

September 11, 1981

9. Casing Setting Depth and Cementing Program:
- Surface casing will be 10-3/4" casing set at 1800' and cemented with 1200 sacks lightweight cement plug 500 sacks Class "C" neat with 2% CaCl₂ circulated.
 - Intermediate casing will be 7-5/8" set at 8600' and cemented with 200 sacks 16% gel Gulfmix and 200 sacks Class "C" neat for estimated top of cement 6000'.
 - Production casing will be a 5" liner set at 11,950' and cemented with Class "C" cement with 1.5% Halad 9 & .2% CFR-2. 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 #4 of Gulf's blowout preventer hook-up for 5000 psi working pressure.
11. Circulating Media:
- | | |
|-------------------|--|
| 0' - 1,100' | Fresh water spud mud; |
| 1,100' - 1,800' | Brine system; |
| 1,800' - 8,600' | Fresh water; |
| 8,600' - 10,200' | Brine water polymer with 3-4% KCL;
weight adjusted upwards from 10 ppg
as well conditions indicate, viscos-
ity minimum, filtrate 10-15 cc's; |
| 10,200' - 11,950' | Salt water polymer 10.0 weight, 33 vis,
10cc water loss-lowered to 4cc at 11,200'. |
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 #4 will be installed prior to drilling below surface casing.
- The presence of hydrogen sulfide is not anticipated.
14. Anticipated Starting Date: Drilling operations should begin approximately November 5, 1981.
15. Other Facets of the Proposed Operation: None

Yours very truly,

R. C. ANDERSON
Area Production Manager