

Attachment to "Application for Permit to Drill", Form 9-331 C

Federal No. 2 - 1650' FNL. & 1650' FEL
Sec. 17, T22S, R37E, Lea County, New Mexico

1. Location

See attached Form C-102

2. Elevation

See attached Form C-102

3. Geologic name of surface formation

Quaternary

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

Base of Salt 2425'
Yates 2600'
Seven Rivers 2800'
Queen 3430'

Grayburg 3600'
San Andres 3780'

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

San Andres 3780'

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

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>New or Used</u>
700'	5½"	14#	J-55	New
200'	4" OD FJ	12.5#	J-55	New liner

9. Proposed cementing program

5 1/2" Casing - Sufficient cement to circulate to surface.

4" OD Liner - 75 sacks of cement.

10. Blowout 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.

Surface to 3900' - Brine water with sufficient commercial mud to maintain good hole conditions.

12. Testing, logging and coring programs to be followed with provisions made for required flexibility.

Surface to total depth - GR, CNL

13. Any anticipated abnormal pressure 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.

Commence re-entry - 9/15/80

Complete operations - 10/1/80

15. Other facets of the proposed operation operator wishes to point out for the Geological Survey's consideration of the application.

None.