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

ACCIDENT INVESTIGATION REPORT

For Public Release

1.	OCCURRED DATE: 15-SEP-2017 TIME: 1150 HOURS	STRUCTURAL DAMAGE X CRANE OTHER LIFTING DEVICE
2.	OPERATOR: Talos Energy, LLC (Talos) REPRESENTATIVE: TELEPHONE: CONTRACTOR: REPRESENTATIVE: TELEPHONE:	DAMAGED/DISABLED SAFETY SYS. X INCIDENT >\$25K \$270,450 H2S/15MIN./20PPM REQUIRED MUSTER SHUTDOWN FROM GAS RELEASE OTHER
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
4.	LEASE: G04842 AREA: ST LATITUDE: BLOCK: 34 LONGITUDE:	PRODUCTION DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL
5.	PLATFORM: B RIG NAME:	PIPELINE SEGMENT NO. X OTHER loading boat with grocery box
6.	ACTIVITY: EXPLORATION(POE) X DEVELOPMENT/PRODUCTION	8. CAUSE: EQUIPMENT FAILURE
7.	TYPE: (DOCD/POD) TYPE: REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days RW/JT (1-3 days) RW/JT (>3 days)	X HUMAN ERROR X EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H2O TREATING OVERBOARD DRILLING FLUID OTHER
	Other Injury	9. WATER DEPTH: 50 FT.
	FATALITY POLLUTION FIRE	10. DISTANCE FROM SHORE: 9 MI.
	EXPLOSION LWC HISTORIC BLOWOUT UNDERGROUND	11. WIND DIRECTION: SPEED: M.P.H.
	SURFACE DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	12. CURRENT DIRECTION: SPEED: M.P.H.
	COLLISION ∏HISTORIC ∏>\$25K ∏ <=\$25K	12 CEN CTNTE: ET

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On September 15, 2017, an incident occurred on the South Timbalier 34B Platform (Lease OCS G04842). Talos Energy, LLC (Talos) is the Designated Operator of Records. The platform is situated nine nautical miles from shore in fifty feet of water.

After completing a third and final lift on the back deck of the Motor Vessel (M/V), the crane operator was in the process of laying the boom down in its rest when the boom encountered a failure. Just prior to completing the boom rest operation, the two bottom bolts connecting the midsection and heel section failed. The failure of the bolts caused excessive stress on the remaining top bolts. Once the top bolts failed the top section of the boom collapsed (jackknifed) to the right, then dropped down, eventually hanging by the main and auxiliary cables on the west side of the platform. The crane operator was able to exit the crane cab. Once the incident was over, the platform Emergency Shutdown (ESD) system was activated. No reportable injuries occurred during the incident.

Though the crane was not present at the facility during onsite inspection by BSEE Houma District personnel, photos obtained of the lower bolt showed signs of stretching and bending, indicating contact. Therefore, it appears the most likely cause of the failure of the bottom bolts in the boom midsection was due to a probable boom/boom stop contact that day or in recent days prior to the incident. The following third party investigative findings support this conclusion:

- 1) "Despite heavy corrosion of these portions of the lower bolts blocked from view by the connection plates and nuts, the shafts of both fasteners show signs of significant elongation and necking. This indicates that both lower fasteners were significantly overloaded in tension prior to or during the collapse."
- 2) "Elongated connection holes at the upper connection pads and bent upper bolts indicate that the lower bolts failed first and the boom jackknifed downward prior to separation."
- 3) "Calculated tensile forces during a boom stop contact event are more than adequate to fail the splice connection lower bolts in tension."
- 4) "Fresh signs of contact between the boom and both boom stops were photographed and noted by the Talos investigator."
- 5) "It is more likely than not that the lower bolts at the heel/mid-section splice were damaged (broken and partially stripped) during a boom stop contact event. As the boom was lowered to the rest, the gradually increasing tensile loading overcame the remaining strength of the lower fastners."

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

The probable cause of the failure of the bottom bolts in the boom midsection was likely due to a recent boom/boom stop contact.

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

Heavy corrossion may have further weakened the lower connecting bolts.

20. LIST THE ADDITIONAL INFORMATION:

N/A

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21. PROPERTY DAMAGED: NATURE OF DAMAGE:

Crane boom (all sections)
Main line
Auxilliary line

Bent/broken boom and lines

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ESTIMATED AMOUNT (TOTAL): \$270,450

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Houma District has no recommendations for the Regional Office.

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

None

25. DATE OF ONSITE INVESTIGATION: 28.

18-SEP-2017 29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

26. ONSITE TEAM MEMBERS:

Micah Charpentier / Terry Hollier /

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan Domangue

APPROVED

DATE: 12-DEC-2017

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