

NOVEMBER 20, 1996
APPLICATION FOR PERMIT TO DRILL
STEVENS & TULL, INC.
FEDERAL "24" NO. 2

660' from the south line. 1980' from the west line. Section 24, T-20-S, R-38-E, Lea County, New Mexico.

The following items and attachments compliment Stevens & Tull, Inc.'s permit to drill the Federal "24" No. 2.

- 1) The geologic surface formation is of Quaternary Age.
- 2) Estimated tops of geologic markers are as follows:
Yates - 3000', Seven Rivers - 3160', San Andres - 4300',
Blaine - 6030', Tubb - 6600', Drinkard - 6860',
ABO - 7150'.
- 3) The estimated depths at which water is expected are between 150' and 500'. The estimated depths which oil or gas is expected is between 2900' thru 7800'. Yates - Gas, Seven Rivers - Gas, San Andres - Oil, Blaine - Oil, Tubb - Oil, Drinkard - Oil, ABO - Oil. Fresh water zones will be protected with independent casing and cement.
- 4) Red beds and fresh water will be protected with 8 5/8"-24#-J-55, LT&C casing run to a good shoe setting depth at approximately 1600' with centralizers and adequate cement to circulate to the surface. The Oil Sands will be protected with 5 1/2"-17#, J-55 LT&C casing run to a total depth of the well and cemented with adequate amounts to cover the top of the Yates Formation estimated at 3000'.
- 5) Pressure control, see the attached sketch.
- 6) Mud program, see the Horizon Mud Company recommendation attached.
- 7) There is no planned auxiliary equipment.
- 8) Open hole logs will be run from total depth to surface. No cores or DTS's are planned.
- 9) No abnormal temperatures or pressures are expected. No lost circulation is expected.
- 10) The anticipated starting date is January 15, 1997.