

11. PROPOSED CIRCULATING MEDIUM: Mud will be used for the circulating medium for all depths in this well. The following mud properties will be maintained:
0-1200' Fresh water based native mud, mud weight 8.5 to 10.0 lb/gal, viscosity 32 to 45 seconds.
1200'-3200' Brine water with lime for Ph control (9.5 to 10.0).
3200'-T.D. Brine water and gel. Mud weight 10.0 to 10.3 lb/gal, viscosity of 33 to 34, water loss of 20 cc or less.
12. TESTING, LOGGING AND CORING PROGRAMS:
 - a. Testing - all testing will be commenced after the well is drilled and casing has been set and cemented.
 - b. Logging - at total depth the following logs will be run:
0 - 3700' Sidewall Neutron Porosity with gamma ray, caliper and "F" curve.
2700' - 3700' Dual Laterolog with Ro curve.
 - c. Coring - none anticipated.
13. POTENTIAL HAZARD: No abnormal pressure or temperature zones are anticipated. Hydrogen sulfide is not expected to be a problem, however, the drilling rig will be so situated as to allow all gas vapors to be expelled away from all personnel gathering sites and engine exhausts.
14. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS: December 1, 1978 road and location to be constructed, December 10, 1978 drilling rig to spud well. January 3, 1979 pulling unit to complete well. February 1, 1979 well to be potentialied.
14. OTHER FACETS of OPERATION: After running 4½" casing, cased hole gamma-ray collar correlation logs will be run from 2150' to 3650'. The Queen zone will be perforated and acidized with an estimated 5000 gallons of 15% HCL acid. The well will be tested by swabbing and if necessary a hydraulic fracturing job of an estimated 60,000 gal. of water with 90,000 lbs. of sand will be employed. The well will be swab tested again and a pumping unit will be installed to potential and produce the well.