

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 @ 600'.

Intermediate Casing: 11" hole, 0' to 2200': 8 5/8", 24#, WC-50, STC
2200' to 3550': 8 5/8", 32#, WC-50, LTC, set @ 3550'

Production Casing: 7 7/8" hole, 0' to 1000': 5 1/2", 17#, WC-70, LTC
1000' to 9200': 5 1/2", 17#, WC-50, LTC, set @ 9200'.

Centralizer Program:

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

Intermediate Casing - Centralize the bottom 3 joints.

Production Casing - Centralize every other joint from TD to 5100'.

MUD PROGRAM:

| <u>Depth</u> | <u>Type</u> | <u>Weight</u> | <u>Viscosity</u> |
|--------------|--------------------|---------------|------------------|
| 0'-600' | Fresh Water | 8.4 | 28 |
| 600'-3550' | Brine | 10.0 | 29 |
| 3550'-9200' | Fresh Water/Starch | 8.4-8.8 | 29-40 |

LOGGING, TESTING:

GR-CAL-CNL-LDT, GR-CAL-DLL-MSFL, and GR-CAL-BHC surveys will be run.

A two-man Mud Logging Unit will be used from 3550' to 9200'.

A drill stem test may be conducted in the Abo, if needed.

No cores will be taken.