

# ENGINE COMPARISON

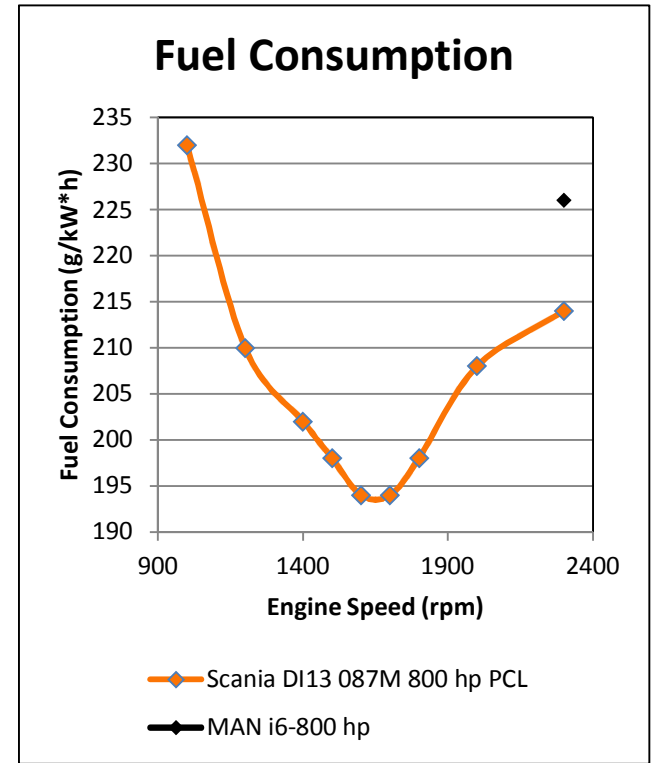
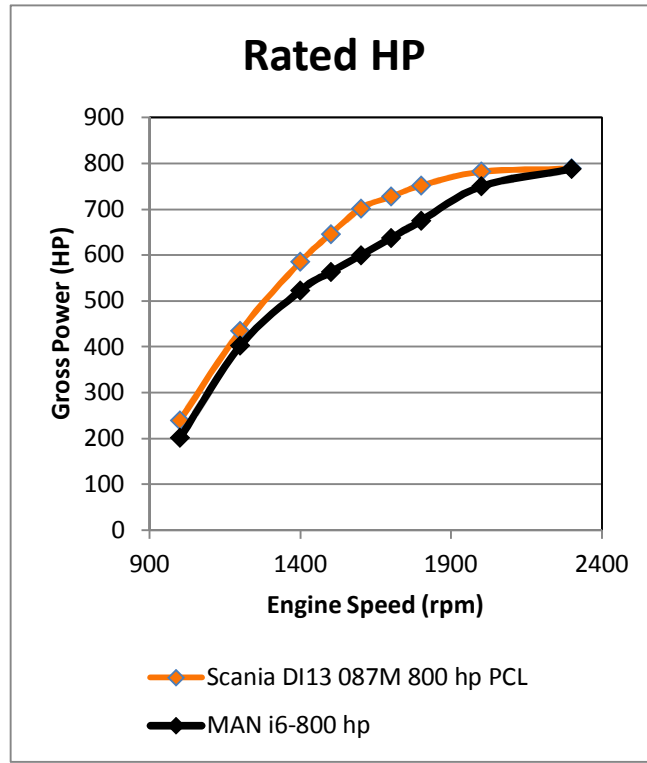
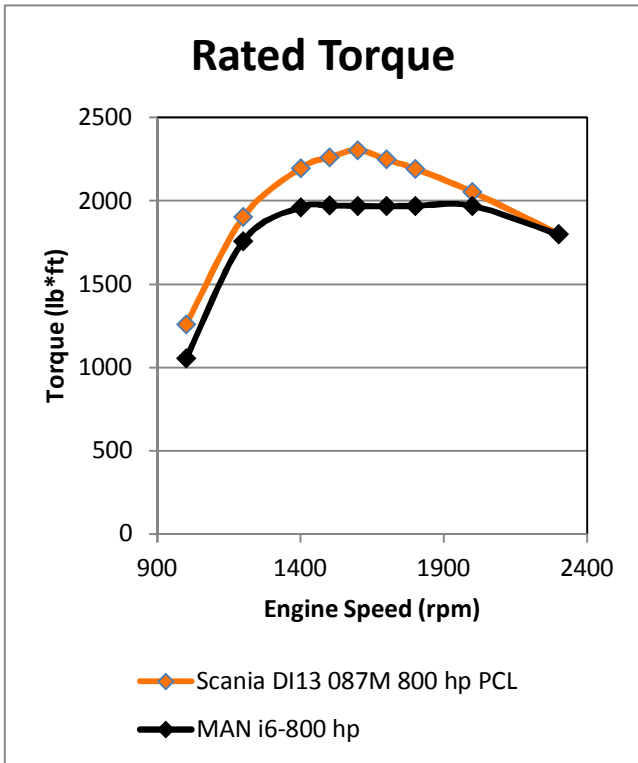
MAN i6-800 hp	RPM	1000	1200	1400	1500	1600	1700	1800	2000	2300
* Competitor data is to the best of our knowledge. The accuracy of this information is not guaranteed.	TORQUE (lb*ft)	1056	1759	1962	1971	1970	1968	1970	1970	1799
	HP*	201	402	523	563	600	637	675	750	788
	FUEL CONSUMPTION (g/kWh)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	226

