

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: 07-JUN-2021 TIME: 1300 HOURS

2. OPERATOR: BP Exploration & Production Inc.

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- OTHER LIFTING
- DAMAGED/DISABLED SAFETY SYS.
- INCIDENT >\$25K
- H2S/15MIN./20PPM
- REQUIRED MUSTER
- SHUTDOWN FROM GAS RELEASE
- OTHER

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

8. OPERATION:

4. LEASE: G09868

AREA: MC LATITUDE:

BLOCK: 778 LONGITUDE:

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

5. PLATFORM: A(Thunder Horse)

RIG NAME:

6. ACTIVITY: EXPLORATION (POE)
 DEVELOPMENT/PRODUCTION (DOCD/POD)

9. CAUSE:

7. TYPE:

INJURIES:

HISTORIC INJURY

OPERATOR CONTRACTOR

REQUIRED EVACUATION

LTA (1-3 days)

LTA (>3 days)

RW/JT (1-3 days)

RW/JT (>3 days)

FATALITY

Other Injury

- EQUIPMENT FAILURE
- HUMAN ERROR
- EXTERNAL DAMAGE
- SLIP/TRIP/FALL
- WEATHER RELATED
- LEAK
- UPSET H2O TREATING
- OVERBOARD DRILLING FLUID
- OTHER _____

POLLUTION

FIRE

EXPLOSION

LWC HISTORIC BLOWOUT

UNDERGROUND

SURFACE

DEVERTER

SURFACE EQUIPMENT FAILURE OR PROCEDURES

10. WATER DEPTH: 6200 FT.

11. DISTANCE FROM SHORE: 66 MI.

12. WIND DIRECTION:
SPEED: M.P.H.

13. CURRENT DIRECTION:
SPEED: M.P.H.

14. SEA STATE: FT.

15. PICTURES TAKEN:

16. STATEMENT TAKEN:

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

INCIDENT SUMMARY:

A pollution event occurred on 7 June 2021 at 1300 hours, lasting through 10 June 2021 at Mississippi Canyon (MC) 778 A (Thunder Horse), a platform owned and operated by BP Exploration & Production Inc. (BP). An estimated 4 barrels of hydrocarbons were released into the Gulf of Mexico from the Thunder Horse facility while attempting to bring a well online from a long term shut-in.

SEQUENCE OF EVENTS:

On 15 June 2021 at 1232 hours, the Bureau of Safety and Environmental Enforcement (BSEE) received an email notification stating that a sheen from Thunder Horse's produced water outfall was noticed on 9 June 2021. BP stated that based on the appearance of the sheen, the sheen may potentially contained over 1 barrel of hydrocarbons.

On 1 July 2021 at 2359 hours, BP submitted an incident report to BSEE stating a sheen from produced water outfall started on 7 June 2021 and continued through 10 June 2021. Based on the results of the lab analysis from the samples BP took at a six-hour interval from 7 June 2021 to 10 June 2021, it was estimated that over a four-day period, approximately 4 barrels of hydrocarbons were released into the Gulf of Mexico.

BSEE INVESTIGATION:

On 7 June 2021, BP's Thunder Horse facility was attempting to bring the S5 well online from a long term shut-in. They were in single Float Cell (FC) operations until maximum capacity was reached, then went into dual FC operations on 7 June 2021 in an attempt to remove fluid from the tubing in the well to lower the bottomhole pressure in the wellbore at the perforations and induce the well to flow, a process also known as "unloading". The well never fully unloaded and was causing produced water issues so it was shut in. BP claims the sheen subsided from that point. Production operators took samples of the produced water outfall starting at 1300 hours on 7 June 2021 at a six-hour interval for four days lasting until 10 June 2021. Based on the results of the analysis from the samples taken, an estimated 4 barrels of hydrocarbons were released into the Gulf of Mexico through their produced overboard water discharge.

The BSEE Accident Investigator (AI) reviewed the daily production reports from 7 July 2021 to 10 July 2021 and the analysis reports from the samples taken. BSEE concurs with BP's estimate of an approximate 4 barrels of hydrocarbons entering into the Gulf of Mexico from 7 June 2021 to 10 June 2021.

CONCLUSIONS:

While attempting to bring the S5 well back online after a long term shut-in, the liquid rate used during the ramp up was more than what FC 1 and FC 2 could handle and the S5 was shut back in. As a result, BP is coming up with a plan to reduce the liquid rate at the beginning of the ramp up to a slower pace in hopes that it helps with the unloading of the well during ramp up and keep the FC at a manageable capacity.

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

• **Equipment Failure - Capacity of equipment exceeded: FC 1 and FC 2 could not handle the liquid rate which was used during the ramping up of the well.**

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

n/a

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

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.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **NO**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

28. ACCIDENT CLASSIFICATION:

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

26. INVESTIGATION TEAM MEMBERS:

Nathan Bradley /

30. DISTRICT SUPERVISOR:

David Trocquet

27. OPERATOR REPORT ON FILE:

APPROVED

DATE: **09-JAN-2022**