

Date July 31, 1989
 Company Bettis Brothers Location Sec 15, T16S, R28E
 Well Name Eddy County Prospect County Eddy State NM

RECOMMENDED DRILLING FLUIDS PROPERTIES

Depth	Mud Weight	Viscosity	API Filtrate	pH		
2000'-7600'	8.4	28-30	NC	10.0-10.5		
<p>Drill out with existing system, circulating the reserves for solids control and mixing Mil-Lime for pH maintenance. Add non-selective flocculant (Jet Jel, Selec Floc) at the flowline to drop out fine drilled solids and maximize use of reserve pit area. Add fresh water or 10.0 lb./gal Brine to control fluid weight to required level for increased wellbore stability. Viscous pills consisting of Milgel, Mil-Lime or Dyna-Sweep, pumped as a sweep, will clean wellbore, as well as seal off fractured and permeable zones and minimize losses. Mud up with Salt Water Gel or sweep hole (100-150 bbl) to ensure successful casing and or logging operations.</p> <p>While drilling with clear fluid, it may be necessary to periodically sweep the hole with Salt Gel or Dyna Sweep pills to assure adequate hole cleaning. Cutting transport depends on cuttings' size and density, fluid weight and viscosity, and annular flow rates. To transport cuttings uphole with clear water, annular fluid velocities of about 100 ft/min are needed. If annular flow rates are too low to clean the hole, then drilled solids will build up in the annulus, reducing penetration rate and increasing the risk of lost circulation.</p> <p>Seepage losses are usually controlled with Ground Paper additions; more severe losses may require Gel/LCM (fiber, Multi-Seal, etc.) pills. For lost circulation, mix a viscous pill consisting of Salt Water Gel (10-20 lb./bbl) and Kwik Seal (10-20 lb./bbl) pump as a sweep at a reduced pump rate to regain returns.</p>						
7600'-9600'	8.8-9.2	32-36	10-12	9.0-9.5		
<p>Return to steel pits, treat make up water with Soda Ash (hardness below 100 mg/l) and Caustic Soda (.3-.5 lb./bbl). Mix Drispac (.5-1.5 lb./bbl) for filtrate control and Potassium</p>						