HOLE PROGNOSIS CORSAIR 27 FEDERAL #5 PAGE 2

4. Casing Program:

Hole Size	Interval	OD Csg	Weight, Grade, JT. Cond, Type
17 ½"	0-600'	13 3/8"	48#, H-40, ST&C
11"	0-4700'	8 5/8"	24# & 32#, J-55, S-80, LT&C
7 7/8"	0-TD	5 ½"	17# J-55, N-80 LT&C

5. Cementing Program:

Surface Casing:	13 3/8" casing will be set at approximately 600' and cemented with approximately 650 sacks of Premium Plus cement with 2% CaCl and additives. The amount may be adjusted depending upon the fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.
Intermediate Casing:	8 5/8" casing will be set at approximately 4700' and cemented with approximately 1500 sacks of 35/65 Poz "c" with additives. The amount may be adjusted dependent upon fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.
Production Casing:	If appropriate, 5 ½" casing will be set at Total Depth. Echo will utilize cement in sufficient quantities to tie back 600' above any Delaware pay. Well will be cemented w/appropriate number of sacks of 50/50 POZ 'H' w/ additives and 100 sacks of 'C' Neat.