

E X H I B I T # 1

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#1 Ridge Federal
Section 23, T24S, R24E
Eddy County, New Mexico

RECOMMENDED DRILLING & COMPLETION PROCEDURE

1. Drill 17½" hole to 400' with spud mud.
2. Set 13-3/8" casing at 400', cement to surface and install 12" x 3000 PSI W.P. casinghead and B.O.P. stack. (Est. 300 sx Class "C" w/2% CaCl).
3. Drill 11½" hole with fresh water from 400' to 3000', control seepage with paper. Dry drill if complete loss of returns is experienced.
4. Load hole with 34 sec. viscosity mud at 3000', if hole is showing severe seepage, otherwise run casing with water in hole.
5. Set and cement 8-5/8" casing at 3000' with sufficient cement to circulate. (Estimate 900 sxs. Halliburton Lite, ½# Flocele, slurry wt. 12.8# gal. + 200 sxs. Incor Neat with 2% CaCl., slurry wt. 14.8#/gal.). WOC 24 hrs. Install 12" - 3000 PSI W.P. x 10" - 3000 PSI W.P. spool with secondary seal and bit guide, choke manifold, B.O.P., and Hydril.
6. Test casing, casing spool, B.O.P., and choke manifold to 3000 psig with Yellow Jacket. Install P.V.T. equipment and flow sensor at nipple up or before 8500' is reached.
7. Drill 7-7/8" hole to a total depth of 11,300' using fresh water to drill to 8500'. Use 4% KCL brine to 9700'. Add soda ash to treat hardness below 600 PPM and add Drispac and Starlose to maintain 31-33 sec. viscosity & 10 cc water loss. At 9700' drop water loss to 5-8 cc & increase viscosity as necessary to maintain hole to total depth.
8. Drill stem test all shows.
9. Run logs (Combination CNL-FDC w/Gamma Ray & DLL).
10. Set and cement 4½" oil string (rough coated and centralized through pay zone) with 350 sxs. Class "H" cement with .5 of 1% CFR-2. Pump plug down with 5% KCL packer fluid. Run temperature survey to locate cement top.
11. Install 10" - 3000 PSI W.P. x 6" - 3000 PSI W.P. tubinghead and Christmas Tree.
12. Move out rotary rig and move in pulling unit.
13. Pressure test casing and head to 3000 psig.
14. Install B.O.P.