

4. Casing Program

<u>Hole Size</u>	<u>Interval</u>	<u>Casing OD</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
12 1/4"	0'-330'	8 5/8"	23#	J-55	ST&C
7 7/8"	0'-TD(3200±)	5 1/2"	15.5#	J-55	LT&C

Cementing Program

8 5/8" Surface Casing: Cement to surface: 150 sks Lite (35% Poz, 65% Class C, 6% gel) with 2 % CaCl and 1/4 lb/sk Cellophane flakes + 100 sks Class C with 2% CaCl and 1/4 lb/sk Cellophane flakes.

5 1/2" Production Casing: Cement to surface: 650 sks Lite (35% Poz, 65% Class C, 6% gel) with 5 lb/sk salt and 1/4# lb/sk Cellophane flakes + 165 sks Class C with 1/4 lb/sk Cellophane flakes.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach surface.

5. Minimum Specifications for Pressure Control

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000# WP) preventor. This unit will be hydraulically operated. The BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. As per State regulations, prior to drilling out the 8 5/8" casing shoe, the BOP and will be function tested.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These function test will be documented on the daily drillers log. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having a 3000# WP rating.