APPLICATION

HARVEY E. YATES COMPANY Mesquite 34 Federal #1 Sec. 34 T-17S, R-31E Eddy County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill the Subject Well in Section 34, Township 17 South, Range 31 East, Eddy County, New Mexico, Harvey E. Yates Company submits the following ten items of pertinent information in accordance with U.S.G.S. requirements:

- 1. The geologic surface formation is quaternary alluvium and bolson deposits and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

Rustler	710'	2nd B. S. Sand	7680 '
	1710'	Base 2nd B.S. Sand	8380'
Cowden	2070'	3rd B. S. Sand	8650'
Yates			8925'
Seven Rivers	2460'	Wolfcamp	9750'
Bowers	2900'	Penn (Cisco)	
Oueen	3135'	Strawn	10800'
Grayburg	3560 '	Atoka	11060'
San Andres	4095 '	Atoka Limestone	11310'
Limestone Reef Facies	5310'	Morrow	11550 '
	7170'	Mississippian Limestone	12290'
lst B.S. Sand	1110	HEODEDDEFT-IN ENDING	

3. We do not anticipate finding water but have listed the formations in which we anticipate finding oil or gas.

Morrow 11550'

- 4. Proposed casing program: See Form 9-311C
- 5. Pressure control equipment: See Exhibit C
- 6. Mud Program: See Form 9-311C
- 7. Auxiliary equipment: Blowout preventer
- 8. Testing, logging and coring programs: Seven DST's: 2-Yates to San Andres, 2-Bone Spring, 1-Wolfcamp, 1-Strawn, and 1-Morrow. Planned logs are CNL and Gamma Ray from Surface to T.D.; Densilog and Dual Laterolog w/GR and Caliper from approximately 4000' to T.D. We are not planning to do any coring.
- 9. No abnormal pressures or temperatures are anticipated.
- 10. Anticipated starting Date: March 7, 1982.