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

For Public Release

# **ACCIDENT INVESTIGATION REPORT**

1.	OCCURRED	TRUCTURAL DAMAGE
2.	OPERATOR: BP Exploration & Production Inc.   D D   REPRESENTATIVE: I   TELEPHONE: R   REPRESENTATIVE: S   TELEPHONE: O   OPERATOR: S   OPERATOR: O   D O   D D   D D   D D   TELEPHONE: O   OPERATOR: O   D O   D O   D O   D O   OPERATOR: O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O   D O	THER LIFTING MAAGED/DISABLED SAFETY SYS. NCIDENT >\$25K 22S/15MIN./20PPM EQUIRED MUSTER HUTDOWN FROM GAS RELEASE OTHER
3. 4.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT: LEASE: AREA: MC LATITUDE: BLOCK: 474 LONCITUDE:	8. OPERATION: X PRODUCTION TEMP ABAND DRILLING PERM ABAND WORKOVER DECOM PIPELINE COMPLETION DECOM FACILITY HELICOPTER SITE CLEARANCE
5.	PLATFORM: A(Na Kika) RIG NAME:	MOTOR VESSEL PIPELINE SEGMENT NO. OTHER
6.	ACTIVITY: EXPLORATION(POE) X DEVELOPMENT/PRODUCTION (DOCD/POD) DECOMMISSIONING	
7.	TYPE: INJURIES: HISTORIC INJURY OPERATOR CONTRACTO REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days) RW/JT (1-3 days) RW/JT (>3 days)	9. CAUSE: X EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK X UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER
	FATALITY Other Injury	10. WATER DEPTH: 6340 FT. 11. DISTANCE FROM SHORE: 59 MI.
	X POLLUTION FIRE EXPLOSION	12. WIND DIRECTION: N SPEED: 17 M.P.H.
	LWC HISTORIC BLOWOUT UNDERGROUND SURFACE DEVERTER	<pre>13. CURRENT DIRECTION: N SPEED: M.P.H. 14. SEA STATE: 5 FT.</pre>
	SURFACE EQUIPMENT FAILURE OR PROCEDURES   COLLISION HISTORIC   +\$25K <=\$25K	15. PICTURES TAKEN: 16. STATEMENT TAKEN:

EV2010R

#### INCIDENT SUMMARY:

On 08 February 2025, at 0700 hours, a pollution event occurred at Mississippi Canyon 474-A Platform, Na Kika, owned by BP Exploration & Production. The personnel on Na Kika identified the source of the sheen as the trial application of an emulsion breaker (EB) product within the produced water system, which commenced on 08 February 2025. Once BP personnel became aware that the pollution was coming from Na KiKa's overboard produced water system, the EB chemical trial was halted. On Thursday, 20 February 2025 at 1015 hours, BP reported a pollution event coming from Na Kika in BSEE electronic reporting system, eWell stating that they had discharged approximately 89 barrels of oil and grease into the Gulf of America (GOA).

# SEQUENCE OF KEY EVENTS

From 08 February 2025 through 15 February 2025, personnel at Na Kika began injecting Champion EB chemical into the produced water treatment system. The BP Control Room (CRO) began monitoring the results displayed on the control room monitors while production operators physically monitored the topside vessels.

Preliminary findings indicate that there was an overboard produced water and oil sheening event that began on 08 February 2025 and lasted until 15 February 2025. Prior to the sheening event, BP was performing an approved EB chemical test trial, being injected into the produced water overboard system. On 14 February 2025, BP realized this trial EB was having an adverse effect on the system, causing liquid separation issues, system process upsets, and shut ins. BP took the steps to discontinue the chemical trial and return to the original EB formula, which successfully ended the overboard produced water sheening. Estimates indicate that approximately 89 barrels of oil & grease were discharged into the Gulf of America waters. Produced water discharges must be under the daily maximum of 42 mg/l and under the monthly average of 29 mg/l. In this case, BP exceeded the daily maximum of 42 mg/l.

On 20 February 2025, BP sent an email to the New Orleans District (NOD) Production Operations Section Chief and submitted an Incident Report in BSEE's electronic eWell Reporting System, of a pollution incident coming from Na KiKa's produced overboard water system. The report indicated that over a six-day span, a total of 89 barrels of oil was discharged. Protocol sampling was initiated. BP identified the cause of this sheening as the trialing of a new EB chemical that was being injected into the produced water system. BP was able to stop the sheening by halting the chemical trials and returning to the original chemical makeup.

