

DRILLING, CASING AND CEMENTING PROGRAM

1. Set and cement 30" O.D. conductor 30' below ground level. In the drilling of Antebellum #1, circulation was lost \pm 56' below ground level. It is believed that this zone contributed heavily to the lost-circulation problems encountered while attempting to drill a 26" hole for the 20" surface casing and while attempting to cement the 20" surface pipe. Provide a 10 x 10' x 10' cellar.
2. Move in rig and drill a 26" hole from 50' into the Redbeds. Estimated top of the Redbeds at 330'. Estimated drilled depth 430'. Cement 20" - 94# K-55 ST&C casing with sufficient cement to bring cement to surface. Consideration should be given to using Dowell Regulated-Fill-up cement with \pm 10#/CF of gilsonite for lost-circulation prevention. Cut the 20" off even with the top of the cellar. Install 20" - 2,000 PSI W.P. Hydril B.O.P. and pressure test to 500 PSI.
3. Drill 17 $\frac{1}{2}$ " hole 430' \pm to 150' into the Delaware. Estimated top of the Delaware 5,091'. Estimated drilled depth 5,241'. Drill this section of the hole with 10 - 10.1 PPG brine water to reduce "wash-outs". Run gamma ray-caliper log. Cement 13-3/8" - 68# K-55 - 72# N-80 combination casing to surface using caliper volume plus 15%. Run 5 centralizers - one 10' from the shoe and one every other joint. Casing design will be based on results of the inspection. Weld the 13-5/8" 5000# casinghead on such that the 13-5/8" - 5000 x 11 - 10,000 PSI tubinghead will have the valve outlets above ground, provided substructure height will accommodate the future B.O.P. requirements. Mudloggers to commence logging @ 5,000'.
4. Install 12" - 3,000# W.P. double ram and Hydril B.O.P.E.
5. Drill 12-1/4" hole to 150'⁺ into the Strawn. Estimated top of the Strawn at 11,657'. Estimated drilled depth - 11,807'. Run the following logs:
 1. Dual-Induction-Laterolog.
 2. Compensated Neutron-Formation Density.
 3. Micro-Microlaterolog Combination.
 4. 4-arm continuous dipmeter.All logs to be tapped.
6. Run and cement 9-5/8" O.D. 53.5# S-95 LT&C casing to T.D. Cement the 9-5/8" casing T.D. to 500' above the shoe of the 13-3/8" casing.
7. Install 5,000' PSI W.P. - triple ram B.O.P.E. and 5,000 PSI W.P. Hydril.