

4. CASING AND CEMENTING PROGRAM (CONTINUED):

b. The Proposed Cementing Program: Continued:

- iv. Production Casing: Two Stage: Stage Tool @ 8,000' MD:
ALL VOLUMES TO BE BASED ON CALIPER LOG VOLUMES.

First Stage: Est. 185 F. @ 9.8 to 10.2 PPG mud @ 11,400'.
Plan Circ. Cement to 7,700' TVD (8000' MD):

Lead Slurry: Est. 8,300' MD to 8,000' MD.

30 % excess over calculated volume: Est. @

60 sx. Super 'H' cement consisting of 70% Class 'H'
+ 17% Pozzalan + 13% Silica Flour
w/ 2#/sx. KCl + Additives.

1.67 cu.ft./sx. @ 13.0 PPG.

Tail Slurry: Est. 11,400' to 8,300':

30 % excess over calculated volume: Est. @

690 sx. Super 'H' cement consisting of 70% Class 'H'
+ 17% Pozzalan + 13% Silica Flour
w/ 2#/sx. KCl + Additives.

1.50 cu.ft./sx. @ 13.5 PPG.

Second Stage: Est. 140 F. @ 9.8 to 10.2 PPG mud @ 8,000' MD:

Lead Slurry: Est. 7,400' MD to 2,000' MD:

100 % excess over calculated volume: Est. @

1,080 sx. Interfill 'H' cement consisting of
50% Class 'H' + 50% Pozzalan + 10% Gel

w/ 2#/sx. KCl + 0.5#/sx. cello-flakes + Additives:
2.45 cu.ft./sx. @ 11.9 PPG.

Tail Slurry: Est. 8,000' MD to 7,400':

100 % excess over calculated volume: Est. @

200 sx. Super 'H' cement consisting of 70% Class 'H'
+ 17% Pozzalan + 13% Silica Flour
w/ 2#/sx. KCl + Additives.

1.50 cu.ft./sx. @ 13.5 PPG.