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:
   06-MAR-2015 TIME: **1615** HOURS

2. OPERATOR: **Murphy Exploration & Production Co**
   REPRESENTATIVE:
   TELEPHONE:
   CONTRACTOR: **Noble Energy, Inc.** -
   REPRESENTATIVE: -
   TELEPHONE:

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

4. LEASE: **G27306**
   AREA: **MC** LATITUDE:
   BLOCK: **736** LONGITUDE: -

5. PLATFORM: - **A(Thunder Hawk)**
   RIG NAME:

6. ACTIVITY:
   - [ ] EXPLORATION(POE)
   - [X] 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.
   - [X] INCIDENT >$25K **Up to $50,000**
   - [ ] H2S/15MIN./20PPM
   - [ ] REQUIRED MUSTER
   - [ ] SHUTDOWN FROM GAS RELEASE
   - [X] OTHER **Mechanical Lifting**

6. OPERATION:
   - [X] PRODUCTION
   - [ ] DRILLING
   - [ ] WORKOVER
   - [ ] COMPLETION
   - [ ] HELICOPTER
   - [ ] MOTOR VESSEL
   - [ ] PIPELINE SEGMENT NO.
   - [ ] OTHER

8. CAUSE:
   - [ ] EQUIPMENT FAILURE
   - [X] HUMAN ERROR
   - [X] EXTERNAL DAMAGE -
   - [ ] SLIP/TRIP/FALL
   - [ ] WEATHER RELATED
   - [ ] LEAK
   - [ ] UPSET H2O TREATING
   - [ ] OVERBOARD DRILLING FLUID
   - [X] OTHER **MOC**

9. WATER DEPTH: **6060** FT.

10. DISTANCE FROM SHORE: **66** MI.

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

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

13. SEA STATE: FT.

1. On March 6, 2015 at 1615 hrs on Murphy Exploration & Production Company's MC 736 A Platform, an incident occurred that resulted in $50,000+ property damages during the installation of the West section of the Gas Lift Mezzanine Deck.
2. While the construction crew was in the process of positioning the West Gas Lift Mezzanine (6,500 pounds) deck into position with the use of temporary overhead chain falls lifting equipment, beam clamps, slings, and rolling scaffoldings, the lift shifted (after removing a beam) causing the load to jam between the existing high pressure (1300 psi) gas lift piping and a 4" isolation valve.
3. The investigation revealed that the specific placement of the lifting equipment was not followed as required by engineering designs; this resulted in the hoisting and traveling of the load to veer from the planned lift path and elevation. Also, the crew did not utilize a hold back hoist and tag lines as planned to assist in direction and controlling the load. In addition, the pre-fabricated stabbing guides for the lift deck legs were not used as planned. Furthermore, the lifting and positioning of the Gas Lift Mezzanine over high pressure piping using temporary hoisting and rolling scaffolding was not documented as a critical lift with the potential to be a major event.
4. Attempts to unjam the lift caused the gas lift piping to bow/bend and create a 5/16" gouge in the isolation valve body. The crew continued to attempt to unjam the deck by cold-cutting the u-clamps that secured the high pressure piping in place without isolating and bleeding down the 1300 psi pressure. During that time, the platform Offshore Installation Manager (OIM), performing a platform walk through, observed the operation and then promptly "Stopped the Job". The crew did not use their stop work authority as the incident developed. 3rd Party Risk Assessment Analysis performed prior to the mezzanine decks installation did not adequately identify the hazards of making the lift over high pressure gas piping.
5. Platform management and Safety Training Supervisor (STS) were notified. Platform operators secured the area, shut in the affected gas lift wells (#2, #5, #6), and bled the pressure to zero inside the 4" high pressure gas piping. A safety stand down was called and then a Job Safety Analysis (JSA) was developed for a plan of action. Then the construction crew cut off the jammed leg of the mezzanine deck freeing it from the piping, and then moved the deck closer to the designated position. The deck was then secured and the work shut down for the day. There were no reported injuries to personnel or hydrocarbon releases to the environment. Prior to the start of the East and West Mezzanine Deck installations, it was reported that there was a Hazard Incident Review Analysis (HIRA) Meeting with management to review and discuss procedures and the concerns of whether to shut in or not shut in the high pressure gas piping. It was reported to have been discussed; however, the decision was made not to shut in piping and the 3 affected gas lift wells.

