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

ACCIDENT INVESTIGATION REPORT

1.	OCCURRED DATE: 21-SEP-2006 TIME: 0630 HOURS	STRUCTURAL DAMAGE CRANE OTHER LIFTING DEVICE
2.	OPERATOR: Freeport-McMoRan Inc. REPRESENTATIVE: Calvin Enclade TELEPHONE: (504) 586-5010 CONTRACTOR: Production Management Industrie REPRESENTATIVE: Arthur Barnes TELEPHONE: (504) 365-8409	DAMAGED/DISABLED SAFETY SYS. INCIDENT >\$25K H2S/15MIN./20PPM REQUIRED MUSTER SHUTDOWN FROM GAS RELEASE OTHER
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
	LEASE: G12362 AREA: MP LATITUDE: BLOCK: 299 LONGITUDE: PLATFORM: B	X PRODUCTION DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO.
	RIG NAME:	X OTHER H2S Exposure
	ACTIVITY: EXPLORATION(POE) DEVELOPMENT/PRODUCTION (DOCD/POD) TYPE:	8. CAUSE: X EQUIPMENT FAILURE HUMAN ERROR
	HISTORIC INJURY REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days RW/JT (1-3 days) RW/JT (>3 days)	EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED X LEAK UPSET H2O TREATING OVERBOARD DRILLING FLUID OTHER
	Other Injury FATALITY	9. WATER DEPTH: 200 FT.
	POLLUTION FIRE	10. DISTANCE FROM SHORE: 18 MI.
	LWC HISTORIC BLOWOUT UNDERGROUND	11. WIND DIRECTION: SPEED: M.P.H.
	SURFACE DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	12. CURRENT DIRECTION: SPEED: M.P.H.
	COLLISION HISTORIC >\$25K <=\$25K	13. SEA STATE: FT.

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Pre-existing conditions and circumstances:

- (1) The Daniel orifice meter run fitting isolation gate a issue in this report had been leaking for some time previous to this incident/accident.
- (2) MP 299-B is an H2S producing facility requiring operators and personnel to utilize proper protective equipment whenever opening a closed loop H2S system to the atmosphere.

Sequence of events:

- 1. Resulting from interview of one of the employees involved in the accident, the holding of a morning safety meeting was recorded but not actually held.
- 2. No JSEA was done prior to performing work; which was the changing of the orifice plate in the test separator Daniels meter run.
- 3. Well B-14 was placed in the test separator 0600 and this required changing the orifice plate in the Daniels meter run.
- 4. The lead operator and his roustabout are both Short Service Employees. They climbed up onto the test separator's elevated stand to change the orifice plate. (No H2S detector for continuous monitoring or SCBAs were used in performing this task)
- 5. The lead operator closed the fitting gate, bled down the meter run, unsecured the fitting seal plate, and then rolled up the orifice plate to be changed.
- 6. At this point, the meter run gate was leaking, releasing H2S gas to the atmosphere.
- 7. The lead operator was overcome by the H2S gas while attempting to get away from the leak.
- 8. The roustabout observing the plate change operation, noticed the lead operator losing consciousness, caught the operator and laid him down on the elevated stand.
- 9. The roustabout was then able to awaken the unconscious operator.
- 10. The facility H2S alarm was by then sounding. The lead operator directed the roustabout to call the night operator (a Short Service Employee) for assistance and to silence the alarm.
- 11. The downed lead operator then attempted to isolate the leaking meter run and was once again overcome by the H2S gas. He was able to block off the leaking gate, attempted to escape to the egress ladder but once again lost consciousness and fell through the egress ladder and cage to the grating deck below.
- 12. The roustabout returned to the test separator and found the lead operator unconscious at the base of the ladder. The roustabout was able to awaken the unconscious lead operator.
- 13. The night operator then arrived at scene of the accident and was directed by the lead operator to call the field foreman at MP 299-FP platform and silence the alarm because the roustabout did not know how.
- 14. The roustabout then brought an SCBA to the lead operator and assisted him with breathing air.
- 15. The lead operator donned the SCBA, went back up the ladder to the top of the test separator and secured the vessel gas meter run orifice fitting. He then descended the ladder, removed the SCBA and was then assisted to the living quarters on the top deck. He was administered oxygen. The injured operator had a cut on his right elbow as a result of the fall down the ladder.
- 16. Main Pass 299-FP was called to arrange air transportation to take the injured lead operator to a medical facility for examination.
- 17. The field superintendent and the injured lead operator arrived at Air Logistics in Venice at 0745. The field superintendent transported the injured operator to the Plaquemine Parish medical facility in Port Sulfur for examination.
- 18. The injured operator was examined. The cut on his elbow was stitched. His upper torso was also x-rayed. After a thorough examination, the injured operator was released by the examining physician and then transported to his home by his superintendent.

