

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-DEC-2016 TIME: 0540 HOURS

2. OPERATOR:

Chevron U.S.A. Inc.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: Pacific Drilling Services Inc.

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: G31752

AREA: GC LATITUDE:

BLOCK: 807 LONGITUDE:

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

5. PLATFORM:

RIG NAME: PACIFIC SHARAV

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
  - 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: 4954 FT.

10. DISTANCE FROM SHORE: 148 MI.

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

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

13. SEA STATE: FT.

## 17. INVESTIGATION FINDINGS:

On December 10, 2016, on board the Pacific Drilling Sharav drillship, operating for Chevron U.S.A. Inc. in Green Canyon block 807, a flash fire occurred inside the waste oil incinerator tank located in the incinerator room. There were no injuries reported and no immediate threat to equipment, the environment, or personnel; therefore a muster did not occur.

At 05:40 a.m. the Motorman was adjacent to the waste oil incinerator room when he heard a "boom" and saw smoke billow from the incinerator room waste oil tank vent. The Motorman proceeded to the door of the incinerator room and checked it for heat to ensure the space was safe to enter. After determining it was safe to proceed through the door, he entered the incinerator room and discovered the waste oil tank had ballooned out and one isolation valve was damaged. Waste oil was spraying from the damaged valve onto the deck inside the enclosed incinerator room. It was reported that 1 gallon of waste oil was released to the secondary containment area. The Motorman then proceeded to isolate the power source to the waste oil control panel and secure all inlet and outlet valves on the tank, after which he proceeded to the Engine Control Room (ECR) and reported his findings to the Engineer.

The Bureau of Safety and Environmental Enforcement (BSEE) Inspectors conducted an inspection/investigation on December 22, 2016 and collected documentation for the incident. It was determined that a single smoke alarm had activated in the incinerator tank room. The Engineer shut the unit down after recognizing that the waste oil level was too low in the tank. The low level exposed the internal heating element which keeps the waste oil warm to circulate in the tank. The suction line inside the tank to circulate the waste oil is located below the heating element. This exposure caused an ignition of fumes which resulted in a flash fire inside the incinerator waste oil tank. The tank then became distorted and ballooned out.

The investigation determined that there was a malfunction of the waste oil level switch that shuts down power to the internal heating element when the waste oil level becomes too low. If the waste oil level switch had operated properly, the power would have been shut down to the heating element before it became exposed. Pacific Drilling's solution to keep this from reoccurring will be to raise the suction line inside the tank above the heating element, to eliminate the possibility of a future flash fire.

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

**Equipment Failure:** Failure of the incinerator oil level switch to shut down power to the heating element inside the tank once the waste oil level became to low.

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

## 20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE: **For Public Release**

Waste oil incinerator tank

Waste oil incinerator tank ballooned and one isolation valve has been damaged

ESTIMATED AMOUNT (TOTAL): **\$1,500**

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:

**BSEE Houma District has no recommendations to make to the Office of Incident Investigations at this time.**

25. DATE OF ONSITE INVESTIGATION:

**22-DEC-2016**

26. ONSITE TEAM MEMBERS:

**Paul Reeves /**

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

**Bryan A. Domangue**

APPROVED

DATE: **13-MAR-2017**