## **BSEE INVESTIGATION:**

The BSEE investigation team arrived at Na KiKa on 21 February 2025 at 0900 hours. The team consisted of one BSEE Accident Investigator, two Office Environmental Control (OEC) Water Quality Engineers and one District Field Engineer. The number of Personnel on Board at the time of the investigation was 109.

The BSEE investigation team met with the BP person in charge. The investigation team requested the following documents: Production Morning Reports from 07 February 2025 until 15 February 2025; National Pollutant Discharge Elimination System (NPDES) Reports; Production rates; chemical Material Safety Data Sheets; any new or recent changes to production procedures, and produced water collective analysis results. An inspection walkthrough of the produced water overboard system was performed.

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For Public Release The BSEE investigation team interviewed the CROs revealing that during the chemical trial period, the produced water system was being closely monitored throughout the production separation process. The separator pressures, levels and upsets were documented, and the system trends were being recorded and analyzed throughout the chemical trial. The BSEE investigation revealed that the chemical trials hindered the typical production process by causing frothing/foaming within the production vessels. This eventually led to faulty level readings, which caused liquid carryover in the vessels, leading to oil discharging out of the produced overboard water discharge point.

Unfortunately, the oil discharge was not immediately realized. Once the chemical trial was determined to be the cause for the sheening and discharging of oil through the overboard water system, BP began returning to the original EB chemical formula and was successful in ending the sheening.

BSEE OEC (Water Quality) has prepared a separate report with its findings and recommendations of specific non-compliances to EPA for possible enforcement as follows: incomplete Chain of Custodies, an effluent violation was issued for a deck drainage sheen observed in March 2024, and produced water effluent violations for February 2025.

# IN CONCLUSION:

Beginning on Saturday, 08 February 2025 and ending on Saturday, 15 February 2025, while performing an EB chemical trial test, BP, unknowingly, discharged 89 barrels of oil, from the produced water overboard system, into the Gulf of America waters. The oil discharge ended once BP realized that the chemical trial was causing the pollution, and reverted to the original EB formulation.

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

Management Systems: Environmental Control programs: Although the chemical trial was approved by BSEE, the trial chemical proved to be non-compatible in the produced water system. The trial chemical caused frothing/foaming which eventually led to upsets within the production vessels, leading to the pollution event.

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

Personnel Training: Personnel poorly trained No or inadequate hazard analysis: BP personnel were not trained properly on what to look for during this chemical trial. They failed to identify issues with the chemical trial, and the pollution event went unnoticed for 7 days before being stopped. The produced overboard water outlet is located 80 feet below the water surface. Strong currents, foaming within vessels caused by the trial chemical leading to topside vessel upsets, facility shut-ins, etc. made it difficult for control room operators to quickly identify and determine the unfavorable results of the chemical trial that led to the pollution event.

# 20. LIST THE ADDITIONAL INFORMATION:

MC 474 A (Na KiKa) had been using the original emulsion breaker chemical since facility start-up. However, production composition changes, increase water cuts, plant instability and safety-related process considerations were the main drivers for the new emulsion breaker trial.

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The new trial emulsion breaker chemical was developed to improve plant stability, improve separation efficiency in the Free Water Knockout/ FWKO (NAM-140) and reduce safety risks in the Treater Degassing Separator (NBD-302) and Bulk Oil Treater (NBK-304).

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Pollution: 89 barrels of oil discharged into the GOA waters from the overboard produced water system.

# ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

Due to the physical barriers involved with monitoring the system, the New Orleans District recommends the BSEE Production Operations Support Section should reach out to industry to require additional safeguards to be developed or explored to improve the time needed to detect when a system upset is or has occurred, so that corrective actions can be taken as soon as possible. As the produced water outlet is located well below the water surface, operators should have other methods in place to detect pollution events, besides looking over the side of the platform for a sheen. The produced water outlet being well below the water surface makes it nearly impossible to quickly identify sheening if/when it occurs.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

E-100 30 CFR 250.300 E-100 INC: Starting Saturday, 08 February 2025 and ending on Friday, 14 February 2025, while performing an emulsion breaker (EB) chemical trial test, BP, unknowingly, discharged 89 barrels of oil, from the produced water overboard system, into the Gulf of America waters. The oil discharge ended as BP reverted to the original emulsion breaker formula.

25. DATE OF ONSITE INVESTIGATION: 28. ACCII

28. ACCIDENT CLASSIFICATION:

21-FEB-2025

26. Investigation Team Members/Panel Members: 29. ACCIDENT INVESTIGATION PANEL FORMED: NO

INC

OCS REPORT:

30. DISTRICT SUPERVISOR:

27. OPERATOR REPORT ON FILE:

Michael J Saucier

APPROVED DATE: 12-JUN-2025