Wireline BOP and Lubricator Ejection into GOM

Recently, a Wireline (W/L) Blowout Preventer (BOP) and Lubricator were ejected from the wellhead into the Gulf of Mexico (GOM) during an attempt to retrieve a W/L DX plug from the production tubing. The accident resulted in severe facial injuries to the W/L Operator.

A Minerals Management Service (MMS) investigation into this accident revealed that its root cause was two fold: (1) Failure to comply with 30 CFR 250.618(c), which requires testing the lubricator prior to running-in-the-hole, and (2) Standard Operating Procedures (SOP) were not followed when pressure was not applied above the W/L DX plug in order to equalize the tubing above the plug with pressure from below the plug prior to attempting to pull the plug out of the wellbore. Additional investigatory findings include the following:

- Failure to follow the MMS approved Application for Permit to Modify (APM) by not beginning each day/tower meeting with a Job Safety Analysis (JSA) for the task at hand.
- The standard W/L tool used for pulling the DX plug out of the wellbore did not function to equalize the pressure across the plug as a result of a modified DX plug being set in the wellbore. The modified DX plug required a W/L pulling tool with a longer equalizing prong to safely perform the plug pulling operation. Failure to review and analyze previous well histories, W/L tickets, etc., resulted in utilization of the incorrect plug pulling tool.
- Failure to exercise Stop Work Authority (SWA) procedures allowed critical warning signs leading up to the accident to be overlooked. Prior to the job, requests from the W/L Operator to the Third Party Company Representative were denied for a W/L Helper to assist the W/L Operator, in addition to acquiring a pump to test the W/L Lubricator and pressure the production tubing above the DX plug prior to attempting to pull the plug.
- Management of Change (MOC) procedures were not implemented when the operation deviated from the APM when lines/Lubricator were not tested, SOP were not followed when pressure to the production tubing was not applied above the DX plug prior to attempting to pull the plug, and when the W/L Operator was unable to equalize the DX plug secondary to utilizing the wrong equalizing/pulling tool.
- No pump or other means of testing the lines/Lubricator or pressuring up to equalize the tubing was available on the location.
Therefore, the MMS recommends the following:

- All applicable personnel involved with well intervention activities review and adhere to approved applications.
- Proper methods are utilized to equalize down hole W/L plugs prior to pulling the plug.
- A complete review and analysis of historical well file data, W/L tickets, etc., should be conducted prior to commencing W/L activities.
- Lessees should remind all workers of the Lessee’s philosophy and policies with respect to SWA and MOC. Company SWA and MOC policies and procedures should be exercised by all parties involved in the task at hand.
- Lessees are reminded that site-specific pre-job planning (JSAs, safety meetings, etc.) and open communications are critical elements for the successful outcome of all job tasks.
- Lessees should consider having a pump on location for testing lines/Lubricator and pressuring up to equalize the tubing prior to pulling the plug when other means of testing/pressuring are not available or other means are available but not utilized.

--MMS--GOMR--

www.gomr.mms.gov