

APPLICATION FOR DRILLING

Mesa Petroleum Co.
Diamond Mound Federal Well No. 2
Eddy County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill subject well in Section 1, Township 16 South, Range 27 East, Eddy County, New Mexico, Mesa Petroleum Co. submits the following items of pertinent information in accordance with USGS requirements:

1. The geologic surface formation series is Guadalupian Artesia Group.
2. The estimated tops of geologic markers are as follows:

Queen	879'
San Andres	1589'
Glorietta	2949'
Tubb	4309'
Abo	5034'
Wolfcamp	6289'
Wolfcamp Bursum	7099'
Cisco-Canyon	7349'
Strawn	8139'
Atoka	8554'
Morrow	8678'
T/Miss Chester Sh.	8769'
Miss Chester Lm.	8909'

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

2900'	water
3400'	water
4410'	water
7540'	gas and water
7920'	gas and water - Cisco Canyon
8450'	gas - Lower Penn
8550'	gas - Lower Penn
8650'	gas - Morrow

4. Casing and Blowout Preventer Program:

Surface: 350' of 13-3/8" 48# H-40 ST&C new casing cemented with 400 sx Class "H" with 1/4# flocele and 2% cc or sufficient volume to circulate cement to surface. Will install 12" API 3000 psi WP bradenhead and nipple up 12" API 3000 WP ram type BOPs to drill 11" intermediate hole.

Intermediate: 1700' of 8-5/8" 24# K-55 ST&C new casing cemented with 575 sx LW with 5# gilsonite, 1/4# flocele and 2% cc followed by 225 sx Class "C" with 2% cc or sufficient volume to circulate cement to bottom of surface casing. Will nipple up 12" API 3000 WP x 10" API 3000 WP casinghead spool and