

**TXO PRODUCTION CORP.
900 WILCO BUILDING
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Re-entry & Directional Drilling Procedure
Hooper #1 Sec 2, T-17-S, R-38-E, Lea County, NM

- 1) MI & RU drilling rig.
- 2) Drill 10 sx surface plug & 50 sx cement plug @ 2150' - 2250', 3550' - 3650', 5150' - 5250', & 6680' - 6780' w/7 7/8" bit & 6¼ x 30' non magnetic DC & 6" - 6½" steel DC's.
- 3) TIH to plug @ 8150'. Use bicarb & thinner as needed. Dress-off cmt plug.
- 4) Run a magnetic multishot directional svy on the bit trip out of hole, to pick up deflection tools, up to the 8 5/8" csg depth of 3601'.
- 5) After TOH, run a gyroscopic multishot svy on wireline inside csg from 0-3601'. The two svys will be merged to provide a precise bottom hole location @ 8150'± (kick off point).
- 6) Pickup a 7 7/8" sidetrack diamond bit, 5½" downhole mud motor, 1½° bent sub, 6¼ x 30' non-mag DC and the rest of the steel DC's and DP. Orientation of the deflecting assembly will require the use of a steering tool.
- 7) Approximately 100' of hole will be drilled with the deflection assembly or until satisfactory trajectory is obtained. TOH for an angle building bottom hole assembly.
- 8) TIH w/7 7/8" insert bit, 7 7/8" integral blade stabilizer, 6¼ x 30' non-mag DC, 30' steel DC, 7 7/8" string roller reamer & drill to approximately 9300' adjusting WOB and rotary speed to achieve a build up rate of 1.5° per 100' of measured depth up to the angle of 17.5°. TOH for a semi-packed hole assembly. Mud up well @ 10,000.
- 9) TIH w/7 7/8" insert bit, 7 7/8" integral blade stabilizer, 8' steel DC, 7 7/8" integral blade stabilizer, 6¼ x 30' non-mag DC, 7 7/8" string roller reamer, 30' steel DC & 7 7/8" string roller reamer. Drill with this assembly to proposed TD, of until a corrective deflection tool run is required, as determined from singleshot svys.
- 10) At TD (11,729) a multishot svy should be run inside DP to fulfill State requirements.
- 11) Run & cement 5½" csg according to prognosis.