Attachment to "Application for Permit to Drill" Form 9-331 C Nellis Federal Well No. 2, Unit 0, 660' FSL and 1980' FEL, Section 6, T-19-S, R-33-E, Lea County, New Mexico.

1. Location

See Attached Form C-102

2. Elevation

See Attached Form C-102

3. Geologic name of surface formation.

Unknown

4. Type of drilling tools and associated equipment to be utilized.

See Form 9-331 C

5. Proposed drilling depth.

See Form 9-331 C

6. Estimated tops of important geologic markers.

Delaware	-	5,200'	Strawn - 12,150'
Bone Springs	-	7,640'	Atoka - 12,520'
3rd Bone Springs	-	10,440'	Morrow - 13,200'
Molfcomp		10 0601	

7. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered.

Morrow - 13,200'

8. Proposed casing program including size, grade, and weight of each string and whether it is new or used.

Depth	<u>Size</u>	Weight	Grade	<u>New or Used</u>
400'	13-3/8"	48#	K-55 ST&C	New
5,000'	9-5/8"	32.3-36#	K-55 ST&C	New
13,700'	5-1/2"	15.5#	K-55 ST&C	New

9. Proposed cementing program.

13-3/8" casing - sufficient cement to circulate to surface. 9-5/8" casing - sufficient cement to circulate to surface. 5-1/2" casing - sufficient cement to tie back to 9-5/8" casing.

- 10. Blow Out Preventer Program is Attached
- 11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained.

0' - 400' - Native mud and water. 400' - 5,000' - Brine water and minimum properties to maintain good hole conditions.

5,000' - 12,400' - Fresh water, brine water, and minimum commercial products. 12,400' - TD - Fresh water, brine water, minimum commercial products, and KCL Testing, logging anti-coring⁴ programs to be followed with provisions made

for required flexibility.

400' - TD - Gamma Ray 5,000' - TD - GR-CNL-FDC-Caliper 5,000' - TD - Dual Laterolog-Micro SFL

- 13. Any anticipated abnormal pressures or temperatures expected to be encountered or potential hazards such as hydrogen sulfide gas, along with plans for mitigating such hazards.
 None anticipated.
- 14. Anticipated starting date and duration of operation. Start December 30, 1977. Complete February 13, 1978.
- 15. Other facets of the proposed operation, operator wishes to point out for the Geological Survey's consideration of the application.

None

12.