



Performance technology for a better planet



### Company Background

Firepower is an Australian company that owns the intellectual property to and manufactures a range of hydrocarbon based fuel conditioners and equipment that:

- Enhance engine or boiler performance for petrol, diesel and heavy fuel oil users
- Significantly reduce harmful emissions
- Reduce maintenance costs and increase equipment life

All Firepower products are manufactured to ISO9001 standards and have been comprehensively tested by leading independent testing institutes and major companies.

- 15+ years trading
- Operating in 53 Countries
- Owns the IP in and manufactures a range of Hydrocarbon based fuel conditioners and machines that:
  - Enhance engine and boiler performance for petrol, diesel and heavy oil users
  - Significantly reduce harmful emissions
  - Reduce maintenance costs and increase equipment life
- Industry Sectors
  - Transportation
  - Shipping
  - Energy
  - Resource
  - Retail
  - Government
- Research and Development
- Australian Government Support (AusTrade)
  - Selected as an Emerging Global Company for World Wide support by AusTrade



### **Products**

**Pill** Petrol Fuel Conditioner. For use in all petrol engines. One

pill treats 60 litres

**FP4000** Diesel Fuel Conditioner. For use in all diesel engines.

FP10000 Heavy Diesel (Bunker) Fuel Conditioner. For use in all

heavy

fuel oil applications, including ships, industrial power plants

and power stations.

These products are similar, in that they address similar problems common to all fuels, however, FP10000 is designed with the higher viscosity fuel oils in mind, and contains additional components to improve the combustion of these fuels.

Firepower products have been safely used for many years. The products do not contain any harsh chemicals that can damage an engine or expensive piece of equipment. The base materials for our fuel conditioning products are hydrocarbons which are fully compatible with the fuel, and full training is provided to ensure the correct application of the products in the field.



# **Firepower Fuel Pill**

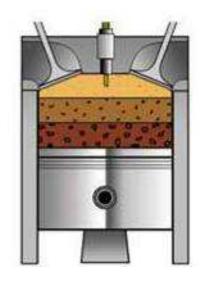


- One pill treats 60L
- Available on a retail level



# When the fuel is burned in the combustion chamber not all of the fuel is used and a proportion goes out the exhaust as poisonous emissions.

# This is fuel that you have <u>paid for</u> and <u>not used</u>



Fuel used in everyday vehicles consists of molecules of different densities: light, medium and heavy elements.

Firepower works by burning more of the heavier elements of your fuel, increasing power and fuel economy.



The Firepower fuel pill is a revolutionary product with multiple benefits for all types of vehicles, petrol and diesel.

The Firepower pill can increase performance, driveability and fuel economy while preventing engine **knock**, **pinging** and **valve** recession

### How is it different to other products?

There are many brands of engine and fuel treatment products available on the market. Most are specifically designed to treat only one problem area, and some can actually be harmful to engines.



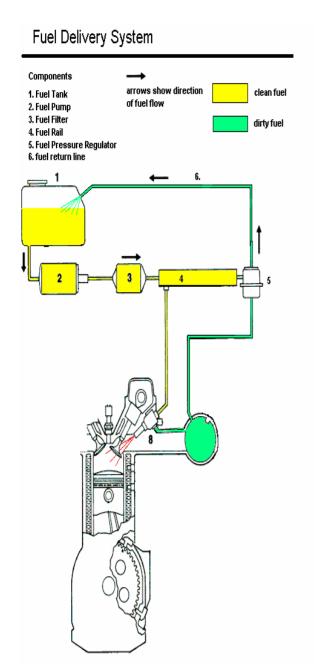
The Firepower pill, performs all of these tasks on its own. As a consequence, the cost of treatment is far less than having to buy four or more separate products.



The Firepower pill has been tested and been proven not to harm any engine. We support this with a AUD\$20 Million insurance policy.



