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

## **ACCIDENT INVESTIGATION REPORT**

## For Public Release

| DATE: 09-JAN-2019 TIME: 0220 HOURS CR  Z. OPERATOR: Talos ERT LLC  REPRESENTATIVE: X IN  TELEPHONE: H2  RE  CONTRACTOR: NOBLE DRILLING (U.S.) INC. | RUCTURAL DAMAGE ANE HER LIFTING hydraulic running tool MAGED/DISABLED SAFETY SYS. CIDENT >\$25K \$184,000 S/15MIN./20PPM QUIRED MUSTER UTDOWN FROM GAS RELEASE HER |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:                                                                      | 8. OPERATION:  PRODUCTION  DRILLING                                                                                                                                |
| 4. LEASE: G16727  AREA: GC LATITUDE: BLOCK: 282 LONGITUDE:  5. PLATFORM: RIG NAME: NOBLE DON TAYLOR                                                | WORKOVER COMPLETION HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO. OTHER                                                                                             |
| EXPLORATION(POE)  X DEVELOPMENT/PRODUCTION (DOCD/POD)  7. TYPE:  HISTORIC INJURY  REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days                  | 9. CAUSE:  EQUIPMENT FAILURE  X HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID                        |
| RW/JT (1-3 days) RW/JT (>3 days) Other Injury  FATALITY POLLUTION FIRE EXPLOSION                                                                   | OTHER  10. WATER DEPTH: 2349 FT.  11. DISTANCE FROM SHORE: 96 MI.  12. WIND DIRECTION:                                                                             |
| LWC   HISTORIC BLOWOUT   UNDERGROUND   SURFACE   DEVERTER   SURFACE EQUIPMENT FAILURE OR PROCEDURES   COLLISION   HISTORIC   >\$25K   <=\$25K      | 15. PICTURES TAKEN:                                                                                                                                                |
|                                                                                                                                                    | 16. STATEMENT TAKEN:                                                                                                                                               |

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On January 9, 2019, an incident occurred on board the drillship, Noble Don Taylor while under contract for Talos Energy Resource Technology (ERT) LLC. The Noble Don Taylor was located at Green Canyon Block 282 OCS - G -16727 at the time of the incident. A single 35,000 pound slick riser joint fell across the rig floor after it was hoisted into the air using a hydraulic riser running tool which was suspended from the top drive. There were no injuries reported, but an employee in the area was nearly struck by the dropped riser joint.

The morning of Wednesday January 9, 2019, at approximately 0220 hours, the "A" drill crew was in the process of picking up and running riser joints to latch the 18.75 inch subsea Blow out Preventers (BOP's) to the SS003 well. Prior to commencing work, the "A" drill crew which consisted of 2 Drillers, 2 Assistant Drillers, 7 Floorhands and 1 Subsea Engineer held a pre job safety meeting. A Work Instruction Manual (WIM) report was generated with all the necessary personnel, permits, tools, equipment and Job Safety Analysis (JSA's). All documents were reviewed and signed by the crew. commenced using the hydraulic Riser Running Tool (RRT), and the first slick riser joint was latched onto with the primary hydraulic lock and secondary manual lock engaged, verified by a designated drill crew member. The designated crew member, a Floorhand, communicated to the Driller via a thumbs up that both locks were engaged and ready to be lifted. The 75 foot long slick riser joint was placed vertically in the spider gimbal and connected to the riser system. The drill crew retrieved the second slick riser joint from the riser cart with the RRT following the same procedure, but a different crew member, a Subsea Engineer, engaged the manual lock on the RRT and confirmed to the Driller via a thumbs up that both locks were engaged. After receiving the thumbs up confirmation, the Driller hoisted the second 75 foot long slick riser joint into the air approximately 74 feet before the RRT came free and the riser joint fell across the drill floor, striking the gimbal and crushing the drops shed. There was a crew member located near the drops shed, but he saw the RRT slip out of the riser and he ran in a safe direction.

