

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **25-FEB-2024** TIME: **0930** HOURS

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K **Crane Boom**
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER

2. OPERATOR: **Talos ERT LLC**

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: **Performance Energy Service, LLC**

REPRESENTATIVE:

TELEPHONE:

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR

ON SITE AT TIME OF INCIDENT:

4. LEASE: **G02280**

AREA: **SM** LATITUDE:

BLOCK: **130** LONGITUDE:

5. PLATFORM: **B**

RIG NAME:

6. ACTIVITY: EXPLORATION(POE)

DEVELOPMENT/PRODUCTION (DOCD/POD)

DECOMMISSIONING

8. OPERATION:

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

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

9. CAUSE:

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

POLLUTION

FIRE

EXPLOSION

LWC HISTORIC BLOWOUT

UNDERGROUND

SURFACE

DEVERTER

SURFACE EQUIPMENT FAILURE OR PROCEDURES

COLLISION HISTORIC >\$25K <=\$25K

10. WATER DEPTH: **215** FT.

11. DISTANCE FROM SHORE: **79** MI.

12. WIND DIRECTION:
SPEED: **28** M.P.H.

13. CURRENT DIRECTION:
SPEED: M.P.H.

14. SEA STATE: **20** FT.

15. PICTURES TAKEN:

16. STATEMENT TAKEN:

On February 25, 2024, at approximately 0930 hours, a crane boom was damaged while attempting to raise the elevation of an I-beam approximately 1-inch on the Talos ERT LLC (Talos) OCS-G02280 South Marsh Island (SM) 130 B Facility. After an unsuccessful attempt with come along winches, the contract construction crew (CCC) attached the main line of the crane to the I-beam and applied tension. The crane boom was damaged at the heel section and a boom lattice after the load rating was exceeded. There were no injuries to personnel and the estimated repair cost is \$400,000.00.

Sequence of Events:

On February 25, 2024, at approximately 0930 hours, a CCC was in the process of replacing 3-inch deck boards with 2-inch grating on the production side of the firewall. After removal of the deck boards, it was determined by the CCC that the elevation on the I-beam support needed to be raised approximately 1 inch to create an even surface for welding down the grating. This adjustment would ensure a proper fit. The CCC attached 2 come along winches to the crane's main line to manually raise the elevation of the I-beam but was unsuccessful.

The CCC decided to attach the crane's main line with a weight indicator to the I-beam and use the crane to apply tension to raise the elevation. A signal person directed the crane operator to lift the line that reached 20,000 lbs. of tension on the I-beam but was unsuccessful. The signal person then directed the crane operator to increase the tension which reached 30,000 lbs., yet the operation was still unsuccessful in achieving the intended outcome. The CCC took a break at 9:00 am and returned to the worksite following the break. The CCC rigger noticed the boom heel of the crane bent and bent lattice. The crane boom was set in the boom rest and then placed out of service.

BSEE INVESTIGATION:

On February 25, 2024, the Bureau of Safety & Environmental Enforcement (BSEE) Lafayette District (LD) Accident Investigator (AI) received a phone call notification of damage to the crane boom that occurred on Talos's SM 130 B Facility. The AI requested additional information pertaining to the incident such as the Job Safety Analysis (JSA), Pre-Use Inspection, Annual Crane Inspection, certifications, statements, and other relevant documents from Talos. The AI confirmed that the load indicator had been tested during the last Annual Crane Inspection. The BSEE LD AI conducted an onsite investigation at SM -130 B on February 26, 2024. BSEE conducted interviews with the personnel involved with the crane operations. According to the witnesses, the crane operator was watching the signal person the entire duration. According to the crane operators' statement, "I was pulling about 20,000 and then I went up to 30,000 and stopped". Upon visiting the incident area, it was determined the crane was at a 55-degree angle at the time of the incident and would have had a maximum capacity of 21,500 lbs. according to the load chart.

The JSEA did not discuss the original plan to utilize two come along winches to raise the I-beams nor did the JSEA discuss attaching the main line of the crane to elevate the I-beams. If the hazards of attaching the crane to the I-beams were discussed prior, the incident could have been prevented. The CCC also failed to conduct stop work as per the JSEA once the attempt to use the come-along winches failed and the crane was attached to the I-beams.

Also, as per API RP 2D appendix B C.3.2.3, Before starting to lift, the following conditions shall be verified: The load is free to be lifted. The crane should not have been connected to or used to lift a fixed object such as an I-beam.

CONCLUSION:

If the crane operator would have been monitoring the weight indicator while having knowledge of the maximum capacity of the boom angle, this incident would not have occurred. BSEE concluded this incident would not have occurred if the crane was not connected to or used to lift a fixed object such as an I-beam. The crane load rating was exceeded when the crane operator surpassed the maximum capacity of the boom angle. The lack of proper discussion in the JSEA regarding the use of come-along winches and the failure to use a stop work after initial attempts were unsuccessful also contributed to the incident. Furthermore, adherence to API RP 2D standards referenced in 30 CFR 250.198 are intended to ensure that cranes are used appropriately and safely.

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

Human Performance Error:

- The crane operator exceeded the load rating of the crane.
- The crane should not have been connected to or used to lift a fixed object, such as an I-beam.

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

Management Systems - Inadequate Job Safety & Environmental Analysis:

- The Job Safety Environmental Analysis (JSEA), failed to discuss the hazards involved with raising the elevation of the beams.
- The CCC failed to conduct stop work as per the JSEA.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Crane Boom

Connected crane to fixed object. Over exceeded the load rating of the crane.

ESTIMATED AMOUNT (TOTAL): \$400,000

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: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110-C - On February 25, 2024, Talos ERT LLC failed to perform operations in a safe and workmanlike manner as follows: A construction crew was in the process of replacing a wooden deck with grating. During his process, it was discovered that a 1-inch elevation on the associated I-beams was needed to allow the grating to be installed. The construction crew utilized two (2) Come Along Winches to begin elevation of an I-beam but were unsuccessful in that attempt. Subsequently, the construction crew decided to attach the main line of the crane to the I-beam in a different attempt to raise the associated I-beam elevation. As the rigger gave the signal to the crane operator to raise the main line, the crane operator applied ~30,000 lbs. to the I-beam, causing an overload on the crane boom. At the time of the incident, the boom angle was at 55.5-degrees, at that angle the boom had a maximum lifting capacity of 21,500 lbs. according to the load chart. Due to the crane operator exceeding the rating on the load chart, the boom heel section of the crane sustained major damage. There were no injuries associated with this incident.

25. DATE OF ONSITE INVESTIGATION:

26-FEB-2024

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:

Mark Malbrue

APPROVED

DATE:

20-NOV-2024