## APPLICATION FOR DRILLING

READ & STEVENS, INC. North Haystack Federal, Well No. 3 660' FNL & 660' FWL, Sec. 34-T5S-R26E Chaves County, New Mexico Lease No.: NM-18821 (Exploratory 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 USGS requirements:

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

San And <b>res</b>	1,036'	Abo	4,322
Glorieta	2,218	Total depth	5,100
Tubb	3,6281	rocar depen	5,100.

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

Water: Aproximately 200 - 400 feet for surface water.

- Gas: Abo: Between 4322' and 4900'.
- Oil: None expected, but may be a show in the San Andres at 1050'.
- 4. Proposed Casing Program: See Form 9-331C.
- 5. Pressure Control Equipment: See Form 9-331C and Exhibit "E".
- 6. Mud Program: See Form 9-331C.
- 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.

Logging:	Gamma Ray: FDC/CNL Dual Ind. Laterolog:	Surface to T.D. Int. Csg. to T.D. Int. Csg. to T.D.
Coring:	None.	

- 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.
- 10. Anticipated starting date: March 20, 1982. Anticipated completion of drilling operations: Approximately two weeks.

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