

Revised Casing program 5/31/12  
Hilcorp State 14-9-16CH

Total Measured Depth (MD)	Hole Diameter	Casing Diameter	Casing Weight And Grade	Cement
0' - 40'	24"	20"	Conductor Casing	Redimix to surface
Surface 0' - 2,000'	17-1/2"	13-3/8"	K-55 54.5 lbm/ft	Lead: +/- 870 sks Swiftcem B2 Tail +/- 410 sks Swiftcem B2*
Intermediate 0' - 6,710'	12-1/4"	9-5/8"	K-55 36 lbm/ft	Lead +/- 530 sks Extendacem Tail +/- 560 sks Extendacem**
Horizontal Production 0' - 10,829'	8-1/2"	5-1/2"	HCP 110 20 lbm/ft	Lead +/- 1040 sks Expandacem**

\* Cement volume calculated based on gauge hole plus 100%.

\*\* Cement volume calculated based on gauge hole plus 35%.

Yields:	Surface:	Lead: Swiftcem B2 =	2.42 ft <sup>3</sup> /sk (12.0 ppg)
		Tail: Swiftcem B2 =	14.36 gal/sk 1.72 ft <sup>3</sup> /sk (13.5 ppg) 9.09 gal/sk
	Intermediate:	Lead: Extendacem =	2.03 ft <sup>3</sup> /sk (11.8 ppg)
		Tail: Extendacem =	11.08 gal/sk 1.69 ft <sup>3</sup> /sk (12.5 ppg) 8.54 gal/sk
	Production:	Lead: Extendacem =	1.67 ft <sup>3</sup> /sk (13.8 ppg) 7.75 gal/sk