

NOVEMBER 12, 1992
APPLICATION, FOR PERMIT TO DRILL
STEVENS & TULL, INC.
FEDERAL "9" NO. 4

330' from the north line. 990' from the west line. Section 9, T-20-S, R-33-E, Lea County, New Mexico.

The following items and attachments compliment Stevens & Tull, Inc.'s permit to drill the Federal "9" No. 4.

- 1) The geologic surface formation is of Quaternary Age.
- 2) Estimated tops of geologic markers are as follows: The anhydrite 1325', salt, 3050', Yates 3250'.
- 3) The estimated depths at which water is expected are between 150' and 350'. The estimated depths which oil or gas is expected is between 3200' and 3600' in the Yates dolomite and sand formations. 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# and 32# J-55 ST&C casing run to a good shoe setting at approximately 1300' with 13 centralizers and cement to surface. Anhydrite, salt and 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 back to 100' inside the 8 5/8" casing shoe. *→ circulate cmt.* SOS
- 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 August 1, 1992.