APPLICATION TO DRILL

ARCH PETROLEUM, INC. C.E. LAMUNYON # 75 UNIT "N" SECTION 22 T23S-R37E LEA CO. NM

12. TESTING, LOGGING, & COREING PROGRAM:

- A. Open hole logs: Dual Induction, CNL, Density, Gamma Ray, Caliper from TD to 3000'.
- B. Run Gamma Ray, Neutron from 3000' to surface.
- C. Place mud logger on hole at 3000' and continue to TD.
- D. No cores of DST's are planned at this time, but may be run at the discression of Geologist.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H_2S detectors will be in place to detect any presence of unsafe levels of H_2S . No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operations of all equipment that will be used. Estimated BHP 4500 PSI & estimated BHT 165°

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Roads and location construction will begin after the BLM approves the APD. Anticipated spud date will be as soon as pad & road construction has been completed. Drilling time for the well is estimated to take <u>30</u> days. If production casing is run an additional <u>25</u> days will be required to complete well and construct surface facilities.

15. OTHER FACETS OF OPERATION:

After running production casing, cased hole Gamma-Neutron & Collar logs will be run over all possible pay intervals. If commercial production from the <u>Simpson</u> pay is indicated it will be perforated and stimulated. Then if necessary the pay will be swab tested and completed as an Oil well.