

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

1. OCCURRED

DATE: **15-FEB-2006** TIME: **1400** HOURS

2. OPERATOR: **El Paso Production GOM Inc.**

REPRESENTATIVE: **Julie Ward**

TELEPHONE: **(713) 420-5554**

3. LEASE: **G03171**

AREA: **PL** LATITUDE:

BLOCK: **13** LONGITUDE:

4. PLATFORM: **9**

RIG NAME

5. ACTIVITY: EXPLORATION(POE)

DEVELOPMENT/PRODUCTION
(DOCD/POD)

6. TYPE: FIRE

EXPLOSION

BLOWOUT

COLLISION

INJURY NO. _____

FATALITY NO. _____

POLLUTION

OTHER **Crane Incident**

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: **35** FT.

10. DISTANCE FROM SHORE: **9** MI.

11. WIND DIRECTION:

SPEED: M.P.H.

12. CURRENT DIRECTION:

SPEED: M.P.H.

13. SEA STATE: FT.

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

Andy Kulka

CITY: **Houston**

STATE: **TX**

TELEPHONE: **(281) 447-4330**

CONTRACTOR: **Superior Energy Services, Inc.**

CONTRACTOR REPRESENTATIVE/
SUPERVISOR ON SITE AT TIME OF INCIDENT:

James Harper

CITY: **Houston**

STATE: **TX**

TELEPHONE: **(281) 999-0047**

17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

The investigation conducted by the marine division of Superior Energy Services for the El Paso Corporation came out with the following findings. On Wednesday, February 15, 2006 at approximately 1400 hours, the Mate/Crane Operator, was in the process of operating the Nautilus 1100L crane (starboard crane). He was using the fast line to lift an empty a tote tank during a load out. He was raising the boom of the crane while rotating the crane around in order so as to allow the crane's boom to clear the port leg of the lift boat and for the tote tank to clear a wireline lubricator that was rigged up utilizing the lift's boat smaller crane (port crane) for support. As normal, the crane operator was watching the approach of the upper cords, of the heel boom section of the crane in relation to the boom stops. At his normal distance of approach, he discontinued lifting up on the boom. However, the boom continued to rise. The crane operator's first reaction to stop the boom was to engage the control lever to lower the boom (boom down). This was not effective and the crane operator then throttled down the crane's engine by pressing the stop engine button that was located in the cab of the crane behind the crane operator seat. By the time he began pressing the stop engine button, the crane's boom came up against the stops.

The distance between the boom and the boom stops was only a matter of inches and the time span during his attempt to stop the boom from rising was only a matter of seconds.

This incident occurred on the Lift Boat L/B Superior Champion. It is a 230ft class lift boat assigned to the Harvey Marine Division of Superior Energy Services. At the time of the incident, the Superior Champion was jacked up on location in the Gulf of Mexico, South Pelto Block 13, Well #9, which is a single pile platform. The vessel was on charter to El Paso.

Sequence of Events:

On Sunday, January 22, 2006 the Superior Champion arrived on location.

On Monday, February 6, 2006 the crane operator called the Crane Smart Canadian office to discuss a Crane Smart issue involving the smaller port crane. While on the phone, he was asked if he had any issues with the larger crane's Crane Smart system. He then took the opportunity to ask the Crane Smart representative on how to increase the boom angle in the Crane Smart system so as to allow him to raise the boom beyond the 78.5 degrees it was presently set at. He also needed to adjust the boom limit switch. The crane operator was told that the maximum angle was 84 degrees.

Following his phone call to Crane Smart, the crane operator called vessel superintendent, to discuss how to adjust the upper boom limit switch to increase the boom angle beyond 78.5 degrees. It was agreed that the crane boom needed to be able to be raised beyond 78.5 degrees and should be allowed to operate at or around 81 degrees.

The crane operator stated that he remembers his discussion with the vessel superintendent as a recommendation to adjust the upper boom limit switch, however, the vessel superintendent states that he in fact told the crane operator to go ahead and adjust the upper boom limit switch. The crane operator did in fact adjust the upper boom limit switch. When asked if he knew how to determine the actual amount of degrees, he had increased the boom limit switch to, he stated that he really did not know how much of an adjustment he actually made. It is viewed that the operator adjusted the upper boom limit switch beyond the 84 degree limit, thus causing damage to the boom section of the crane.

Due to the close position of the Nautilus 1100L crane, in relation to the lift boat's port and starboard legs, the crane boom needs to be raised, on a regular basis, to a

higher angle greater than 78.5 degrees.

Thursday, February 9, 2006, (five days before the incident) an AB/Crane operator was operating the crane when the boom to continued to rise after he let up on the lever, to stop lifting the boom. He first tried to boom down to stop the upward movement. When this was not successful, he moved the throttle to idle and boomed down. This action was successful in stopping the boom from rising. This incident was noted by the crane operator on a Biweekly Crane Inspection Report dated 2/9/2006 which was signed off by the vessel captain in addition to verbally informing the captain of the incident. However, no one in the office was notified about this crane event.

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

The maximum safe angle that the crane can boom up to is 78.5 degrees. The operator made adjustments to the crane that allowed the crane to extend an estimated 84 degrees, which is beyond crane's safe operating limits. This adjustment is believed to be cause of the crane incident.

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

A crane mechanic, with Oil States, was sent out. He arrived on board the Champion the same day of the incident. Upon his initial investigation, he noted that the heel boom section of the crane was bent beyond the acceptable tolerance limits, resulting in having to make the necessary repairs to get it back into compliance. He also noted that there was an air build up in the hydraulic controls, upon start up of the crane, or trash which could result in contributing to the problem of the uncontrolled rising of the boom.

The crane's placement and it's close proximity to the the vessels legs was a contributing cause of this incident. If the crane had been placed further away from the legs, the crane operator may not have felt the need to adjust the boom's maximum angle.

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The Following are Corrective Action Recommendations submitted by El Paso's Investigation Team:

1. Upon the investigation the high angle indicator was immediately corrected to the appropriate angle of 81 degrees.
2. Ensure communications are established between fleet personnel and office staff regarding alterations to any crane safety device and conduct a management of Change, to avoid improperly trained individuals to make mechanical adjustments.
3. Send out Health Safety and Environment (HSE) alert to the Fleet on item #1 stated above also, any other type of equipment failure, to ensure that HSE Management System Communication Procedures are being followed as stated in the HSE Management System book.
4. Install an air pressure relief valve to purge out excess air pressure inside crane control lines.
5. Relocate crane engine kill switch from behind the crane operator to right side of crane operator for easier access.
6. Conduct appropriate disciplinary action on Captain Rich to stress importance of following Communication Procedures.

21. PROPERTY DAMAGED:

Crane

NATURE OF DAMAGE:

Crane Malfunction Damaged

ESTIMATED AMOUNT (TOTAL): **\$200,000**

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

Due to the nature of this incident, the Houma District has no recommendations to the Regional Office.

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

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

26. ONSITE TEAM MEMBERS:

Brad Hunter /

29. ACCIDENT INVESTIGATION

PANEL FORMED: **NO**

OCS REPORT:

30. DISTRICT SUPERVISOR:

FPausina for MSaucier

APPROVED

DATE: **14-APR-2006**