

APPLICATION FOR DRILLING

READ & STEVENS, INC.
Mark Federal. Well No. 4
330' FSL & 990' FEL, Sec. 3-T20S-R34E
Lea County, New Mexico
Lease No.: NM-54432
(Development Well)

In conjunction with Form 3160-3, 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	1570'	Seven Rivers	3870'
Top of Salt	1720'	Delaware	5620'
Base of Salt	3170'	T.D.	6600'
Yates	3415'		
Queen	3690'		

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

Water: Surface water in the Triassic between 80' - 230'.

Oil: Possible in the Delaware below 5620'

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, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging, and Coring Program:

Drill Stem Tests: None unless warranted.

Logging: T.D. to 5000':
T.D. to surface:

G/R, CNL-FDC, DLL, MSFL
G/R, neutron

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 = 3000 psi with temperature of 110°.
10. H₂S: None expected. None in previously drilled wells.
11. Anticipated starting date: July 10, 1993.
Anticipated completion of drilling operations: Approx. 3 weeks.