5. **Proposed Casing and Cementing Program**

	Hole Size	Interval, M.D.	Casing Size	Weight & Grade
Surface	17 1/2"	0-860'	13-3/8"	48.0# H-40
Intermediate	11"	860'-4600'	~~9 5/8"~~ 8 5/8	32.0# J-55
Production 55	7 7/8"	4600'-8600'	5-1/2"	15.5# & 17.0# J- LTSC 7000' 15.5 ppf 1600' 17 ppf

Cement Program: (Actual volumes will be based on caliper log when available)

Surface - Cement to surface with total of ±1360 cu ft as follows:
Lead Slurry - 575 sks 35:65 Poz: C + 2% $CaCl_2$ + 6% Gel + 1/4 pps Cello-Seal + 10 pps Gilsonite
Tail Slurry - 200 sks Class "C" + 2% $CaCl_2$ + 1/4 pps Cello-Seal

Intermediate - Cement to surface with total of ±3572 cu ft as follows:
Lead Slurry - 1600 sks 35:65 Poz: C + 2% $CaCl_2$ + 6% Gel + 1/4 pps Cello-Seal
Tail Slurry - 200 sks Class "C" + 2% $CaCl_2$ + 1/4 pps Cello-Seal

Production - Cement to 6500' with a total of ±875 cu ft as follows:
Lead Slurry - 155 sks 35:65Class "H" Poz + 6% Gel + 5% salt + .25 pps Cello-Seal
Tail Slurry - 325 sks Class "H" + 12 pps BA-90 + 0.4% FL52 + 3% salt + .2% CD-32 + 1/4 pps Cello-Seal

6. **Mud Program**

Depth	Mud Type	Weight ppg	Funnel Viscosity	Water Loss
0-860'	Spud Mud	8.4-8.9	29-34	NC
860'-4600'	Brine	10.0-10.2	28-30	NC
4600'-8400'	FW	8.4-8.8	28-30	NC
8400" -8600'	FW LSND	8.6-9.0	32-34	<10

7. **Auxiliary Equipment**

Upper Kelly Cock, Lower Kelly Cock, and Full Opening Stabbing Valve

8. **Testing, Coring and Logging Program**

A. Drill Stem Tests - None Planned.

B. Coring - None planned.

C. Logging - Mud logging planned from 4000' to TD.