

APPLICATION FOR DRILLING

READ & STEVENS, INC.
Mark Federal, Well No. 1
660' FSL & 660' FWL, Sec. 3-T20S-R34E
Lea County, New Mexico
Lease No.: NM-54432
(Development Well)

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Read & Stevens, 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	1550'	Wolfcamp	11,000'
Top of Salt	1770'	Strawn	12,110'
Base of Salt	3150'	Morrow	12,990'
Yates	3395'	Mississippi	13,600'
Queen	3670'	T.D.	14,000'
Bone Springs	8250'		

3. The estimated depth at which anticipated water, oil or gas formations are expected to be encountered:

Water: Random fresh water sands at approximately 100' or less in alluvium and at about 1000' in the Triassic.

Gas: Morrow Clastic at approximately 13,000'.

Oil: Bone Springs at approximately 8250'.

4. Proposed Casing Program: See Form 9-331C.
5. Pressure Control Equipment: See Form 9-331C and Exhibit "D".
6. Mud Program: See Form 9-331C.
7. Auxiliary Equipment: Blowout Preventer, gas detector, kelly cock, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging and Coring Program:

Logging:	1,600' - 5,200'	G/R CNL-FDC, DLL, MLL
	5,200' - 14,000'	" " " " "

Drill Stem Tests: Tests in the Bone Springs and Delaware.

Coring: None.
9. There is a possibility that abnormally high pressure may be encountered below 9500'. In that event, the proposed mud program will be modified to increase the mud weight to 9.8 - 10.2 ppg.
10. Anticipated starting date: December 15, 1987.
Anticipated completion of drilling operations: Approximately 60 days.