APPLICATION FOR DRILLING

Robert E. Landreth Reno Federal Com. No. 1 1200' FNL and 1200' FWL Section 11, T-25-S, R-35-E Lea County, New Mexico

The operator proposes to re-enter this well, drill out plugs and complete in the Morrow sands that previously produced.

In conjunction with Form 3160-3, Application for Permit to Drill or Re-enter subject well, Robert E. Landreth submits the following items of pertinent information in accordance with BLM requirements:

- (1) The geologic surface formation is Quaternary sands.
- (2)The estimated tops of geologic markers are as follows: Delaware Sand 5,182 Strawn 13,248 Bone Springs 8,782 Atoka Lime 13,647 3rd Bone Springs Sand 11,747 Morrow 14,618 Wolfcamp 12,004 Barnett 16,304
- (3) The estimated depths at which anticipated water, oil and gas formations are expected to be encountered:

Water: Approximately 300'

Oil: Possible in Bone Springs Lime – 11,660'

- Gas: Morrow 15,246'
- (4) Proposed Casing Program: (Existing) See Exhibit "A"
- (5) Pressure control equipment: See Exhibit "B" An 11" 10,000 psi WP BOP will be installed on the 10³/₄" casing. The casing and BOP will be tested before drilling out cement plugs. The BOP will be tested daily.
- (6) Mud Program: See Exhibit "C"
- (7) Auxiliary Equipment: Blowout Preventor and Choke Manifold, Kelly Cock and a full opening drill pipe stabbing valve. A pit volume totalizer system will not be used. The drilling fluids system will be visually monitored.
- (8) Testing, Logging, and Coring Program: Drill Stem Tests: Possible in the Morrow Electric Log Program: None Planned Coring: None planned
- (9) Abnormal Conditions, Pressures, Temperatures and Potential Hazards: No abnormal pressures or temperatures are anticipated. The only planned completion attempt will be in the Morrow. The Reno Federal Com. No. 1 produced the Morrow to depletion with the last reported production being in December 1988. A 96-hour shut-in pressure of 2800 psi was recorded in September 1987. The proposed mud program and BOP equipment will be adequate to handle any pressure that is encountered. The maximum Anticipated bottom hole temperature is 200°F. No hydrogen sulfide or other hazardous gases are anticipated based on the drilling and production history of this well.