

9. Casing Setting Depth and Cementing Program:
- Surface casing will be 10-3/4" casing set at 1800' and cemented with 1100 sacks of lightweight cement plus 200 sacks of Class "C" Neat cement with 2% CaCl₂.
 - Intermediate casing will be 7-5/8" set at approximately 8600' and cemented with 625 sacks Class "C" cement with a .5% friction reducer and 1/4# flocele per sack for estimated top of cement 6000'.
 - Production casing will be a 5" liner set from 8600' to 11700', cemented with Class "H" cement with 1.0% friction reducer and .5% Halad-9. Cement volume will be determined from caliper log.
10. Pressure Control Equipment: The minimum specifications for pressure control equipment can be seen on the attached Drawing No. 4 of Gulf's blowout preventer hook-up for 5000 psi working pressure.
11. Circulating Media:
- | | |
|-------------------|---|
| 0' - 1,800' | Fresh water spud mud |
| 1,800' - 8,600' | Brackish water with brine water as needed to increase weight; polymer as required for samples and DST's |
| 8,600' - 11,000' | Brine water polymer with 3-4% KCL; weight adjusted upwards from 10 ppg as well conditions dictate; viscosity minimum; filtrate 10-15 cc's |
| 11,000' - 11,700' | Brine water polymer as above; filtrate, 4 cc's or less |
12. Testing, Logging and Coring Programs:
- Formation testing may be done at any depth where samples, drilling rate or log information indicate a possible show of oil or gas.
 - Open hole logs will be run at total depth.
 - No cores are anticipated.
13. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas: We do not anticipate any abnormal pressure or temperature; however, BOP's with remote control and choke manifold as shown on Drawing No. 4 will be installed prior to drilling below surface casing.
- The presence of hydrogen sulfide gas is not anticipated.
14. Anticipated Starting Date: Drilling operations should begin approximately September 30, 1980
15. Other Facets of the Proposed Operation: None

Yours very truly,


R. C. ANDERSON