B. Proposed Cement Program (Continued):

CASING	LEAD SLURRY	TAIL SLURRY	DISPLACEMENT			
5 1/2"	565 sacks (35:65) Poz (Fły	250 sacks Class C Cement + 3%	100.2 bbls Fresh			
	Ash): Class C Cement + 5	bwow Potassium Chloride	Water @			
	lbs/sack Sodium Chloride +	+0.2% bwoc CD-32 + 0.6%	8.33 ppg			
	0.003 gps FP-6L + 6% bwoc	bwoc FL-62 + 0.2% bwoc				
	Bentonite + 99% Fresh Water;	Sodium Metasilicate + 56.6%				
	1091 Vol. Cu Ft	Fresh Water				
	1.93 Vol. Factor	338 Vol. Cu Ft				
	Shurry Weight (ppg) 12.7	1.35 Vol. Factor				
	Shurry Yield (cf/sack) 1.93	Slurry Weight (ppg) 14.8				
	Amount of Mix Water (gps)	Slurry Yield (cf/sack) 1.35				
	10.33;	Amount of Mix Water (gps)				
	Amount of Mix Fluid (gps)	6.38;				
	10.33;	Amount of Mix Fluid(gps) 6.38;				
	Estimated Pumping Time – 70	Estimated Pumping Time – 70				
	BC (HH:MM)-3:00;	BC (HH:MM)-2:30;				
	Free Water (mls) @ 98 Deg. F	Free Water (mls) @ 98 Deg. F				
	@ 90 Deg. Angle: 1.8;	@ 90 Deg. Angle: 0.0;				
	Fluid Loss (cc/30 min) at 1000	Fluid Loss (cc/30 min) at 1000				
	psi and 98 Deg. F:	psi and 98 Deg. F: 300.0				
	950.0	Compressive Strength:				
	Compressive Strength:	12 hrs @ 106 Deg. F (psi) 1200				
	12 hrs @ 106 Deg. F (psi) 280	24 hrs @ 106 Deg. F (psi) 1800				
	24 hrs @ 106 Deg. F (psi) 375	72 hrs @ 106 Deg. F (psi) 2300				
<u> </u>	72 hrs @ 106 Deg. F (psi) 900					
5 1/2" Casing: Volume Calculations:						

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5 ⁴ / ₂ " Casing: Volume Calculations:							
400 ft	х	0.1926 cf/ft	with	0% excess	=	77.0 cf	
3150 ft	х	0.1733 cf/ft	with	86% excess	=	1015.4 cf	
700 ft	x	0.1733 cf/ft	with	174% excess	=	332.5 cf	
80 ft	х	0.1336 cf/ft	with	0% excess	=	10.7 cf (inside pipe)	
		TOTAL SLU	RRY V	OLUME	=	1435.6 cf	

All slurries will be tested prior to loading to confirm thickening times and a lab report furnished to Apache. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.

255 bbls

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