UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED STRUCTURAL DAMAGE DATE: 14-MAR-2017 TIME: 2330 HOURS CRANE OTHER LIFTING DEVICE 2. OPERATOR: Exxon Mobil Corporation DAMAGED/DISABLED SAFETY SYS. **REPRESENTATIVE:** INCIDENT >\$25K TELEPHONE: H2S/15MIN./20PPM CONTRACTOR: EXXON CORPORATION, U.S.A. REQUIRED MUSTER REPRESENTATIVE: SHUTDOWN FROM GAS RELEASE TELEPHONE: OTHER 3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR 6. OPERATION: ON SITE AT TIME OF INCIDENT: **PRODUCTION** DRILLING 4. LEASE: **G04139** X WORKOVER AREA: MI LATITUDE: COMPLETION BLOCK: 657 LONGITUDE: HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO. 5. PLATFORM: в OTHER RIG NAME: * LIFT BOAT (L.J. #2)) 8. CAUSE: 6. ACTIVITY: EXPLORATION(POE) x DEVELOPMENT/PRODUCTION X EQUIPMENT FAILURE (DOCD/POD) HUMAN ERROR 7. TYPE: EXTERNAL DAMAGE HISTORIC INJURY SLIP/TRIP/FALL WEATHER RELATED REQUIRED EVACUATION LTA (1-3 days) LEAK UPSET H20 TREATING LTA (>3 days OVERBOARD DRILLING FLUID RW/JT (1-3 days) OTHER ____ RW/JT (>3 days) Other Injury 9. WATER DEPTH: **72** FT. FATALITY POLLUTION 10. DISTANCE FROM SHORE: 13 MI. X FIRE EXPLOSION 11. WIND DIRECTION: SE LWC | HISTORIC BLOWOUT SPEED: 15 M.P.H. UNDERGROUND SURFACE 12. CURRENT DIRECTION: SE DEVERTER SPEED: 2 M.P.H. SURFACE EQUIPMENT FAILURE OR PROCEDURES COLLISION HISTORIC >\$25K <=\$25K 13. SEA STATE: **3** FT.

EV2010R

On March 14, 2017 at 2400 hours, Exxon reported that a fire had occurred on a diesel driven cement pump at MI 657B, Lease G10228 while conducting decommissioning operations from the Lift Boat (L/B) Jamie G Eymard. There were no injuries or pollution involved in the incident.

Investigation revealed that on March 14, 2017 at approximately 2330 hours while utilizing the cement pump positioned on the deck of the L/B to pump a gel sweep on well B02, the cement pump diesel engine Rotations Per Minute (RPM) suddenly accelerated to an over-speed causing heavy smoke and flames to erupt from the exhaust stacks. The Pump Operator immediately reduced the throttle speed and then disengaged the transmission. The Pump Operator was not able to activate the Emergency Shutdown Device (ESD) at the Operator's station due to heavy smoke and flames; therefore, he evacuated the Operator's station. The Pump Operator attempted to activate the ESD near the turbo charger of the engine; however, the fire was intense and the Operator could not activate the ESD.

A total of four crew members began fighting the fire using hand portable extinguishers and the L/B fire water system while remaining crew members mustered for evacuation. The fire was reduced enough for crew member to activate the ESD at the turbo charger; the over-speeding engine RPM reduced to a rough idle and then accelerated to over-speed again. The crew continued to fight the fire and the Supervisor was able to get the engine fuel valve closed, but the engine continued to run for an additional 3-5 minutes while the crew continued to fight the fire. After the fire was extinguished the crew continued to douse the engine for 30 minutes.

Further investigation found engine continued to run after the ESD activation due to the flapper on the right bank intake closed hard enough to roll the O-ring seal out of the seat thus allowing air to continue to feed the engine.

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

1. Investigation found the right bank turbo charger had failed, allowing the engine oil to be injected into the air intake causing the diesel engine to over-speed. 2. The engine continued to run after the ESD activation because the flapper on the right bank intake closed hard enough to roll the O-ring seal out of the seat thus allowing air to continue to feed the engine.

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

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

MMS - FORM 2010

For Public Release

ESTIMATED AMOUNT (TOTAL): \$100,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

No recommendations

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
- 25. DATE OF ONSITE INVESTIGATION:

15-MAR-2017

- 26. ONSITE TEAM MEMBERS: 29. ACCIDENT INVESTIGATION Michael Henry / Daniel Gonzalez / Edward Keown / OCS REPORT:
 - 30. DISTRICT SUPERVISOR:

John McCarroll

APPROVED DATE: **11-APR-2017**