APPLICATION FOR DRILLING

Mark D. Wilson Rocky Arroyo Federal 4 No. 1 Section 4-T22S-R22E Eddy County, New Mexico RECEIVED

FEB 21 1979

U.S. GEULUGICAL SURVEY ARTESIA, NEW MEXICO

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Mark D. Wilson submits the following items of pertinent information:

- 1. The geologic surface formation is the San Andres formation with a cover of alluvium.
- 2. The estimated tops of geologic markers are as follows:

Glorieta Ss.	1650
Yeso Fm.	1750'
Bone Spring Ls.	3100
3rd Bone Spring Sh.	4450
Wolfcamp	4615
Wolfcamp "Reef"	5186.
B. Wolfcamp "Reef"	6000
TD	6325'

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

Water: Lost circulation from the surface to 1650 feet. Position of water table not known. Formation water 3100'-3500' and 5660' to 6000'.
Oil: Glorieta-Yeso Fm. 1650' - 1950'.
Gas: Wolfcamp "Reef" 5466' - 5660'.

- 4. Proposed casing program: See Form 9-331C.
- 5. Pressure control equipment: See Exhibit B.
- 6. Mud program: See Form 9-331C.
- 7. Auxiliary equipment: Blowout Preventer, Inside Blowout Preventer, Kelley Cock.
- 8. Testing, logging and coring programs: No coring. Drill Stem Tests as as warranted. Logs: CNL-FDC; DIL. Mud logging unit will be at the location from intermediate casing to TD.
- 9. No abnormally high pressures or temperatures are anticipated. Lost circulation is anticipated from the surface to intermediate casing point.
- 10. Anticipated starting date: March 10, 1979 or sooner if possible.