### How the fuel system is affected

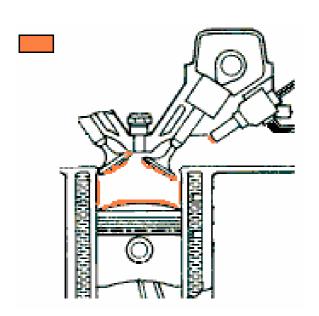


This is a simplified diagram of a fuel delivery system.

Acid formation and fuel ageing degrades the fuel quality by forming gum, lacquer and varnishes that accumulate in the fuel system.



# How the engine is affected



Contamination of the fuel will cause incomplete combustion, leading to carbon deposits.
These deposits accumulate on:

Valves
Piston Crown
Cylinder Bore
Fuel Injectors

resulting in

Poor fuel spray pattern Reduced valve sealing Loss of engine power Reduced fuel efficiency Increased emissions Pre-ignition (Knocking)



# Trepower

INTERNATIONAL

Performance technology for a better planet

Attention: Mr. Frank Samani

### Intertek Caleb Brett

Firepower Group 16 Brodie Hall Drive, Technology Park BENTLEY, WA 6102

### LABORATORY TEST CERTIFICATE

NUMBER: AU190-31230 / 4311000 ISSUED: 24 November 2005

Sample Description

: Fuel Additives

Received from

; Firepower

Description on label

Pill (treat rate 1 pill / 60 litre) \*\* : Sample A-

Sample B-FP-1 treat rate 1:2000

Three types of petrol were blended with the samples above

according to the recommended treat ratio.

nined as detailed below and the following results were obtained:-

Property	Method	Unit	Base Fuel Type	Base Fuel	+ Pitt	+ FP-1
RON	D2699	RON	98 PULP	98,4	98.7	98.8
RON	D2699	RON	95 PULP	96.6	96.9	97.1
RON	D2699	RON	91 ULP	91.8	92.0	92.0
MON	D2700	MON	98 PULP	85.9	86.1	86.1
MON	D2700	MON	95 PULP	85.2	85.5	85.5
MON	D2700	MON	91 ULP	<b>82.</b> 3	82.6	82.5
Sulphur	D5453	mg/kg	98 PULP	56	58	58
Oxygen	D4815	wt%	98 PULP	<0.12	<0.12	<0.12
				_		

The testing detailed in this report is performed in accordance with procedures incorporated within our Quality Management System complying with the requirements of AS/NZS ISO 9001:2000. The sample has been tested as received on 15 November 2005.

for Intertek Caleb Brett Australia

Graeme Marks Senior Chemist

Intertek Testing Services (Australia) Pty. Ltd.

A.B.N. 56 001 722 854

218 Lorimer Street, Port Melbourne, Victoria 3207, Australia P.O. Box 483, Port Melbourne, Victoria 3207 Telephone: (61-3) 9646 9299 Facsimile: (61-3) 9646 0308 Email: melbourne@intertek.com Website: www.intertek.cb.com

(See over for Terms & Conditions of Service)

<sup>\*\*</sup> Some insoluble particles were evident after preparing the fuel samples with the pill addition.

<sup>\*</sup> Note: The results indicate that there is no statistically significant increase in either sulphur content or oxygen content when fuels are treated according to instructions. Therefore when added to a base fuel which complies with the Australian Standard, the resulting fuel would also comply.





Test Report No. 75406-3 A/05

The testings showed, that after addition of the additive to the accordant fuel and fuel oils respectively according to the specifications of the client all parameters meet the requirements of standard EN 590 and DIN 51603. An addition f the additives according to the specifications of the client causes no change of the parameters to the effect, that they are not in line with standard EN 590 and DIN 51603 and therefore not in accordance with these standards. In this connection no statements are given to further effects, which physical changes appear during the combustion of the fuels and fuel oils respectively, e.g. fuel consumption or life-cycle of the motor.

### Hints:

The test results refer exclusively to the samples specified. A reproduction in excerpts of the test report must not be made without the written consent of the test laboratory.

