## APPLICATION FOR DRILLING

MESA PETROLEUM CO ADAMS FEDERAL #1 SEC 31, T19S, R31E EDDY CO., NEW MEXICO

In conjunction with permitting subject well for drilling in Section 31, Township 19 South, Range 31 East of Eddy County, Mesa Petroleum Co submits the following:

- 1. The geologic surface formation is Permian Ochoan, Dewey Lake formation.
- 2. Rotary tools, owned by Moranco, will be utilized to drill this well to a total depth of approximately 12,500'.
- 3. The estimated tops of several geologic markers are:

Rustler	557'
Yates	2,055'
Capitan	2,350'
Delaware	4,110'
Bone Spring	6,607'
Wolfcamp Lime	10,125'
Strawn Carb.	10,920'
Atoka	11,100'
Morrow B-II	11,850'
Mississippian	12,350'

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

Water - approximately 400'and 2400' Gas - approximately 10,200', 11,000', 11,400', 11,900' and 12,200' Oil - approximately 2100'

- 5. Casing and Blowout Preventer Program
  - Surface: Approximately 850' of 13-3/8" 48# H-40 ST&C new casing cemented with 600 sx of light weight with 1/4# flocele and 2% cc followed by 200 sx Class H + 2% cc followed by 200 sx Class H + 2% cc (or sufficient volume to circulate to the surface). Will install 12" API 3000 psi WP bradenhead and nipple up 12" API 3000 psi WP BOPs to drill the 12¼" intermediate hole.
  - Intermediate: Approx 4200' of 8-5/8" 24 and 32# K-55 ST&C new casing will be cemented in one stage with 2000 sx LW with 5# gilsonite, 1/4# flocele and 2% cc followed by 300 sx Class H with 2% cc. Will circulate cement to surface or use small diameter tubing down annulus to complete cementing operations. Will nipple up 12" API 3000 psi WP x 10" API 3000 psi WP casinghead spool, then install 12" API 3000 psi WP BOP stack (consisting of pipe rams, blind rams and bag type BOP) prior to drilling 7-7/8" production hole.