BSEE Investigators that they would be making recommendations to route all fuel gas through rigid steel pipe instead of a flexible hose. BSEE Investigators

then identified an extremely loose connection/fitting on the vent exhaust piping coming from the Pipeline Pump #2's fuel gas starter.

The BSEE Investigators and W&T personnel agreed that this loose fitting allowed fuel gas to seep out of the connection in the immediate vicinity of the incident where personnel were attempting to start Pipeline Pump #2. W&T personnel pointed out that at the time of the incident, the wind was blocked by Pipeline Pump #2, which allowed hazardous gas accumulation on the downwind side where the Mechanic was crouched in order to observe the magneto. The BSEE Investigators and W&T determined that this accumulation of gas combined with the source of ignition of the backfire resulted in the fire that engulfed and injured the two workers.

W&T reported to the BSEE Investigators that multiple attempts were made to get Pipeline Pump #2 to stay running, but it kept shutting down on the annunciator panel with a "Board Code 71 failure", which means "No ignition" or "Loss of Ignition". The BSEE Investigators noted that the air breather/air intake hose on the pump was disconnected. It is possible that the air breather could have been disconnected prior to the backfire and may have contributed to ingestion of gas enriched atmosphere leading to the backfire. However, the BSEE Investigators could not conclude if the breather came off as a result of the backfire, was removed prior to the incident for troubleshooting purposes, or if the backfire simply occurred as a result of metal-on-metal connection within the starter. The BSEE Investigators asked if the Electrician (or anyone) had used diethyl ether or any other vapor mixture with a low autoignition temperature typically introduced into the engine combustion chambers to help start internal combustion engines. W&T responded that no starter fluid of any kind was used. W&T reported to the BSEE Investigators that they believed the breather had blown off due to engine backfire.

W&T management explained to the BSEE Investigators during the IF that the witness to the incident (another mechanic) was conducting separate work on Pipeline Pump #1. According to his witness statement, once the witness had completed adding "Stop Leak" to the radiator of Pipeline Pump #1, he went over to Pipeline Pump #2 to assist the Mechanic and Electrician and saw a large flash. He reported that he immediately ran and got with the Production Operator and assisted in shutting in the facility. He then grabbed the nearest fire extinguisher, a rolling wheel unit, and extinguished the remaining flames. The witness then escorted both IP's to the nearby tool room to assess their injuries.

The Production Operator specified in his witness statement that he was not in the area where the incident happened and did not witness the incident. The Production Operator reported that once he was told to make sure everything was shut-in by the witness, he did just that. He confirmed that all processes were shut and secure and then went to join the affected parties in the tool room. He immediately initiated radio communication with the nearest manned facility Ship Shoal 28 to arrange a medivac for the IP's to be transported to the onshore.

The documents provided to the BSEE Investigators by W&T informed that the incident involved component PAX-360, also known as Pipeline Pump #2 and that during the time of the incident, personnel were attempting to troubleshoot issues with the pipeline pump's starter. W&T described the procedure/process of the manual start of Pipeline Pump #2 as "Visual inspection of unit, check oil, water, and fuel pressure, hit start." Pipeline Pump #2 was typically run every three months with the average run time length being five to ten days. According to Well Test records, the last time the Pipeline Pump #2 had been run was on March 2, 2025. The facility had been shut-in for four days prior to the incident.

When BSEE Investigators viewed pictures of the injuries sustained by the IP's, the injuries did not appear to be consistent with those that may have been prevented or minimized by the use of their required Personal Protective Equipment (PPE). W&T

verified that the IP's were not following proper PPE guidelines at the time of the incident, and that neither of the IP's were wearing gloves. This along with wind direction and speed were described as possible factors that contributed to the severity of the injuries. At the time of the incident, the wind was reportedly blowing out of the south at around 25-30 knots. The wind speed pushed the fire into the IP who was on the northern side of the pump. This person was reported to have sustained the worst injuries of both IP's. The burns also would have been less severe or possibly prevented had the IP's worn the proper gloves for the job being performed.

