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

**ACCIDENT INVESTIGATION REPORT** 

		For Public Release
1.	. OCCURRED	UCTURAL DAMAGE
	DATE: 22-DEC-2020 TIME: 1530 HOURS CRA	NE
2.	. OPERATOR: Cox Operating, L.L.C.OTHREPRESENTATIVE:INCTELEPHONE:H2SCONTRACTOR:REQREPRESENTATIVE:SHUTELEPHONE:OTH	ER LIFTING AGED/DISABLED SAFETY SYS. IDENT >\$25K /15MIN./20PPM UIRED MUSTER TDOWN FROM GAS RELEASE ER
3.	. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR 8	. OPERATION:
4.	ON SITE AT TIME OF INCIDENT: . LEASE: G02445 AREA: VK LATITUDE: BLOCK: 900 LONGITUDE:	X PRODUCTION DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL
5.	. PLATFORM: A RIG NAME:	PIPELINE SEGMENT NO. OTHER
6.	. ACTIVITY: EXPLORATION(POE) <b>X</b> DEVELOPMENT/PRODUCTION 9 (DOCD (DOD))	. 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) FATALLTY	<pre>X EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER</pre>
	Other Injury 1	0. WATER DEPTH: 340 FT.
	1	1. DISTANCE FROM SHORE: 18 MI.
	POLLUTION   X   FIRE   EXPLOSION	2. WIND DIRECTION: SPEED: M.P.H.
	LWC HISTORIC BLOWOUT 1 UNDERGROUND SURFACE	3. CURRENT DIRECTION: SPEED: M.P.H.
	DEVERTER 1	4. SEA STATE: FT.
	SURFACE EQUIPMENT FAILURE OR PROCEDURES 1	5. PICTURES TAKEN:
	COLLISION $\square$ HISTORIC $\square >$ \$25K $\square <=$ \$25K $^1$	6. STATEMENT TAKEN:

On 22 December 2020, at 15:30 hours, a small fire occurred at Viosca Knoll (VK) 900 Platform A, OCS-G 02445 production platform. This platform is owned and operated by Cox Operating, LLC. (Cox). A pipeline was taken out of service (OOS) as a result of the fire; however, no injuries, pollution, or property damage occurred as a result of the fire.

Sequence of Events:

Per the operator's report, on 22 December 2020 at approximately 15:30 hours, while operators were making their rounds, a small flame was noticed on the pipeline pump's exhaust insulation. Once noticed, the operators grabbed a nearby handheld fire extinguisher and extinguished the flame in under a minute. The only damage noted at the time was a plastic dust cover for the air filter's housing. The pipeline pump was taken OOS.

On 22 December 2020 at approximately 17:05 hours, the incident was reported to BSEE.

On 23 December 2020 at 13:29 hours, the BSEE Accident Investigator (AI) received photographs showing the damage to the pipeline pump.

On 28 December 2020 at 11:03 hours, BSEE received an update from Cox's Health, Safety, and Environment (HSE) coordinator, stating a failure occurred on the exhaust's expansion joint resulting in a fire.

BSEE Investigation:

On 22 December 2020, the BSEE AI received an email summarizing the incident. The AI contacted the facility and requested photos from Cox's HSE Coordinator. The AI received photos of the pipeline pump, the #1 sister pump, the expansion joint, the left bank air filter housing melted dust cover, the right bank housing air filter, expansion joint removed, and location of the fire extinguisher used.

BSEE AI concurs with Cox's Root Cause Analysis (RCA) which indicated that the failure occurred from a 6 to 8 inch crack on the expansion joint. The crack on the expansion joint allowed hot exhaust to contact the engine's left bank air filter housing. A plastic dust cover located inside the air filter's access hatch began to melt. As the plastic dust cover began to melt, the plastic dripped out of the filter housing onto the exhaust blanket which resulted in a small flame.

BSEE found that Cox's response to fire was adequate and followed regulations. The fire extinguisher was in working order and its inspection was up-to-date. The location of the fire extinguisher was close enough to fight an incipient fire, and the pipeline pump was properly shut down to prevent further escalation.

Conclusion:

The Cox RCA and the BSEE AI concluded that the flame on the pipeline pump was caused by a crack in the expansion joint. Over time, the expansion joint may have cycled through hot and cool conditions such that it cracked due to fatigue. BSEE found that Cox's response to the fire was adequate and followed regulations.

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

Equipment failure - Fatigue Over time; the expansion joint may have cycled through hot and cool conditions such that it cracked due to fatigue.

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

n/a

20. LIST THE ADDITIONAL INFORMATION:

n/a

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

n/a

n/a

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

• BSEE NOD recommends incorporating a more frequent and thorough inspection of expansion joints and equipment to help identify these flaws in equipment before they escalate into something more severe.

• Look into the possibility of finding a dust cover that can withstand higher temperatures than previous and current plastic dust covers.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

- 28. ACCIDENT CLASSIFICATION:
- 29. ACCIDENT INVESTIGATION PANEL FORMED: NO

26. INVESTIGATION TEAM MEMBERS: Nathan Bradley /

30. DISTRICT SUPERVISOR:

OCS REPORT:

27. OPERATOR REPORT ON FILE:

David Trocquet

APPROVED DATE: 25-MAR-2021

EV2010R