

Gold Engineering, Inc.

5000 West Industrial

MIDLAND, TEXAS 79703

Company Superior Oil Company

County Lea

State New Mexico

Well Name Mescalero Ridge-Com.

Prepared for Mr. Larry Ivie

Legal Description

Date 3-12-80

MUD RECOMMENDATIONS				CASING	FORMATION TOPS
Depth ft.	Mud Weight ppg	Viscosity Sec./Qt.	API Filtrate ml	Oil	
0 - 600'	8.4 - 8.8	36-40	NC		
Spud with Fresh Water Gel flocculated with Lime. Use Paper and Fiber for loss circulation or seepage.					

600'-5400'	8.8 - 10.4	32-34	NC	5-6%	
Drill Out with fresh water. Let native viscosity build to 32-34 viscosity. Care should be taken to maintain viscosity constant because of troublesome redbeds. We suggest adding 5 - 6% oil at 1500' to 1700' and maintain 4 - 6% at 5200' or to casing point. Additions of brine can be added after entering salt section to help prevent large washouts. Use paper for seepage.					

5400'-11,500'	8.4 - 9.2	28	NC		
Drill out with fresh water. We suggest staying in reserve pit to keep a good penetration rate. The use of Benex and Drilling Detergent will help to keep a low solids system. Lime as needed for PH control. Use Paper for seepage. Note: At 10,500' or top of Wolfcamp we suggest adding brine to raise chlorides to 80,000 - 100,000ppm. to prevent shale problems if brine is too expensive. Consideration should be given to adding 6-8% KCL. Use Lime for PH control.					

11,500-13,400'	9.2 - 10.5	32-36	12-15cc.		
Return to steel pits. Treat total hardness below 200ppm. with Soda Ash. Then add 1/2 to 3/4 lb./bbl. Mon-Pac to lower water-loss to 12-15cc. If hole conditions warrant raise viscosity with Sea-Mud. Should the need to raise the mud weight arise, we suggest adding Soda Ash.					
