

APPLICATION FOR DRILLING  
MESA PETROLEUM CO  
DEPCO FEDERAL #1  
2160' FNL & 1980' FWL  
Sec 4, T16S, R28E  
LEASE: NM-18831  
February 25, 1980

In conjunction with permitting subject well for drilling in Section 4, Township 16 South, Range 28 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	990
San Andres	1750
Glorietta	2935
Tubb	4465
Abo	5245
Wolfcamp	6480
Bursum	7390
Strawn	8450
Atoka	8750
Morrow	8970
Miss Chester Sh	9165
Miss Chester Lm	9265
Miss Meramec Osage	9395

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

Water	3008
Water	3508
Water	4518
Gas & Water	7648
Gas - Lower Penn	8458
Gas - Lower Penn	8758
Gas - Morrow	8978

4. Casing and Blowout Preventer Program:

Surface: 350' of 13-3/8" 48#, H40, ST&C, new casing cemented with 400 sx Class "H" with 1/4# flocele and 2% CaCl or sufficient volume to circulate cement to surface. Will install 12" API 3000 psi WP bradenhead and nipple up 10" API 3000 WP ram type BOPs to drill 11" intermediate hole.

Intermediate: 1900' of 8-5/8" 24#, K55, ST&C, new casing cemented with 200 sx thick-set plus 825 sx LW with 5# gilsonite, 1/4# flocele and 2% CaCl followed by 200 sx Class "C" with 2% CaCl 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 10" 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.