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

## **ACCIDENT INVESTIGATION REPORT**

## For Public Release

•	OCCURRED STRUCTURAL DAMAGE
	DATE: 28-SEP-2020 TIME: 1249 HOURS CRANE
)	OPERATOR: Shell Offshore Inc.  X OTHER LIFTING Construction Hoist Block  OPERATOR: Shell Offshore Inc.
•	DAMAGED/DISABLED SAFETI SIS.
	TELEPHONE: INCIDENT >\$25K  H2S/15MIN./20PPM
	CONTRACTOR:  REQUIRED MUSTER
	REPRESENTATIVE: SHUTDOWN FROM GAS RELEASE
	TELEPHONE:
	ODED LEON (GOVERN GEOR DEDDECENE) ELVE (GVDEDVI GOD O ODED LEI OV.
	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR 8. OPERATION:
	ON SITE AT TIME OF INCIDENT:
ı	LEASE: G07493
٠.	AREA: GB LATITUDE:
	PLOCK: 137 LONGITUDE:
	HELICOPTER
	PLATFORM: MOTOR VESSEL PIPELINE SEGMENT NO.
•	RIG NAME: NOBLE GLOBETROTTER OTHER
·	ACTIVITY:
	x DEVELOPMENT/PRODUCTION 9. CAUSE:
	(DOCD/POD)
٠.	TYPE:  INTUDIES:  X EQUIPMENT FAILURE
	HUMAN ERROR
	HISTORIC INJURY EXTERNAL DAMAGE
	OPERATOR CONTRACTOR SLIP/TRIP/FALL
	REQUIRED EVACUATION  LTA (1-3 days)  WEATHER RELATED  LEAK
	LTA (1-3 days)  LTA (>3 days)  UPSET H20 TREATING
	RW/JT (1-3 days)
	RW/JT (>3 days)
	FATALITY
	Other Injury 10. WATER DEPTH: 2719 FT.
	11. DISTANCE FROM SHORE: 148 MI.
	POLLUTION
	FIRE 12. WIND DIRECTION:
	EXPLOSION SPEED: M.P.H.
	LWC   HISTORIC BLOWOUT 13. CURRENT DIRECTION:
	UNDERGROUND SPEED: M.P.H.
	SURFACE
	DEVERTER 14. SEA STATE: FT.
	SURFACE EQUIPMENT FAILURE OR PROCEDURES 15. PICTURES TAKEN:
	COLLISION   HISTORIC   >\$25K   <=\$25K   16. STATEMENT TAKEN:

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On 28 September 2020, Shell Offshore Inc. (Shell) had an uncontrolled decent of the construction hoist block on the Noble Corporation (Noble) Globetrotter I Drill Ship while conducting well completion operations on Well DC001 at Garden Banks Block 427. Shell reported this incident to the Bureau of Safety and Environmental Enforcement (BSEE) Lafayette District at 0703 hours on 28 September 2020.

On 28 September 2020, Noble Globetrotter I drill ship personnel were setting down single joint drill pipes onto the construction floor using the construction hoist block to lower the drill pipe down from the construction floor to the pipe rack. At approximately 0049 hours, after the slips were set on pipe joint #26, a Noble driller attempted to stop lowering the construction hoist block and observed the construction hoist block descending without any input from the Driller. The construction hoist block continued to its uncontrolled descent until it contacted the top of a joint of drill pipe. The Driller shut down the drawworks, stopping any additional motion of the construction hoist block.

The Driller then stopped all operations to investigate the possible cause(s) of this incident. The construction hoist block was estimated to have applied approximately 50,000 pounds of pressure on the joint of drill pipe and resulted in bowing of the pipe joint. Noble immediately implemented a safety stand down and all personnel were instructed to avoid the area until a safety assessment could be performed.

Due to the Noble Globetrotter 1 being a Level 3 Covid facility, at the time of the incident, the BSEE investigation team was unable to arrive on the Drill Ship to conduct an on-site incident investigation until 20 October 2020, at 1213 hours. The BSEE Team met and were briefed on the incident by Shell and Noble Globetrotter I representatives. The BSEE Team inspected the rig as well as the construction floor where the incident occurred and observed no visible damage to equipment. BSEE gathered all available documentation including the Job Safety Analysis and photographic documentation related to this incident and departed the rig at 1430 hours on 20 October 2020. The remaining investigation documents were submitted by Shell to BSEE at later dates.

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

The BSEE investigation team determined the probable cause of the incident was due to a failure of the Mechanical Coupling between the Forward Motor and Gearbox on the Construction Hoist Block.

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

BSEE's incident investigation identified the following contributing cause: 1) premature failure of the mechanical couplings on the Gearbox of the Construction Hoist Block and 2) failure of the control system to balance the load (torque) between the Aft and Forward Motors due to the failure of the mechanical coupling between the Forward Motor and Gearbox.

#### 20. LIST THE ADDITIONAL INFORMATION:

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21. PROPERTY DAMAGED:

A single joint of 5.875-inch drill pipe and construction hoist block coupling were damaged during this incident.

NATURE OF DAMAGE:

The single joint of drill pipe was bent and taken out of service and the Construction Hoist Block coupling was damaged beyond repair and replaced.

ESTIMATED AMOUNT (TOTAL):

\$3,390

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE Lafayette District makes no recommendations to the Office of Incident Investigations.

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

28. ACCIDENT CLASSIFICATION:

20-OCT-2020

26. INVESTIGATION TEAM MEMBERS:

Troy Naquin (Report Author) / Johnny Serrette (Onsite) / Roy Kuhn (Onsite and Report Author) /

27. OPERATOR REPORT ON FILE:

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Robert Ranney

APPROVED

DATE: 22-JUL-2021

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