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

ACCIDENT INVESTIGATION REPORT

For Public Release

l.	OCCURRED STRUCTURAL DAMAGE
	DATE: 26-SEP-2020 TIME: 1300 HOURS X CRANE
2.	OPERATOR: Cox Operating, L.L.C. REPRESENTATIVE: TELEPHONE: CONTRACTOR: REPRESENTATIVE: TELEPHONE: CONTRACTOR: REPRESENTATIVE: TELEPHONE: TELEPHONE: 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: PRODUCTION
1.	LEASE: G02324 AREA: EI LATITUDE: BLOCK: 361 LONGITUDE: WORKOVER COMPLETION HELICOPTER MOTOR VESSEL
5.	PLATFORM: A PIPELINE SEGMENT NO. RIG NAME: X OTHER Construction
5.	ACTIVITY: EXPLORATION (POE) X DEVELOPMENT/PRODUCTION 9. CAUSE: (DOCD/POD)
7.	TYPE:
	INJURIES: HISTORIC INJURY OPERATOR CONTRACTOR EQUIPMENT FAILURE *** HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL
	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: 306 FT.
	11. DISTANCE FROM SHORE: 77 MI.
	POLLUTION FIRE EXPLOSION 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:

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On September 26, 2020, at approximately 1300 hours, a crane operator on a Cox Operating, L.L.C.'s EI 361A facility, discovered the boom section closest to the cab was bent.

A construction crew was on board the platform offloading equipment utilizing the platform crane. Construction equipment including a 6' x 12' basket of scaffolding weighing approximately 16,300 lb was being placed directly under the crane causing the boom to be oriented at a vertical angle only inches away for the boom angle kick out. The basket of scaffolding was placed under the crane due to the limited space left on the deck from the amount of equipment offloaded. As per the crane operator, the basket was placed on the deck and the boom safely placed in the boom cradle. When the crane operator returned to operate the crane, he noticed the bends in the boom's heel section.

The BSEE Lafayette District conducted an onsite investigation September 30, 2020. The BSEE Investigator gathered documents, witness statements and photographs of the crane boom and deck area during the onsite investigation to determine the root cause.

During the investigation, the BSEE investigator spoke with the crane mechanic to determine a possible cause. According to the crane mechanic, with the crane boom at the angle it was during the incident, the load would have been lowered too fast causing the boom bounce back into the boom angle kick out. According to API RP 2D 3.2.3 Moving the Load: d. "The Crane Operator should be aware of the effect of velocity and weight of the load when lowering to minimize shock load." There were no witnesses to confirm what caused the damage to the crane boom, including the crane operator, who stated he did not see when the damage occurred. When the crane operator returned to the crane to conduct operations, he noticed the damage and immediately placed out of service until the boom could be replaced.

The BSEE investigation concluded based on the information gathered during the onsite investigation, the crane operator set the basket down too fast causing the boom to forcibly contact the boom angle kick out. The operator did not follow the guidance of API RP 2D, whose relevant section is listed below:

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

The crane operator failed to lower the load at a safe speed which would have prevented the boom from contacting the boom angle kick out.

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

As per the API RP 2D document, the crane operator should have been aware of the effect of velocity and weight of the load when lowering to minimize shock load. Following the API document could have prevented the boom from coming in contact with the boom angle kick out.

As per API RP 2D

- 3.1.5 Operating Practices
- b. The Crane Operator should be aware of the operating characteristics of the crane. Mechanical and nonmechanical cranes will require different operating techniques, especially with regards to engine speed, control operation, control arrangement and braking. The Crane Manufacturer should provide operating instructions or be consulted for specific information.
- 3.2.3 Moving the Load
- d. The Crane Operator should be aware of the effect of velocity and weight of the load when lowering to minimize shock load.

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21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Crane Boom

Operator error

ESTIMATED AMOUNT (TOTAL):

\$51,600

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE Lafayette District office makes no recommendations to the Regional Office of Incident Investigations (OII).

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

NA

25. DATE OF ONSITE INVESTIGATION:

- 26. INVESTIGATION TEAM MEMBERS:
- W. Guillotte /

30-SEP-2020

27. OPERATOR REPORT ON FILE:

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

Robert Ranney

APPROVED

DATE:

08-MAY-2021