

CEMENT PROGRAM OUTLINE

WELL NAME: Dee State No. 5

LOCATION : 990' FSL & 990' FEL, Sec. 36, T-19S, R-24E, Eddy County

Casing Program

Surface 9-5/8 inch in 14 3/4 hole at 1200 ft.
Inter inch in hole at ft.
Prod 7" inch in 8 3/4 hole at 8100 ft.

Cementing Program

Surface

Lead 800 sxs Class Thixad Mixed at 12.2 ppg
Additives 12# Calsonite
Tail 1200 sxs Class C Mixed at 13.9 ppg
Additives 2% CaCl

Intermediate (first stage)

Lead sxs Class Mixed at ppg
Additives
Tail sxs Class Mixed at ppg
Additives
Percent free water Water loss cc

(second stage)

Lead sxs Class Mixed at ppg
Additives
Tail sxs Class Mixed at ppg
Additives
Percent free water Water loss cc

Production (first stage)

Lead 600 sxs Class "C" Lite Mixed at 12.4 ppg
Additives 2% CaCl & FLA as needed
Tail 300 sxs Class H Mixed at ppg
Additives 3% KCl & FLA as needed for zero free water and 250 cc
Percent free water 0 Water loss 250 cc

(second stage)

Lead 600 sxs Class "C" Lite Mixed at ppg
Additives 3% KCl & FLA as needed
Tail 300 sxs Class H Mixed at ppg
Additives 3% KCl FLA as needed
Percent free water Water loss cc