

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

1. OCCURRED

DATE: **13-DEC-2006** TIME: **1750** HOURS

2. OPERATOR:

Newfield Exploration Company

REPRESENTATIVE: **Dickey Marze**

TELEPHONE: **(337) 280-6788**

CONTRACTOR: **Danos & Curole Marine Contracto**

REPRESENTATIVE: **Travis Johnson**

TELEPHONE: **(985) 518-1822**

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

4. LEASE: **00787**

AREA: **SM** LATITUDE:

BLOCK: **49** LONGITUDE:

5. PLATFORM: **A**

RIG NAME:

6. ACTIVITY:

EXPLORATION(POE)
 DEVELOPMENT/PRODUCTION
 (DOCD/POD)

7. TYPE:

HISTORIC INJURY

- REQUIRED EVACUATION
- LTA (1-3 days)
- LTA (>3 days)
- RW/JT (1-3 days)
- RW/JT (>3 days)
- Other Injury

- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

LWC

- HISTORIC BLOWOUT
- UNDERGROUND
- SURFACE
- DEVERTER
- SURFACE EQUIPMENT FAILURE OR PROCEDURES

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

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

6. OPERATION:

- PRODUCTION
- DRILLING
- WORKOVER
- COMPLETION
- HELICOPTER
- 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: **85** FT.

10. DISTANCE FROM SHORE: **40** MI.

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

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

13. SEA STATE: FT.

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

A glycol fire occurred on the SM Block 49, A platform glycol reboiler, adjacent platform decking and crane gantry at approximately 17:45 hours on December 13, 2006. Hot Glycol was initially observed to be percolating uncontrolled out of the glycol reboiler still column vent by _____, Island Operating. Upon observing the malfunctioning glycol reboiler, _____ immediately alerted the platform operator person in charge (PIC), _____, and actions to shut down the glycol reboiler were initiated immediately. The hot glycol percolating from the still column vent was being blown onto portions of the adjacent glycol reboiler burner base and exhaust stack. Ignition of the hot glycol occurred immediately upon coming in contact with exposed portions of the burner base and exhaust stack. Once the hot glycol became ignited, the immediate area surrounding the glycol reboiler had to be evacuated of all personnel. The resulting fire continued for approximately fifteen (15) minutes before being controlled and extinguished by the onboard personnel with fourteen (14) hand held portable and two (2) wheeled chemical fire fighting units. There were no injuries and no pollution reported as a result of this incident.

The glycol reboiler still column and vent and burner exhaust stack are parallel and positioned within approximately two (2) feet of each other. The burner exhaust stack is insulated from the burner base to within approximately three (3) feet of the top of the burner exhaust stack arrestor (SA). Once the hot glycol was initially ignited, hot glycol continuing to percolate from the still column vent continued to be ignited and burned as it came in contact with the adjacent platform decking and crane gantry.

The platform living quarters located approximately twenty (20) from the glycol reboiler unit and on the same deck level sustained no damage.

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

Hot hydro-carbon contaminated glycol percolating uncontrolled out of the glycol reboiler still column vent came in contact with exposed (non-insulated) surface areas of the glycol reboiler burner base and exhaust stack resulting in ignition.

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

Glycol began stacking up in the reboiler due to a restriction in the lean glycol heat exchanger from the reboiler to the exchanger. With the glycol restricted from leaving the reboiler on the lean side, the level in the reboiler increased preventing rich glycol from entering the glycol reboiler through the still column. Rich glycol contaminated with hydro-carbons percolated out the still column vent. The parallel and adjacent still column and vent to the burner exhaust stack and burner base. The glycol reboiler pressure relief valve (PSV) and the still column vent were piped to together to one common discharge point.

21. PROPERTY DAMAGED: NATURE OF DAMAGE:
Crane Charred and burned
General alarm station Glycol reboiler Charred and burned
still column Charred and burned
and burner stack

ESTIMATED AMOUNT (TOTAL): \$90,000

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

MMS' recommendations to Newfield:

Clean and flush the glycol reboiler heat exchanger tubes. Subsequent to the fire, a January 5, 2007 acid treatment of the glycol reboiler heat exchangers generated approximately seven (7) boxes of carbon sludge.