Stuttgart, 2005-10-28

**DEKRA Umwelt GmbH** 

Stefan Thomann

Laboratory for Environmental & Product Analysis



### **Harmful Emissions and Environmental Effects**

### The key harmful emissions from poor combustion are:

•Sulphur Dioxide Produced through the combustion of sulphur compounds in the fuel. A major cause of acid rain

•Nitrous Oxides Produced by the reaction of nitrogen in the air with free oxygen in the combustion environment

•Carbon Monoxide Probably the most poisonous gas. Produced at the expense of CO<sub>2</sub> due to incomplete combustion

•Unburned Hydrocarbons Simply unburned fuel. Major cause of smog pollution and breathing related illnesses. Usually measured by smoke opacity test.



### The Effect of Firepower Products on Carbon Dioxide Emissions

### Introduction

Carbon Dioxide (CO<sub>2</sub>) is a chemical compound composed of one carbon and two oxygen atoms. It is often referred to by its formula CO<sub>2</sub>. It is present in the Earth's atmosphere at a low concentration and acts as a greenhouse gas, contributing to global warming. The combustion of fossil fuels (e.g. coal, diesel fuel, petrol, heating oils and natural gas) contribute to the volume of CO<sub>2</sub> in the atmosphere, and CO<sub>2</sub> currently makes up 72% of man-made greenhouse gas emissions.

### Chemistry of Burning Fossil Fuels

Fossil fuels are hydrocarbons (compounds of hydrogen and carbon) formed from the remains of dead animals and plants. When they are burned, the following basic chemical reaction takes place:

HC (Hydrocarbon fuel) + O<sub>2</sub> (Oxygen) CO<sub>2</sub> (Carbon Dioxide) + H<sub>2</sub>O (Water) + Enthalpy (Heat or Energy)

It can be seen from the above equation that CO<sub>2</sub> production is inevitable when Hydrocarbons are burned. Simply put, the more fuel you burn, the more CO<sub>2</sub> you will produce.

### Carbon Dioxide Emission Measurement

Considering the chemistry of burning fossil fuels, it is important when considering the impact of Firepower products to ensure that the appropriate method for measuring CO<sub>2</sub> emissions is used.

There are two main methods for the measurement of CO<sub>2</sub>.

- Parts per million in a fixed volume of exhaust gas.
   When combustion quality is improved through the addition of a Firepower product to the fuel, it is expected that this figure may increase, as more of the fuel will be burned and converted into CO<sub>2</sub>. (Note: In this case, Carbon Monoxide and unburned Hydrocarbon levels will fall, as the total Carbon input remains the same)
- 2. Mass (usually grams) produced for a fixed amount of work (e.g. kilometres driven) When combustion quality is improved through the addition of a Firepower product to the fuel, it is expected that this figure will decrease due to the overall reduction in fuel consumption for a fixed amount of work (e.g. litres per kilometre or litres per kilowatt hour.)

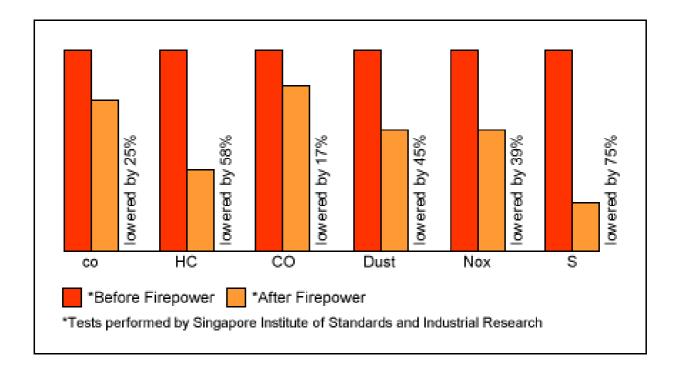
In current certified emission tests, including those approved under the Kyoto Protocol, method two is used, and this will show that Firepower products can be beneficial in the overall reduction of CO<sub>2</sub> emissions.



### **Scientific Reports**

Firepower has many scientific reports demonstrating the advantages of using it's fuel conditioning products. Below is a test carried out by the Singapore Institute of Standards and Industrial Research on emissions using Firepower Fuel Conditioner with diesel fuel. Further Results available in Test reports.

