

Procedure by MAF

\*\*\* NOTE: A CBL was run on 4-16-91 in attempts to identify the TOC behind the 3-1/2" csg w/ no success. Gas was migrating up the hole and could not be shut off. The CBL tool will not function properly w/ gas migrating in the hole, therefore the CBL attempt was abandoned.

1. Notify the New Mexico Oil Conservation Commission in the Artesia office at (505) 748-1283 at least 48 hours prior to commencing plugging operations.
2. When cementing use 2 bbl fresh water spacers on both sides of the cmt. Mix class "C" cmt w/ 6.3 gal wtr/sk to a weight of 14.8 ppg. Mix class "H" cmt w/ 4.3 gal wtr/sk to a weight of 16.4 ppg except where noted differently.
3. Pull test rig anchors per guidelines in Operations Bulletin No.52 (dated 1/25/88) prior to rigging up. Send results and charts to Rosemarie Whitlock in the Midland Office. Install new anchors as needed.
4. Check the pressures on all casing annuli. Report annular pressures found to the Exxon supervisor and discuss safe and appropriate blow down procedures. Attempt to bleed annulus pressure to zero. For pressures that will not bleed to zero, first review with the field superintendent then inform the subsurface engineer. Document all annular pressure activity on the morning report.
5. MIRU 1-1/4" coil tbg unit w/ class II BOP. Test BOP as per ESUA operations guidelines.
6. RIH w/ mule shoe bottom 1-1/4" coil tbg and clean out fill to 10,550'.
7. RU cementers w/ batch mixer and spot a continuous cmt plug, as listed below, while POH w/ coil tbg at a speed that will not exceed the rate of cement filling up the casing (Plug will cover the Atoka, Penn, and Wolfcamp formations).

\*\*\* Note: Cement = Class "H" mixed w/ 0.3 gal/sk D-604 (Dowell dispersant) or equivalent, 0.3% D-59 (Dowell fluid loss additive) or equivalent, and necessary retarder for 5 hours pump time for BHST = 180 deg at 10,550'. Dowell's lab in Hobbs is refining the cmt design. Check w/ Ben House (chemist) at Dowells Hobbs office for final design. Make sure to have a pilot test run w/ sample of mix water to be used prior to cmtg.

\*\*\* Mix cmt to 16.4 ppg w/ 4 gal wtr/sk (total mix fluid = 4.3 gal/sk due to fluid loss additive). Yeild = 1.05 ft<sup>3</sup>/sk.