APPLICATION FOR DRILLING

MANZANO OIL CORPORATION P.B.I.C. Federal, Well No. 1 660' FNL & 660' FEL, Sec. 18-T18S-R32E Lea County, New Mexico Lease No.: NM-67986 (Exploratory Re-entry Well)

In conjunction with Form 9-331C, 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:

Behind casing:		- 1	4442'
Yates	2485 '	Delaware	
Seven Rivers	2868'	Open hole below cas	
	36321	Bone Springs	6386'
Queen	3940'	1st Bone Spring	8000'
Penrose			8550'
Grayburg	3992'	Τ. D.	0000
San Andres	4289'		

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

Water: None expected. Existing casing set to 4971'.

Oil: Possible in Bone Spring between B030' and 8088'.

Gas: None expected.

- 4. Proposed Casing Program: See Form 9-331C.
- 5. Proposed Control Equipment: See Form 9-331C and Exhibit "E".
- 6. Mud Program: See Form 9-331C.
- 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 planned.

Logging: From existing casing to T.D.: 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.
- Anticipated starting date: December 15, 1987.
 Anticipated completion of drilling operations: Approximately 15 days.