## APPLICATION FOR DRILLING

## MESA PETROLEUM CO. Nash Unit Well No. 7 685' FNL & 1295' FWL of Section 18 (surface location) 1315' FSL & 1320' FWL of Section 7 (bottomhole location) T23S, R30E Eddy County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Mesa Petroleum Co., submits the following items of pertinent information in accordance with U.S.G.S. requirements.

Due to potash mining in the area, this well will be directionally drilled to reach the objective Morrow pay in the SW quarter of Section 7, T23S, R30E. The surface location will be 685' FNL & 1295' FWL of Section 18, T23S, R30E. Plans are to vertically drill to approximately 7000', gradually build angle to a total of  $18\frac{1}{2}^{\circ}$ , then continue drilling toward target area consisting of a 400' radius circle whose center is 1315' FSL and 1320' FWL of Section 7 at a true vertical depth (TVD) of 13,500'. The directional hole should cross the common section line at an approximate depth of 9617' measured depth (MD) or 9514' TVD.

- 1. The geologic surface formation in series is Ochoan.
- 2. Estimated tops of geologic markers are as follows:

Lamar Lime 3268	<u>DEPTH</u> (TVD)
Cherry Canyon4865Brushy Canyon5450Bone Spring70503rd Bone Spring9950Wolfcamp10,250Strawn Carbonate12,127Atoka12,250Morrow13,100Morrow B-II13,350Miss. Shale13,850Tatal data13,850	3300 4865 5450 7050 9950 10,250 12,127 12,250 13,100 13,350 13,850

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

MD

Air			250 <b>'</b>
oil,	water,	gas	4850 <b>'</b>
gas			12,290'
gas			13,500'