Tests performed by Singapore Institute of Standards & Industrial Research





## **Recent Test Results**







TEST RESULTS

Country	Date	Equipment Tested	Fuel Savings	Emission Reduction
Philippines	Mar-07	Davao Transport Co., Isuzu Trucks	27%	45%
Australia	Feb-07	Veolia Environmental Services, Trucks Tasmania Australia	9%	35%
Russia	Jan-07	Rusal (Russian Aluminium), Smelter Siberia - Bunker Fuel	8%	70%
Russia	Jan-07	Moscow Transport Authority (Mosgrotrans), Ikarus Buses	11%	39%
Oman	Nov-06	Oman Rurals Electricity Co., Madha Facility, Diesel Generator	22.00%	66%
Germany	Aug-06	Celle Bus Company, Mercedes Bus, Citaro Model 2001	8.77%	39.9%
Germany	Aug-06	Frankfurt Bus Company, Mercedes & MAN 2005 Model	7.20%	36.23%
Indonesia	Jul-06	KPC Mine, 773 Haul Pack	10.3%	2
Ukraine	Jun-06	Auto Line, Kiev, Bus (Bogdan Engine)	11.5%	49%
Russia	Apr-06	Cherepovets, Russia, OAO Severstyle Bel-AZ-7547 Truck	17%	25%
Greece	Apr-06	Athens Taxis, Konstantinos Liagris, Greece, Toyota Corona Avensis	17.35%	54.55%
Lithuania	May-06	Rega Taxis	17%	64%
South Africa	May-06	Johannesburg International Airport, Generators	10%	70%
Indonesia	Mar-06	Temas Line, Indonesia, Container Ship, Engine UBE MAK 6M453B	7.30%	72
Russia	Mar-06	Moscow, Spetsstroy (Special purpose Construction) of Russia. Tractor UMZ	46%	33.10%
Belans	Mar-06	Railways, Minsk	19%	45.00%
Russia	Mar-06	Russian Railway Company, Russia, Steam Locomotive	4.50%	32%
Russia	Feb-06	Federal Penal Service, Ivanovo, Russia, DE-16-14GM Boiler	8%	14.60%
Malaysia	Jan-06	Rapid KL, Bus	22%	67%
UAE	Jan-06	United Arab Emirates, Atlas Copco Compressor (J.Ray McDermott)	32%	63.50%
Russia	Jan-06	Moscow Bus Depot Russia Bus	22.80%	24.30%

### TEST RESULTS

Country	100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 × 100 ×		Fuel Savings	Emission Reduction	
Pakistan	Nov-05	Daewoo Lahore, Bus	12%	120	
Croatia	Nov-05	Jamnica, Zagreb, Croatia, Mercedes Actros 7/2004	12%	47.25%	
Russia	Mar-05	Ministry of Agriculture, Scientific Academy, Russia, Tractor	8.30%	80%	
Russia	Feb-05	Ministry of Agriculture, Scientific Academy	8.3%	80%	
Germany	Jan-05	Hallibuton Germany, Mercedes Benz Trucks	8.4%	60%	
Holland	Dec-04	Peugot Workshop, de Bruin Peugeot in Enkhuizen	17%	70%	
Russia	Dec-04	Kuzbass Coal Mine, Siberia, Bachty Mine	40%	45%	
Russia	Nov-04	Moscow City Transport Authority	17%	70%	
Russia	Sep-04	Defence Ministry of Russian Federation, T-72 Main BattleTank	13.15%	(=)	
Belgium	May-04	Volvo FL10, Belgo Milk	10.6%	( e.g.	
Belgium	May-04	Mercedes Truck, Coca Cola Enterprises	29.9%	-	
India	May-04	Bus Fleet, Chennai Bus Company	15.3%	50%	
Italy	Apr-04	Volvo FH16, MACELLARI	10.82%	(4)	
Italy	Mar-04	Iveco Truck, Fire Service Depart. Of Forli	18.13%	(4)	
Romania	Mar-04	Trucks operated by Romanian Ministry of Defence	14.10%	40%	
Belgium	Jan-04	De Lijn, Bus, DAF Euro 2 engine	5.78%	925	
Italy	Nov-03	Mercedes Benz Actros Truck, Gruppo Dynamica, San Miniano	14%	48%	
Turkey	Sep-03	Volvo, Mercedes and Mitsubishi buses operated by Istanbul Government Bus Company	19%	60%	
Philippines	Jul-03	California Bus Company, Manila	15%	45%	
Germany	Apr-03	Opel Vectra, Bosch Opel Dealership, Wiesbaden	17%	31.4%	

