APPLICATION FOR DRILLING

SUPERIOR OIL DELTA FEDERAL WELL #1 1980' FN&EL SEC. 7, T25S, R26E EDDY COUNTY, NEW MEXICO

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Superior Oil submits the following items of pertinent information in accordance with USGS requirements:

- 1. The geologic surface formation is Permian.
- 2. The estimated tops of geologic markers are as follows:

Delware	1520'
Bone Spring	5250'
Wolfcamp	8350'
Pennsylvanian	10,050'
Atoka	10,470'
Morrow	11,350'

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

Water:	Approximately 300' to 500'
	Capitan Reef above 1520'
Gas:	Atoka - Morrow 10,470-11,900'

- 4. Proposed casing program: See Form 9-331C and Exhibit F.
- 5. Pressure control equipment: See Form 9-331C and Exhibit E.
- 6. Mud Program: See Exhibit G.
- 7. Auxiliary equipment: See Exhibit H.
- 8. Testing, logging and coring programs:
 - A. Drill stem tests in Morrow near TD (All Dst's to be justified by a valid show of oil or gas):

Morrow: 11,500'

B. Logging:

Mud logging unit from 1570' ⁺ to TD Electric log program: 500' - 1570' ⁺ GR-BHC 1570' <u>+</u> - 12500' TD FDC-CNL, GR-BHC & DLL-MSFL

- Abnormal pressure is anticipated in the Atoka: 10,470 11,350'. No abnormal temperature.
- 10. Anticipated starting date: January 15, 1980.