

APPLICATION FOR DRILLING

READ & STEVENS, INC.
Susie Federal, Well No. 1
1980' FNL & 990' FWL, Sec. 1-T18S-R30E
Eddy County, New Mexico
Lease No.: LC-047633-B
(Exploratory 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	463'	Wolfcamp	8,500'
Top of Salt	600'	Strawn	10,300'
Base of Salt	1600'	Atoka	10,600'
Queen	2670'	Morrow	11,350'
San Andres	3390'	Devonian	12,160'
Bone Spring	6600'	T.D.	13,000'

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 Bone Spring formation below 6600'.

Gas: Possible in the Morrow below 11,350' and the Devonian below 12,160'.

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, Kelly cock, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging, and Coring Program:
 - Drill Stem Tests: None Planned.
 - Logging: T.D. to intermediate casing: G/R, CNL-FDC, DLL, MSFL
 - T.D. to surface: 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 = 5600 psi (evac. hole) with temperature of 178°.
10. H₂S: None expected or reported from wells in the immediate area.
11. Anticipated starting date: September 15, 1993
Anticipated completion of drilling operations: Approx. 6 weeks.