Change out the bulk carbon media. Changed January 4, 2007.

Change out the high pressure and low pressure sock filters. Changed January 4, 2007.

Replace complete systems fluids.

Install level control valve on the glycol flash separator to enhance removal of hydro-carbons from glycol system.

Review the still column vent close proximity location to the glycol reboiler burner exhaust stack. Review the glycol reboiler PSV that is piped common with the still column vent. Glycol reboiler PSV and still column vent piped independently February 1, 2007.

Based on a January 1, 1971 vintage installation of this glycol system and the close proximity of the still column vent and the burner exhaust stack, the Lafayette District recommends that the Office of Safety Management (OSM) alert the MMS inspection force of the potential fire hazard of this type installation.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

None

25. DATE OF ONSITE INVESTIGATION:

27-DEC-2006

26. ONSITE TEAM MEMBERS:

Wade Guillotte / Jason Abshire /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED

DATE: 01-MAR-2007

FIRE/EXPLOSION ATTACHMENT

1. SOURCE OF IGNITION: **Glycol Reboiler Burner Base & Exhaust Stack**

2. TYPE OF FUEL: GAS
 OIL
 DIESEL
 CONDENSATE
 HYDRAULIC
 OTHER **Hydro-carbon contaminated glycol**

3. FUEL SOURCE: **Glycol reboilder still column vent**

4. WERE PRECAUTIONS OR ACTIONS TAKEN TO ISOLATE
KNOWN SOURCES OF IGNITION PRIOR TO THE ACCIDENT ? **YES**

5. TYPE OF FIREFIGHTING EQUIPMENT UTILIZED: HANDHELD
 WHEELED UNIT
 FIXED CHEMICAL
 FIXED WATER
 NONE
 OTHER

INJURY/FATALITY/WITNESS ATTACHMENT

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE: (337) 344-5748 TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY: Grasso Production Management / 20384

BUSINESS ADDRESS: 850 Kaliste Saloom Royal Bldg #207

CITY: Lafayette STATE: LA

ZIP CODE: 70508

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

NAME:

HOME ADDRESS:

CITY:

STATE:

WORK PHONE: (985) 518-1822 TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY: Danos & Curole Marine Contractors, Inc. / 20803

BUSINESS ADDRESS: P. O. Box 1460

CITY: Larose STATE: LA

ZIP CODE: 70373

INJURY/FATALITY/WITNESS ATTACHMENT

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

NAME:

HOME ADDRESS: **UCI EMPLOYEE**

CITY: STATE:

WORK PHONE: **(337) 837-1175** TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: **(337) 344-9172** TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY: **ISLAND OPERATORS CO. INC. / 20324**

BUSINESS ADDRESS: **108 ZACHARY**

CITY: **LAFAYETTE** STATE: **LA**

ZIP CODE: **70583**

INJURY/FATALITY/WITNESS ATTACHMENT

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

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<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

NAME:

HOME ADDRESS: **PHILLIPS INDUST EMPLOYEE**

CITY: STATE:

WORK PHONE: **(337) 233-4889** TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

NAME:

HOME ADDRESS: **B&S CONSTRUCT EMPLOYEE**

CITY: STATE:

WORK PHONE: **(318) 359-0561** TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

NAME:

HOME ADDRESS: **B&S CONSTRUCT EMPLOYEE**

CITY: STATE:

WORK PHONE: **(318) 359-0561** TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input checked="" type="checkbox"/>	WITNESS

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HOME ADDRESS:

CITY: STATE:

WORK PHONE: **(337) 344-9172** TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME :

HOME ADDRESS: **B&S CONTRUCCT EMPLOYEE**

CITY :

STATE :

WORK PHONE: **(318) 359-0561** TOTAL OFFSHORE EXPERIENCE: _____ EARS

EMPLOYED BY :

BUSINESS ADDRESS :

CITY :

STATE :

ZIP CODE :