

18,300' - 22,500'

Weight: 8.9 - 9.2
Viscosity: 30 - 32
Filtrate: 10 - 20
ph: 9 - 11

Will drill out from under 7-3/4" liner with fresh water adding brine water to raise weight. Ph will be closely monitored to determine presence of any H₂S in Fusselman and/or Ellenburger formations. H₂S detection equipment will be utilized while drilling this interval of the well.

6. Ten (10) foot drilling samples will be caught from the base of the first intermediate casing (Delaware - 5300') to total depth.

7. Testing, Coring and Logging Programs:

- (a) Twenty four (24) hour mud logging operations will commence at 5300' and continue for the remainder of the well.
- (b) No coring or drill stem testing is planned.
- (c) Electric Logging:

BHC Sonic/GR	5,300' - 1,100'
DLL-MSFL/SP/GR	13,000' - 5,300'
GR/CNL-LDT	13,000' - 5,300'
BHC Sonic/GR	13,000' - 5,300'
DIL-SFL/SP/GR	18,300' - 13,000'
GR/CNL-LDT	18,300' - 13,000'
BHC Sonic/GR	18,300' - 13,000'
DIL-SFL/SP/GR	22,500' - 18,300'
GR/CNL-LDT	22,500' - 18,300'
BHC Sonic/GR	22,500' - 18,300'
Dipmeter	22,500' - 18,300'

8. Abnormal pressures (gradient greater than 0.5 psi/ft.) are expected in the Lower Pennsylvanian formations - Strawn, Atoka, Morrow.
9. The Fusselman and Ellenburger formations may contain Hydrogen Sulfide gas. H₂S detection, monitoring and safety equipment will be on location and operational prior to drilling out from under 7-3/4" liner at 18,300'. See attached H₂S Contingency and Evacuation Plan.
10. Auxiliary Equipment:
Prior to drilling out from under the 9-5/8" casing at 13,000 feet the following pressure detection and gas handling equipment will be installed and operational--
Flo-Sho, PVT System, Mud Gas Separator, Hydraulic Chokes, Full Opening Safety Valves, Degasser, Drill Scan, U&L Kelly Valves, D.P. Float Valve, Inside BOP.
11. Blowout Preventers and Associated Equipment:
- (a) Surface to 1100' - None
 - (b) 1100' to 5300' - 2,000 psi W.P.
 - 2 - 20" Rams
 - 1 - 20" Hydril MSP
 - 1 - Rotating Head