

Test Matrix Key	
Complete	
In Progress	
Incomplete	
Unnecessary	

48-foot Trailer			
Front \ Bottom	Baseline Model	Hopper Bins	Possum Belly
No Nose Cone	Cd = 0.7042	Cd = 0.6807	Cd = 0.6576
Nose Cone	Cd = 0.6520	Cd = 0.6188	Cd = 0.5954
Bull Nose	Cd = 0.5573	Cd = 0.5339	Cd = 0.5063

A-Train Trailer		
4.47" Length		
Pup \ Lead	No Nose Cone	Nose Cone
No Nose Cone	Cd = 0.8942	
Nose Cone		Cd = 0.7994

A-Train Trailer		
5.26" Length		
Pup \ Lead	No Nose Cone	Nose Cone
No Nose Cone	Cd = 0.7986	
Nose Cone		Cd = 0.6010

A-Train Trailer		
6.67" Length		
Pup \ Lead	No Nose Cone	Nose Cone
No Nose Cone	Cd = 0.8243	
Nose Cone		Cd = 0.6835

A-Train Trailer		
7.45" Length		
Pup \ Lead	No Nose Cone	Nose Cone
No Nose Cone	Cd = 0.8436	
Nose Cone		Cd = 0.7800

A-Train Trailer		
9.02" Length		
Pup \ Lead	No Nose Cone	Nose Cone
No Nose Cone	Cd = 0.9179	
Nose Cone		Cd = 0.7561

Emissions Output (g-CO2/ton-mile)					
48-foot Trailer			A-Train Trailer		
No Nose Cone	No UnderCarriage	N/A	No Nose Cone	7'-1"	123.2
	Hopper Bins	122.7		9'-7"	118.7
	Possum Belly	81.1		14'-1"	119.9
Nose Cone	No UnderCarriage	120.7	Nose Cone	16'-7"	120.8
	Hopper Bins	118.4		21'-7"	N/A
	Possum Belly	78.5		7'-1"	118.7
Bull Nose	No UnderCarriage	114.2	Nose Cone	9'-7"	109.4
	Hopper Bins	112.6		14'-1"	113.3
	Possum Belly	74.7		16'-7"	117.8
				21'-7"	116.7

Fuel Consumption Rates (Gal-diesel/1000 ton-miles)					
48-foot Trailer			A-Train Trailer		
No Nose Cone	No UnderCarriage	N/A	No Nose Cone	7'-1"	12.10080
	Hopper Bins	12.05120		9'-7"	11.65970
	Possum Belly	7.97010		14'-1"	11.77800
Nose Cone	No UnderCarriage	11.85640	Nose Cone	16'-7"	11.86700
	Hopper Bins	11.63150		21'-7"	N/A
	Possum Belly	7.71150		7'-1"	11.66310
Bull Nose	No UnderCarriage	11.21530	Nose Cone	9'-7"	10.74780
	Hopper Bins	11.05710		14'-1"	11.12840
	Possum Belly	7.34110		16'-7"	11.57360
				21'-7"	11.46340