

UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO REGION
ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: 05-DEC-2005 TIME: 2200 HOURS

2. OPERATOR: Newfield Exploration Company

REPRESENTATIVE: Gary Harrington

TELEPHONE: (281) 847-6096

3. LEASE: G23125

AREA: PN LATITUDE: 27.18628565

BLOCK: 891 LONGITUDE: -96.80551851

4. PLATFORM: A

RIG NAME

5. ACTIVITY: EXPLORATION(POE)

DEVELOPMENT/PRODUCTION
(DOCD/POD)

6. TYPE: FIRE

EXPLOSION

BLOWOUT

COLLISION

INJURY NO. 0

FATALITY NO. 0

POLLUTION

OTHER

7. OPERATION: PRODUCTION

DRILLING

WORKOVER

COMPLETION

MOTOR VESSEL

PIPELINE SEGMENT NO. _____

OTHER _____

8. CAUSE: EQUIPMENT FAILURE

HUMAN ERROR

EXTERNAL DAMAGE

SLIP/TRIP/FALL

WEATHER RELATED

LEAK

UPSET H2O TREATING

OVERBOARD DRILLING FLUID

OTHER _____

9. WATER DEPTH: 203 FT.

10. DISTANCE FROM SHORE: 45 MI.

11. WIND DIRECTION: N

SPEED: 35 M.P.H.

12. CURRENT DIRECTION: E

SPEED: 2 M.P.H.

13. SEA STATE: 10 FT.

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

None at time of incident

CITY: Houton STATE: TX

TELEPHONE: (281) 847-6096

CONTRACTOR: ISLAND OPERATORS CO. INC.

CONTRACTOR REPRESENTATIVE/
SUPERVISOR ON SITE AT TIME OF INCIDENT:

None at time of incident

CITY: Aransas Pass STATE: TX

TELEPHONE: (361) 758-9098

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

Based on SCADA monitoring, the PN 891 'A' structure was shut-in between the hours of 10 & 11 pm on Monday night, December 5, 2005. Upon arrival to the field office on Tuesday morning December 6, 2005, a strong drop in production volume was observed (22 mmcf to 17 mmcf).

Contract employees Mr. Jerry Longino (Lead operator) and Adrian Gatain (A-operator) flew to the PN 891 'A' structure to investigate. When boarding the shut-in structure, there were neither flames nor pollution visible. Residual oil was noticed around the compressor unit and was promptly cleaned. The turbo-charger on top of the compressor appeared damaged, presumably distressed by high heat or a flash fire near the top of the compressor unit. Initial observations of the turbo-charger on top of the compressor unit contributed to an all-inclusive inspection by a compressor mechanic.

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

Prior to viewing evidence that a small fire had occurred, it was believed that the compressor went down on low suction pressure, thus causing the platform to shut-in on a PSL from the fuel gas. Ultimately, the compressor mechanic, Mr. Pete Rocha, suggested that the oil line feeding the turbo-charger malfunctioned with a leak, allowing oil to come in contact with the back (hot) side of the turbo-charger. Just as enough oil came into contact with the extremely hot turbo-charger, a flash fire was likely to have occurred. A list of probable causes contributing to the accident includes:

- 1) low suction pressure on compressor unit (suction scrubber)
- 2) oil leakage from turbo-charger feed line
- 3) carbon build-up on turbo-charger impeller blades created off-balance rotation, instability & friction of blades
- 4) worn-out oil seal on discharge side of turbo-charger enabled oil to come in contact with back (hot) side
- 5) inadequate oil quality for compressor operability

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

21. PROPERTY DAMAGED:

**Turbo-charger for compressor
Black boot
Sleeve coupling
Oil feed line (inlet)**

NATURE OF DAMAGE:

**Broken fins
Destroyed by heat/flash fire**

ESTIMATED AMOUNT (TOTAL): **\$6,000**

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The Lake Jackson District has no recommendations to prevent recurrence.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

N/A

25. DATE OF ONSITE INVESTIGATION:

12-DEC-2005

MINOR

26. ONSITE TEAM MEMBERS:

Tyrone Bell / Kathleen Crumrine /

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

FPausina for ESmith

APPROVED

DATE: **31-JAN-2005**

FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: **Poor oil quality or a worn-out seal on discharge side of turbo charger.**

2. TYPE OF FUEL:

- GAS
- OIL
- DIESEL
- CONDENSATE
- HYDRAULIC
- OTHER

3. FUEL SOURCE: **Oil feed line**

4. WERE PRECAUTIONS OR ACTIONS TAKEN TO ISOLATE KNOWN SOURCES OF IGNITION PRIOR TO THE ACCIDENT ? **NO**

5. TYPE OF FIREFIGHTING EQUIPMENT UTILIZED:

- HANDHELD
- WHEELED UNIT
- FIXED CHEMICAL
- FIXED WATER
- NONE
- OTHER