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: **10-MAY-2015** TIME: **0430** HOURS

2. OPERATOR: **Arena Offshore, LP**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Hercules Offshore, Inc.** -
   REPRESENTATIVE:
   TELEPHONE:

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

4. LEASE: **G02705**
   AREA: **HI** LATITUDE:
   BLOCK: **A 547** LONGITUDE: -

5. PLATFORM: - **C**
   RIG NAME: **HERCULES 300**

6. ACTIVITY:
   - [ ] EXPLORATION(POE)
   - [x] DEVELOPMENT/PRODUCTION (DOCD/POD)

7. TYPE:
   - [ ] HISTORIC INJURY -
     - [x] REQUIRED EVACUATION 1 -
     - [ ] LTA (1-3 days)
     - [x] LTA (>3 days 1
     - [ ] RW/JT (1-3 days)
     - [ ] RW/JT (>3 days)
     - [ ] Other Injury -
   - [ ] FATALITY
   - [ ] POLLUTION
   - [ ] FIRE
   - [ ] EXPLOSION
   - LWC -
     - [ ] HISTORIC BLOWOUT
     - [ ] UNDERGROUND
     - [ ] SURFACE
     - [ ] DEVERTER
     - [ ] SURFACE EQUIPMENT FAILURE OR PROCEDURES
   - COLLISION [ ] HISTORIC [ ] >$25K [ ] <=$25K
   - [ ] STRUCTURAL DAMAGE
   - [ ] CRANE
   - [ ] OTHER LIFTING DEVICE
   - [ ] DAMAGED/DISABLED SAFETY SYS.
   - [ ] INCIDENT >$25K
   - [ ] H2S/15MIN./20PPM
   - [ ] REQUIRED MUSTER
   - [ ] SHUTDOWN FROM GAS RELEASE
   - [ ] OTHER

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

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

9. WATER DEPTH: **253** FT.

10. DISTANCE FROM SHORE: **97** MI.

11. WIND DIRECTION: **SE** -
    SPEED: **29** M.P.H.

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

13. SEA STATE: **6** FT.

17. INVESTIGATION FINDINGS:-

For Public Release

On May 10, 2015, during back-reaming while tripping out of the hole operations on the Hercules 300 jackup rig for operator Arena Offshore, a Floorhand was struck on his right arm by a set of make-up tongs which failed to remain secured to the drill pipe while backing out connection to the Top Drive from the first stand of drill pipe pulled out of the hole. The Floorhand was medically evacuated and later determined to have a radial fracture on his right arm.

Tongs used to secure drill pipe for breaking connections are known to slip at times under torque if the tongs do not get a sufficient hold of the drill pipe. It is imperative crew members are aware and avoid the hazardous area where the tongs can break free from the drill pipe and swing unimpeded endangering anyone in the path.

The initial Job Safety Analysis (JSA) conducted, May 10, 2015, did not include a proper analysis of the hazards associated with back-reaming out of the hole operations. A safe standing zone after the make-up tongs were connected was not established for the Floorhand who was injured. There was inefficient communication between crew members assigned to the task. All rig floor crew members participating in the back-reaming operation failed to insure all personnel were in a safe location after securing make-up tongs to the drill pipe. Stop Work Authority should have been utilized to insure the Floorhand was clear of the tongs prior to breaking and spinning out of the connection. The Driller in particular failed to ensure the Floorhand was in the proper position prior to backing out of the connection while the tongs were being utilized on the rig floor. As stated in the Tripping Practices (7.1.3), the Toolpusher should be present on the rig floor when pulling the first ten stands at a minimum. The Driller did not wait for the Toolpusher to arrive on the rig floor prior to start of operations. Due to the lack of onsite supervision, the Toolpusher was unable to completely insure all rig floor personnel were in their proper locations for safe operations. Procedures for back-reaming out of the hole operations were not adequate and failed to incorporate safety measures to prevent this type of injury occurrence. Equipment associated with any job task should be inspected as per the procedures, policies in place, and manufacturer specifications. The Top Drive grabber dies failed to provide the necessary grip to back out the Top Drive from the first stand of drill pipe pulled out of the hole.

Experienced crew members were not taking the necessary time to review procedures, JSA's, and company policies thoroughly for routine operations. Experienced crew members were not observing others for safety issues due to complacency with routine operations. Procedures such as Tripping Practices (7.1.3) are insufficient for routine operations.

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

The initial Job Safety Analysis (JSA) conducted, May 10, 2015, did not include a proper analysis of the hazards associated with back-reaming out of the hole operations. A safe standing zone after the make-up tongs were connected was not established for the Floorhand who was injured. There was inefficient communication between crew members assigned to the task. All rig floor crew members participating in the back-reaming operation failed to insure all personnel were in a safe location after securing make-up tongs to the drill pipe. Stop Work Authority should have been utilized to insure the Floorhand was clear of the tongs prior to breaking and spinning out of the connection. The Driller in particular failed to ensure the Floorhand was in the proper position prior to backing out of the connection while the tongs were being

utilized on the rig floor. As stated in the Tripping Practices (7.1.3), the Toolpusher should be present on the rig floor when pulling the first ten stands at a minimum. The Driller did not wait for the Toolpusher to arrive on the rig floor prior to start of operations. Due to the lack of onsite supervision, the Toolpusher was unable to completely insure all rig floor personnel were in their proper locations for safe operations. Procedures for back-reaming out of the hole operations were not adequate and failed to incorporate safety measures to prevent this type of injury occurrence. Equipment associated with any job task should be inspected as per the procedures, policies in place, and manufacturer specifications. The Top Drive grabber dies failed to provide the necessary grip to back out the Top Drive from the first stand of drill pipe pulled out of the hole.

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

Experienced crew members were not taking the necessary time to review procedures, JSA's, and company policies thoroughly for routine operations. Experienced crew members were not observing others for safety issues due to complacency with routine operations. Procedures such as Tripping Practices (7.1.3) are insufficient for routine operations.

20. LIST THE ADDITIONAL INFORMATION:

All JSA's need to be reviewed and verified to insure all hazards associated with job tasks have been identified. While utilizing tongs, an area on the rig floor needs to be designated for Floorhands to safely stand after the connection has been made for all operations utilizing tongs. Discussions during safety meetings should emphasize the importance of good working communications between crew members during operations. Stop Work Authority should have been utilized to assure the injured Floorhand was clear of the tongs prior to breaking and spinning out of a connection. Stop Work Authority should be utilized any time there are concerns of operations failing to follow procedures, are unsafe, or have personnel who cannot fulfill their assigned duties. Supervision from experienced personnel who are not responsible for a specific task during back-reaming operations can help prevent undesired events with potential of injury incidents.

21. PROPERTY DAMAGED:	NATURE OF DAMAGE:
None	**None**

ESTIMATED AMOUNT (TOTAL): **$**

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake Jackson District does not have any recommendations to the regional office.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 (S) 30 CFR 250.107(a) -
At the time of the incident, May 10, 2015, Lessee failed to perform operations in a - safe and workmanlike manner and provide for the preservation and conservation of property and the environment. -

For Public Release

25. DATE OF ONSITE INVESTIGATION:

14-MAY-2015

26. ONSITE TEAM MEMBERS:

Casey Conklin / John Orsini / David Kearns /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

John McCarroll

APPROVED DATE: **21-JUL-2015**