

We do not plan to run an automatic remote-controlled choke. We will have installed and tested two manual, H2S trimmed, chokes.

#### CASING AND CEMENT PROGRAM:

All casing will be new.

##### Casing Program:

Surface Casing - 11 3/4", 42#, H-40, STC set at 1200'.

Intermediate Casing - 8 5/8", 32#, J-55, LTC set at 4700'.

Production Casing - 5 1/2", 17#, N-80, LTC set at 9800'.

##### Centralizer Program:

Surface Casing - Centralize the bottom 3 joints plus every 4th to surface. Run float shoe only.

Intermediate Casing - Centralize bottom 3 joints. Run float shoe and insert float 1 joint up.

Production Casing - Centralize bottom 3 joints. Float shoe and collar 2 joints up. DV @ 6800'. Centralize above and below DV and place 2 baskets below DV.

##### Cementing Program:

Surface Casing: 460 sacks Class C w/2% Gel, 2% CaCl<sub>2</sub> (14.2 PPG, 1.5 CF/S, 7.45 GW/S). F/B 260 sacks Class C w/2% CaCl<sub>2</sub> (14.8 PPG, 1.34 CF/S, 6.40 GW/S).

Intermediate Casing: 1180 sacks 35/65 Poz Class H w/6% Gel, 5% Salt, 1/4# FC (12.8 PPG, 1.94 CF/S, 10.46 GW/S). F/B 740 sacks Class H (15.6 PPG, 1.18 CF/S, 5.20 GW/S).

Production Casing: 900 sacks 50/50 Poz Class H w/2% Gel, 5% Salt, 1/4# FC (14.2 PPG, 1.35 CF/S, 7.45 GW/S). F/B 630 sacks 35/65 Poz Class H w/6% Gel, 5% Salt, 1/4# FC (12.4 PPG, 2.14 CF/S, 10.46 GW/S). F/B 300 sacks 50/50 Poz Class H w/2% Gel, 5% Salt, 1/4# FC (14.2 PPG, 1.35 CF/S, 7.45 GW/S).

##### MUD PROGRAM: