

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: 13-DEC-2015 TIME: 1637 HOURS

2. OPERATOR:

ConocoPhillips Company

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: Maersk Drilling USA 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:

G35137

AREA: AC LATITUDE:

BLOCK: 475 LONGITUDE:

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

5. PLATFORM:

RIG NAME: MAERSK VALIANT

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

9. WATER DEPTH: 5143 FT.

10. DISTANCE FROM SHORE: 177 MI.

11. WIND DIRECTION:
SPEED: 45 M.P.H.

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

13. SEA STATE: 17 FT.

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

On December 13, 2015, a fire occurred in the B-Deck linen closet during drilling operations on the drill ship Maersk Valiant, Alaminos Canyon 475, OCS-G-35137, Well 001, API 608054007600, operated by ConocoPhillips Company. As a result of the fire, well operations were suspended and the crew mustered at their primary and alternate muster stations. Fire Team 2 was deployed to the B-Deck to extinguish the fire. The damage cost to the B-Deck linen closet was estimated at \$5,000 to \$10,000.

At 16:31, the Senior Dynamic Positioning Officer (SDPO) received a pre-warning smoke alarm on the bridge for the B-Deck. At 16:32, the Dynamic Positioning Officer (DPO) was sent to investigate the alarm. Upon arrival to the B-Deck, the DPO noted a haze in the hallway and could smell smoke. The DPO opened the B-Deck linen closet door and black smoke escaped from the closet. The DPO immediately shut the door and notified the SDPO via radio. At 16:37, the Offshore Installation Manager (OIM) activated the rig fire alarm and announced to the rig crew all personnel should muster at their primary muster stations, except for life boat two personnel who were to report to their alternate muster station due to a fire on the B-Deck. The HVAC was shutoff, dampers were closed, electrical isolations were in place, and the fire pumps were activated. Fire team 2 was deployed to extinguish the fire. Due to the severity of the fire, fire hoses were utilized. The fire could not be extinguished with a fog pattern and solid bursts of water were required to extinguish the fire. While investigating the space for hot spots, the fire reflashed and was extinguished immediately. At 16:54, an "all clear" was given. The linen closet was inspected by the Marine Section Leader (MSL) and Safety Officer, drained of fire water, and sealed for the investigation team.

BSEE investigators arrived on December 14, 2015 to conduct the incident investigation. Statements, data logs, pictures of the fire, and initial reports were gathered. The initial report from the crew stated a mattress stored in the B-Deck linen closet was the suspected source. BSEE investigators conducted a walkthrough investigation of the B-Deck linen closet. After looking at the space, it appeared the fire started on a metal shelf on the far right side of the room, near an offshore travel bag which was stored in the closet. BSEE investigators agreed to open the bag with the operator's investigators the following day. All electrical components appeared in good condition and no further evidence was noted. The following day, December 15, 2015, BSEE and the operator's investigators opened the offshore travel bag identified in the closet, but found no indication the contents started the fire. The offshore travel bag appeared to be burned from the outside only. BSEE and the operator's representatives began a thorough investigation of the linen closet. The linen closet provided little evidence to confirm a source of the fire. An empty container of facial cream (Ponds Flawless White Dewey Rose Whitening Soft) was found without the lid on and noted. The lid of the facial cream jar was later found after all items were removed from the linen closet. The operator then hired an expert fire investigator to continue the investigation.

Upon completion of the investigation, the final report stated the cause of the fire at this time be classified as undetermined. The evidence indicates the fire started near or on the offshore travel bag stored in the B-Deck linen closet. The bag tested positive for organic oils which are known to be susceptible to spontaneous heating. The actual facial cream jar and lid found in the B-Deck linen closet could not be tested because it did not contain any product. However, the composition of the facial cream included glycerin, butylene glycol, propylene glycol, triglyceride and other chemicals. A sample was taken from a similar product provided by rig stewardess. This sample came back negative for organic oils. No other ignition sources were identified within the fire debris or from the inspection of the area. The fire expert concluded the probable ignition scenario of the fire was identified as heat from either chemical reaction or spontaneous heating involving available combustible materials.

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

Products on board the Maersk Valiant were improperly stored in the B-Deck linen closet containing combustible materials which were susceptible to spontaneous heating or chemical reaction resulting in a fire.

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

Multiple offshore travel bags were being stored in the B-Deck linen closet. All offshore travel bags should be stored in designated lockers. Potentially flammable personal care products were not sealed properly and stored in a safe manner. The B-Deck linen closet was filled with pillows, linens and mattresses which provided a significant fuel source.

20. LIST THE ADDITIONAL INFORMATION:

The probable ignition of the fire was from unknown chemical reaction/spontaneous heating

21. PROPERTY DAMAGED:

Linen closet and contents

NATURE OF DAMAGE:

Fire damage from unknown chemical reaction/spontaneous heating

ESTIMATED AMOUNT (TOTAL): \$10,000

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

None

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 (S)

On December 13, 2015, Lessee failed to perform all operations in a safe and workmanlike manner and provide for the preservation and conservation of property and the environment. A fire occurred in the B-Deck linen closet due to a flammable substance being stored improperly and/ or not securing heat or ignition sources. The fire resulted in a full muster of the crew to their designated muster points and Fire Team 2 was sent to extinguish the fire. Due to the severity of the fire, fire hoses were utilized. The fire could not be extinguished with a fog pattern and solid bursts of water were required to extinguish the fire. While investigating the space for hot spots the fire reflashed and was extinguished immediately. An all clear was given at 16:54 hours, 17 minutes after the initial rig fire alarm was acknowledged at 16:37 hours.

25. DATE OF ONSITE INVESTIGATION:

14-DEC-2015

26. ONSITE TEAM MEMBERS:

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

John Orsini / Daniel Gonzalez /
David Kearns /

OCS REPORT:

For Public Release

30. DISTRICT SUPERVISOR:

John McCarroll

APPROVED

DATE: **13-JAN-2015**