

Cedar Lake 35 Federal Com. No 1  
AFE No. 2119500012  
Eddy County, New Mexico

Cementing Detail for 5-1/2" Production Casing

Rigged up Halliburton Service; tested lines to 4000 psi; pumped 10 barrels fresh water; pumped 1000 gallons Halliburton's Super Flush 102; pumped 10 barrels fresh water; pumped 50 sacks Halliburton's light weight cement (scavenger cement) + 5#/sx Potassium Chloride, slurry weighted to 11.0 ppg; pumped 240 sacks (102 bbls) Halliburton's light weight Premium cement + 5#/sx Potassium Chloride + .6 of one percent Halad 22-A + .3 of one percent CRF-3, slurry weighted to 12.4 ppg, yield 1.98 cuft/sx; pump time 3 hrs, 40 min; pumped 940 sacks (208 bbls) Premium cement + 5#/sx Potassium Chloride + .6 of one percent Halad 22-A + .4 of one percent CFR-3, slurry weighted to 15.6 ppg, yield 1.24 cuft/sx; pump time 3 hrs, 10 min; dropped top plug; displaced with 100 barrels of fresh water and 189.4 barrels of drilling mud; did not bump plug; final pressure before shutting down was 1700 psi; released pressure to floats; had 1-1/2 barrels flow back; floats held; dropped DV tool bomb, took 30 minutes and 1400 psi to open tool; circulated out 256 sacks of cement off top of DV tool.

Waited 8 hours between stages - -

Pumped 20 barrels of fresh water; pumped 485 sacks (171 bbls) of Halliburton's Premium + 5#/sx Potassium Chloride, slurry weighted to 12.4 ppg, yield 1.98 cuft/sx; pump time 3 hrs, 10 min; pumped 260 sacks (55 bbls) Halliburton's Premium neat cement, slurry weighted to 15.6 ppg, yield 1.18 cuft/sx; pump time 5 hrs, 40 min; dropped top plug; pumped 198.5 barrels of fresh water; bumped plug and closed DV tool with 3200 psi; final pressure before bumping plug was 2200 psi; released pressure to DV tool, had 2 barrel flow back; DV tool held; job completed at 4:15 am 05-14-92.

5-1/2" casing hardware used:

- 1 float collar
- 1 float shoe
- 1 Halliburton DV tool
- 12 centralizers
- 42 standard tubulators