

Permit Information:

Well Name: Hunter 21 State Com No. 604H

Location:

SL: 200' FNL & 2333' FWL, Section 21, T-23-S, R-35-E, Lea Co., N.M.

BHL: 2410' FNL & 2587' FEL, Section 28, T-23-S, R-35-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,570'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0' - 4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000' - 5,400'	9.625"	40#	HCK55	LTC	1.125	1.25	1.60
8.75"	0' - 18,964'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
1,570'	850	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	550	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,400' DV Tool w/ ECP @ 4,400'	940	12.7	2.37	Stage 1 Lead: Class C + 5% Gypsum + 30 pps SFA + 0.4% CPT-503P + 3.5% CPT-45 + 0.25% CPT-35 + 0.85% CPT-20 + 0.85% Citric Acid (TOC @ Surface)
	200	14.8	1.37	Stage 1 Tail: Class H + 0.2% CPT-51 + 0.3% CPT-20
	1750	12.7	2.37	Stage 2 Lead: Class C + 3% Salt + 0.6% Gel + 0.5% CPT-45 + 0.1% CPT-20 + 0.1% Citric Acid (TOC @ Surface)
	200	14.8	1.37	Stage 2 Tail: Class C + 0.2% CPT-19
18,964'	800	14.4	1.34	65:35 Class H + 0.2% C-20 + 0.75% C-41P + 0.05% CSA-1000 + 5% MagOx + 0.35% C-47B (TOC @ 4,900')

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,570'	Fresh - Gel	8.6-8.8	28-34	N/c
1,570' - 5,400'	Brine	8.7-9.4	58-68	N/c - 6
5,400' - 18,964' Lateral	Oil Base	9.0-11.5	58-68	N/c - 6