

APPLICATION FOR DRILLING
MESA PETROLEUM CO.
BUZZARD FEDERAL COM #1
2310' FSL & 1980' FWL
Sec 17, T20S, R23E
LEASE: NM-29607
APRIL 16, 1980

In conjunction with Form 9-331-C, Application For Permit to Drill subject well, the following pertinent information is submitted in accordance with U.S.G.S. requirements:

1. The geological surface formation is Grayburg.
2. Estimated tops of geological markers are as follows:

San Andres	105'
Glorieta	1420'
Yeso	1520'
Abo	3700'
Wolfcamp	4990'
Bursum	5790'
Cisco	6340'
Strawn	7940'
Atoka	8190'
Morrow	8390'
Chester Sh	8590'
Chester Lm	8640'

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

San Andres	- Water	250'
Bursum	- Gas	5800'
Cisco	- Gas	6500'
Morrow	- Gas	8400'

4. Casing and Blowout Preventer Program:

Surface: 300' of 13-3/8", 48#, H40, ST&C casing cemented with 300 sx Class "C" + 2% CaCl. Cement will be circulated using redimix down the annulus if necessary. Will install 13-3/8" slip-on X 12" API 3000 psi bradenhead with one 2" API 3000 psi ball valve and install 12" API 3000 psi X 10" API 3000 psi rental spool; nipple up 10" API 3000 psi WP double BOP with pipe rams (bottom) and blind rams and test to 600 psi for 30 minutes.

Intermediate: 1800' of 8-5/8", 24#, K55, ST&C casing cemented with 200 sx thix-set, followed by 190 sx Howco Lite and tailed in with 200 sx Class "C" to surface using 1" pipe down the annulus if necessary. Will install 8-5/8" sow X 10" API 3000 casinghead with 2" API 2500 psi ball valve. Nipple up 10" API 3000 psi WP double BOP with pipe rams (bottom) and blind rams to drill 7-7/8" hole to total depth.