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

## **ACCIDENT INVESTIGATION REPORT**

# For Public Release

	OCCURRED  DATE: 27-JAN-2022 TIME: 1625 HOURS  OPERATOR: Cox Operating, L.L.C.  REPRESENTATIVE:  TELEPHONE:  CONTRACTOR:  REPRESENTATIVE:  TELEPHONE:  CONTRACTOR:  REPRESENTATIVE:  TELEPHONE:  CONTRACTOR:  REPRESENTATIVE:  TELEPHONE:  TELEPHONE:  STRUCTURAL DAMAGE  CRANE  OTHER LIFTING  DAMAGED/DISABLED SAFETY SYS.  INCIDENT >\$25K  H2S/15MIN./20PPM  REQUIRED MUSTER  SHUTDOWN FROM GAS RELEASE  OTHER  OTHER	
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR 8. OPERATION: ON SITE AT TIME OF INCIDENT:    X   PRODUCTION	
1.	LEASE: G02947  AREA: MP LATITUDE: WORKOVER  COMPLETION  HELICOPTER	
5.	PLATFORM: CF  RIG NAME:  MOTOR VESSEL  PIPELINE SEGMENT NO.  OTHER	
5.	ACTIVITY: EXPLORATION(POE)  X DEVELOPMENT/PRODUCTION 9. CAUSE: (DOCD/POD)	
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)  RW/JT (>3 days)  OVERBOARD DRILLING FLUID  OTHER	
	FATALITY Other Injury  10. WATER DEPTH: 146 FT.	
	POLLUTION  FIRE  EXPLOSION  11. DISTANCE FROM SHORE: 8 MI.  12. WIND DIRECTION:  SPEED: M.P.H.	
	LWC   HISTORIC BLOWOUT	
	SURFACE EQUIPMENT FAILURE OR PROCEDURES 15. PICTURES TAKEN:  COLLISION ☐ HISTORIC ☐ >\$25K ☐ <=\$25K 16. STATEMENT TAKEN:	

MMS - FORM 2010 PAGE: 1 OF 4

EV2010R 05-APR-2022

#### INCIDENT SUMMARY:

On 27 January 2022 at approximately 1625 hours, an incident occurred on Main Pass (MP) 73-A C/F, a production platform owned and operated by Cox Operating, L.L.C. (Cox) OCS-G02947. A flame near the engine's starter of the Rental gas compressor was observed by a platform operator enroute to the compressor after an alarm sounded and the platform shut in. The operator announced there was a fire and sounded the General Alarm requiring a platform muster while four nearby personnel grabbed handheld fire extinguishers and successfully extinguished the fire. No injuries or pollution occurred, and all Personnel on Board (POB) were able to safely return from their muster station.

### SEQUENCE OF EVENTS:

On the morning of 27 January 2022, crew change took place, and platform operators and an onboard mechanic made their rounds around the platform to ensure there were no issues or threats to safety throughout the facility. During this time, the mechanic did not find any issues with the compressor.

On 27 January 2022 at approximately 1610 hours, the platform started flaring gas, so a production operator went to the gas compressor to speed it up in order to reduce the flaring gas. While enroute, the production alarm sounded, and the platform shut in. At approximately 1611 hours, the operator arrived at the compressor and found a flame originating near the starter of the compressor's engine. The operator made an announcement of the fire and sounded the General Alarm. Four platform operators in the area of the compressor grabbed handheld fire extinguishers and headed towards the fire while the rest of the POB went to their primary muster station. It took operators approximately three minutes to extinguish the fire from the time it was first observed. The four operators remained by the compressor to monitor for any flare-ups while the Person In Charge (PIC) gave the all-clear for the rest of the POB to return from their muster station. The compressor was locked out awaiting an investigation and repairs made.

## **BSEE INVESTIGATION:**

On 27 January 2022 at 17:33 hours, the Bureau of Safety and Environmental Enforcement (BSEE) received noticed that a fire occurred on the rental compressor located on the C/F facility of MP 73 and was safely extinguished with no injuries or pollution noted. The only damage reported at that time was to some associated wire in the area where the fire occurred.

On 29 January 2022, three BSEE inspectors arrived on location to gather information, take photographs, conduct an initial investigation, and inspect the facility.

On 4 February 2022, upon request from the BSEE Accident Investigator (AI), Cox provided additional information on the compressor, personnel involved, timeline of events, and photographs after the incident. In addition, post-repair photographs were also provided. The rental gas compressor was installed prior to the date when Cox acquired the facility. Cox stated that witnesses saw flames coming from an exhaust hose dislodged from the starter. The four operators who extinguished the fire used two 30 pound ABC, and two 30 pound Purple K fire extinguishers to extinguish the fire. Maintenance reports showed there was maintenance repairs made to the compressor two weeks prior to the incident, but none of the repairs involved removing the starter hose. Interviews with platform operators revealed the compressor's starter hose was removed and reinstalled approximately four months prior to incident. Cox tried to

MMS - FORM 2010 PAGE: 2 OF 4

contact the mechanic who made the repairs for an interview but were unable to due to the mechanic no longer being employed by rental compressor company or on any Cox facility contract. Through Cox's investigation, it was discovered that the Joint Industry Council (JIC) fitting connecting the exhaust hose to the starter was most likely not completely tightened when it was last installed. The Flow Safety Valve (FSV) on the exhaust's line to the starter was also found to be leaking. The leaking FSV allowed small traces of natural gas to leak out and migrate to the turbo and exhaust area. The normal operating temperature around the exhaust area reach temperatures greater than 900 degrees. The accumulated gas around the exhaust flashed off and melted the Temperature Safety Element (TSE), shutting in the platform.

#### CONCLUSIONS:

Vibration over time caused the improperly tightened JIC fitting located on the engine's starter exhaust hose to slowly back off over time. A failed FSV allowed gas to migrate to the hot exhaust resulting in the fire.

- 18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:
- Human Performance Error Inattention to task: Earlier maintenance performed on the compressor failed to properly tighten the JIC fitting which caused it to back off over time.
- 19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:
- Equipment Failure Inoperable equipment or safety devices: Exhaust FSV leaked.
- 20. LIST THE ADDITIONAL INFORMATION:
- 21. PROPERTY DAMAGED: NATURE OF DAMAGE:

Compressor wiring, FSV internal parts Burnt compressor wiring

ESTIMATED AMOUNT (TOTAL): \$12,000

- 22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:
- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

MMS - FORM 2010 PAGE: 3 OF 4

EV2010R 05-APR-2022

25. DATE OF ONSITE INVESTIGATION: 28. ACCIDENT CLASSIFICATION:

## 29-JAN-2022

26. INVESTIGATION TEAM MEMBERS:

Nathan Bradley / Jason Bowens / Jacob Tullos / Derick Lewis /

27. OPERATOR REPORT ON FILE:

- 29. ACCIDENT INVESTIGATION PANEL FORMED: NO OCS REPORT:
  - 30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED

DATE: 05-APR-2022

MMS - FORM 2010 PAGE: 4 OF 4 05-APR-2022

EV2010R