UNITED STATES DEPARTMENT OF THE INTERIOR Bureau of Ocean Energy Management, Regulation and Enforcement GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

1.	OCCURRED		
	DATE:	STRUCTURAL DAMAGE	
	28-MAY-2010 TIME: 1415 HOURS	CRANE	
_		OTHER LIFTING DEVICE	
2.	OPERATOR: Maritech Resources, Inc.	DAMAGED/DISABLED SAFETY SYS.	
	REPRESENTATIVE: Feik, Courtney	☐ INCIDENT >\$25K	
	TELEPHONE: (281) 578-3388	H2S/15MIN./20PPM	
	CONTRACTOR: TETRA Technologies, Inc.	REQUIRED MUSTER	
	REPRESENTATIVE: Mike Walters TELEPHONE: (281) 364-5353	SHUTDOWN FROM GAS RELEASE	
	1ELEPHONE: (201) 304-3353	X OTHER Cutting torch fire	
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:	
		☐ PRODUCTION	
		DRILLING	
4.	LEASE: G02560	WORKOVER	
	AREA: WC LATITUDE:	COMPLETION	
	BLOCK: 630 LONGITUDE:	HELICOPTER	
		MOTOR VESSEL	
5.	PLATFORM: A	PIPELINE SEGMENT NO.	
	RIG NAME:	X OTHER Permanent Abandonment	
_	ACTIVITY:	8. CAUSE:	
٠.	ACTIVITY: EXPLORATION(POE) DEVELOPMENT/PRODUCTION		
	(DOCD/POD)	EQUIPMENT FAILURE	
7.	TYPE:	X HUMAN ERROR	
	DITTOMORE THE THE	EXTERNAL DAMAGE SLIP/TRIP/FALL	
	HISTORIC INJURY REQUIRED EVACUATION 1	WEATHER RELATED	
	LTA (1-3 days)	LEAK REDATED	
		UPSET H20 TREATING	
	RW/JT (1-3 days)	OVERBOARD DRILLING FLUID	
	RW/JT (>3 days)	OTHER	
	Other Injury	_	
	☐ FATALITY	9. WATER DEPTH: 337 FT.	
	POLLUTION	10	
	X FIRE	10. DISTANCE FROM SHORE: 119 MI.	
	EXPLOSION		
		11. WIND DIRECTION:	
	LWC HISTORIC BLOWOUT	SPEED: M.P.H.	
	UNDERGROUND		
	SURFACE	12. CURRENT DIRECTION:	
	DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	SPEED: M.P.H.	
	COLLISION HISTORIC >\$25K <=\$25K	13. SEA STATE: FT.	

MMS - FORM 2010 PAGE: 1 OF 7 18-NOV-2010

EV2010R

17. INVESTIGATION FINDINGS:

On 28 May 2010, a third party construction crew was in the process of preparing the platform for removal. The task conducted at the time of the incident involved the cutting away of pipe spools on the cellar deck of the platform as part of the preparatory phase of the decommissioning process. The piping systems would be dismantled by cutting them into sections for removal. During the week leading up to this incident, three crew changes occurred among the personnel conducting preparatory work.

The scope of work included the removal of interconnecting piping between decks to facilitate deck removal. A Job Safety Environmental Analysis (JSEA) which addressed "hydrocarbon in lines" was prepared and stated, "Before cutting on pipes, drill and check with gas meter, have pipe open ended, cold cut if necessary. Cut away from body". Although the JSEA states to "have pipe open-ended", it failed to specifically address draining and flushing lines before cutting.

At the time of the incident a welder was on the production cellar deck when he utilized a cutting torch to make a hole in a 2-inch pipe that extended overhead. As the welder cut through the pipe that had not been drained and rendered free of flammable materials, liquid hydrocarbons were released. The liquid contacted the welder and instantly ignited the welders clothing. The welder was at an elevated level working off of scaffolding at the time of the incident. He disconnected his fall arrest system then jumped down to the deck below and began rolling on the deck.

The firewatch extinguished the flames on the welder and surrounding area within a couple of minutes and the welder was immediately evacuated for medical attention. The welder received 2nd degree burns on the front of both thighs, back of his right hand and a 1.5-inch by 2.5-inch area on his face. He also had bruising on his right calf and complained of pain in his right ankle and foot. As of 16 June 16 2010, the welder was still in the hospital recovering from skin graph surgery.

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

The welder utilized a cutting torch to cut into process piping that had not been rendered free of flammable contents.

