APPLICATION FOR DRILLING

MANZANO OIL CORPORATION Elliott Federal, Well No. 3 760' FSL & 2080' FEL, Sec. 30-T18S-R30E Eddy County, New Mexico Lease No.: NM-27279 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Manzano Oil Corporation submits the following items of pertinent information in accordance with BLM requrements:

- 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	440 '	San Andres	3420'
Base of Salt	1275'	1st Bone Springs	7157'
Queen	2557 '	2nd Bone Springs	7873'
N. Benson pay	3045'	Τ.D.	8275'

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

Water: Fresh water from 100' to 300'.

Oil: Possible in Bone Spring: 7175' - 7375' 7875' - 7975' 8225' - 8275'

Gas: Possible in Bone Springs.

- 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: One possible in the Bone Springs.

Logging: Surface casing to T.D.: Gamma Ray. Inter. Casing to T.D.: DLL, CNL-FDC, MSFL

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.
- Anticipated starting date: May 15, 1988.
 Anticipated completion of drilling operations: Approximately 35 days.