The Bureau of Safety and Environmental Enforcement (BSEE) investigation team conducted the initial onsite investigation on January 9, 2019. The team took photographs, interviewed personnel and collected statements. The investigation team learned the Floorhand that had made the first function was the designated person to close the manual lock of the RRT. When the RRT was stabbed into the second riser joint, he was placing a water hose in the choke and kill lines. While doing this, he saw the Subsea Engineer manipulating the secondary manual lock on the RRT. He asked another crew member if the Subsea Engineer locked the RRT, and he replied yes and gave him a thumbs up. The Floorhand then moved near the auxiliary side drops shed while the riser joint was being moved. The Subsea Engineer stated that he was on the rig floor checking the seals in the riser, and he asked another Floorhand if he was going to lock the RRT, and he responded with, "You got it." The Subsea Engineer then positioned himself to function the manual lock on the RRT, slid the secondary lock, and made sure the pin was seated to keep it from sliding. He gave the thumbs up to the Driller and he proceeded to pick up the riser joint. Once the joint was near vertical, the RRT slipped out of the riser joint and fell to the rig floor. The Floorhand that had positioned himself near the auxiliary drops shed saw the RRT slip out of the riser joint, and ran in the opposite direction. Moments after he cleared the area, the riser joint impacted the drops shed and crushed it beyond repair. The Rig Manager instructed the rig to not lower the RRT until he was on the rig floor, and he stated that when the RRT was lowered, he observed the manual lock was not engaged.

The primary lock on the RRT is hydraulically operated from the Drillers chair. The tool is seated in the joint of riser, and the Driller pushes a button to engage the lock. Locking dogs extend into the grooves inside the joint of riser, and if seated properly indicator pins will drop and allow the secondary manual lock to be

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functioned. To function the manual lock, the operator must pull a "T-Handle" up and rotate the manual lock ring 10 degrees. The "T-Handle is then released and it engages into a hole on the tool. By rotating the "T-Handle," the pins are isolated via a metal plate and this prevents the primary lock from being allowed to open. If the RRT is not properly seated in the riser, the primary lock can still be engaged even though the dogs are not engaged in the grooves of the riser. If the dogs are not engaged in the grooves of the riser, the RRT will not have an effective hold on the riser, and the secondary manual lock cannot be engaged. The inability to function the secondary manual lock would be a sign that the RRT is not properly seated in the riser and not safe to lift. In the RRT's manual under the "Manual Lock-Out" section, it states: "Ensure the running tool is locked properly to the riser joint before picking up. Failure to heed this warning may cause serious injury or death to personnel."

Based on the design of the RRT and the interviews of personnel, the investigation team identified the primary cause of this incident to be that the RRT was not properly seated in the riser and the secondary manual lock was not engaged. The Subsea Engineer stated that he engaged the manual lock, but when the RRT was lowered to the rig floor, it was found in the open position. The secondary manual lock could not have opened on its own, indicating that it was never actually locked. And if it was never actually locked, the primary lock was probably not properly engaged. If the primary locking dogs were not extended within the riser's internal grooves, the RRT could not support the weight of the riser.

Since the incident, Noble has revised the WIM for running riser and BOP's so that there will be a designated person to engage the secondary manual lock on the RRT and added a secondary verifier. The JSA has also been revised to include that the second verifier and the indicator rods on the RRT are painted red and green for greater visibility for secondary latch verification. Also, revisions have been submitted to management for review on Noble's personnel zone management procedures for the drill floor area.

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

The RRT was not seated properly in the riser and the secondary manual lock was not engaged by the Subsea engineer.

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

Inexperience doing the task related to incident: The Subsea engineer thought he engaged the secondary manual lock on the RRT but after the riser joint dropped to the rig floor, the Rig Manager had the Driller lower the RRT to rig floor and observed it was not engaged.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

1 75 ft. slick joint of riser, riser cart and a drop shed.

Inspection of dropped riser joint and crushed drop shed

ESTIMATED AMOUNT (TOTAL): \$184,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

BSEE Houma District has no recommendations for the Office of Incident Investigations at this time.

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- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
- 25. DATE OF ONSITE INVESTIGATION:

09-JAN-2019

26. INVESTIGATION TEAM MEMBERS:

Chris Treland / Troy Boudreaux / Clint Campo / Paul Reeves - author /

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

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

27. OPERATOR REPORT ON FILE:

APPROVED

DATE: **22-MAR-2019** 

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