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

Human error by the welder as a result of the following:

- 1. Poor judgment in that the operation was performed without recognizing the hazard of the process piping not being rendered free of flammable contents.
- 2. Failure to follow recommendations to eliminate or reduce potential hazards specified in the JSEA (i.e. "Before cutting on pipes, drill and check with gas meter, have pipe open ended, cold cut if necessary, and cut away from body").

Furthermore, either of the following or a combination of these contributed to the incident:

a) The company representative on board at the time of the incident failed to ensure that the construction crew adhered to company policy/procedures, specifically to control fluids and gases as stipulated on page 13 of the Lockout/Tagout procedures. b) The Job Safety Environmental Analysis (JSEA), signed by personnel on the date of the accident, failed to specifically address draining and flushing lines before

MMS - FORM 2010 PAGE: 2 OF 7

cutting.

- c) The three crew changes in the week of preparatory work could have resulted in poor communication and the resulting incomplete hazard analysis and lack of corrective action taken prior to the incident.
- 20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

None

None

ESTIMATED AMOUNT (TOTAL):

Š

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake Charles District does not have any recommendations for the Regional Office of Safety Management.

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

G-310 The construction crew failed to properly isolate process piping and render the flammable contents inert prior to utilizing a cutting torch to perform the cut. Furthermore, the crew failed to follow recommendations in the JSEA which stipulated "Before cutting on pipes, drill and check with gas meter, have pipe open ended, cold cut if necessary, and cut away from body".

25. DATE OF ONSITE INVESTIGATION:

07-JUN-2010

26. ONSITE TEAM MEMBERS:

Wayne Meaux / Scott Mouton / Royce Buford / Mike Jardell / Willard Smith / 29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

williamson, larry

APPROVED

DATE: 17-NOV-2010

18-NOV-2010

MMS - FORM 2010 PAGE: 3 OF 7

EV2010R

FIRE/EXPLOSION ATTACHMENT

1.	SOURCE OF IGNITI	ON: O1	pen flame to	orch cut	ting	g into	pipe.	
2.	TYPE OF FUEL:		GAS					
		x	OIL					
			DIESEL					
		x	CONDENSATE					
			HYDRAULIC					
			OTHER					
3.	FUEL SOURCE: Pla	tfor	m process p	iping.				
	WERE PRECAUTIONS KNOWN SOURCES OF						NO	
5.	TYPE OF FIREFIGHT	ING E	QUIPMENT UT	TILIZED:	x	HANDHE	LD	
						WHEELE	D UNIT	
						FIXED	CHEMICAL	
						FIXED	WATER	
						NONE		
					x	OTHER	Water and	rolled

MMS - FORM 2010 PAGE: 4 OF 7 EV2010R 18-NOV-2010

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI OTHER Individual		
NAME:		
HOME ADDRESS:		
CITY:	STATE:	
WORK PHONE:	TOTAL OFFSHORE EXPERIENCE:	Y
EMPLOYED BY:		
BUSINESS ADDRESS:		
CITY:	STATE:	
ZIP CODE: OPERATOR REPRESENTATIVE		
ZIP CODE:	☐ INJURY	
ZIP CODE: OPERATOR REPRESENTATIVE	INJURY FATALITY	
ZIP CODE: OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI	INJURY FATALITY	
ZIP CODE: OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI X OTHER Allison Marine C	INJURY FATALITY	
ZIP CODE: OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI X OTHER Allison Marine C	INJURY FATALITY	
ZIP CODE: OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI X OTHER Allison Marine C NAME: HOME ADDRESS:	INJURY VE FATALITY Contractors In X WITNESS	Y
ZIP CODE: OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI OTHER Allison Marine C NAME: HOME ADDRESS: CITY:	INJURY VE FATALITY Contractors In X WITNESS STATE:	Y
ZIP CODE: OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI OTHER Allison Marine C NAME: HOME ADDRESS: CITY: WORK PHONE:	INJURY VE FATALITY Contractors In X WITNESS STATE:	Υ
ZIP CODE: OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATI OTHER Allison Marine C NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY:	INJURY VE FATALITY Contractors In X WITNESS STATE:	Y

MMS - FORM 2010 PAGE: 5 OF 7

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIV		INJURY
X OTHER Allison Marine	Contractors I	WITNESS
NAME: HOME ADDRESS:		
CITY:	STAT	E:
WORK PHONE:	TOTAL OFFSHO	RE EXPERIENCE: YEARS
EMPLOYED BY:		
BUSINESS ADDRESS:		
CITY:		STATE:
ZIP CODE:		

MMS - FORM 2010 PAGE: 6 OF 7

MMS - FORM 2010 PAGE: 7 OF 7
EV2010R 18-NOV-2010