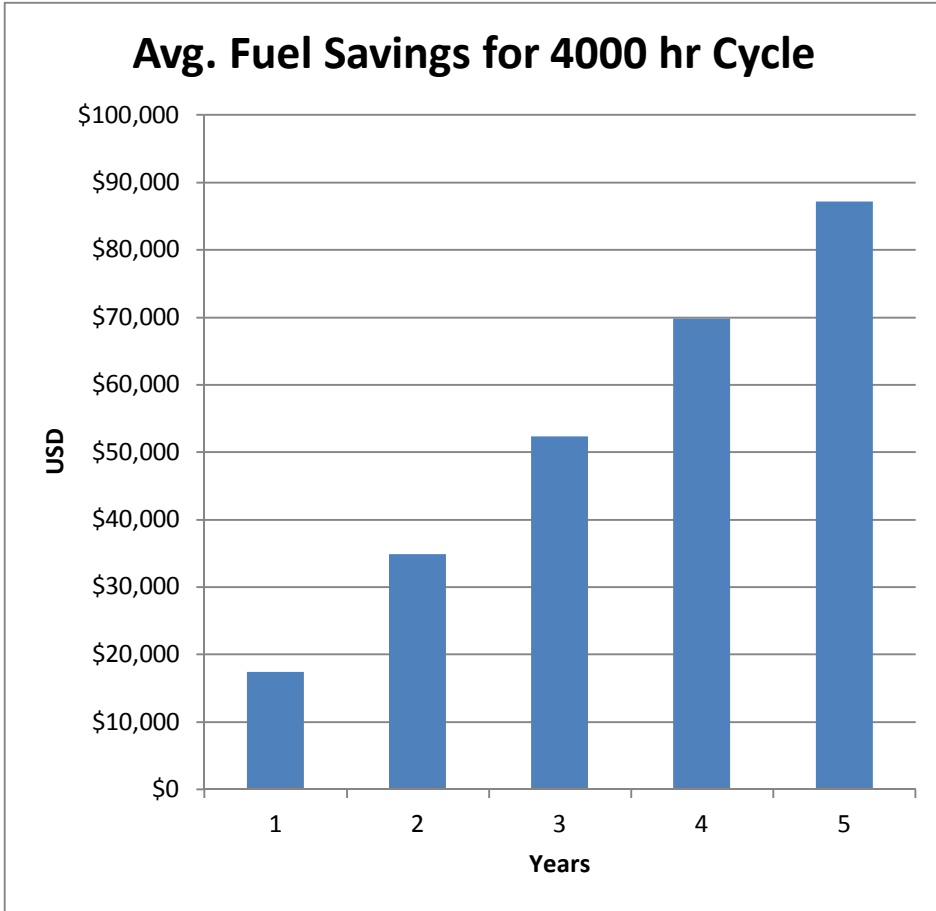
Scania DI13 087M 800 hp PCL	RPM	1000	1200	1400	1500	1600	1700	1800	2000	2300
	TORQUE (lb*ft)	1258	1903	2197	2261	2304	2248	2192	2053	1801
	HP*	240	435	586	646	702	728	751	782	789
	FUEL CONSUMPTION (g/kWh)	232	210	202	198	194	194	198	208	214

<b>TOTAL AVG:</b>	<b>11%</b>	<b>TORQUE % DIFFERENCE:</b>	<b>19%</b>	<b>8%</b>	<b>12%</b>	<b>15%</b>	<b>17%</b>	<b>14%</b>	<b>11%</b>	<b>4%</b>	<b>0%</b>
<b>TOTAL AVG:</b>	<b>11%</b>	<b>HP % DIFFERENCE :</b>	<b>19%</b>	<b>8%</b>	<b>12%</b>	<b>15%</b>	<b>17%</b>	<b>14%</b>	<b>11%</b>	<b>4%</b>	<b>0%</b>
<b>TOTAL AVG:</b>	<b>-1%</b>	<b>FUEL CONSUMPTION % DIFF. :</b>	<b>#N/A</b>	<b>#N/A</b>	<b>#N/A</b>	<b>#N/A</b>	<b>#N/A</b>	<b>#N/A</b>	<b>#N/A</b>	<b>#N/A</b>	<b>-5%</b>

\*Horsepower is in Brake HP



## FUEL COMPARISON ANALYSIS



Scania DI13 087M 800 hp PCL		
Fuel Consumption at 2300 RPM	214	g/kWh
Gross Power	589	kW
Specific Gravity of Fuel	840	g/L
Flow Rate	149.97	L/h
Conversion	0.2641721	gal/L
Flow Rate	39.62	gal/h
Running Time	4000	h
Yearly Fuel Consumption	158468.71	gal/yr
Fuel Cost	\$2.00	/gal
Total Fuel Cost	\$316,937.43	/yr

MAN i6-800 hp		
Fuel Consumption at 2300 RPM	226	g/kWh
Gross Power	588	kW
Specific Gravity of Fuel	840	g/L
Flow Rate	158.22	L/h
Conversion	0.2641721	gal/L
Flow Rate	41.80	gal/h
Running Time	4000	h
Yearly Fuel Consumption	167185.08	gal/yr
Fuel Cost	\$2.00	/gal
Total Fuel Cost	\$334,370.16	/yr

5 Year Savings Outlook	
Competitor Fuel Cost	\$1,671,851
Scania Fuel Cost	\$1,584,687
Total Savings	\$87,164

Year	1	2	3	4	5
Competitor Fuel Cost (millions)	\$0.33	\$0.67	\$1.00	\$1.34	\$1.67
Scania Fuel Cost (millions)	\$0.317	\$0.634	\$0.951	\$1.268	\$1.585
Cost Difference	\$17,433	\$34,865	\$52,298	\$69,731	\$87,164

Completed by: Tyler Stuckey



