

13-3/8" casing will be cemented with 450 sx Class "C" cement containing 2% CaCl to circulate to the surface.

9-5/8" casing will be cemented with sufficient light cement, tailed-in with 400 sx Class "C", to circulate to the surface.

5-1/2" casing will be cemented back up above the bottom of the 9-5/8" casing.

Note: All casing strings will be pressure tested to 0.22 psi/ft. of setting depth or 1500 psi (whichever is greater) after cementing and prior to drillout.

5. Pressure Control Equipment: See Attached Diagrams.

6. Mud Program:

Surface to 500': Fresh water spud with 35 to 45 sec/1000 cc viscosity. Will keep mud weight as low as possible using solids separation equipment and water. Will maintain fresh gel in system.

500' to 3,800': 10.0 ppg saturated brine water. Circulate to reserve pit. Will use lime for pH control in range 10 to 11. Will sweep hole with salt gel slugs as required for hole cleaning.

3,800' to 10,000': Fresh water. Will sweep hole with gel slugs as required for hole cleaning. Begin adding brine as required prior to 10,000.

10,000' to TD: KCl/Salt/Polymer mud. 9.0 to 10.0 ppg, vis 34 to 38, FL 10 cc or less.

7. AUXILIARY EQUIPMENT:

- a) Upper kelly cock valve with handle available
- b) Lower kelly cock valve with handle available
- c) Safety valves and subs to fit all drill string connections in use
- d) Inside BOP or float sub available
- e) Wear ring in casing head
- f) No floats at bit
- g) Monitoring of mud system will be visual
- h) Full opening floor valve manually operated