

PROPOSED CASING & CEMENTING PROGRAM

Chem State Well No. 9

13 3/8" 48 lb/ft H-40 Surface Casing Set at 400' - 17 1/2" Hole:

Circulate to surface with 700 sacks of Class "C" + 2% CaCl_2 .

Slurry Weight:	14.8 ppg
Slurry Yield:	1.32 ft ³ /sx
Water Requirement:	6.3 gals/sx

8 5/8" 24 & 32 lb/ft K-55 Intermediate Casing Set at 4200' - 12 1/4" Hole:

Lead: 1200 sx Class "C" 65/35 Poz + 6% Bentonite + 5% Salt.

Slurry Weight:	13.2 ppg
Slurry Yield:	1.70 ft ³ /sx
Water Requirement:	8.8 gals/sx

Tail: 150 sx Class "C" Neat.

Slurry Weight:	14.8 ppg
Slurry Yield:	1.32 ft ³ /sx
Water Requirement:	6.2 gals/sx

5 1/2" 15.5 & 17 lb/ft K-55 & N-80 Prod. Casing Set at 10100' - 7 7/8" Hole:

Set stage tool at 8500'.

1st Stage: 400 sx Class "H" Neat. Desired TOC = 8500'.

Slurry Weight:	15.6 ppg
Slurry Yield:	5.2 ft ³ /sx
Water Requirement:	1.18 gals/sx

2nd Stage:

Lead: 500 sx Class "C" + 20% Diacel "D". Desired TOC = 3700'.

Slurry Weight:	12.0 ppg
Slurry Yield:	2.69 ft ³ /sx
Water Requirement:	15.5 gals/sx

Tail: 150 sx Class "C" Neat.

Slurry Weight:	14.8 ppg
Slurry Yield:	1.32 ft ³ /sx
Water Requirement:	6.3 gals/sx