# 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: 21-APR-2023 TIME: 1200 HOURS CRANE
)	OPERATOR: Hess Corporation OTHER LIFTING  DAMAGED/DISABLED SAFETY SYS
•	DEDDECENTATIVE.
	TELEPHONE: INCIDENT >\$25K  H2S/15MIN./20PPM
	CONTRACTOR: Transocean Offshore REQUIRED MUSTER
	REPRESENTATIVE: SHUTDOWN FROM GAS RELEASE
	TELEPHONE: X OTHER EDS
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR 8. OPERATION:
•	ON SITE AT TIME OF INCIDENT:
	☐ PRODUCTION
١.	LEASE: G14224 DRILLING
	AREA: GB LATITUDE: X WORKOVER COMPLETION
	BLOCK: 216 LONGITUDE: HELICOPTER
	MOTOR VESSEL
	PLATFORM: PIPELINE SEGMENT NO.
	RIG NAME: T.O. DISCOVERER INSPIRATION OTHER
	ACTIVITY:
	x DEVELOPMENT/PRODUCTION 9. CAUSE:
	(DOCD/POD)
٠.	TYPE:  INTUDIES:  EQUIPMENT FAILURE
	HIMAN ERROR
	HISTORIC INJURY  OPERATOR CONTRACTOR  OPERATOR CONTRACTOR  OPERATOR CONTRACTOR  OPERATOR CONTRACTOR
	SLIP/IRIP/FALL
	REQUIRED EVACUATION WEATHER RELATED  LTA (1-3 days)  LEAK
	LTA (>3 days)  UPSET H20 TREATING
	RW/JT (1-3 days) OVERBOARD DRILLING FLUID
	RW/JT (>3 days)  X OTHER <u>Unknown Thruster Issues</u>
	FATALITY
	Other Injury 10. WATER DEPTH: 1372 FT.
	11. DISTANCE FROM SHORE: 114 MI.
	POLLUTION FIRE 12. WIND DIRECTION: SSE
	EXPLOSION SPEED: 87 M.P.H.
	LWC HISTORIC BLOWOUT 13. CURRENT DIRECTION: <b>NE</b>
	UNDERGROUND SPEED: 6 M.P.H.
	SURFACE DEVERTER 14. SEA STATE: 9 FT.
	SURFACE EQUIPMENT FAILURE OR PROCEDURES 15. PICTURES TAKEN:
	COLLISION THISTORIC T>\$25K T <=\$25K 16. STATEMENT TAKEN:

MMS - FORM 2010 PAGE: 1 OF 4

EV2010R 03-AUG-2023

#### Incident Summary:

At 0938 hours on 21 April 2023, the Transocean (TO) Discoverer Inspiration (Inspiration) drillship experienced an intense frontage passage during well abandonment operations for Hess Corporation (Hess) on Well PS006 at Garden Banks Block 216. The TO Inspiration drillship encountered high winds and began drifting off location requiring the initiation of the Emergency Disconnect System (EDS) resulting in a discharge of 513 barrels (bbl) of calcium bromide (CaBr2) into the Gulf of Mexico waters. No muster was required and there were no injuries during this incident. There was no equipment nor structural damage to the TO Inspiration drillship.

## Sequence of Events:

On 21 April 2023, prior to the EDS incident, Hess and TO both received regular weather updates from a weather reporting website. The weather website showed no indication that the frontal passage approaching the TO Inspiration drillship would produce winds forecasted above 45 knots. Hess had completed a negative pressure test and tripped out of the hole with the Subsea Test Tree (SSTT). Prior to the weather event, TO reported that all engines and thrusters were online and available; however, Thruster #6 was in reduced power due to ongoing issues. At 0938 hours, when the SSTT was about 7 feet above the Blind Shear Rams, the TO Inspiration drillship encountered 67 knot winds from the West and started drifting off the well center. According to TO, prior to the EDS activation and for reasons unknown, Thruster #4 went into a reduced power for a period of 3 seconds. When the TO Inspiration drillship entered the Yellow Watch Circle, about 35 feet off well center, the Bridge called for an EDS "Disconnect". The EDS sequence was initiated at 0939 hours from the TO Inspiration Driller's chair when the drillship was 97 feet off location. The Lower Marine Riser Package lifted off the Blowout Preventer (BOP) and the 513 bbl of CaBr2 that was contained in the riser was discharged into the Gulf of Mexico waters.

## BSEE Investigation:

On 24 April 2023, the BSEE Lafayette District Office conducted an onsite Incident Follow-up Investigation on the TO Inspiration drillship. BSEE met with the Hess Company Representative, the TO Offshore Installation Manager, and the TO Drilling Supervisor. The Hess Company Representative reported to BSEE that the discharge of the 513 bbl of CaBr2 was based on the volume in the riser at the time of the incident. CaBr2 is not listed in 40 CFR 302.4-List of Hazardous Substances and Reportable Quantities, which is referenced in Notice to Lessees and Operators No. 2019-N05. During the BSEE investigation, Hess and TO were unable to provide the rationale on why Thrusters #4 and #6 were operating in a reduced state. However, due to TO taking action by activating the EDS, that performed as intended, there were no damages to the drillship, riser, BOP or to any equipment. Also, there were no report of injuries.

BSEE gathered the following documents during the onsite Incident Follow-up Investigation: Witness Statements, International Association of Drilling Contractors Reports, CaBr2 Material Safety Data Sheet, TO's requirements for Managing Dynamic Position Vessels during Squalls or Frontal Passages, TO's Well Specific Operation Criteria Report, weather prediction reports, and a screenshot of the Propulsion of the TO Inspiration drillship during the weather incident showing winds from the North at 54.4 knots with a 5.2 knot current.

BSEE coordinated with the United States Coast Guard (USCG) who informed BSEE that the causal factors for this EDS incident were "neither equipment failure nor personnel actions". Therefore, the USCG did not conduct an incident investigation beyond initial information gathering.

Based on the findings during this investigation, the most likely cause of this incident was due to a combination of factors including the unforeseen wind shift during a strong frontal system and the drillship's thrusters #6 & #4 output percent of

MMS - FORM 2010 PAGE: 2 OF 4

EV2010R 03-AUG-2023

operation during the event. TO was unable to provide any information to BSEE on why the thrusters were not operating at full capacity during this incident.

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

#### Work Environment:

- Other weather influences The TO Inspiration drillship encountered an unforeseen strong frontal passage with 67 knot winds with a 2.3 knot current.
- 19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

#### Management system:

- Equipment issues Prior to the weather event, TO reported that all engines and thrusters were working and available; however, due to reasons unknown, two thrusters went into reduced power during the EDS incident.
- 20. LIST THE ADDITIONAL INFORMATION:
- 21. PROPERTY DAMAGED:

No property was damaged during this incident.

NATURE OF DAMAGE:

Not applicable.

ESTIMATED AMOUNT (TOTAL): \$

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

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

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

28. ACCIDENT CLASSIFICATION:

24-APR-2023

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

26. Investigation Team Members/Panel Members:

Johnny Serrette (Onsite) / Troy Naquin (Onsite & Report Author) /

27. OPERATOR REPORT ON FILE:

OCS REPORT:

30. DISTRICT SUPERVISOR:

Mark Malbrue

APPROVED

DATE: 03-AUG-2023

MMS - FORM 2010 PAGE: 3 OF 4

EV2010R 03-AUG-2023