

C. W. Trainer
 Union Federal No. 1
 660' FSL and 1980' FWL of Sec. 6, T19S, R34E, Lea County, New Mexico
 NM-6869

1. Surface formation: Quaternary Alluvium
2. Estimated tops of geologic markers: Base Salt 2900
 San Andres 5000
 Bone Spring 7400
 Wolfcamp 10,600
 Morrow 13,400
3. Estimated depth of mineral bearing formations: Fresh water 100 to 700
 Bone Spring- oil 7400
 Morrow - gas 13,400

4. Casing program:

Hole Size	Size of Casing	Weight Per Ft.	Cond.	Grade	Depth	Sacks Cement	
17 1/2	13 3/8	48#	New	H-40	350	350	
12 1/4	8 5/8	24# & 32#	New	J-55	4,500	1000	- DV collar @ 1360
7 7/8	5 1/2	17# & 20#	New	N-80	13,600	500	

5. Blowout preventers: One 10" x 1500 series Cameron model "QRC", 3000# W. P., Maximum pressure 10,000# and one 12" x 900 series Hydrill. See Exhibits "E", "F" and "G". Pipe rams to be activated at lease once each 24 hours and blind rams each time the drill pipe is out of the hole.
6. Mud program: 0-350 - Spud mud consisting of Bentonite flocculated with lime.
 350-4500 - Fresh water with soils control by circulating through the reserve pit, other mud properties as required.
 3400-10,000 - Fresh water and lime with lost circulation material as needed.
 10,000-13,000 - 10# brine water with lost circulation material as needed.
 13,000-TD - 10# brine water circulating through steel pits. Mud up with Drispac. Properties should be viscosity 34-36, weight 9.8 - 10 ppg, filter loss below 10 cc and pH 10. If higher than anticipated pressures are encountered, increase weight with Baroid and viscosity with Baroco clay and Flosal.
7. Auxiliary equipment: Mud monitoring equipment to record pit level, measure mud volume and a flow sensor: Kelly valve; safety sub with full opening valve; drill pipe float valve.
8. Logging & testing: All shows will be drillstem tested. It is anticipated that the Bone Spring and Morrow will be tested. Logs to consist of Neutron-formation Density and Dual induction Laterolog.
9. Anticipated pressures and potential hazards: Prior wells drilled in the area indicate that maximum pressure will be 6500 psi and that hydrogen sulfide will not be encountered.
10. Starting date and duration: Starting date to be March 31, 1978 with operation to be completed in 120 days.