

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling below surface casing will be a 3000 psi working pressure BOP stack. The BOP sketch is shown as Exhibit 1.

6. CIRCULATING MEDIUM:

Surface to 500': Fresh water spud mud: viscosity 30 to 33 as required for hole cleaning, 8.5-8.8#/gal.

500' to 1650': Fresh water with lost circulation material as required, 28-30 viscosity, pH 9-10, weight 8.5-8.8#/gal.

1650' to TD: 10# brine system circulating reserve pit. Weight 9.5-10#, pH 9-10, viscosity 30-36, with mud sweeps as required. Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- A. An upper kelly cock will be used.
- B. The drilling fluids system will be visually monitored at all times.
- C. A mud-logging unit will monitor drilling penetration rate and hydrocarbon shows from somewhere below the intermediate casing. (tentative)

8. TESTING, LOGGING, AND CORING PROGRAMS:

- A. No drill stem tests are planned.
- B. Compensated Neutron/LDT Log - GR and Dual Laterolog w/ MSFL. The Gamma Ray Log will be continued back to surface.
- C. Mud-logging unit will be used below 2700'.
- D. A set of sidewall cores is anticipated.
- E. Other testing procedures may be used after the production casing has been set depending on shows and other testing indicators.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES, & POTENTIAL HAZARDS:

No abnormal pressures or temperatures are anticipated. The estimated bottom-hole temperature (BHT) at TD is 90F and the estimated maximum bottom hole pressure (BHP) is about 1400 psi. No hydrogen sulphide (H<sub>2</sub>S) or other hazardous fluids are known to exist at this depth and area. No lost circulation zones are anticipated.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

It is planned that operations will commence shortly after approval of this application, with drilling and completion operations lasting about 30 days. A decision as to design and installation of permanent facilities will be made after adequate testing of the well.