APPLICATION TO DRILL

GRUY PETROLEUM MANAGEMENT CO. RHODES FEDERAL UNIT # 86 UNIT "F" SECTION 8 T26S-R37E LEA CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

- 1. Location: 1980' FNL & 1980' FWL SEC. 8 T26S-R37E LEA CO. NM.
- 2. Elevation above sea level: 2973' GR.
- 3. Geologic name of surface formation: Quaternery Aeolian Deposits.
- <u>Drilling tools and associated equipment:</u> Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
- 5. Proposed drilling depth: Drilled to 3700' in 1984.

6. Estimated tops of geological markers:

Rustler Anhydrite	1000'	Yates	2700'
Saladu Salt	1330'	7 Rivers	3050'
Tansil	2535'		

7. Possible mineral bearing formation:

Tansil	Gas
Yates	Gas
7 Rivers	Gas

8. <u>Casing program:</u>

	Hole size	Interval	OD of casing	Weight	Thread	Collar	Grade
*	124"	0-1000'	8 5/8"	24	8-R	ST&C	K-55
*	7 7/8"	0-3700'	512"	15.5	8-R	ST&C	J-55

* This is a re-entry above casings have been set.

APPLICATION TO DRILL

GRUY PETROLEUM MANAGEMENT CO. RHODES FEDERAL UNIT # 86 UNIT "F" SECTION 8 T26S-R37E LEA CO. NM

9. Cementing & setting Depth:

- 8 5/8" Surface * 988' of 8 5/8" 24# K-55 8-R ST&C casing was set at 1000' and cemented with 550 Sx. of Class "H" + 4% Gel and tailed in with 200 Sx. of Class "H" + 2% CaCl. Cement was circulated to surface and tested at 600 PSI for 30 mim. Test was OK.
- 5½" Production * 3690' of 5½" 15.5# J-55 8-R ST&C casing was set at 3700' and cemented with 1000 fx. of 50/50 POZ + 10# Salt/Sx. + ½# Flo-cele/Sx. Cement was circulated to surface. 5½" casing was tested at 1500 PSI for 30 min. and held OK.
- Pressure Control Equipment: A 3000 PSI BOP will be rigged up on the 5¹/₂" casing well head and will remain on till well is completed.

11. Proposed Mud Circulating System:

Brine water will be used to drill cement plugs down to the top of the plug at 3150'.

12. Testing & logging Program:

Cased hole Gamma Ray- Neutron Correlation log will be run then $5\frac{1}{2}$ " casing will be perforated and well will be tested.

13. Potential Hazards:

No abnormal pressure or temperature is expected. Hydrogen Sulfide gas may be encountered H_2S dectors will be in place to detect any presence. All personnel will be fimiliar with all aspects of safe operation of equipment being used. Estimated BHP 750 PSI, estimated BHT 120°.

14. Anticipated Starting Date & Duration of Operation:

Operation will start as soon as approval is granted and is expected to take 3-5 days, testing and completion is expected to take from 12-15 days.

- 15. The Tansil, Yates, & 7 Rivers will be perforated, tested and completed as a gas well.
- * THIS IS A RE-ENTRY