

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: **20-AUG-2023** TIME: **1000** HOURS

2. OPERATOR: **Arena Offshore, LP**

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K **\$80,000**
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR
ON SITE AT TIME OF INCIDENT:

4. LEASE: **G00983**

AREA: **EI** LATITUDE:

BLOCK: **252** LONGITUDE:

5. PLATFORM: **I**

RIG NAME:

6. ACTIVITY: EXPLORATION(POE)
 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

POLLUTION

FIRE

EXPLOSION

LWC HISTORIC BLOWOUT

UNDERGROUND

SURFACE

DEVERTER

SURFACE EQUIPMENT FAILURE OR PROCEDURES

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

8. OPERATION:

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO.
- DECOMMISSIONING
- PA PIPELINE SITE CLEARANCE
- TA PLATFORM
- OTHER

9. CAUSE:

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

10. WATER DEPTH: **150** FT.

11. DISTANCE FROM SHORE: **51** MI.

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

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

14. SEA STATE: FT.

15. PICTURES TAKEN:

16. STATEMENT TAKEN:

On August 20, 2023, at approximately 1000 hours, the auxiliary jib on the platform crane detached while attempting to relocate a construction supply box for Arena Offshore, (Arena) LP OCS-G00983 Eugene Island (EI) 252 I Facility. While attempting to relocate a construction supply box from one location of the top deck to another, the auxiliary jib detached from the platform crane and became entangled in the hydraulic hose lines which kept the auxiliary jib from falling to the deck. There were no injuries to personnel due to this incident.

Sequence of Events:

On August 20, 2023, the crane operator was attempting to relocate a construction supply box weighing 3,886 lbs. from one side of the top deck to another. The rigger had longer than one year at the EI 252 I facility, but the crane operator had only one hitch at EI 252 I. The crane operator lowered the auxiliary line to connect to a 4-part sling which would be used to lift the construction supply box. As per the lifting plan, the auxiliary line was rated for 9115 lbs. The crane operator began to make the lift but failed to center the auxiliary line over the center of the construction supply box. As the auxiliary line was raised, the bottom of the construction supply box moved forward and the footing on the construction supply box became lodged on a capping beam. The rigger observed the lift but failed to communicate the "all stop signal" to the crane operator. The crane operator continued to lift the auxiliary line which caused a side loading effect due to the angle of the boom. The force caused the boom to twist and the bolts holding the auxiliary jib to shear. The twisting of the boom also caused the vertical side plates to separate and the jib sheave pin to dislodge. The auxiliary jib detached from the boom and became entangled in the hydraulic lines. The crane boom was placed over the heliport to prevent the auxiliary jib from falling to the deck. The crane was placed out of service immediately. Repairs to the crane totaled approximately \$80,000.00. There was no damage to the facility and no injuries to personnel due to this incident.

BSEE INVESTIGATION:

On August 20, 2023, the Bureau of Safety & Environmental Enforcement (BSEE) Lafayette District (LD) Accident Investigator (AI) received a phone call notification of a crane auxiliary jib failure that occurred on Arena's EI-252-I Facility. The AI requested additional information pertaining to the incident such as the Job Safety Analysis (JSA), crane inspections, crane lifting procedure, statements, and other relevant documents from Arena.

The BSEE LD AI and Inspectors conducted an onsite investigation at EI-252-I on August 22, 2023. BSEE conducted interviews with the personnel involved with the lifting operations, Seatrax personnel and reviewed all pertinent documentation.

CONCLUSION:

The crane operator failed to center the auxiliary line over the construction supply box causing the supply box to become lodged on a capping beam. The Job Safety Analysis that was completed for the crane operations that morning discussed centering the crane over the lift to prevent side loading the crane. As the construction supply box became lodged, the crane operator also failed to determine the amount of force being applied to the crane boom while continuing to attempt the lift causing the auxiliary jib bolts to shear. The twisting of the boom also caused the vertical side plates to separate and the jib sheave pin to dislodge. The auxiliary jib detached from the boom and became entangled in the hydraulic lines. The rigger failed to communicate the "all stop signal" once he realized the construction supply box footing was wedged on a capping beam.

As a result of the EI-252-I incident, Arena has implemented the following actions:

- The crane operator has been scheduled to attend a Crane Operator & Rigging refresher

training by his company through a different training program.

- Arena is currently evaluating an internal process with field leadership to improve the selection and assignments of crane operators on Arena facilities.

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

Inadequate knowledge of equipment operation: The crane operator failed to center the auxiliary line over the construction supply box as well as applying enough force on the crane boom to shear the jib bolts once the construction supply box was wedged.

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

Inadequate communication: The rigger failed to communicate the "all stop signal" once he realized the construction supply box was wedged.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Crane Boom

Excessive force applied to the crane boom caused auxiliary jib bolts to shear.

ESTIMATED AMOUNT (TOTAL): \$80,000

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:

On August 20, 2023, Arena Offshore, LP failed to perform operations in a safe and workmanlike manner as follows: While attempting to move a construction supply box weighing approximately 3886 lbs. from one section of the top deck to another, the auxiliary jib separated from the main boom and became entangle with the hydraulic hoses. After further investigation, it was discovered that the bottom of the construction supply box became wedged under the elevated capping beam while attempting the lift due to the auxiliary line not being centered over the construction supply box. As the crane operator attempted to raise the boom, a side load occurred causing the auxiliary jib to twist and separate from the main boom.

25. DATE OF ONSITE INVESTIGATION:

22-AUG-2023

28. ACCIDENT CLASSIFICATION: *For Public Release*

26. Investigation Team Members/Panel Members:

J. LeMieux / M. Gary / W. Guillotte /

27. OPERATOR REPORT ON FILE:

29. ACCIDENT INVESTIGATION PANEL FORMED:

NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Mark Malbrue

APPROVED

DATE:

15-FEB-2024