



Section	Total Depth ft	Cement Coverage ft	OH	Excess	OH Volume (ft <sup>3</sup> /ft)	OH Volume (ft <sup>3</sup> )	OH Volume (ft <sup>3</sup> ) with Excess	Min # Sks of cement	
Plug Back	4600	1600	12-1/4"		0.8185				Spacer we can discuss, I plan to set plugs back to back after waiting TT on stage 1 plug back
Stage 1 Plug back	TOC								
Spacer	3621	179	12-1/4"	15%	0.8185	146.5	168.5	0	
cement	3800	800	12-1/4"	15%	0.8185	654.8	753.0	655	
Stage 2 KOP	TOC								
Spacer	2821	179	12-1/4"	15%	0.8185	146.5	168.5	0	
cement	3000	800	12-1/4"	15%	0.8185	654.8	753.0	761	

Stage 1 Spacer	Tuned Spacer III, Baroid 175.4lb/bbl+0.125 Gal/bbl D-Air, 35.35 gal/bbl Fresh water		
Density	11	33.1 gal/bbl Mix water	993.2566 Min gal Mix water
<b>Total Spacer</b>	<b>30.0 bbls</b>		
Stage 1 Plugback	HALCEM (TM) SYSTEM-0.6 % HR-5 + 0.1 % CFR-3+35%SS-200 , 6.2 Gal/sack(water)		
Density	15.8 ppg	13.24 gal/sk Mix water	8670 Min gal Mix water
Yield	1.15 ft <sup>3</sup> /sk		
<b>Total Tail sks</b>	<b>655 sks</b>	<b>134.1 bbls</b>	<b>753.0 ft<sup>3</sup>/sk</b>
Stage 2 Spacer	Tuned Spacer III, Baroid 175.4lb/bbl+0.125 Gal/bbl D-Air, 35.35 gal/bbl Fresh water		
Density	11 ppg	33.1 gal/bbl Mix water	993 Min gal Mix water
<b>Total Spacer</b>	<b>30.0 bbls</b>		
Stage 2 KOP	HALCEM (TM) SYSTEM-0.6 % HR-5 + 0.1 % CFR-3+35%SS-200 , 6.2 Gal/sack(water)		
Density	17 ppg	3.8 gal/sk Mix water	2890 Min gal Mix water
Yield	0.99 ft <sup>3</sup> /sk		
<b>Total Tail sks</b>	<b>761 sks</b>	<b>134.1 bbls</b>	<b>753.0 ft<sup>3</sup>/sk</b>