

CASING AND CEMENT PROGRAM:

The cementing program is detailed on Form 3160-3. All casing will be new.

Surface Casing - 14 3/4" hole. 11 3/4", 42#, WC-50, STC, set @ 1000'.

Intermediate Casing - 11" hole. 8 5/8", 32#, WC-50, LTC, set @ 4700'.

Production Casing - 7 7/8" hole. 1000' of 5 1/2", 17#, WC-70, LTC and 3900' of 5 1/2", 17#, WC-50, LTC and 1800' of 5 1/2", 17#, WC-70, LTC and 3000' of 5 1/2", 20#, L-80, LTC set @ 9700'.

Centralizer Program:

Surface Casing - Centralize the bottom 3 joints and every 4th to surface.

Intermediate Casing - Centralize every other joint on bottom 700'.

Production Casing - Centralize every other joint on bottom 780'.

MUD PROGRAM:

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>
0'-1000'	Fresh Water	8.4	28
1000'-4700'	Brine	10.0	29
4700'-9700'	Fresh Water	8.4	28

Bottom Hole Pressure at T.D. estimated to be 6.7 PPG EMW (3379 psi).

Duration of Operation: 24 Days to Drill + 18 Days to Complete= 42 Days

LOGGING, TESTING:

SGR-CNL-LDT, GR-DLL-SFL, and GR-BHC surveys will be run.

A two-man Mud Logging Unit will be used from 4800' to 9700'.

No drill stem tests will be conducted.

No cores will be taken.