

APPLICATION FOR DRILLING

Charles B. Gillespie, Jr.
Hamilton Federal No. 4
660' FSL and 1980' FWL
Section 33, T-15-S, R-35-E
Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Charles B. Gillespie, Jr. submits the following nine items of pertinent information in accordance with USGS requirements.

1. The geologic surface formation is Quaternary.
2. The estimated tops of geologic markers are as follows:

Rustler	1,850'
Salado	1,950'
San Andres	4,700'
Glorieta	6,520'
Tubb	7,410'
Abo	8,120'
Wolfcamp	9,680'
Pennsylvanian	10,890'
Strawn	11,460'

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

Water:	Approximately 100'
Oil or Gas: Wolfcamp	Approximately 10,300 - 10,650'
Strawn	Approximately 11,460 - 11,760'

4. Proposed Casing Program: See Form 3160-3 and Exhibit F.
5. Pressure Control Equipment: See Form 3160-3 and Exhibit E.
6. Mud Program: See Exhibit G.
7. Testing, Logging and Coring Programs:

Drill Stem Tests (all DST's to be justified
by a valid show of oil): Wolfcamp 10,575'
Strawn 11,575'

Mudlogging: Two man unit from 10,000' (Wolfcamp) to TD
Electric Log Program: Spectral Density Dual Spaced Neutron Log
Dual Laterolog Microguard Log
Long Spaced Sonic Log
High Density Dipmeter

Coring: Core 120' of strawn starting at 11,550'.

8. No abnormal pressures or temperatures are anticipated. The BHP is anticipated to be 3800 psi. The BHT is anticipated to be 170° F.
9. Anticipated starting date: September 20, 1993.