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

1. Specified locations for placement of the chain hoist and slings, as required by engineering designs were not followed and as such, the hoisting and traveling of the load did not follow the planned lift path and elevation.
2. A low impact strike of the Gas Lift Deck against the gas lift piping caused the lift to jam.
3. A hold back chain hoist was not used as planned to assist in controlling the load.
4. Tag lines on the lift were not used as required to help direct and control the load. -
5. Stabbing guides for the gas lift deck legs were not pre-installed and not used.
6. Stop Work authority was not used as the incident developed.
7. Continued attempts to use the chain faults to unjam the lift cause the piping to bend.

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

1. The lifting and positioning of the Gas Lift Mezzanine (6,500 pounds), over the high pressure (1300 psi) gas lift piping, with the use of temporary hoisting equipment and rolling scaffolding, was not documented as a critical lift with the potential to be a major event.

20. LIST THE ADDITIONAL INFORMATION:

1. The installation of the East Mezzanine Deck section was reported to have been executed without incident.-
2. Prior to the start of the East and West Mezzanine Deck installations, there was reported a HIRA Meeting with management to review and discuss procedures and concerns and the concern whether to shut in the high pressure gas piping was reported to have been discussed; however, the decision was made not to shut in piping and the 3 affected gas lift wells.
3. 3rd Party Risk Assessment Analysis performed prior to the mezzanine decks installation did not adequately identify the hazards of making the lift over high pressure gas piping.-
4. Personnel concerns about the decision to make the lift without isolating and bleeding down the high pressure piping was discussed during a pre-job teleconference with management; however, the decision was made not to bleed down.

21. PROPERTY DAMAGED:

4" Gas Lift Piping

NATURE OF DAMAGE:

Bent Piping-

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: **YES**

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 Murphy USA did not perform its Gas Lift Mezzanine installation in a safe and damage free manner. The unsafe actions resulted in over $50,000.00 damages to replace the Departing Gas Lift Piping bent in the attempt.

G-112 Murphy USA did not provide adequate safety for all personnel during the Gas Lift Mezzanine installation by not taking the necessary precautions and remove the potential hazardous gas lift pressure (1300 pounds) within the gas lift piping directly under the heavy lift (mezzanine deck 6,500 pounds).

I-101 Chain Fault operators failed to "stop the job" and refuse the lifting and floating of the mezzanine deck once the lift became jammed. Not an impact strike. Continued operations resulted in bending and damages to production piping and requiring total platform shut in.

Onsite Investigation conducted on 16-MAR-2015 & 17-MAR-2015

25. DATE OF ONSITE INVESTIGATION:

16-MAR-2015

26. ONSITE TEAM MEMBERS:

Gerald Taylor / Darryl Williams / Jason Bowens /

29. ACCIDENT INVESTIGATION PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

APPROVED DATE: **08-SEP-2015**

INJURY/FATALITY/WITNESS ATTACHMENT

[x] OPERATOR REPRESENTATIVE
[ ] CONTRACTOR REPRESENTATIVE
[ ] OTHER _____

[ ] INJURY
[ ] FATALITY
[x] WITNESS

NAME:

HOME ADDRESS:

CITY: STATE:

WORK PHONE: TOTAL OFFSHORE EXPERIENCE: YEARS

EMPLOYED BY:

BUSINESS ADDRESS:

CITY: STATE:

ZIP CODE:

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[x] CONTRACTOR REPRESENTATIVE
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