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

The lead operator involved in the accident failed to follow PMI's safety practices and policies (no JSEA, no continuous gas monitoring, did not don a SCBA for respiratory protection) and did not mentor his support personnel (SSEs) in performing the facility test separator orifice plate change.

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

- 1. No morning daily safety meeting was held to review the day's planned work.
- 2. The support personnel, day roustabout and night operator (both SSEs) were not mentored in the utilization of proper procedures and proper PPE.
- 3. No JSEA was formulated to plan the changing of the orifice plate and to identify all job steps, any possible safety hazards during the performing of the task and identifying solutions to identified safety hazards or issues.
- 4. No continuous gas monitoring was done to assure safe atmospheric conditions.
- 5. No SCBA's were donned during the changing of the orifice plate; which presented a hazardous H2S release to the atmosphere.

20. Continued from Item 22:

- 5. If a job task creates the possibility or necessity of the opening of a closed loop H2S system: (a) Continuous monitoring utilizing a gas detector must be implemented.
- (b) SCBA must be donned to perform the task in an H2S exposure environment. (c) Continuous gas monitoring and SCBA usage to be monitored/audited weekly by the area Superintendent and Foremen.
- 6. Proper PPE usage by all PMI employees is to be continuously monitored by the field Foremen and reported to the field Superintendent.
- 7. Mandatory H2S re-education for all employees (MP-299 Field). This includes Superintendents and Field Foremen.

(Employees who fail to attend this mandatory training will not be allowed to return to duty at MP-299 and will face disciplinary action to include possible termination).

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21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

None

ESTIMATED AMOUNT (TOTAL):

\$

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

No recommendations to MMS. We concur with the following operator's recommendations.

- 1. Assure that morning pre-job safety meetings are held to include attendance roster and safety topic of discussion and the filing for record of same. (Participation to be monitored/audited weekly by the area Foremen and reported to the Superintendent).
- 2. Assure that SSEs are mentored in following PMI safety, health & environmental practices and policies. (Mentoring practices are to be monitored/audited weekly by the area Foremen and reported to the Superintendent)
- 3. Formulate a JSEA for all tasks to be performed throughout each workday; for routine or non-routine tasks. JSEA's are to include all probable steps of the task, identify all possible safety hazards or safety issues and resolutions and or solutions for any identified safety hazards or issues and signature of all involved in the job task and JSEA.(Utilization of JSEAs to be monitored/audited weekly by area Foreman and reported to the Superintendent).
- 4. If the scope of work changes during the job task, "Stop Work Authority" must be enforced and after resolution of the issue requiring Stop work, a new JSEA must be formulated and reviewed. (Utilization Stop Work Authority is to be monitored/audited weekly by the area Foremen and reported to the Superintendent).

(Continued)

See Item 20 for Additional Information.

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
 - G-111 The operator has not maintained the test separator in a safe and workman like manner.
 - G-110 Gas was bled into the atmosphere and not to a flare system.
 - H-110 Operator failed to conduct operations in accordance to the approved H2S contingency plan.
- 25. DATE OF ONSITE INVESTIGATION:

22-SEP-2006

26. ONSITE TEAM MEMBERS:

Perry Jennings /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Troy Trosclair

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APPROVED

DATE: 20-NOV-2006

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