

## APPLICATION FOR DRILLING

TMBR/SHARP DRILLING, INC.  
Johnson Federal, Well No. 1  
1650' FNL & 2100' FEL, Sec. 33-T9S-R34E  
Lea County, New Mexico  
Lease No.: NM-82935  
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, TMBR/Sharp Drilling, Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Rustler	2150'	Strawn	10,744'
Yates	2754'	Morrow	11,739'
San Andres	4431'	Lower Miss.	12,218'
Glorieta	5432'	Woodford	12,700'
Clearfork	6930'	Devonian	12,800'
Wolfcamp	8940'	T.D.	12,900'
Upper Penn.	9544'		
Bough "C"	9783'		
3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Random fresh water sands from surface to - 200'+/-.

Oil: Possible in the San Andres below 4431', Bough "C" below 9783', and the Devonian below 12,800'.

Gas: None expected.
4. Proposed Casing Program: See Form 3160-3.
5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
6. Mud Program: See Form 3160-3.
7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock.
8. Testing, Logging, and Coring Program:

Drill Stem Tests: None unless needed.

Logging: T.D. to surface: GR-CNL-LDT, .  
T.D. to intermediate casing: DLL-MSFL.

Coring: None planned.
9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated BHP = 5100 psi (evac.) with temperature = 180°.
10. H<sub>2</sub>S: None expected.
11. Anticipated starting date: October 29, 1994.  
Anticipated completion of drilling operations: Approximately 45 days.