Cementing Program

4-1/2" Production Casing

Depth:3600'Casing Size:4-1/2"Hole Size:7-7/8"Caiculated Cement Fill:3600' (In Two Stages)Excess Calculated15% over caliper1st Stage:15% over caliper2nd Stage:100%Cementing Company:Halliburton

Cement Recommendation:

1st Stage:

Slurry: 150 sacks Premium Plus + 2.5 #/sk Salt (Accelerator) + 0.4% HALAD-322 (Fluid Loss)

Slurry Weight:	14.8 ppg
Slurry Yield:	1.36 cu.ft./sack

2nd Stage:

Lead Slurry: 720 sacks Premium Plus + 1% CaCl2 + 15 #/sk Salt

Slurry Weight: 14.0 ppg Slurry Yield: 1.75 cu.ft./sack

Tail Slurry: 80 sacks Premium Plus

Slurry Weight	14.8 ppg 1.32 cu.ft./sack
Slurry Yield:	

Procedure:

Cement the 4 1/2" casing string as follows:

A. Reciprocate the casing during the <u>first stage</u> circulation and cementation.

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