

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: 25-DEC-2020 TIME: 1800 HOURS

2. OPERATOR: Fieldwood Energy LLC

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 **Compressor Backfired**

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

8. OPERATION:

4. LEASE: G01967

AREA: MP LATITUDE:

BLOCK: 153 LONGITUDE:

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

5. PLATFORM: B

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: 300 FT.

11. DISTANCE FROM SHORE: 10 MI.

12. WIND DIRECTION:
SPEED: 0 M.P.H.

13. CURRENT DIRECTION:
SPEED: 0 M.P.H.

14. SEA STATE: 0 FT.

15. PICTURES TAKEN:

16. STATEMENT TAKEN:

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

On 25 December 2020 at approximately 18:00, a backfire occurred while trying to start the compressor engine at the Main Pass (MP) Block 153 "B" platform, owned and operated by Fieldwood Energy, LLC. (Fieldwood). The platform remained shut in as a result of the incident. No injuries were reported. There was damage to the wall siding, lights in the compressor building, the sliding side window in the crane, and several air filters.

Sequence of Events:

On 25 December 2020 prior to 18:00, the platform shut in and could not get the permissive signals to start the compressor. After several hours of troubleshooting the panel, a pneumatic tech was able to get a permissive on the panel to start the engine. The operator pulled the start relay to crank the engine, but it did not crank. He waited a few minutes and pulled the starter relay again. The engine started rolling over and, at about that same time, the compressor backfired. The PIC shut the operation down and identified the muffler separated from the engine. As result of the blast, wall siding was damaged, several lights in the compressor building went out, debris was blown onto the platform, the sliding side window in the crane was cracked, and several air filters were blown from their position.

On 26 December 2020 at 12:42, BSEE received an email with photos and an incident summary.

On 28 December 2020 at 13:18, BSEE received an email from Fieldwood's Health, Safety, and Environment (HSE) representative requesting approval to begin cleanup of the area affected by incident. BSEE approved the cleanup operations.

On 5 January 2021 at 10:28, Fieldwood requested to begin scaffolding operations in preparation to repair the damages incurred from the incident. At 10:32, BSEE granted permission to proceed into the post-incident phase.

BSEE Investigation:

A BSEE Accident Investigator (AI) spoke with the HSE representative and requested photos of the scene of the incident. The AI received photos of the compressor air intake filter housing, compressor wall, crane cab, muffler, debris, and fuel valve.

On 29 December 2020, a BSEE Lead Inspector flew to MP 153 B to conduct a Production Complete annual inspection and to gather additional photos and documentation.

On 6 January 2021, the AI accompanied by another BSEE Inspector visited the platform to take pictures and gather more information.

BSEE concurs with Fieldwood's report that the direct cause of the incident was a fuel valve relay that was sticking, which allowed unburnt fuel outside the engine's combustion chamber into the exhaust which resulted in a backfire. The backfire caused the muffler to separate from the engine. The muffler, as a projectile, damaged the wall siding, lights in the compressor building, and the window in the crane. Other debris was blown about as well as several engine air filters.

Conclusion:

A sticking relay in a pneumatic panel in the start fuel/ignition circuit allowed the engine to be saturated with unburnt fuel, which caused a backfire upon the second attempt to start the engine.

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

Equipment Failure: Inoperable equipment - A sticking relay in a pneumatic panel in the start fuel/ignition circuit allowed the engine to be saturated with unburnt fuel, which caused a backfire upon the second attempt to start the engine.

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

n/a

20. LIST THE ADDITIONAL INFORMATION:

n/a

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Compressor Muffler, wall siding, lights in the compressor building, sliding side window in the crane, and several air filters.

Equipment was damaged from the impact of the backfire blast.

ESTIMATED AMOUNT (TOTAL): \$22,600

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans District makes no recommendations to the Office of Incident Investigation.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

28. ACCIDENT CLASSIFICATION:

26-JAN-2021

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

26. INVESTIGATION TEAM MEMBERS:

OCS REPORT:

Nathan Bradley / Eric Mcgowan / Eric Neal /

30. DISTRICT SUPERVISOR:

27. OPERATOR REPORT ON FILE:

David Trocquet

APPROVED

DATE: 26-MAR-2021