

4b. The cementing program including type, amounts, and additives:

- 8-5/8" Surface Casing: Equip with guide shoe, insert float, and three centralizers. Cement to surface with 250 sacks of API Class "B" cement wit 2% CaCl₂.
- 4½" Production Casing: Equip with a float shoe, baffle collar, and 10 centralizers. Cement to surface with 220 sacks of "Light" filler cement followed by approximately 220 sacks of API Class "B" cement with 10% salt. All cement to contain 0.5% friction reducer and 2% CaCl₂.

5. B.O.P. specification and testing: (see the attached schematic diagram for size and pressure ratings):

2,000 psi WP hydraulic double ram preventer with blind rams and drill pipe rams. Operation to be checked daily.

Test Hydraulic Operations

<u>BOP</u> <u>Ram Type</u>	<u>Pressure</u> <u>1,000 psi</u>	<u>Time</u> <u>30 minutes</u>	<u>Remarks</u>
			Test before drilling out surface casing.

6. Mud program and anticipated pressures:

<u>From</u>	<u>To</u>	<u>Type Mud</u>	<u>Weight</u>	<u>% Oil</u>	<u>Water Loss</u>
0'	225'	Native	8.5-9.0	--	--
225'	1,250'	Gel-Chem	9.5-10.0	(Be ready to weight up to 1 ppg if gas kicks are encountered.)	
1,250'	TD	Gel-Chem	10.0-11.0	Vis 40 sec.	10 cc Water lo

7a. Type of drilling tools and auxiliary equipment:

Normal rotary tool operation requires:

1. Drill time and pipe weight to be recorded on a geolograph or equivalent instrument from surface to TD.
2. Single shot survey instrument.
3. Desilter or desander.