

REPORT ON TEST CONDUCTED AT EPS COURIER SERVICES

Prepared for

Submitted by:

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Submitted to:

Phillip Serfontein Managing Director EPS Courier Services



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1 INTRODUCTION AND BACKGROUND

Upon introducing and presenting Centron's eco-friendly four in one fuel enhancing product, the Managing Director of EPS Courier Mr. Phillip Serfontein requested Centron SA to perform a product Pilot Test Project at EPS' Germiston Depot to assess the improvement that would exist should EPS implement Centron fuel enhancer into its operations. The Pilot Test Project began in May 2012 and was completed in September 2012. The Pilot Test Project was performed on 3 (three) vehicles. The vehicles covered long distance country travel vehicle, city distant travel vehicle and local urban travel vehicle. The Pilot Test Project entailed analyzing the fuel consumption, harmful gas emissions and asset life cycle cost improvement opportunities. The project followed a carefully designed test protocol which was discussed with EPS.

EPS provided baseline data of the three vehicles for a three months period beginning in January 2012. The driver of each vehicle was given a specially designed Centron Logbook to record fuel fill; kilometers travelled at each fuel re-fill and the amount of Centron top up at each re-fill.

A data monitoring schedule was developed and each vehicle's consumption per kilometer was calculated and benchmarked against the consumption baseline data per vehicle for the duration of the test. Fuel consumption data is based on the electronic motherboard of the vehicles as well as manually recorded data. This data collected from the driver's recordings was used as the standard for comparison for collected data after initiation of Centron.

EPS management priority focus on this Pilot Test Project as per their brief is fuel savings and the rest of the benefits would be an added benefit.

In summary the primary objective of this performance test was to qualify Centron as a valid solution to the following operational and environmental challenges facing EPS:

- Rising diesel costs negatively affecting EPS' bottom line
- Increased maintenance costs
- Higher emission levels causing environmental harm and stakeholder pressure



2 SUMMARY OF RESULTS

2.1 OVERALL SUMMARY OF ALL THREE TRUCKS

Baseline Data Graphic Representation

Each vehicle's consumption data for the three months prior to Pilot Test Project initiation was established and these figures are EPS' actual consumption figures for each vehicle. These are then used as benchmark data to compare with after the Centron initiation to determine the performance of the vehicles after treating them with Centron. We also compared the results achieved to the "Norm" as presented to us by EPS. We understand that the Norm is the average performance of similar vehicles at EPS.

Vehicle Registration	Model	Baseline (KM/L)	Norm (KM/L)
ZMY224GP	MAN	2.87	2.22
WLD641GP	MAN	3.69	3.23
YRJ622GP***	FREIGHTLINER	2.09***	2.08

** We requested EPS management to re-check the baseline figures for this vehicle as baseline records reflect certainly abnormal consumption figures and are distorting the actual baseline data. We await the final data submission from EPS. In the meantime, we adjusted one line item where the baselines were clearly overstated. Our last reported figures were as of 14 July 2012.

Test Results Data Graphic Representation

The Table below reflects actual consumption data after treating the vehicle fuel tanks with Centron for the duration of the test. As the initial period includes a "clean up" phase where Centron cleans the engine, our results are taken from the 1st recorded day of May 2012 to the last day of August 2012 except in the case of YRJ 622 GP (for reasons explained above).



Summary of Results							
VEHICLE	Make	SUMMARY	KMs	Itre		% improveme nt on baseline	% improveme nt against Norm
VEHICLE	маке		KIVIS	Ltrs	KM/L	Dasenne	NOTITI
WLD641GP	MAN	01 May 2012 to 31 August 2012	21 911.20	5 393.11	4.06	10.07%	25.95%
		02 May 2012 to 29 August					
ZMY 224 GP	MAN	2012	31 583.40	10 141.72	3.11	8.66%	40.14%
	FREIGHTL						
YRJ 622 GP	INER	15 May 2012 to 14 July 2012	18 880.30	8 662.70	2.18	4.32%	4.62%

As can be seen from the above table, Centron's impact has been extremely beneficial to EPS and has returned an average of about 9% fuel savings on the two trucks for which the data was available (WLD 641 GP and ZMY 224 GP). We also understand from driver feedback an improvement in performance as well as visible reduction in black smoke.

** We requested EPS management to re-check the baseline figures for this vehicle as baseline records reflect certainly abnormal consumption figures and are distorting the actual baseline data. We await the final data submission from EPS. As such we have not taken these results into account. It was further brought to our attention that vehicle ZMY224GP is now assigned to local urban route which has impacted on its overall performance regarding the savings.

2.2 ROI

If Centron saves EPS a mere 7% average savings on fuel consumption, this yields a Return on Investment of more than 200% assuming a fuel price R10,50 per liter <u>after</u> paying for the product (please refer to **section 4** of this Report for full details and calculations).

2.3 ENGINE LIFESPAN AND OPERABILITY

Based on the evidence gleaned from the pilot, we are certain that the VEHICLES lifespan will increase and wear and tear resulting from fuel related problems will be minimized which will add to the ROI.



