

5-1/2" casing to be cemented in two stages with stage collar at approximately 6000 feet. First stage to be 700 sacks of Class H. Second stage to be 500 sacks of Lite cement tailed in with 200 sacks of Class "C". Cement to tie back to 3300 feet.

Cement may have lost circulation or other additives depending on hole conditions at time casing is run.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling the 11" hole, will be either a 3000 psi working pressure double ram type preventer or a 3000 psi working pressure annular type preventer.

Blow out prevention equipment, while drilling below the 8-5/8" casing seat, will be a 3000 psi working pressure BOP stack. A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 800 feet: Fresh water spud mud. Viscosity 30 to 36 as required for hole cleaning.

800 feet to 4300 feet: Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10. pH 9 to 10. Viscosity 32 to 36.

4300 feet to T.D.: Water base drilling fluid conditioned as necessary for control of weight, viscosity, pH and water-loss. Weight 9 to 10. Viscosity 38-45. pH 9 to 10. Filtrate while drilling pay zone 6 to 15.

7. AUXILIARY EQUIPMENT:

A mud logging trailer will be in use while drilling below the intermediate casing.