# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT GULF OF MEXICO REGION -

#### **ACCIDENT INVESTIGATION REPORT**

# For Public Release

L.	OCCURRED	
	DATE: 02-JUL-2015 TIME: 0400 HOURS	STRUCTURAL DAMAGE
	02-30L-2015 TIME: 0400 HOURS	CRANE
) .	OPERATOR: Freeport-McMoRan Oil & Gas LLC	OTHER LIFTING DEVICE DAMAGED/DISABLED SAFETY SYS.
	REPRESENTATIVE:	INCIDENT >\$25K
	TELEPHONE:	H2S/15MIN./20PPM
	CONTRACTOR: ROWAN COMPANIES INC	REQUIRED MUSTER
	REPRESENTATIVE:	SHUTDOWN FROM GAS RELEASE
	TELEPHONE:	OTHER
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
		☐ PRODUCTION
		X DRILLING
ŧ.	LEASE: G18194  AREA: MC LATITUDE:	WORKOVER
	BLOCK: 126 LONGITUDE: -	COMPLETION
	BLOCK: 126 BONGITODE.	HELICOPTER MOTOR VESSEL
5	PLATFORM:	PIPELINE SEGMENT NO.
•	RIG NAME: ROWAN RELENTLESS	OTHER
5.	ACTIVITY: X EXPLORATION (POE)	8. CAUSE:
	DEVELOPMENT/PRODUCTION	COUIPMENT FAILURE
7.	(DOCD/POD) TYPE:	X HUMAN ERROR
•		EXTERNAL DAMAGE -
	HISTORIC INJURY-	SLIP/TRIP/FALL WEATHER RELATED
	REQUIRED EVACUATION  LTA (1-3 days)	LEAK RELATED
	LTA (>3 days)	UPSET H20 TREATING
	RW/JT (1-3 days)	X OVERBOARD DRILLING FLUID
	RW/JT (>3 days)	OTHER
	Other Injury-	9. WATER DEPTH: <b>4525</b> FT.
	FATALITY	7. WATER DELTH. 4323 11.
	X POLLUTION	10. DISTANCE FROM SHORE: 52 MI.
	FIRE	
	L EXPLOSION	11. WIND DIRECTION: E-
	LWC- HISTORIC BLOWOUT	SPEED: 13 M.P.H.
	UNDERGROUND	
	SURFACE	12. CURRENT DIRECTION: SE
	DEVERTER  CHIEFACE FOLLOWENE FAILURE OF PROCEDURES	SPEED: 0 M.P.H.
	SURFACE EQUIPMENT FAILURE OR PROCEDURES	
	COLLISION HISTORIC >\$25K <=\$25K	13. SEA STATE: <b>0</b> FT.

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EV2010R 20-AUG-2015-

On 02 July 2015 an incident occurred on the Rowan Relentless drill ship that resulted in a 368 barrel discharge of SBM (Synthetic Base Mud). The SBM discharged was 9.4 pounds per gallon and contained 67 percent synthetic oil.

At 0100 hours the Derrick Man aligned reserve pit #1 (containing SBM) to the Schlumberger cement pumping unit. This would allow the Schlumberger cementer to pump SBM into the well to conduct a FIT (Formation Integrity Test). The Derrick Man also aligned pit # 1 to circulate on itself to prevent pressure building up on the valve at the cement pumping unit. After the FIT was completed, the Schlumberger cementer pumped the excess SBM from his tanks into the wellbore. At this time, the Derrick Man was not aware that the FIT was completed and reserve pit #1 continued to circulate on itself. The Driller was only monitoring active pit #3 and active pit #5 for wellbore operations.

At 0200 hours the Derrick Man prepared a cold work permit in order to dump the sea water out of pit #12 and pit #14. Both of these pits contained the seawater that was used to displace the wellbore to SBM.

