

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

Terra Resources, Inc., Carlson B-13, #8
990' ENL and 990' FEL of Sec. 13, T-25S, R-37E
Lea County, New Mexico

1. Geological name of surface formation: Tertiary
2. The estimated tops of important geological markers:

A. Rustler 1114'	D. Yates 2821'	G. Grayburg 3696'
B. Salt 1205'	E. Seven Rivers 3134'	H. Tubbs 5650'
C. Tansil 2660'	F. Queens 3496'	I. Drinkard 6000'
3. The estimate depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered.

A. Fresh or brackish water - 90 to 900'
B. Gas - 2660 to 3100'
C. Oil - 3100 to 3700'
D. Oil and/or Gas - 5650 to 5700'
E. Oil - 6000 to 6300'
4. The proposed casing program is shown on Form 9-331 C
5. The operator's minimum specifications for pressure control equipment and proposed hook up is shown on attached schematic. A drilling head will be used to drill the surface hole.
6. The type and characteristics of the proposed circulating medium to be employed for rotary drilling, and the quantities and types of mud and mud weight to be maintained are shown on Form 9-331 C.
7. The auxiliary equipment to be used will be a sub on the floor with a full opening valve to be stabbed into the drill pipe when the kelly is not in the string.
8. Open hole logs will be run after reaching total depth. No testing or coring is anticipated.
9. Abnormal pressure may be encountered from surface to Santa Rosa formation and a drilling head will be in use.
10. Anticipated starting date will be immediately after approval of application. Drilling and completion will be approximately 28 days duration.

RECEIVED
JUL 10 1978
CONSERVATION COMMISSION
HONOLULU, H. I.