

CASING PROGRAM

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
12-1/2"	12-3/4"	35.62	New	350	400 / accelerator (Circ. cem)
12-1/2"	12-5/8"	36 & 40	New	4800	1700*
8-1/2"	2-7/8" (Abo)	1.5	New	#10,200	**
8-1/2"	2-7/8" (WC)	1.5	New	#10,200	**
8-1/2"	2-7/8" (Penn.)	1.5	New	#10,200	**

Setting depths of Abo and Wolfcamp strings may be shortened after logging.

* 1500 sacks Class "C", 8 1/2 gal, plus 200 sacks Class "C" Neat. Should be into surf. csg.

** Cementing program to be determined after csg. setting depths selected. Tentative program is to set Penn. string TD and Abo & Wolfcamp strings @10,000'. Coat with Epoxy & sand as follows: Penn. string 10,000'-10,150'; Abo & Wolfcamp strings 10,000' - 10,040' & 50' above and below top of Wolfcamp. Cement down long string w/400 sacks Class "C". 2 1/2 gal. w/friction reducing agent, then down all 3 strings w/1400 sx. Class "C". 8 1/2 gal, followed by 600 sx. Class "C". 2 1/2 gal. Displace cement in each string w/acetic acid. Use centralizers & scratchers over all pays.

FORMATION TOPS EXPECTED

San Andres	4485'
Glorieta	5805'
Blaine (Mkr.)	7535'
Tubb	7255'
Abo	7803'
Wolfcamp	9240'
L. Wolfcamp	9795'
T. Penn.	10,010'
Total Depth	10,200'