

Cementing Program:

13-3/8" Surface Casing

475 sx 35/65 Poz "C", 6% gel., 5% salt, 1/4#/sx cellophane flakes; followed by 200 sx "C", 2% CaCl, 1/4#/sx cellophane flakes.

8-5/8" Intermediate:
(Stage Tool @ 2600')

1st stage: 500 sx 35/65 Poz "C", 6% gel., 5% salt, 1/4#/sx cellophane; followed by 200 sx "C", 1% CaCl, 1/4#/sx cellophane flakes.

2nd stage: 800 sx 35/65 Poz "C", 6% gel., 5% salt, 1/4#/sx cellophane flakes; followed by 125 sx "C", 2% CaCl, 1/4#/sx cellophane flakes.

5-1/2" Production Casing:

1250 sx 50/50 Poz "C", 2% gel., 5% salt, 0.5% FL-25 (Fluid Loss). This is designed to bring cement to surface.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3000 PSI WP) preventer and a bag-type (Hydril) preventer (3000 PSI WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. Both BOP's will be installed on the 13-3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 PSI before drilling out of surface casing. Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 PSI and the bag-type (Hydril) preventer will be tested to 70% of rated working pressure (2100 PSI).

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily time sheets.

A 2" kill line and a 3" choke line will be installed on the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include the choke lines and choke manifold (3000 PSI WP), kelly cock and floor safety valve (inside BOP).