

Mud Program
Smith Federal Gas Com No. 2
Sec 12, T22S, R23E
Eddy County, New Mexico

Depth	Mud Properties	Remarks
0' - 160'	Weight: 8.4 - 8.6 Viscosity: 36 - 40 Filtrate: NC pH: 10 - 11	Spud well with Fresh Water Gel and Lime slurry. Mix paper for seepage. For more severe losses mix a high visc LCM pill and sweep hole.
160' - 2300'	Weight: 8.4 - 8.6 Viscosity: 28 - 30 Filtrate: NC pH: 10 - 11	Drill out from under casing with Fresh Water. Circulate the reserve pit for solids control. Mix Lime for pH control and paper for seepage. Note: Severe lost circulation may be prevalent at +/- 2000'. Dry drill to casing point sweeping hole with high visc LCM pills.
2300' - 6600'	Weight: 8.4 - 8.6 Viscosity: 28 - 30 Filtrate: NC pH: 10 - 11	Drill out from under casing with Fresh Water, continuing to circulate to the reserve. Continue to mix Lime for pH control and paper for seepage. For severe lost circulation, sweep hole with high visc LCM pills as necessary. At 5500' discontinue Lime additions and mix Caustic Soda for pH control.
6600' - 7600'	Weight: 8.6 - 8.8 Viscosity: 34 - 36 Filtrate: 10 - 12 cc pH: 9.5 - 10	Return to steel pits and lower total hardness to below 200 ppm with Soda Ash. Continue to mix Caustic Soda for pH control. Mix Fresh Water Gel and Drispac for desired properties. Small amounts of Desco may be mixed for rheology control.