

IV. A. Proposed Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>Csg OD</u>	<u>Weight Grade Jt.</u>
17 1/2"	0 - 400'	13 3/8"	48# H-40, 8rd, STC
12 1/4"	400'-2650'	9 5/8"	36# J-55, 8rd, STC
8 3/4"	2650'-11250'	7"	26# & 29# N-80, 8rd, LTC
6"	11250'-12750'	4 1/2"	11.6# N-80, 8rd, LTC

13 3/8" Surface

<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Jt.</u>	<u>Pc</u>	<u>Pb</u>	<u>Tensile</u>
0-400'	48#	H-40	STC	770 psi	1730 psi	322,000#
<u>Depth</u>	<u>SF (Pc)</u>	<u>SF (Pb)</u>	<u>SF (Ten)</u>			
0-400'	3.8	8.6	16.8			

9 5/8" Intermediate

<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Jt.</u>	<u>Pc</u>	<u>Pb</u>	<u>Tensile</u>
400'-2650'	36#	J-55	STC	2020 psi	3520 psi	394,000#
<u>Depth</u>	<u>SF (Pc)</u>	<u>SF (Pb)</u>	<u>SF (Ten)</u>			
400'-2650'	1.5	2.7	4.1			

7" Intermediate

<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Jt.</u>	<u>Pc</u>	<u>Pb</u>	<u>Tensile</u>
0'-2000'	29#	N-80	Butt.	7020 psi	8160 psi	676,000#
2000'-8500'	26#	N-80	LTC	5401 psi	7240 psi	519,000#
8500'-11250'	29#	N-80	LTC	7020 psi	8160 psi	597,000#
<u>Depth</u>	<u>SF (Pc)</u>	<u>SF (Pb)</u>	<u>SF (Ten)</u>			
0' - 2500'	7.0	8.1	2.2			
2500'-8500'	1.3	1.7	2.0			
8500'-11250'	1.2	1.4	7.5			

4 1/2" Production Liner

<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Jt.</u>	<u>Pc</u>	<u>Pb</u>	<u>Tensile</u>
10900'-12750'	11.6#	C-95	LTC	7010 psi	9240 psi	234,000#
<u>Depth</u>	<u>SF (Pc)</u>	<u>SF (Pb)</u>	<u>SF (Ten)</u>			
10900'-12750'	1.10	1.45	--			

B. Proposed Cement Program:

13 3/8" Surface

Cement to surface with 450 sx Class "C" + additives

9 5/8" Intermediate

Cement to surface with 550 sx 35:65 Poz "C" + additives & 200 sx Class "C"