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

## **ACCIDENT INVESTIGATION REPORT**

1.	OCCURRED	_
	DATE:	STRUCTURAL DAMAGE
	<b>12-OCT-2009</b> TIME: <b>0630</b> HOURS	CRANE
		OTHER LIFTING DEVICE
2.	OPERATOR: W & T Offshore, Inc.	DAMAGED/DISABLED SAFETY SYS.
	REPRESENTATIVE: Gautreaux, Antoine	INCIDENT >\$25K
	TELEPHONE: (713) 624-7274	H2S/15MIN./20PPM
	CONTRACTOR:	REQUIRED MUSTER
	REPRESENTATIVE:	SHUTDOWN FROM GAS RELEASE
	TELEPHONE:	X OTHER Fire in AC Evap. Enclosure
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
		x PRODUCTION
		DRILLING
4.	LEASE: <b>G14391</b>	WORKOVER
	AREA: EC LATITUDE:	COMPLETION
	BLOCK: 373 LONGITUDE:	HELICOPTER
		MOTOR VESSEL
5.	PLATFORM: A	PIPELINE SEGMENT NO.
	RIG NAME:	☐ OTHER
6.	ACTIVITY: EXPLORATION (POE)	8. CAUSE:
	X DEVELOPMENT/PRODUCTION	
	(DOCD/POD)	EQUIPMENT FAILURE  X HUMAN ERROR
7.	TYPE:	EXTERNAL DAMAGE
	HISTORIC INJURY	SLIP/TRIP/FALL
	REQUIRED EVACUATION	WEATHER RELATED
	LTA (1-3 days)	LEAK
	LTA (>3 days	UPSET H20 TREATING
	RW/JT (1-3 days)	OVERBOARD DRILLING FLUID
	RW/JT (>3 days)	OTHER
	Other Injury	9. WATER DEPTH: 400 FT.
	FATALITY	7. WATER BEITH. 100 11.
	POLLUTION	10. DISTANCE FROM SHORE: 113 MI.
	X FIRE	10. DISTANCE FROM SHORE: 113 MI.
	EXPLOSION	11 WIND DIDECTION.
	LWC   HISTORIC BLOWOUT	11. WIND DIRECTION:
	UNDERGROUND	SPEED: M.P.H.
	SURFACE	
	DEVERTER	12. CURRENT DIRECTION:
	SURFACE EQUIPMENT FAILURE OR PROCEDURES	SPEED: M.P.H.
	COLLISION   HISTORIC   >\$25K   <=\$25K	
	COURT DION	13. SEA STATE: FT.

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#### 17. INVESTIGATION FINDINGS:

On 14 October 2009, operations personnel noticed a temperature increase inside the climate-controlled Petrobras Motor Control Center (MCC) building. The MCC building is not located in a Classified Area. Upon further investigation it was discovered that a fire had occurred inside one of the air conditioner (AC) evaporator enclosures located on top of the MCC building. The date and time of the incident is unknown since the location of the unit is isolated and no one witnessed the fire.

During the operator investigation it was discovered that the drain line from the AC evaporator enclosure on top of the MCC building was routed to the cellar deck and terminated in the fuel gas skid. On 18 September 2009, in an effort to eliminate any oil accumulation in the fuel gas skid when bleeding liquid from the fuel gas meter and associated 5-way manifold, operations personnel installed a 1/4 inch drain line from the bottom of the 5-way manifold directly into the AC evaporator enclosure's 1/2 inch drain line which terminates at the main drain line for the fuel gas skid. This fuel gas 5-way manifold is drained regularly to prevent fluid build up in the meter. Operations personnel mentioned that from time to time they would experience a gas/condensate smell in the MCC building but no one investigated the source of the odor.

On 24 September 2009, Diamond S. Refrigeration Inc. replaced a bad condenser motor, bad contactor and overload. The platform experienced an Emergency Shut Down (ESD) on 12 October 2009 due to inclement weather, evidence of fire damage was found on 14 October 2009 and Diamond S. Refrigeration assessed damages on 18 October 2009. Subsequent to discovering the incident, the drain line from the AC enclosure was routed to a safe location.

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

Gas migrated up through the air conditioner evaporator enclosure's drain line and accumulated inside the enclosure prior to ignition. Due to the severity of the damage caused by the fire, the source of ignition could not be determined but is believed to be a bare wire that made contact with a metal surface causing a spark and igniting the gas.

- 19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:
  - \* Failure to trace the drain line prior to making the tie-in.
  - \* Failure to investigate the source of the gas/condensate odor inside the MCC building.
  - \* The use of 1/2 inch stainless steel tubing for the AC evaporator enclosure drain line combined with the hazardous location in which the drain line was routed provided an easy and convenient tie-in point for the fuel gas manifold drain line.
- 20. LIST THE ADDITIONAL INFORMATION:

N/A

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21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Air Conditioner Evaporator Coil, Blower Fire damage - Destroyed Motor and associated Enclosure

ESTIMATED AMOUNT (TOTAL):

\$6,404

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake Charles District recommends that the MMS Regional Office of Safety Management (OSM) issue a Safety Alert to heighten industry's awareness of the hazards involved with combining pressure drains with atmospheric drain lines.

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
  - G-110 An unsafe work practice resulted in a significant fire that destroyed one of the MCC building's AC evaporator coil, blower motor and associated enclosure.
  - \* The drain line from the fuel gas meter 5-way manifold (process source) was tied directly into the domestic AC evaporator enclosure drain line which terminated at the fuel gas skid main drain inlet.
- 25. DATE OF ONSITE INVESTIGATION:

02-NOV-2009

26. ONSITE TEAM MEMBERS:

Marcus Mouton / Royce Buford / Guy Bertrand / Wayne Meaux /

29. ACCIDENT INVESTIGATION PANEL FORMED:

OCS REPORT:

30. DISTRICT SUPERVISOR:

Larry Williamson

**APPROVED** 

DATE: 24-NOV-2009

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# FIRE/EXPLOSION ATTACHMENT

1.	SOURCE OF IGNITION:	Believed to be a bare w surface causing a spark	ire made contact with a metal .	
2.	TYPE OF FUEL:	GAS		
		OIL		
		DIESEL		
		CONDENSATE		
		HYDRAULIC		
		OTHER		
3.	FUEL SOURCE: Gas a	ccumulation inside the A	C evaporator enclosure.	
4.	. WERE PRECAUTIONS OR ACTIONS TAKEN TO ISOLATE KNOWN SOURCES OF IGNITION PRIOR TO THE ACCIDENT ? NO			
5.	TYPE OF FIREFIGHTING	EQUIPMENT UTILIZED:	HANDHELD	
			WHEELED UNIT	
			FIXED CHEMICAL	
			FIXED WATER	
		x	NONE	
			OTHER	

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