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

ACCIDENT INVESTIGATION REPORT

1.	OCCURRED DATE:	STRUCTURAL DAMAGE				
	10-NOV-2009 TIME: 1357 HOURS	CRANE OTHER LIFTING DEVICE				
2	OPERATOR: BP Exploration & Production Inc.					
۷.	REPRESENTATIVE: Sustala, Dennis	DAMAGED/DISABLED SAFETY SYS. INCIDENT >\$25K				
	TELEPHONE: (281) 366-0898	H2S/15MIN./20PPM REQUIRED MUSTER SHUTDOWN FROM GAS RELEASE OTHER				
	CONTRACTOR: Transocean Offshore					
	REPRESENTATIVE: Barber, Dennis					
	TELEPHONE: (832) 587-6933					
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:				
		PRODUCTION				
4		x DRILLING				
4.	LEASE: G15607 AREA: GC LATITUDE: 27.22501861	WORKOVER COMPLETION				
	BLOCK: 743 LONGITUDE: -90.03194833					
	BLOCK: 743 HONGIIODE: -30:03134033	HELICOPTER MOTOR VESSEL				
5	PLATFORM:	PIPELINE SEGMENT NO.				
٠.	RIG NAME: GSF DEVELOPMENT DRILLER II	OTHER				
	_	0				
6.	ACTIVITY: EXPLORATION(POE)	8. CAUSE:				
	DEVELOPMENT/PRODUCTION	X EQUIPMENT FAILURE				
7.	(DOCD/POD) TYPE:	HUMAN ERROR				
	HISTORIC INJURY	EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED				
	☐ REQUIRED EVACUATION					
	LTA (1-3 days)	LEAK				
	LTA (>3 days	UPSET H20 TREATING				
	RW/JT (1-3 days)	OVERBOARD DRILLING FLUID				
	RW/JT (>3 days)	X OTHER Choke line detached				
	Other Injury	9. WATER DEPTH: 6824 FT.				
	FATALITY					
	X POLLUTION	10. DISTANCE FROM SHORE: 122 MI.				
	FIRE EXPLOSION					
	_	11. WIND DIRECTION: N				
	LWC HISTORIC BLOWOUT	SPEED: 22 M.P.H.				
	UNDERGROUND SURFACE					
	DEVERTER	12. CURRENT DIRECTION: NNE				
	SURFACE EQUIPMENT FAILURE OR PROCEDURES	SPEED: 1 M.P.H.				
	COLLISION	13. SEA STATE: 1 FT.				

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17. INVESTIGATION FINDINGS:

On 10-Nov-2009, the Development Driller II rig was performing operations of flushing the kill, boost and choke lines with 11.7 ppg Synthetic Oil Base Mud (SBM). While this operation was being conducted, the rig was also preparing to repair the main top drive service loop. The rig decided to pump through the choke line with the SBM when there was a loss of observed pump pressure and a rapid drop in mud volume at the mud pits.

At 1740 hours the choke line was observed to be detached from the gooseneck on the slip joint and was hanging in the water releasing the SBM overboard. The source was immediately contained by shutting down and securing the systems to prevent additional spillage overboard. The incident was immediately reported to all appropriate parties. The mud engineer calculated that a total of 97 bbls (4074 gal.) of SBM had been discharged through the choke line due to a siphon effect which forced the mud through the mud pump by the charging pump. None of the mud was recovered and it was noted that sixty two percent (60 bbls) of the SBM was the actual synthetic oil portion.

BP conducted a preliminary investigation and discovered that the choke line tie-in points onto the slip joint had been changed in June 2009 while the rig was out of service. When the gooseneck connection was replaced it was installed incorrectly and, although pressure tested numerous times, it eventually parted at the gooseneck swivel.

BP completed a failure analysis on all boost, kill and choke line connections, resulting in the chokeline gooseneck being replaced. Also, a safety line was installed on the slip joints to prevent the line from discharging overboard. The kill and boost line goosenecks were not required to be replaced since they were installed in the correct manner.

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

The choke line detached from the slip joint's gooseneck.

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

The slip joint's gooseneck connection was installed incorrectly when the rig was out of service.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

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The choke line gooseneck was damaged and N/A was replaced. A total of 97 bbls of Synthetic Oil Base Mud was lost overboard.

ESTIMATED AMOUNT (TOTAL): \$43,750

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

Due to the specific nature of this incident, the Houma District has no recommendations to report to the Regional Office.

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
- 25. DATE OF ONSITE INVESTIGATION:
- 26. ONSITE TEAM MEMBERS: Casey Bisso / Ben Coco /
- 29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE: 10-FEB-2010

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POLLUTION ATTACHMENT

1.	VOLUME:	GAL	60	BBL				
		YARDS LONG X		YARDS	WIDE			
	APPEARANCE:							
2.	TYPE OF HYDROCARE	ON RELEASED:	OIL					
			DIES	EL				
			COND	ENSATE				
			HYDR	AULIC				
			NATUI	RAL GAS	S			
		x	OTHE	g syn	thetic	oil		
3.	SOURCE OF HYDROCA	RBON RELEASED:	failed	slip	joint	gooseneck o	connection	
4.	. WERE SAMPLES TAKEN? NO							
5.	. WAS CLEANUP EQUIPMENT ACTIVATED? NO							
	IF SO, TYPE: SKIMMER							
	CONTAINMENT BOOM							
	ABSORPTION EQUIPMENT							
		DISPERSANTS						
	OTHER							
6.	ESTIMATED RECOVER	Y: G	BAL			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 ANI	MALS OBSERVED NE	EAR: NC)				

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12. WERE ANY OILED OR DEAD ANIMALS OBSERVED NEAR SPILL: NO