## APPLICATION FOR DRILLING

READ & STEVENS, INC. Quail Federal, Well No. 5

990' FNL & 990' FWL, Sec. 3-T20S-R34E

Lea County, New Mexico Lease No.: NM-84902 (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	1,580'	7 Rivers	8,250'
Top of Salt	1,770'	Delaware	5.200'
Base of Salt	3,120'	Bone Spring	8,200'
Yates	3,200'	T.D.	8,400'

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 5500'.

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':

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 = 3300 psi (evac. hole) with temperature of  $140^{\circ}$ .
- 10. H<sub>2</sub>S: None expected. None in previously drilled wells, but a Drilling Operations Plan, Exhibit "F", is being submitted to cover this contingency.
- 11. Anticipated starting date: April 15, 1996.

Anticipated completion of drilling operations: Approx. 3 weeks.