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

# **ACCIDENT INVESTIGATION REPORT**

1.	OCCURRED	STRUCTURAL DAMAGE	
	DATE: 07-JUN-2023 TIME: 1100 HOURS	CRANE	
C	OPERATOR: BP Exploration & Production Inc.	X OTHER LIFTING Elevators	
۷.	REPRESENTATIVE:	DAMAGED/DISABLED SAFETY SYS.	
	TELEPHONE:	INCIDENT >\$25K	
	CONTRACTOR:	H2S/15MIN./20PPM REQUIRED MUSTER	
	REPRESENTATIVE:	SHUTDOWN FROM GAS RELEASE	
	TELEPHONE:	OTHER	
2	. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR 8. OPERATION:		
5.	ON SITE AT TIME OF INCIDENT:	$\square$ PRODUCTION	
	on bill mi time of incident.	x DRILLING	
4.	LEASE: G09821	WORKOVER	
	AREA: MC LATITUDE:	COMPLETION	
	BLOCK: <b>520</b> LONGITUDE:	HELICOPTER	
		MOTOR VESSEL PIPELINE SEGMENT NO.	
5.	PLATFORM:	DECOMMISSIONING	
	RIG NAME: DIAMOND OCEAN BLACKHORNET	$\square$ PA $\square$ PIPELINE $\square$ SITE CLEARANCE	
		TA PLATFORM	
6.	ACTIVITY: EXPLORATION(POE)	OTHER	
	X DEVELOPMENT/PRODUCTION		
7.	(DOCD/POD) TYPE:	9. CAUSE:	
	INJURIES:	EQUIPMENT FAILURE	
	HISTORIC INJURY	X HUMAN ERROR EXTERNAL DAMAGE	
	OPERATOR CONTRAC		
	REQUIRED EVACUATION	WEATHER RELATED	
	LTA (1-3 days)		
	LTA (>3 days) RW/JT (1-3 days)	UPSET H2O TREATING OVERBOARD DRILLING FLUID	
	$\square RW/JT (>3 days)$	X OTHER Supervision	
	FATALITY		
	Other Injury	10. WATER DEPTH: <b>6688</b> FT.	
		11. DISTANCE FROM SHORE: 68 MI.	
	POLLUTION	12. WIND DIRECTION: E	
	FIRE EXPLOSION	SPEED: 2 M.P.H.	
	LWC 🔲 HISTORIC BLOWOUT	13. CURRENT DIRECTION: E	
	UNDERGROUND	SPEED: <b>1</b> M.P.H.	
	SURFACE		
	DEVERTER	14. SEA STATE: 0 FT.	
	SURFACE EQUIPMENT FAILURE OR PROCEDUR		
	COLLISION HISTORIC >\$25K <- \$25K	K 16. STATEMENT TAKEN:	

#### 17. INVESTIGATION FINDINGS:

## INCIDENT SUMMARY:

On June 7, 2023, at 11:00 hours, BP Exploration & Production Inc. (BP) incurred an incident on board the Diamond Ocean BlackHornet Drillship while performing drilling operations on Well 006 located at Mississippi Canyon (MC) 520, Lease OCS-G 9821. The incident involved dropping a 43- foot cleanout assembly approximately 40 feet onto the pipe skate. BP reported the incident to the Bureau of Safety and Environmental Enforcement (BSEE) New Orleans District (NOD).

### SEQUENCE OF EVENTS:

On June 7, 2023, the Diamond drill crew, consisting of the two floor hands, the Assistant Driller, and the Driller, came on tour at 02:00 hours after shortchanging (crew change mid hitch from days to nights). As the crews exchanged, they discussed upcoming operations during the tour. Operational work orders that would be used that day were reviewed and signed by the drill crew. The drill crew performed their daily checks and prepared to pick up a cleanout assembly.

At 07:00 hours, a toolbox talk was held with the Diamond drill crew, crane crew, and Schlumberger service hand for picking up the cleanout assembly. The drill crew discussed what would be picked up and how it would be racked in the derrick.

At 09:45 hours, the floor hands were instructed to change the elevator inserts from 5-7/8 inch to 4-1/2 inch inserts. After the inserts were changed out, the Diamond Assistant Driller conducted a visual inspection of the insert change and verified the installation was done correctly, with the safety retention pins properly installed. The Assistant Driller took a glance at the size and observed 4-1/2 inch stamped on the inserts and continued back into the driller's shack. The Assistant Driller was asked to run the racker and move a stand of 4-1/2 inch drill pipe from the derrick to the Auxiliary Top Drive so the Driller could remove a single joint of drill pipe from the stand and use it to build the last piece of the cleanout assembly. The triple stand of 4-1/2 inch pipe was then racked back in its designated finger board row. The racker was brought back to the Auxiliary rotary to hold the single joint of 4-1/2 inch drill pipe while the Driller picked up the last part of the cleanout assembly (which was the 4-1/2 inch joint). These joints were moved successfully with the incorrect inserts due to the pipe being hard banded. The measurement of the pipe with the hard-band is 5-1/2 inch versus 5-1/4 inch without the hard-band. The 1/4 inch difference in diameter was sufficient to hold the weight of the pipe that was moved.

At 11:00 hours, as the crew picked up the last piece of the 4-1/2 inch cleanout assembly from the skate, it fell to the rig floor and onto the pipe skate (this pipe did not have a hard-band allowing it to slip through the elevator inserts. At 11:20 hours, a safety stand down was ordered by the Diamond Captain. Both drill and crane crews had a safety meeting in the Driller's shack regarding on the incident and about moving forward.

