

5. Proposed Cementing Program: (cont'd)

8-5/8" Cement to surface with 1200 sx 65:35:6 'C' lite + 10% BWOW salt + 10#/sx gilsonite, tail in with 575 sx Class 'C'.
Top of tail cement to be at 3500'.

Cement Properties: Lead slurry; 12.2 ppg, 2.29 cu.ft./sx
Tail slurry; 14.8 ppg, 1.32 cu.ft./sx
Per Cent Excess: 200% over theoretical fill for 8-5/8" x 12-1/4" annulus. Actual volume to be adjusted by fluid caliper + 15%.

5-1/2" Cement to 6800' with 1025 sx 50:50:2 'H' pozmix + fluid loss additives + dispersants.

Cement Properties: 14.2 ppg, 1.26 cu.ft./sx
Per Cent Excess: 80% over theoretical fill for 5-1/2" x 7-7/8" annulus. Actual volume to be adjusted by electric caliper + 15%.

6. Mud System and Characteristics:

<u>From</u>	<u>To</u>	<u>Type</u>	<u>Wt.</u>	<u>Vis</u>	<u>WL</u>
0	400	Fresh Water w/Gel & Lime sweeps	8.3-8.6	28	NC
400	4,500	Sat. Brine w/Lime & Paper sweeps	10.0-10.3	28	NC
4,500	9,000	Fresh Water w/Paper & Lime sweeps	8.4-8.5	28-30	NC
9,000	10,950	Cut Brine + 2% KCL & Drispac	8.8-9.3	32-36	10-12

7. Blowout Preventer and Auxillary Equipment:

B.O.P. and Choke Manifold will be set up as in Exhibit 'D'.

Accumulator volume will be sufficient to function annular preventer and rams with a 50% reserve.

A full-opening safety valve to fit all drill pipe connections in use will be kept on the floor in the open position at all times.

An Upper and Lower Kelly Cock will be used.

PVT, Hydraulic Choke, and Mud Gas Separator will be installed and in service by 8000'. Flow Sensors will be installed by 6100'.