W&T's Investigation:

W&T's Investigation Report stated that a loose fitting was found on the starter outlet. When the attempt to start the engine was made, gas was released in the area through the loose fitting. When the engine backfired, it ignited the remaining gas in the space causing the flash fire. W&T continued that moving forward, when trouble shooting and/or attempting to start up natural gas-operated equipment, and particularly on equipment that has been down for an extended period of time, it is a best practice to check all hoses and fittings for cracks, corrosion, or loose fittings to reduce the likelihood of a gas leak. W&T identified multiple corrective actions to implement as a result of this incident. They reported that they will: share findings at their upcoming April Field Lead Meeting, conduct blitzes/audits on gas-operated equipment on all W&T facilities to verify that all flexible hoses are replaced with hard piping, begin routine checks on all fittings associated with starter gas, stress the importance of wearing all required PPE moving forward, and generate a W&T based safety alert to discuss the importance of inspecting equipment prior to start up.

BSEE Conclusion:

After review of all pictures, witness statements, JSA's, evidence gathered during the IF, witness interviews, and W&T's final investigation, the BSEE concludes that the loose fitting on the exhaust hose was the main contributor to this incident. Had the hose fitting been properly tightened, flammable gas would not have accumulated near the engine. Also, if the IPs were wearing the proper PPE at the time, they may have suffered less significant injuries. The BSEE recommends that operators and their contractors, where appropriate, do the following: when using fuel gas to start prime movers, always ensure the starter exhaust gas is vented to a safe location, review gas engine startup procedures to include equipment checks verifying proper installation of components, utilize gas detectors when performing startup procedures on engines with gas as a fuel source and/or as a pneumatic supply for starters, and conduct mandatory checks on engines with gas as a fuel source and/or as a pneumatic supply for starters to ensure proper installation of starter exhaust piping.

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

Equipment Failure: Inadequate Equipment Maintenance- The incident would have been prevented had the equipment been maintained by periodically tightening fittings.
Human Performance Error- Personnel were not aware of the hazards of loose fittings and the resulting release of and accumulation of gas and the combined hazards associated with backfires.

Management Systems: No/Inadequate hazard analysis- Personnel failed to identify the hazard associated with gas accumulation in an area where a likely gas engine backfire could occur.

Prior to job inspect equipment/personnel: Routine checks on all fittings associated with starter gas would have prevented the incident.

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

Supervision- Not ensuring the Proper Use of PPE. If the IP's would have been wearing the proper PPE at the time, they may have suffered less significant injuries.

20. LIST THE ADDITIONAL INFORMATION:

Work Environment: Other weather influences- W&T informed the BSEE Investigators that the wind was blowing significantly out of the south when the incident occurred. The wind direction did aid the flames in engulfing one of the IP's that was on the northern side of the pump. It is possible the result of injuries could have been different if the wind had been steady.

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

N/A

N/A

ESTIMATED AMOUNT (TOTAL): \$

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

BSEE recommends that operators and their contractors, where appropriate, do the following: when using fuel gas to start prime movers, always ensure the starter exhaust gas is vented to a safe location, review gas engine startup procedures to include equipment checks verifying proper installation of components, utilize gas detectors when performing startup procedures on engines with gas as a fuel source and/or as a pneumatic supply for starters, and conduct mandatory checks on engines with gas as a fuel source and/or as a pneumatic supply for starters to ensure proper installation of starter exhaust piping.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

10-MAR-2025

28. ACCIDENT CLASSIFICATION:

26. Investigation Team Members/Panel Members: 29. ACCIDENT INVESTIGATION PANEL FORMED:

NO

27. OPERATOR REPORT ON FILE:

OCS REPORT:

30. DISTRICT SUPERVISOR:

Amy Gresham

APPROVED

DATE:

03-SEP-2025