#### BSEE INVESTIGATION:

On June 7, 2023, an incident was reported to the NOD with limited information regarding its severity. The NOD Accident Investigator requested video footage of the relevant area, which revealed a Diamond floor hand holding a remote control for the pipe skate and standing just a few feet away from the pipe skate in the red zone. The driller began to lift the 43-foot cleanout assembly as the floor hand stepped closer to the pipe skate to get a better line of site of the cleanout assembly being lifted, then stepped back. Suddenly, the assembly fell approximately 40 feet onto the pipe

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For Public Release skate. The floor hand quickly moved away and ran to a safe location. Given the weight and force of the 43 foot assembly falling from such a height, this incident could have caused a fatality.

On June 8, 2023, the BSEE NOD Accident Investigator and a BSEE Well Operations Inspector performed an onsite investigation. The onsite investigation included gathering documentation, conducting interviews, and taking photographs of relevant equipment and the incident scene. The BSEE NOD Accident Investigator and the BSEE Well Operations Inspector issued an Incident of Noncompliance for the incident.

### CONCLUSION:

BSEE concludes that the incident occurred due to the Driller and Assistant Driller not following the guidelines and procedures and did not fill out the Elevator Pre-use checklist. Due to the Driller and Assistant Driller not following the guidelines and procedures and not filling out the checklist (which all state to verify the correct insert size is installed in the elevators before lifting), the incorrect inserts were installed which resulted in dropping the 43-foot cleanout assembly 40 feet onto the pipe skate. There was one floor hand in the red zone at the time of the incident. This employee was operating the pipe skate with a remote which allowed this employee to walk into the red zone to get a better line of site of the opposite end of the pipe skate while the tubulars werebeing picked up. No injuries occurred.

1) Drill Pipe Elevators Guideline (5.1.4.8.a) "Develop a specific procedure for inspecting elevators prior to use. Designate the Assistant Driller as the responsible person to carry out the checks. These checks are to be verified by the Driller. Procedures will include positive checks, i.e., actual measurements, which override any temporary marks on equipment.

2) Change Inserts in Elevators Procedure (SSP180-DRL-13)" Driller or Assistant Driller will verify the correct size inserts are installed and safety cables are in good condition.

3) Elevator Pre-Use Checklist (ref# CHKL/001) was not filled out for this operation. This checklist had two items to verify the correct inserts are used: 1) Verify the size of the pipe that the elevators are to be used with. 2) Physically measure the internal bore of the elevators to confirm that the elevators are the correct size for the tubular in use. In the notes at the bottom of the checklist it states: It is the Assistant Driller's responsibility to ensure that the above checks have been completed. It is the Driller's responsibility to verify that the above checks have been carried out to his satisfaction, the correct elevators have been selected, and that they are fit for purpose. If there is any doubt as to the selection or condition of the elevators to be used the Tool pusher or Rig Superintendent must be informed.

4) The inserts that were installed were designed for use with 4.5 inch External Upset (EU) pipe. The pipe that was being lifted was 4.5 inch Internal-External Upset (IEU) which requires the smaller diameter inserts. The IEU pipe upset is approximately 1/4 inch smaller in diameter than the EU pipe upset.

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

Human Error:

• The Driller and Assistant Driller did not follow the guidelines and procedures and did not fill out the Elevator Pre-use checklist. Due to the Driller and Assistant Driller not following the guidelines, procedures and not filling out the checklist, the incorrect inserts were used in the elevators which resulted in dropping the 43foot cleanout assembly 40 feet onto the pipe skate.

• The inserts that were installed were designed for use with 4.5 inch External Upset (EU) pipe. The pipe that was being lifted was 4.5 inch Internal-External Upset (IEU) which requires the smaller diameter inserts. The IEU pipe upset is approximately 1/4 inch smaller in diameter than the EU pipe upset.

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

Human Error:

The Assistant Driller was not aware of his responsibility to ensure that the Elevator Pre-use Checklist was completed.

Supervision:

The Driller did not verify that the Elevator Pre-use Checklist was carried out to his satisfaction.

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Hoses and portable ladder were broken.

2 Hoses and Portable Ladder

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans District has no recommendations for the Office of Incident Investigations at this time.

\$500

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G110 S 30 CFR 250.107 DOES THE LESSEE PERFORM ALL OPERATIONS IN A SAFE AND WORKMANLIKE MANNER AND PROVIDE FOR THE PRESERVATION AND CONSERVATION OF PROPERTY AND THE ENVIRONMENT?

During the investigation it was discovered that there were guidelines and procedures not being followed by the Driller or Assistant Driller and a checklist that was not filled out by the Driller or Assistant Driller. Due to the Driller and Assistant Driller not following the guidelines, procedures and not filling out the checklist, the incorrect

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inserts were used in the elevators which resulted in dropping the 43' cleanout assembly 40' onto the pipe skate. There was one floorhand in the red zone at the time of the incident. 1) Drill Pipe Elevators Guideline (5.1.4.8.a) "Develop a specific procedure for inspecting elevators prior to use. Designate the Assistant Driller as the responsible person to carry out the checks. These checks are to be verified by the Driller. Procedures will include positive checks, i.e., actual measurements, which override any temporary marks on equipment. 2) Change Inserts in Elevators Procedure (SSP180-DRL-13)" Driller or Assistant Driller will verify the correct size inserts are installed and safety cables are in good condition. 3) Elevator Pre-Use Checklist (ref# CHKL/001) was not filled out for this operation. INC corrected before end of inspection on 6/7/2023

25. DATE OF ONSITE INVESTIGATION:

28. ACCIDENT CLASSIFICATION:

#### 08-JUN-2023

26. Investigation Team Members/Panel Members: 29. ACCIDENT INVESTIGATION PANEL FORMED:

Frank Musacchia / Jason Schollian /

27. OPERATOR REPORT ON FILE:

NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED DATE: 07-MAR-2024

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