

PHILLIPS PETROLEUM COMPANY MUD PROGRAM

WELL: U. S. Minerals Well No. 5, SW/4 SE/4 Section 38, T-17-S, R-33-E, Lea County,
New Mexico.

1. Type Mud(s): 0-1280': Flosal, Soda Ash and Gel.
 1280-4000': Brine water.
 4000-4500': Lower WL w/Drispac, if viscosity is needed--use
 Flosal.
2. Make-up Water: 0-1280': Fresh
 1280-4500': Brine
3. Solids Control: 0-4000': Reserve pit
 4000-T.D.: Mud up in metal pits (working pits) and use shale
 shaker if necessary.
4. Methylene Blue Test: Less than 20 parts per barrel.
5. Alkalinity, ph and Calcium Control: Soda Ash.
6. Abnormal Pressure Zone: None
7. Other Trouble Zones: Redbeds to 1250'
8. Viscosifying Additives: Bentonite and Flosal in surface casing. Flosal below
 surface.
9. Filtration Additives: Drispac.
10. Dispersing and Thinning Additives: Desco if needed.
11. Inhibiting Additives: Soltex and oil if needed in Red beds.
12. Properties: Minimum practical mud weights will be used and adjusted as
 necessary to control well. Probable weights and types are shown.

<u>DEPTH</u>	<u>WEIGHT</u>	<u>pH</u>	<u>W.L.</u>	<u>MUD TYPE</u>
0-1280'	8.6-9.2			Fresh
1280-4000'	10.0-10.2			Salt
4000-4500'	10.0-10.3		L20	Salt