

9. The proposed casing program is as follows:

Surface: 13-3/8" 48# H40 ST&C new casing set at 400'
Intermediate: 9-5/8" 36# HCK/K55 ST&C new casing from 0-4500'
Production: 5-1/2" 17# L80/S95 LT&C new casing from 0-12400'
L80-8800' S95-3600'

10. Casing setting depth and cementing program:

- A. 13-3/8" surface casing set at 400' in 17-1/2" hole.
Circulate cement with 160sx 35:65 POZ/C w/ 6% Bentonite + 2% CaCl_2 + .25#/sx Cello-Seal followed by 200sx Class C w/ 2% CaCl_2 .

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2% CaCl_2 .

- B. 9-5/8" intermediate casing set at 4500' in 12-1/4" hole.
Circulate cement with 800sx 35:65 POZ/C w/ 6% Bentonite + 2% CaCl_2 + .25#/sx Cello-Seal followed by 200sx Class C w/ 2% CaCl_2 .

If hole conditions dictate, a DV tool may be run to ensure that the intermediate string is cemented to surface.

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2% CaCl_2 .

Note: Cement volumes may be adjusted according to fluid caliper.

- C. 5-1/2" production casing set at 12400' in 8-3/4" hole.
Cement with 1200sx 15:61:11 POZ/C/CSE w/ .5% FL-25 + .5% FL-52 + 8#/sx Gilsonite followed by 100sx Class C w/ .7% FL-25.

Estimated top of cement is 6500'.

Note: Cement volumes may need to be adjusted to hole caliper.

11. Pressure Control Equipment

0-400'	None
400-4500'	13-3/8" 3M annular preventer, to be used as divertor only. Exhibit A
4500-12300'	11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 8500'. Exhibit A.