2.4 NET BOTTOM LINE

Based on the above factors, we are of the opinion that the application of Centron across all EPS vehicles will be a major contributor to the net bottom line of EPS as well as enhance its sustainability report.

3 CONCLUSION OF TRIAL RESULTS

The fact that the Trial VEHICLES ran for more than a month post clean up the trial gave us adequate time to form solid conclusions and Centron delivered excellent results in all departments:

- Average Fuel savings were about 9%;
- Opacity reduction is visibly notable with testimonies from the drivers
- The results obtained are compelling evidence for EPS to roll out the implementation of Centron into all of its Vehicles.

4 RETURN ON INVESTMENT (ROI) AND REDUCTION IN CARBON FOOTPRINT

We understand that ROI is important to users of Centron. At a mere 8% fuel savings, our calculations below reflect that EPS will earn a 275% Return on Investment and accordingly Centron will contribute to EPS' bottom line profit in more ways than one. The calculated ROI is <u>before</u> taking account of the savings that EPS will benefit from as a result of reduced maintenance costs, longer engine life, fewer fuel related problems and greater shareholder confidence as a result of decreased emissions.

Assuming that EPS uses 7 260 000 litres of diesel annually at a price of R11 per litre, the figures at a conservative saving of 8%, 10% and 12% are likely to be as follows:



Estimated annual consumption	7 260 000	7 260 000	7 260 000
Fuel Savings %	8.0%	10.00%	12.00%
Liters of Fuel Saved	580 800	726 000	871 200
Cost of Fuel per Liter in USD	11.00	11.00	11.00
Fuel Cost Saving	6 388 800	7 986 000	9 583 200
Centron Required in Liters	23 232	23 232	23 232
Cost per Centron litre ex VAT	100.00	100.00	100.00
Cost of Centron	2 323 200	2 323 200	2 323 200
Annual Net fuel Savings	4 065 600	5 662 800	7 260 000
Return on Investment	275%	344%	413%
CO2 Reduction in Metric Tonnes	1 545	1 931	2 317
Capital expenditure :			
1 x dosing tank	150 000.00	150 000.00	150 000.00
pay back period for dosing tank in days	13.47	9.67	7.54

Centron additive may well become one of EPS' greatest contributors to its overall profitability and sustainability thereby increasing stakeholder value.

Based on the above calculation we EPS will require a dosing tank to store and treat the bulk fuel tank automatically. At a cost of R150 000, this could be paid through the savings that Centron brings to EPS within 2 weeks of implementing Centron (following clean-up).

5 **RECOMMENDATIONS:**

Based on the results of the Centron evaluation it can be concluded that Centron causes fuel to combust more efficiently resulting in reduced exhaust emissions and improved fuel economy performance. Further, the cost of implementing Centron is more than offset by fuel cost savings resulting <u>in net positive cash flow</u> & enhanced bottom line profit for EPS together with an enhanced sustainability report. It is therefore recommended that EPS treat their diesel fuel supply with Centron additive to achieve reduced harmful emissions and improved fuel economy performance.

The results of the Centron evaluation confirm Centron's claims of reduced emissions & improved fuel economy performance. Therefore it is reasonable to conclude that the potential for additional maintenance & financial benefits exist for EPS by treating its fuel supply with Centron.



6 SAFETY AND SUPPLY ASPECTS

Petrochemical based product

Centron is a "Petro chemical" based product manufactured under a world-wide patent and who's ingredients has been thoroughly scrutinised by Patent Examiners world-wide. All ingredients are fully disclosed in a transparent manner as well as their workings and actions and none of the chemicals in Centron are capable of causing any harm to an engine. With over 10 years in operation there has not been a single failure or claim against Centron. We will be glad to supply EPS the MSDS of these chemicals and or surfactants which work as synergistic blend to optimise combustion.

Zero metals, ethanol or acetone

Centron contains no metals, ethanol or acetone. It is tested by SABS which includes a on oxidation as well. This test proves that Centron is not leaving behind any residue in the fuel tank and that it clean burns through the combustion chamber.

Zero claims history

Centron has been in use for more than 8 years and 600 million kilometres of road use with zero claims. This as a result of Centron introducing nothing harmful such as metal, alcohol, acetone or particulates into the fuel or fuel system.

MANUFACTURING OF CENTRON

Our blending company, IMPROCHEM, a specialist lubricant/additive manufacturer, is part of the AECI Group and one of the largest blending companies in South Africa. They are able to handle substantial volumes with reduced lead times and manage the quality of production in line with the latest ISO and other applicable standards.

7 CONCLUSION AND WAY FORWARD

We thank EPS for the opportunity provided to us and the staff at EPS involved in the project for their assistance and kind co-operation during this trial. With these substantial savings and compelling results we hope to secure EPS's business and look forward to an exciting business relationship.



Kind regards

Transmitted electronically Mpho Mosoeu Director: **Sales and Marketing** For: Centron Energy SA Duly authorised DATE: 14th September 2012

