Application for Drilling Sink Fed Well #1 Page 3

## 5. CIRCULATING MEDIUM

- 0 350' Spud with fresh water gel mud floculated with lime. Pretreat with 8# per bbl hulls, 3# per bbl fiber, 1# per bbl paper for possible loss zone from 100' to 200'. If necessary to blind drill to 350' TD, mix 150 bbls viscous mud with 12 to 15# per bbl LCM and spot on bottom before running casing.
- 350 1550' Drill out with fresh water, through controlled section of reserve pit. Add paper and fiber for seepage as needed. When hole is completed, flush hole with 150 bbls viscous fluid with 4 to 6# LCM per bbl before running casing.
- 1600 7000' Drill with fresh water. Use paper and sea mud as needed for seepage and hole seep. Maintain 10 pH. Good possibility of encountering lost returns beginning at 2700'.
- 7000 8300' Return to steel pits and mud up with 35 to 40 sec/1000 cc viscosity. Lower WL to 10 cc or less and add 3% KCL.
- 8300 TD Maintain viscosity 35 to 40 sec/1000 cc, WL 6 cc or less, 3% KCL and 10 pH with caustic.
- 6. TESTING, CORING, AND LOGGING PROGRAMS:
  - a. One set of washed samples with logged depth will be caught each 10' from bottom of 8-5/8" casing, tied in 100' bundles and stored in a clean, dry location at the rig.

b.	Possible	drill	stem	tests	-	Glorietta	2725'-2825'
						Strawn	7925'-8125'
						Atoka	8325'-8375'
						Morrow	8400'-8425'

- c. Mud logging from 6000' to TD
- d. Logging: (1) GR Neutron surface to TD
  (2) Density approximately 1550' to TD
  (3) Dual LL/RXO approximately 1550' to TD
- Maximum anticipated bottom hole pressure is 3300 psi at approximately 8500' based on offset well data. Mud weight required to offset this pressure is 7.5 ppg. Bottom hole temperature approximately 130° F. No sour gas is expected.
- 8. Anticipated starting date: As soon as possible after approval, with completion of drilling operations approximately 30 days thereafter. Completion operations (perforating and stimulating) will immediately follow the drilling operations.