

**B. Proposed Cement Program:**

- 8 5/8"**      Lead Slurry: Volume CU-FT=423/Volume Factor=1.97: 215 sx Poz (Fly Ash): Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.003 gps FP-6L + 6% bwoc Bentonite + 103% Fresh Water  
Tail Slurry: Volume CU-FT=202/Volume Factor=1.34: 150 sx Class C Cement + 2% bwoc Calcium Chloride + 56.4% Fresh Water
- 5 1/2"**      Lead Slurry: Volume CU-FT=919/Volume Factor=1.93: 475 sx Poz (Fly Ash): Class C Cement + 5 lbs/sack Sodium Chloride + 0.003 gps FP-6L + 6% bwoc Bentonite + 99% Fresh Water  
Tail Slurry: Volume CU-FT=271/Volume Factor=1.35: 200 sx Class C Cement + 3% bwow Potassium Chloride + 0.2% bwoc CD-32 + 0.6% bwoc FL-62 + 0.2% bwoc Sodium Metasilicate + 56.6% Fresh Water.

The top of cement is designed to reach 100' above 8 5/8" casing shoe.

**V. Proposed Mud Program:**

The well will be drilled to total depth using fresh water & brine. 8.6-9.2 weight mud using fresh water will be used from surface to 1200' and 9.0 - 10.3 weight mud with brine water will be used from 1200' to TD.

**VI. Proposed Control Equipment:**

Will install on the 8 5/8" surface casing a 10" Series 900, Type "E", Shaffer Double Hydraulic BOP, with pipe and blind rams and annular stabbing valve, and will test before drilling in the Queen formation. BOP working pressure: 3000 psi. See Exhibit "E" for BOP layout.

**VII. Auxiliary Equipment:**

Blowout preventor, gas detector, kelly cock, pit level monitor, flow sensors, and stabbing valve.

**VIII A. Testing Program:**

Drill Stem Tests: None planned

**B. Logging Program:**

Density Neutron

**C. Coring Program:**

None planned

**IX. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight.**