

7" casing to be cemented with approximately 600 sacks of light cement followed by approximately 600 sacks of premium cement. Cement to tie back 200 feet into the 9-5/8" casing.

5" liner to be cemented with approximately 300 sacks of premium cement. Cement to circulate the liner.

If indications are that stage cementing of casing is needed to attain projected cement tops, staging tool(s) will be run and positioned to best suit hole conditions at the time casing is run.

Cement volumes may be adjusted and cement may have lost circulation and/or other additives depending on hole conditions at the time casing is run.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment while drilling below the surface casing will be a 3000 psi working pressure stack.

The BOP stack, while drilling below the first intermediate casing, will be a 5000 psi working pressure stack and manifold.

While drilling below the second intermediate casing, BOP equipment is to be a 10,000 psi working pressure stack and manifold.

Well control equipment is to be consistent with the provisions of Onshore Oil and Gas Order No. 2.

BOP sketches are attached.

6. CIRCULATING MEDIUM:

Surface to 800 feet: Fresh water gel spud mud. Weight 8.6 to 8.8. Viscosity 34 to 36 as required for hole cleaning.

800 feet to 4500 feet: Brine conditioned as necessary for control of viscosity and seepage. Weight 10 to 10.2. pH 9 to 10. Viscosity 28 to 30.

4500 feet to 12,250 feet: Fresh water cut with brine if necessary. Weight 8.4 to 9.0. pH 9-10. Viscosity 28-29.

12,250 feet to 13,000 feet: Brine conditioned as necessary. Weight 10 to 10.1. pH 9 to 10. Viscosity 28 to 29.