# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT GULF OF MEXICO REGION

## **ACCIDENT INVESTIGATION REPORT**

L.	OCCURRED	_
	DATE: 29-JUL-2010 TIME: 0945 HOURS	STRUCTURAL DAMAGE CRANE
	OPERATOR: Energy XXI GOM, LLC REPRESENTATIVE: Kay Morgan TELEPHONE: (713) 351-3048 CONTRACTOR: Fluid Crane and Construction REPRESENTATIVE: Ross Bonin TELEPHONE: (337) 364-6191  OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR	OTHER LIFTING DEVICE  DAMAGED/DISABLED SAFETY SYS.  INCIDENT >\$25K  H2S/15MIN./20PPM  REQUIRED MUSTER  SHUTDOWN FROM GAS RELEASE  X OTHER Spill from cut process  piping
	ON SITE AT TIME OF INCIDENT:	6. OPERATION:
1.	LEASE: G02062  AREA: EC LATITUDE:  BLOCK: 334 LONGITUDE:	PRODUCTION DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL
5.	PLATFORM: E RIG NAME:	PIPELINE SEGMENT NO.  X OTHER Construction
	ACTIVITY:  EXPLORATION(POE)  DEVELOPMENT/PRODUCTION (DOCD/POD)  TYPE:  HISTORIC INJURY  REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days) RW/JT (1-3 days) RW/JT (>3 days)	8. CAUSE:  EQUIPMENT FAILURE X HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID X OTHER Release of liquid hydrocarbons
	Other Injury  FATALITY  POLLUTION	9. WATER DEPTH: 242 FT.  10. DISTANCE FROM SHORE: 103 MI.
	FIRE EXPLOSION  LWC   HISTORIC BLOWOUT	11. WIND DIRECTION: SSW  SPEED: 7 M.P.H.
	UNDERGROUND SURFACE DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	12. CURRENT DIRECTION: SPEED: M.P.H.
	COLLISION ☐ HISTORIC ☐ >\$25K ☐ <=\$25K	13 SEA STATE: <b>2</b> FT

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#### 17. INVESTIGATION FINDINGS:

On 29 July 2010, a BOEMRE inspector was in route to a predetermined location when he noticed a bright multicolored sheen approximately ¼ mile long by 100 feet wide emanating from an offshore platform. When the inspector landed on the platform the crew was in the process of controlling the source of pollution. The inspector learned that the platform was shut-in while a third party construction crew was in the processing of making repairs to the platform when the incident occurred. The scope of the work included replacing corroded piping associated with the production process system. At the time of the incident, a construction worker was wearing a fall arrest apparatus and working at an elevated height over open water while utilizing an electric band saw to make a cut on the 1-inch dump line associated with the generator fuel gas filter, fuel gas scrubber and sump pump discharge line. The cut in the pipe released liquid hydrocarbons which spilled onto the individual making the cut and into the gulf waters. Although the individual was not injured during the incident, any personnel rescue efforts would have been very difficult due to his location on the platform.

The onsite investigation also revealed that the 1-inch line had not been properly isolated and rendered free of liquid hydrocarbons prior to making the cut. In addition, the BOEMRE Inspector observed a drain valve approximately 40 feet to 50 feet away from where the cut was made on the 1-inch dump line. This drain valve provided a location to check for the presence of fluid prior to making the cut, but had not been identified on the Job Safety Analysis (JSA) Form. Although the potential hazard of hydrocarbons entering the gulf waters was identified on the JSA, it failed to specifically address draining and flushing lines before cutting. The JSA also failed to mention other critical safety measures for specific work activities such as wearing a life jacket and fall protection while working over water and rescue measures for injured personnel working at elevated heights over open waters. Furthermore, the crew did not follow company Lockout and Tagout procedures which are established to mitigate the risk of pollution incidents and personnel injuries.

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

A construction worker utilized an electric band saw to cut into process piping that had not been rendered free of liquid hydrocarbons.

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

Human error by all parties involved as a result of the following:

- 1. Poor judgment in that the cutting operation was performed without recognizing the hazards of the process piping not being rendered free of hydrocarbon before making the cut.
- 2. Failure to adhere to written procedures stipulated in the company Lockout/Tagout procedures combined with the deficient JSA allowed critical safety hazards to be overlooked. The JSA form failed to address task specific hazards and mitigating safety measures.

### 20. LIST THE ADDITIONAL INFORMATION:

A similar incident is referenced in MMS safety Alert No. 188, where a construction worker was fatally burned when he utilized an electric band saw to cut into a process line that had not been properly isolated and rendered inert.

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NATURE OF DAMAGE:

None None

ESTIMATED AMOUNT (TOTAL):

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22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake Charles District recommends that the Regional Office of Safety Management consider re-issuing the aforementioned Safety Alert No. 188 with additions specific to this incident since this type of incident is recurring. The Safety Alert is recommended to highlight the importance of proper isolation and rendering process piping free of hydrocarbons prior to hot work. The Lake Charles district investigated another incident similar in nature that occurred in May of this year.

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-110 - The failure to perform all operations in a safe and workmanlike manner resulted in a pollution incident. The crew failed to properly isolate and render the piping free of hydrocarbons prior to performing the cutting operations.

25. DATE OF ONSITE INVESTIGATION:

29-JUL-2010

26. ONSITE TEAM MEMBERS:

Scott Mouton / Darron Miller / Willard Smith / Terry Hoillier /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Larry Williamson

APPROVED

DATE: 15-DEC-2010

16-DEC-2010

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## INJURY/FATALITY/WITNESS ATTACHMENT

CONTRACTOR REPRESENTATIVE OTHER Third party constructi	INJURY FATALITY  X WITNESS	
E: E ADDRESS:  C: C PHONE:  LOYED BY:	STATE: OTAL OFFSHORE EXPERIENCE:	YEA
INESS ADDRESS: Y: CODE:	STATE:	
OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE OTHER Third party constructi	INJURY  FATALITY  WITNESS	
E: E ADDRESS: Y: K PHONE:	STATE:	YEA
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## **POLLUTION ATTACHMENT**

1.	VOLUME: .45 GAL BBL			
	423 YARDS LONG X 33 YARDS WIDE			
APPEARANCE: RAINBOW SHEEN				
2.	TYPE OF HYDROCARBON RELEASED: OIL			
	DIESEL			
	X CONDENSATE			
	HYDRAULIC			
	NATURAL GAS			
	OTHER			
3.	SOURCE OF HYDROCARBON RELEASED: 1 inch process drain piping cut by electric bandsaw			
4.	WERE SAMPLES TAKEN? NO			
5.	. WAS CLEANUP EQUIPMENT ACTIVATED? NO			
	IF SO, TYPE: SKIMMER			
	CONTAINMENT BOOM			
	ABSORPTION EQUIPMENT			
	DISPERSANTS			
	OTHER			
6.	ESTIMATED RECOVERY: GAL BBL			
7.	RESPONSE TIME: HOURS			
8.	IS THE POLLUTION IN THE PROXIMITY OF AN ENVIRONMENTALLY SENSITIVE AREA (CLASS I)? NO			
9.	HAS REGION OIL SPILL TASK FORCE BEEN NOTIFIED? NO			
10.	CONTACTED SHORE: NO IF YES, WHERE:			
11.	WERE ANY LIVE ANIMALS OBSERVED NEAR: NO			
12.	WERE ANY OILED OR DEAD ANIMALS OBSERVED NEAR SPILL: NO			

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