Between 0220 hours and 0245 hours, without double checking valve alignment as stated in the Job Risk Assessment, the overboard discharge valve was unlocked. The Derrick Man then began to pump displacement sea water overboard from pit #12. Once pit #12 was pumped out, the Derrick Man switched the valve alignment to pump out pit #14. A total of 1,350 barrels of displacement sea water was discharged overboard between both pits.

At approximately 0345 hours, the Derrick Man noticed the manual splitter valve separating the SBM in reserve pit #1 from pits #12 and #14 was halfway open. Note that at the time of the incident, this splitter vale was not recognized as a sensitive valve and was not locked out, as outlined in Rowans Platinum Rules. The Derrick Man then confirmed reserve pit #1 was pumped empty. He notified his supervisors about this incident and it is determined that 368 barrels of SBM was inadvertently discharged into Gulf of Mexico waters.

- 18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:
  - 1) Poor communication between all parties involved. -
  - 2) Failure of the Derrick Man and Assistant Derrick Man to verify valve alignment-prior to pumping the displacement sea water overboard.
  - 3) Splitter valve was left half open. -
- 19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:
  - 1) SBM from reserve pit #1 was used to conduct the FIT and that pit was not monitored-by the Driller.-
  - 2) Driller was only monitoring mud pits #3 and #5 (active) for wellbore operations.
  - 3) Lack of awareness on company (Rowan) policy. -
  - 4) Simultaneous operations in pit room: SBM transfer and sea water being pumped-overboard at the same time. The signed Job Risk Assessment states "Do one job at atime from start to finish".
  - 5) The mud pit dump valves leading to the overboard discharge line were not locked-out.-

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21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

368 barrels of SBM

Discharged overboard.

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BSEE New Orleans District makes no recommendations to the Agency.

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

G-110, 30 CFR 250.107(a) issued 7-7-2015, Operations were not performed in a safe and workmanlike manner to provide for the preservation and conservation of property and the environment.

E100, 30 CFR 250.300(a) issued 7-7-2015, Operator failed to prevent the unauthorized discharge of pollutants into offshore waters, resulting in 368 barrels of 9.4 ppg SMB inadvertently released into Gulf of Mexico waters.

25. DATE OF ONSITE INVESTIGATION:

07-JUL-2015

26. ONSITE TEAM MEMBERS:

Earl Roy / Suleiman Ibrahim / Lorenzo Buckley /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

David Trocquet

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# INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER	INJURY  FATALITY  WITNESS	
NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY: BUSINESS ADDRESS:	STATE: TOTAL OFFSHORE EXPERIENCE:	YEARS
CITY: ZIP CODE:	STATE:	
OPERATOR REPRESENTATIVE  CONTRACTOR REPRESENTATIVE  OTHER  NAME:	INJURY FATALITY  WITNESS	
HOME ADDRESS: CITY:	STATE:	
WORK PHONE:	TOTAL OFFSHORE EXPERIENCE:	YEARS
EMPLOYED BY:  BUSINESS ADDRESS:  CITY:  ZIP CODE:	STATE:	

# **POLLUTION ATTACHMENT**

1.	VOLUME:	GAL	368	BBL
		YARDS LONG X		YARDS WIDE
	APPEARANC	E:		
2.	TYPE OF HYDROCARB	ON RELEASED:	OIL	
		[	DIES	≅L
			COND	ENSATE
			HYDR	AULIC
			NATU	RAL GAS
			OTHE:	Synthetic Based Mud
3.	. SOURCE OF HYDROCARBON RELEASED: Overboard discharge line			
4.	WERE SAMPLES TAKE	N? <b>NO</b>		
5.	WAS CLEANUP EQUIPMENT ACTIVATED? NO			
	IF SO, TYPE: SKIMMER			
	CONTAINMENT BOOM			
		ABSORPTION EQ	UIPMENT	
		DISPERSANTS		
		OTHER		
6.	ESTIMATED RECOVER	Y:	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	S, WHERE	:
11.	WERE ANY LIVE ANIMALS OBSERVED NEAR: NO			
12.	WERE ANY OILED OR DEAD ANIMALS OBSERVED NEAR SPILL: NO			

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