

CLEARY PETROLEUM CORPORATION
NEW MEXICO FEDERAL "E" #1
LEA COUNTY, NEW MEXICO

RECOMMENDED DRILLING FLUID PROGRAM

Depth ft	Mud Weight ppg	Viscosity sec/qt	API Filtrate ml				
0' - 470'	8.5-9.0	35-42	NC	Spud with Drilling Gel and Lime maintaining as needed to set 13-3/8 pipe.			
470' - 5600'	8.5-10.0	32-34	NC	Drill out with fresh water letting native viscosity increase to 32 to 34 sec/qt. Around 1600', add 10 ppg brine water for salt stringers. Add and maintain 3% to 5% oil. Use Paper for seepage.			
5600' - 11000'	8.5-8.8	28-30	NC	Drill with fresh water, adding Lime for pH and Paper for seepage. Use Visbestos sweeps for hole cleaning.			
11000' - 14000'	10.0-10.2	30-34	Below 10	Displace with 10.0 ppg brine maintaining pH with Caustic Soda. At 13500', mud up with KCL, Drispac, Starch, and Soda Ash to produce the above properties. Adjust the mud weights and viscosities as hole conditions warrant.			