

CASING PROGRAM

ROBERTS & CO. O. S. C.

AUG 24 8 14 AM '64

We propose to use the following strings of Casing and to cement them as indicated:

Size of Hole	Size of Casing	Weight per foot	New or Second Hand	Depth	Sacks Cement
15"	11-3/4"	22, 23.72 31.20	New	950'	600 *
10-5/8"	8-5/8"	24 & 32	New	3900'	700 **
7-7/8"	4-1/2"	11.6	New	11,500'	300 ***

* 400 Sacks Class "C" 4% gel, followed by 200 sacks Class "C" Neat. Cement to circulate.

** Set stage collar at approx. 2800. Cement 1st. stage with 300 sacks Class "C" 8% gel, followed by 150 sacks. Class "C" Neat. Cement 2nd. stage with 150 sacks 8% gel, plus 100 sacks Class "C" Neat.

*** Externally clean casing & install centralizers 11000 TD. Cement with 300 sacks Class "C" 4% gel, containing retarder & friction reducing agent to obtain turbulent flow. Displace with acetic acid.

FORMATION TOPS EXPECTED

Anhydrite	940'
Yates	2560'
Delaware Mt.	4700'
Bone Spring	7180'
Wolfcamp Lime	10420'
Strawn	11140'
Total Depth	11500'