

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-FEB-2017 TIME: 0223 HOURS

2. OPERATOR: Anadarko Petroleum Corporation

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: ROWAN DRILLING

REPRESENTATIVE:

TELEPHONE:

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

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

6. OPERATION:

4. LEASE: G24194

AREA: GC LATITUDE:

BLOCK: 859 LONGITUDE:

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- MOTOR VESSEL
- PIPELINE SEGMENT NO.
- OTHER

5. PLATFORM:

RIG NAME: ROWAN RESOLUTE

6. ACTIVITY:  EXPLORATION(POE)  
 DEVELOPMENT/PRODUCTION  
(DOCD/POD)

8. CAUSE:

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

7. TYPE:

- HISTORIC INJURY
- REQUIRED EVACUATION 1
- LTA (1-3 days)
- LTA (>3 days)
- 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

9. WATER DEPTH: 5355 FT.

10. DISTANCE FROM SHORE: 114 MI.

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

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

13. SEA STATE: FT.

On February 10, 2017 a Rowan Floorhand was evacuated from the drillship Rowan Resolute while working for Anadarko Petroleum Corp in Green Canyon Block 859. The Floorhand was injured while assisting on the rig floor with pulling the 5-7/8 inch work string out of the hole (tripping out of the hole). Several stands into the tripping operation, a rope holding the manual tongs out of the way broke and allowed the tongs to swing forward and struck the Floorhand in the back. The Floorhand was sent in on a medevac flight for evaluation.

While the drill floor crew was tripping pipe out of the hole, a hydraulic hose on the hydra-tong ruptured and the drill floor crew opted to use manual tongs in order to finish pulling out of the hole. After the manual tongs were suspended by a hoist line, they were secured away from the rotary table by a half inch tie back rope. At approximately 0223 hours the Driller was lowering the top drive to latch onto a stand of pipe, but as the top drive was lowered, a clamp on the kelly hose caught the hoist line and the manual tongs were hoisted higher into the air. When the Driller finally stopped the top drive, the tie back rope broke and the tongs swung toward the rotary table. At this time the Floorhand was standing in the permanent Red Zone between the tongs and the rotary table, and was struck in his back by the tongs. The Injured Person (IP) was loaded into a stokes litter and transported to the rig medics office. He was medevac'd to be evaluated by a land based medical center where it was determined that he had sustained a bruise, but did not have broken bones or internal injuries.

Bureau of Safety and Environmental Enforcement (BSEE) Inspectors conducted an inspection / investigation on February 10, 2017 and collected documentation for the incident. It was determined based on incident statements that a Rig Specific Operating Procedure (RSOP) was initiated prior to the pipe tripping operation, and it was revised and updated once the rig floor crew swapped to the manual tongs. However, this RSOP did not identify the possibility of the kelly hose clamp catching the hoist cable and breaking the rope, and allowing the manual tongs to swing across the rig floor. Also, the IP was standing in a permanent Red Zone facing away from a suspended load on the drill floor while waiting for the top drive to descend. This was poor body placement in relationship to the possible moving equipment, and put the IP at risk of injury if/when the hold back rope broke. No other rig floor crew member identified this poor body placement at the time of the incident, and when the hold back rope broke, the IP was standing with his back to the suspended load and was struck as the tongs traveled across the rig floor. Rowan has addressed these issues thru discussing with crew members about stopping the job when there are changes to a planned job to determine all risks involved and to discuss the hazards of the Red Zones.

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

-The rope being used to hold the manual tongs out of the way broke, which allowed the tongs to swing across the rig floor and strike the IP.

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

-Poor body placement: The IP positioned himself facing away from a suspended load while standing in a permanent Red Zone.

-The clamp on the kelly hose catching the hold back rope was not identified in the RSOP when the drill floor crew switched over to the manual tongs.

20. LIST THE ADDITIONAL INFORMATION:

Rowan's Red Zone policy identifies areas of the rig in which there is significant risk of personnel being struck by moving equipment, dropped objects, or exposure to high pressure lines. The purpose of the Red Zone is to heighten employees awareness that they are working in an area that is more hazardous than normal and extra caution should be taken.

21. PROPERTY DAMAGED:

N/A

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

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

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

10-FEB-2017

26. ONSITE TEAM MEMBERS:

Adriano Garcia / Gabe Orellana /  
Troy Boudreaux / Paul Reeves /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan Domangue

APPROVED

DATE: 16-MAY-2017