

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: 02-JAN-2016 TIME: 0910 HOURS

2. OPERATOR:

Hess Corporation

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR: Diamond Offshore Drilling, 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 Dropped Object (TD Svc Loop)

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

6. OPERATION:

4. LEASE: G26315

AREA: GC LATITUDE:

BLOCK: 512 LONGITUDE:

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

5. PLATFORM:

RIG NAME: DIAMOND OCEAN BLACKLION

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: 3577 FT.
- 10. DISTANCE FROM SHORE: 107 MI.
- 11. WIND DIRECTION: NE
SPEED: 35 M.P.H.
- 12. CURRENT DIRECTION: N
SPEED: 1 M.P.H.
- 13. SEA STATE: 9 FT.

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

On January 2, 2016, the 'Diamond Ocean BlackLion' experienced an incident when the Control Composite Service Loop was pulled out of the rig's Top Drive System (TDS) allowing it to fall approximately 152 feet to the drill floor.

On the day of the incident, the Diamond Ocean BlackLion was performing drilling operations on HESS Corporation's SB002 well, which is located in Green Canyon Block 512, Lease #G26315. The drill crew was in the process of performing 'fishing' operations in an attempt to retrieve the Bottom Hole Assembly (BHA) that had been lost in the hole during previous operations. The BHA consisted of 9 ½ inch drill collars and a 26 inch drilling assembly.

After several failed attempts, the drill crew was eventually able to latch onto the BHA and started to pull it back to surface. Once the BHA was near the drill floor, the Floorhands began making adjustments to the rotary to ensure that the BHA was able to pass safely through the drill floor without any obstructions. The BHA was successfully pulled through and three of the rig's Floorhands moved into place to secure the pipe so that the BHA could be disconnected from the drill string and removed from the floor. Two of the Floorhands were in charge of handling the equipment and one Floorhand was tasked with signaling the Driller throughout the operation. As the crew began preparing to secure the pipe, the Driller continued slowly picking up on the TDS. It was at this time that the service hose was noticed being pulled out of the TDS. The Floorhands were quickly instructed to move out of the way, just as the hose fell to the drill floor. After confirming that no one was injured and that it was safe to do so, the drill pipe was secured and the crew began an investigation to determine the cause of the incident.

The investigation that followed showed that the primary cause of the incident was due to one of the pear shaped rings on the TDS's 'Ring Assembly', located on the Control Composite Service Loop, becoming entangled on a bolt that protruded from the bumper guard of the rig's derrick. According to the Manufacturer, the pear shaped rings were installed to help prevent chaffing and tangling of the service loops and prevent the service loops from swinging independently and becoming entangled. Although the rings were installed onto the service loop during the commissioning process of the drill ship, they were not secured together as intended by the manufacturer. In addition, there was no documentation available on the rig explaining the proper installation or hazards associated with the Ring Assembly of the Control Composite Service Loop. The Operator's Manual and the Installation Procedures supplied by the manufacturer fail to provide sufficient guidance on the purpose of the rings or how to properly install them. It was found that a 'Safety Alert' had been issued on February 18, 2013 that provided more clarity on the rings and recommended upgrading the 'Ring Assembly' to a 'Service Loop Jacket Kit' for the service loops. Because the rig had not yet been commissioned, the ship failed to receive the information and was not aware of the Safety Alert until after the incident.

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

1) One of the rings of the 'Ring Assembly' for the 'Control Composite Service Loop' became entangled on a bolt protruding from the bumper guard of the rig's derrick and was pulled free of the Top Drive.

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

1) **Poor Documentation:** Neither the manufacturer's 'Operating Manual' nor the 'Installation Procedures' provided with the equipment gave sufficient guidance on the purpose of the Ring Assembly or how to properly install them.

2) **Lack of Information:** A 'Safety Alert' was issued by NOV, the manufacturer of the service loops, that advised a upgrade kit to the Ring Assembly on February 18, 2013. Because the rig had not yet been commissioned, the ship failed to receive the information and was not aware of the Alert until after the incident.

3) **Weather Conditions:** High winds and sea states caused the service loops to sway back and forth.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

Service Loop

NATURE OF DAMAGE:

Pulled out of Top Drive

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:

N/A

25. DATE OF ONSITE INVESTIGATION:

04-JAN-2016

26. ONSITE TEAM MEMBERS:

Josh Naquin / James Richard /

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan Domangue

APPROVED

DATE:

25-MAR-2016

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