

## APPLICATION FOR DRILLING

MANZANO OIL CORPORATION  
Burro Federal, Well No. 1  
1980' FSL & 1980' FEL, Sec. 30-T21S-R22E  
Lea County, New Mexico  
Lease No.: NM-92143  
(Exploratory 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 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:

Glorieta	1400'	Atoka	7900'
Abo	3400'	Morrow	8100'
Wolfcamp	4560'	Mississippi	8800'
Cisco	5900'	T.D.	9000'
Strawn	7200'		

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

Water: Surface water between 100' - 350'.  
Oil: None expected.  
Gas: Possible in the Morrow below 8100'.

4. Proposed Casing Program: See Form 3160-3.

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8 "	24.0#	J-55	ST&C	1,500'	Circ. 1000 sx Lite + 200 sx Neat.
7 7/8"	4 1/2"	11.6#	N-80	LT&C	9,000'	500 sx of 50/50 Poz.

5. Proposed Control Equipment: See Exhibit "E".

### BOP Program:

A 10" 3000 psi wp Schaffer Type E double hydraulic ram BOP, will be installed on the 8 5/8" casing. Casing and BOP will be tested before drilling out with 7 7/8". The BOP will be tested daily.

6. <u>Mud Program:</u>		<u>MUD WEIGHT</u>	<u>VIS.</u>	<u>W/L CONTROL</u>
0' - 1500':	Fr/water w/gel & lm	8.4 ppg	28	No W/L control
1500' - 7900':	Cut Brine mud:	8.6 ppg	29	No W/L control
7900' - 9000':	Cut Brine mud:	8.8 - 9.0 ppg	30 - 32	W/L control 10 +/-

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: Gamma Ray/neutron: T.D. to surface.  
DLL-MSFL, CNL-LTD: T.D. to 8 5/8" Casing.

Coring: None planned.