

APPLICATION FOR DRILLING  
MESA PETROLEUM CO  
~~VANDAGRIFF FEDERAL #2~~ *Diamond Mound Fed. #1*  
EDDY COUNTY, NEW MEXICO

In conjunction with permitting subject well for drilling in Section 1, Township 16 South, Range 27 East, Eddy County, New Mexico, Mesa Petroleum Co submits the following:

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 depth at which water, oil, or gas are expected is:

2900'	water
3400'	water
4410'	water
7540'	gas & water
7920'	gas & 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 install 12" API 3000 psi WP BOP stack (consisting of 1 pipe ram, 1 blind ram, 1 bag type BOP) to drill 7-7/8" production hole.