

# APPLICATION FOR DRILLING

Hanley Petroleum, Inc.  
Marathon - Martinez Federal No. 1  
660' FSL and 1980' FEL  
Section 31, T-19S, R-29E,  
Eddy Co., New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Hanley Petroleum, Inc. submits the following ten items of pertinent information in accordance with USGS requirements:

1. The Geologic age of the surface formation is Quaternary.
2. The estimated tops of certain Geologic Markers are as follows:

Yates	960'
San Andres	2330'
Delaware	3195'
Bone Spring	4640'
Wolfcamp	9085'
Strawn	10155'
Atoka	10510'
Morrow	11030'

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

Ogallalla (water)	100'
Bone Spring (oil)	+8000'
Wolfcamp (gas)	9000'
Strawn (gas)	10150'
Morrow (gas)	11030'

4. Casing Program: See attached Form 3160-3 and Exhibit F.
5. Blowout Equipment Specifications: See attached Form 3160-3 and Exhibit E.
6. Mud Program: See Exhibit G.
7. Auxiliary Equipment: A stabbing valve will be kept on floor to be used when kelly is not in string. Upper and lower kelly cocks will be in place and tested and the wrench will be in a conspicuous place on the floor at all times.

8. Testing, Logging, and Coring Programs:

A. DST's (to be justified by a valid show of oil or gas)

Queen	2000'
Bone Spring	8000'
Strawn	10150'
Morrow	11030'