

# APPLICATION FOR DRILLING

Lucille F. McKinley  
Artesia Petroleum Co. -- Well No. 4  
890' FNL & 890' FEL, Sec. 1, T17S, R30E  
Eddy County, New Mexico  
Lease: LC02933B  
(Development Well)

In conjunction with form 9-331C, Application for Permit to Drill subject well, Lucille F. McKinley submits the following items of pertinent information in accordance with USGS requirements:

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

Rustler	390'	Grayburg	2760'
Base of salt	1300'	Premier	3020'
Queen	2348'	San Andres	3060'
3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: Possibly between 200' and 500'.

Oil: Grayburg at approximately 2760'.  
Premier at approximately 3050'.  
San Andres at approximately 3080'.

Gas: None expected.
4. Proposed Casing Program: See Form 9-331C.
5. Pressure Control Equipment: See Form 9-331C and Exhibit "D".
6. Mud Program: See Form 9-331C.
7. Auxiliary Equipment: Kelly Cock; pit level indicators and flow sensor equipment; Blow out preventer; inside blowout preventer.
8. Testing, Logging and Coring Program:

Logging: Compensated Neutron Log, Laterolog, and Bond Log.

Drill Stem Test: None anticipated at this time.

Coring: None.
9. No abnormal pressures or temperatures are indicated or anticipated.
10. Anticipated starting date: June 6, 1981.  
Anticipated completion date: Approximately three weeks after starting date.