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

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED
   DATE: **25-FEB-2022** TIME: **0530** HOURS
2. OPERATOR: **Cox Operating, L.L.C.**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR:
   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: **G01083**
   AREA: **WD** LATITUDE: **28.94195**
   BLOCK: **73** LONGITUDE: **-89.715566**

5. PLATFORM: **C**
   RIG NAME:

6. ACTIVITY:
   - [ ] EXPLORATION(POE)
   - [X] DEVELOPMENT/PRODUCTION (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)		
[ ] FATALITY		
[ ] Other Injury		

   - [X] POLLUTION
   - [ ] FIRE
   - [ ] EXPLOSION

   LWC
   - [ ] HISTORIC BLOWOUT
   - [ ] UNDERGROUND
   - [ ] SURFACE
   - [ ] DEVERTER
   - [ ] SURFACE EQUIPMENT FAILURE OR PROCEDURES

   COLLISION [ ] HISTORIC [ ] >$25K [ ] <=$25K

8. OPERATION:
   - [X] PRODUCTION
   - [ ] DRILLING
   - [ ] WORKOVER
   - [ ] COMPLETION
   - [ ] HELICOPTER
   - [ ] MOTOR VESSEL
   - [ ] PIPELINE SEGMENT NO.
   - [ ] OTHER

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

10. WATER DEPTH: **168** FT.
11. DISTANCE FROM SHORE: **17** MI.
12. WIND DIRECTION: **NNE**
    SPEED: **23** M.P.H.
13. CURRENT DIRECTION: **SSW**
    SPEED: **3** M.P.H.
14. SEA STATE: FT.
15. PICTURES TAKEN:
16. STATEMENT TAKEN:

INCIDENT SUMMARY:

On 25 February 2022 at approximately 0530 hours, a pollution event occurred at West Delta (WD) 73 C, a production platform owned and operated by Cox Operating, L.L.C. (Cox). An initial estimate of 660 gallons of unrecoverable oil was discharged into the Gulf of Mexico through the platform's vent boom. Later calculations suggest that it was closer to 111 gallons of unrecoverable oil that entered into the Gulf of Mexico.

SEQUENCE OF EVENTS:

On 24 February 2022 at approximately 1600 hours, after mechanics completed gas compressor repairs, platform day operators prepared to bring the platform back online. Operator 1 (OP1) was placed at the new water handling system to monitor it while Operator 2 (OP2) monitored the level on the Flotation Cell (ABM-1100) to adjust the level controller as needed. Operator 3 (OP3) went to the wellbay to bring the wells online. Each well was brought online one at a time and routed to the new water handling system.

At approximately 0000 hours after a majority of the wells were brought back online, OP1 advised to OP2 that the level in the Water Skimmer (MBM-1050) was abnormally high and asked if OP2 could check the panel. As OP2 was walking to the panel, a production alarm sounded alerting the operators of a Level Safety High (LSH) on the Vent Scrubber (MBF-9000), resulting in a shutdown of the entire platform. Operators kept the platform shut in and went to the Vent Scrubber to verify the level. OP2 then went back to the panel to place the Vent Scrubber back in service to pump down the liquid level to the Swab Tank (ABJ-5000), but kept the wells shut in.

After verifying the pump was working on the Vent Scrubber, the operators went to the Water Skimmer where a high level was observed. They also observed a large amount of oil in the Flotation Cell. OP2 made a call to the Lead Operator at the main facility WD 73 A. The Lead Operator advised them to not flow through the new water handling equipment and flow into the Low Pressure (LP) Bulk Separator (MBD-1030) instead.

At approximately 0200 hours, operators isolated the new equipment and brought some wells back online into the LP Bulk Separator while the Vent Scrubber was pumped down. After all wells were brought back online, operators verified that the level on the Vent Scrubber had been pumped down and cleared the LSH. OP2 suggested that OP1 and OP3 shower and go to bed while OP2 monitored the Vent Scrubber a little longer. At around 0300 hours, OP2 took a shower and went to bed feeling extremely fatigued.

On 25 February 2022 at 0530 hours, OP2 walked down to the lower deck and observed fluids spraying out of the Vent Boom (ZZZ-9075). The platform was then shut in and the WD 73 A was notified.

