5. **Proposed Casing and Cementing Program**

	Hole <u>Size</u>	Interval, MD	Casing <u>Size</u>	Weight & <u>Grade</u>
Conductor	20"	0 - 40'	13-3/8"	48.0# H-40
Surface	12-1/4"	0 - 1000'	8-5/8"	24.0# J-55
Production	7-7/8"	1000'-6200'	4-1/2"	10.5# J-55

<u>Cement Program</u>: (Actual volumes will be based on caliper log when available)

Conductor - Cement to surface with redimix.

Surface - Cemented to surface with total of ±825 cu ft as follows: <u>Lead Slurry</u> - ±300 sks Pacesetter Lite 65/35/6 C/Poz/Gel + 2% CaCl2 + 1/4 pps Cello-Seal <u>Tail Slurry</u> - ±200 sks Class "C" + 2% CaCl2 + 1/4 pps Cello-Seal

Production - Cement to surface with total of ±3200 cu ft as follows: <u>Option 1</u>: If no loss circulation occurs or loss is controlled. Lead Slurry - ±1175 sks Super C 44/20/20 C/Poz/CSE + 0.5% Thrifty Lite 1/4 pps Cello-Seal Tail Slurry - ±300 sks Cl "C" + 12 pps CSE + 1 pps WL-1P + 0.3% CF-2 + 1/4 pps Cello-Seal + 3 pps Hi-Seal

<u>Option 2</u>: If loss circulation is severe then a DV Tool will be set at ±3250' Stage 1 - Lead Slurry - ±400 sks Pacesetter Lite 65/35/6 C/Poz/Gel 3% salt Tail Slurry - ±300 sks Cl "H" + 8 pps CSE + 0.6% CF-14 + 0.35% Thrifty Lite Stage 2 - Lead Slurry - ±900 sks Pacesetter Lite 65/35/6 C/Poz/Gel + 3% salt Tail Slurry - ±100 sks Cl "C" Neat

6. Mud Program

		Weight	Funnel	Water
<u>Depth</u>	<u>Mud Type</u>	ppg	Viscosity	Loss
0 - 1000'	Spud Mud	8.4 - 8.9	29-32	NC
1000' - 4850'	SBW	<u>+</u> 10.0	29-32	NC
4850' - 6200'	SWG	<u>+</u> 10.0	32-34	<15

7. Auxiliary Equipment

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