

4. CASING AND CEMENTING PROGRAM (CONTINUED):

b. The Proposed Cementing Program:

i. OPTIONAL Conductor Casing: Grouted:

Est. 70 F. @ 8.34 PPG water to 40':

Grout w/ Redi-Mix to Surface: Est. 4 Yds. of Redi-Mix.

ii. Surface Casing: Single Stage:

Est. 75 F. @ 9.5 PPG mud @ 700'.

Circ. Cement to Surface:

Top Jobs if needed to bring cement to Surface.

Lead Slurry: Est. Surface to 510'.

100 % excess over calculated open-hole volume: Est. @

320 sx. Lite (65% Class 'C' + 35% Pozzalan + 6% Gel)

w/ 5#/sx. Gilsonite + 0.25#/sx. cello-flakes

+ 2% CaCl₂:

1.99 cu.ft./sx. @ 12.4 PPG.

Tail Slurry: Est. 510' to 700'.

100 % excess over calculated open-hole volume: Est. @

250 sx. Class 'C' w/ 2% CaCl₂ + 0.25#/sx. cello-flakes:

Additives: 1.33 cu.ft./sx. @ 14.8 PPG.

iii. Intermediate Casing: Single Stage:

Est. 100 F. @ 8.6 to 12.5 PPG mud @ 2,360'.

Circ. Cement to Surface:

Top jobs if needed to bring cement to Surface.

Lead Slurry: Est. Surface to 1,760'.

100 % excess over calculated open-hole volume: Est. @

400 sx. Interfill 'C' (50% Class 'C'+50% Pozzalan+10% Gel)

w/ 10#/sx. Gilsonite + 0.5#/sx. cello-flakes:

2.47 cu.ft./sx. @ 11.9 PPG.

Tail Slurry: Est. 1,870' to 2,360'.

100 % excess over calculated volume: Est. @

250 sx. Class 'C' w/ 2% CaCl₂ + 0.25 #/sx. cellophane:

1.33 cu.ft./sx. @ 14.8 PPG.