On 25 February 2022 at approximately 1515 hours, Forefront Emergency Management conducted an overflight of the sheen, and Clean Gulf Associates (CGA) mobilized a 95-foot skimming vessel. No oil was recovered, and it naturally dissipate

BSEE INVESTIGATION:

On 25 February 2022 at 1000 hours, Cox notified the Bureau of Safety and Environmental Enforcement (BSEE) of the incident.

On 28 February 2022, a BSEE Accident Investigator flew to WD 73 C and gathered witness statements, start-up procedures, drawings, POB, JSAs, Cox's "General Safety Rules,"

and photographs.

Per Cox’s Root Cause Analysis (RCA) report, the float device in the Water Skimmer had a pinhole that was not allowing it rise properly. This defect was allowing an abnormal amount of oil to pass through to the Flotation Cell and Vent Scrubber.

However, when the Vent Scrubber fluid level raised, the LSH should have tripped and automatically shut in the platform preventing pollution out of the Vent Boom. This safety device was functioning prior to the incident and did trip hours before on a similar event. Therefore, the safety device was either in bypass or failed to operate. The device was tested before and after the event successfully. This platform does not have an electronic control system that automatically records bypassed devices, trips, and alarms. The witness statements indicate that no operators placed the LSH on the Vent Scrubber in bypass. BSEE is not able to conclude that the device was bypassed. However, BSEE determined that the LSH device did not operate as designed which allowed fluid into the Vent Boom.

A contributing cause to this incident is operator fatigue. OP2’s witness statement said he was “extremely fatigued.” OP2 was working from 0600 hours on 24 February 2022 to 0300 on 25 February 2022. Cox’s “General Safety Rules” revision 2 (12-12-2019) states, “Fatigue Management: It is our intent that offshore personnel work a scheduled 12-hour shift per 24-hour day. Shift starting times may vary from location to location, and/or may differ from day/night work schedules. If at any time an employee is observed or self-evaluated to be too fatigued for continuing work, a work stoppage shall be utilized, and the employee must be given proper rest before returning to work. Supervision personnel must pay close attention to hours worked and ensure that workers are not allowed to return to work without proper rest.”

Therefore, BSEE concludes that OP2 did not follow Cox’s procedures to call for a “all stop” before becoming extremely fatigued. A work stoppage may have allowed the platform to remain shut in so that the liquid carryover issues could be investigated the next day.

CONCLUSIONS:

BSEE determined 2 probable causes of the spill and 1 contributing cause. The first probable cause was a Water Skimmer float device equipment failure. The next probable cause was an equipment failure regarding an LSH device that did not operate as designed which allowed fluid into the Vent Boom. And last, operator fatigue was determined to be a contributing factor.

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

Equipment Failure: Inoperable equipment or safety devices - The LSH on the Vent Scrubber failed to shut in the platform on a high fluid level.

Equipment Failure: Inoperable equipment or safety devices - The Water Skimmer liquid level float failed to operate due to a mechanical defect.

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

Human Performance Error: Fatigue - OP2’s witness statement said he was “extremely fatigued.” The operator should have called a stop work, left the platform shut in, and rested.

20. LIST THE ADDITIONAL INFORMATION:

Cox corrective actions:
The liquid level float on the Water Skimmer was repaired.
The LSH on the Vent Scrubber was tested successfully after the incident.
Cox's management team discussed Cox's "General Safety Rules" with platform personnel.

21. PROPERTY DAMAGED:

N/A

NATURE OF DAMAGE:

N/A

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:

E100: IS THE OPERATOR PREVENTING UNAUTHORIZED DISCHARGE OF POLLUTANTS INTO OFFSHORE WATERS?
On 25 February 2022, an estimated 660 gallons/15 BBL was released into the Gulf of Mexico from West Delta 73 C.

P422: IS EACH PRESSURE VESSEL EQUIPPED WITH AN OPERABLE LSH?
On 25 February 2022, the LSH on the Vent Scrubber (MBF-9000) failed to operate and did not prevent liquid to be released out of the vent boom.

25. DATE OF ONSITE INVESTIGATION:

28-FEB-2022

28. ACCIDENT CLASSIFICATION:

26. INVESTIGATION TEAM MEMBERS:

Nathan Bradley /

27. OPERATOR REPORT ON FILE:

28. ACCIDENT INVESTIGATION PANEL FORMED: **NO**

29. ACCIDENT SUPERVISOR: **David Trocquet**

OCS REPORT: For Public Release

APPROVED DATE: **07-APR-2022**