

Background

General Info

Test Date:	1-Jan-13
Site / Location:	Customer W, Multan
Fuel type:	Diesel
Dose Rate (powder):	
Product used:	Ferox Powder
Make:	Ghaddar Perkins
Model:	2300 Series
Capacity:	400kVA
Year manufactured:	
Hours run per day:	
Total hours on Machine:	
Maintenance cycle:	
Notes & Observations:	Regular shape tank - 1 cm = 17.1818 Liters. The baseline on this test is not very thorough,

HFO / RFO Information

Fuel Spec:	Unit	IP Methc	ASTM Method
Density at 15C:	Kg / Ltr		
Kinematic Viscosity at 50C:	cST		
Flash Point (Pensky-Martens):	Celcius		
Pour Point:	Celcius		
Gross Calorific value:	Kcal / Kg		
Water content:	% vol		
Sediment:	% mass		
Ash content:	% mass		
Sulfur content:	% mass		
Conradson Carbon:	% mass		
Vanadium:	% mass		
Sodium:	% mass		

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Baseline - No Ferox Added

Time	Time (hours)	Fuel Used (Liter)	Electric Output (kWh)	kW	kWh Per Liter
0:00					
0:30	0.50	17.20	52.00	104.00	3.02 Start
1:00	0.50	17.20	105.00	106.00	3.08
2:00	1.00	39.50	210.00	105.00	2.66
3:00	1.00	27.50	320.00	110.00	4.00
4:00	1.00	32.60	433.00	113.00	3.47
7:00	3.00	128.90	762.00	109.67	2.55 End
	0.00				
	0.00				
	0.00				
	0.00				
	0.00				
	0.00				

Product Demonstration - Add Ferox

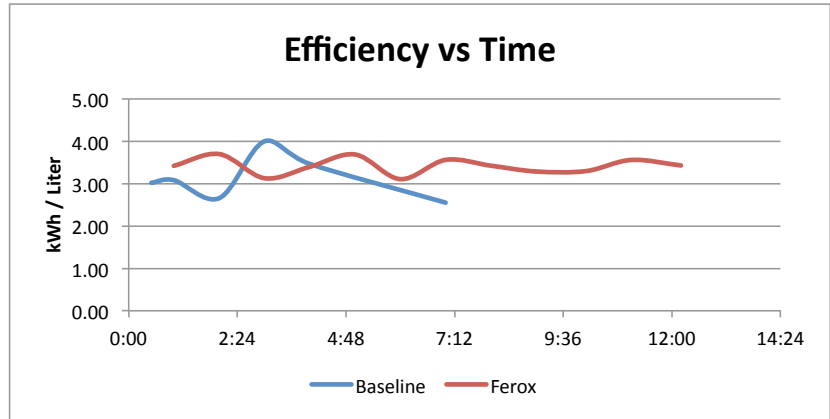
Time	Time (hours)	Fuel Used (Liter)	Electric Output (kWh)	kW	kWh Per Liter
0:00					
1:00	1.00	29.20	100.00	100.00	3.42 Start
2:00	1.00	29.20	208.00	108.00	3.70
3:00	1.00	32.60	310.00	102.00	3.13
4:00	1.00	30.90	415.00	105.00	3.40
5:00	1.00	30.90	529.00	114.00	3.69
6:00	1.00	30.90	625.00	96.00	3.11
7:00	1.00	29.20	729.00	104.00	3.56
8:00	1.00	29.20	829.00	100.00	3.42
9:00	1.00	29.20	925.00	96.00	3.29
10:06	1.10	36.10	1,044.00	108.18	3.30
11:06	1.00	30.90	1,154.00	110.00	3.56
12:12	1.10	34.40	1,272.00	107.27	3.43 End

Calculation Boundaries

	Row	
Baseline Start	21	12
Baseline End	26	13
Ferox Start	21	14
Ferox End	32	15

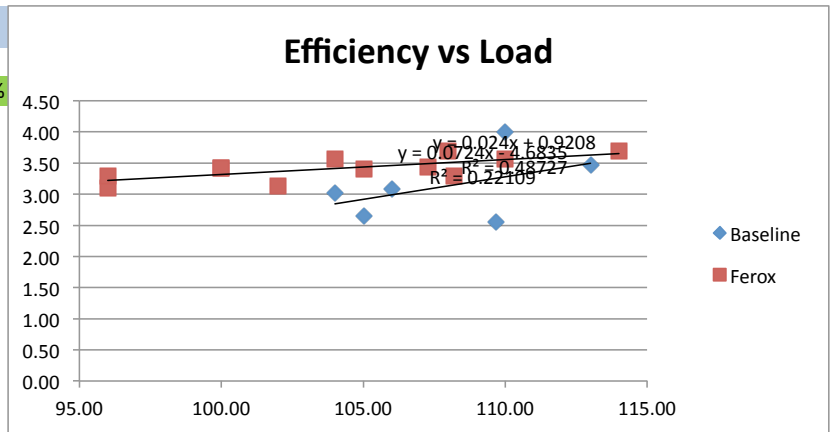
Results

Baseline Average	
Fuel Consumption	0.35 Liters / kWh
Efficiency	2.90 kWh / Liter
Mean Load	108.86 kWh / Hr
Std. Dev. Load	3.18 kWh / Hr
Results Average	
Fuel Consumption	0.29 Liters / kWh
Efficiency	3.41 kWh / Liter
Mean Load	104.26 kWh / Hr
Std. Dev. Load	5.36 kWh / Hr
% Change	
Fuel Consumption	-15.07% Liters / kWh
Efficiency	17.75% kWh / Liter



Trend

	Baseline	Ferox	% Change
Efficiency	2.95	3.45	16.86%



This section would be modified to show how much money is being saved for this particular customer given the test results

Return On Investment calculation sheet

Enter your Numbers here

Fuel

Price: Per

Fuel Usage

Fuel consumption: Liters How much fuel do you consume in a month?

Fuel Cost: \$132,000,000.00

Product

Product Cost: Per Treated

Summary

Fuel Cost: \$132,000,000.00

Product Cost: \$9,600,000.00

Total Cost: \$141,600,000.00

Results	Electric	Electric Trend	Steam	Steam Trend
Efficiency Increase:	17.75%	16.86%	0.00%	0.00%
Per Unit Savings:	\$0.1953	\$0.1855	\$0.0000	\$0.0000
Total Savings:	\$19,898,713.19	\$19,044,093.68	\$0.00	\$0.00
Net Return:	\$10,298,713.19	\$9,444,093.68	\$0.00	\$0.00