RECOMMENDED DRILLING & COMPLETION PROCEDURE

A.F.E. NO. 309

David Fasken ----- MOBIL "10" FEDERAL NO. 1 ----- Eddy County, N.M.

- 1. Drill 17-1/2" hole to 300'.
- 2. Set 13-3/8" casing at 300', cement to surface and install 12" x 3000 PSI W.P. casinghead.
- 3. Drill 12-1/4" hole with water 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 seepage.
- 5. Set and cement 8-5/8" casing at 3000' with sufficient cement to circulate. (Estimate 900 sxs. "Halliburton-Lite," 1/2# flocele, slurry wt. 12.8#/gal. + 200 sxs. Incor Neat with 2% CaCl, slurry wt. 14.8#/gal.). W.O.C. 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.
- 7. Drill 7-7/8" hole to a total depth of 10,400' using water to drill to 6500', use 5% KCl brine to 9700', mud up with polymer starch mud with 8.7#/gal., 45 sec. viscosity, 10 cc water loss. At 9700' 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, and Dip Meter).
- 10. Set and cement 4-1/2" oil string (resin coated and centralized through pay zone) with 450 sxs. Class "H" cement with 5.4# KCl and 0.8% Halad-22. Pump plug down with 5% KCl packer fluid. Run temperature survey to locate cement top.