### **Russian Ministry of Defence**



Test conducted on T72 Main Battle Tank

Testing of FP4000 at engine stand No. 10 GUP (State Utilitarial Enterprise) 38 NII (SRI - Science Research Institute) according to program and methods (supplement No 1) on engine B-92C2 the test of conditioner FP4000 effect on fuel economy had been conducted.

The testing was conducted on serial engine B-92C2 No 2M11AT2841, 12 cylinders V-type 4-tact diesel with 1000hp boost pressure, p-2000 turns per minute.

Data from the table shows that on idle the FP4000 conditioner - fuel savings averaged 13.06%.

As 20% loading was applied fuel savings averaged 10.7%



(Stamped above "APPROVE" Defense Ministry of Russian Federation 38 NII (SRI- Science Research Institute) Chief Assistant for Science research-I. Bechoulatov-30.09.2004)

Table 1- Experimental data results from conditioner FP 4000 test on summe diesel fuel

Crankshaft turns speed	Fuel consumption, k	Fuel with conditione	
Turns per minute	Without conditioner	With conditioner	Consumption reduction %
	On Idle		
1000 1200 1400 1600	6,1 7,2 8,6 11,8	5.45 6,1 7,5 10,2	10,65 15,20 12.79 13,60
	Loading 20%		8 7 7
1600 1500 1400 1300	29,3 28,1 26,71 25,7	25,8 25,4 23,7 22,6	9,80 10,20 11,20 11,60

### Conclusion.

"The test of conditioner FP4000 effect on fuel economy for diesel type B-2 (summer diesel fuel) presented that working on idle conditioner FP4000 makes the fuel economy grow up to 10,65%...15,20%. And as loading grows to 20%, fuel economy grows up to 9,80...11,60% compare with engine operation on diesel fuel without conditioner."



### Russian Railways Trial



Long term comparative test of an operational locomotive carried out by the Research Institute of the Russian Railways in 2000/01, under the supervision of Professor Evgeny Kossov. After six months and 152,000 kilometres, the following results were achieved:

- Engine wear reduced by 50%
- Oil Consumption reduced by 32.1%
- Fuel Saving of 5.1 % with a total fuel saving in excess of US100,000,000
- Increased life of bearings, turbo compressors, cylinder piston groups and doubled fuel filter life









# State Science Research Institute Russian Federation Ministry of Defense

Conclusion:

During the trials it was determined that the sample of diesel fuel DLECH-0.05-62 with FP4000 meets the TU 38.1011348-2003 standards.

Checked operational characteristics indexes meets standards of qualification estimate method's complex for high-speed diesel fuel.

FP4000 conditioner has no effect on physical, chemical and operational characteristics.

Defense Ministry of Russian Federation

Federal State Unitary Enterprise "25 State Science Research Institute Russian Federation Defense Ministry"

> ВЕРЖДАЮ "Спителя начальника научной работе А.В. Исаев оклября 2004 г.

("Approved"- signed by temporary deputy of Head of Institute for science research A.V.Isaev, ... October 2004)

TECHNICAL CERTIFICATE

Upon laboratory trials results of diesel fuel DLECH-0,05-62 use with conditioner FP 4000

H.D. № 305.HD/12-04

Temporary Head of Chemitology Board, PHD, Senior science expert

Head of department, PHD, Senior science expert



لَوْلَ لِيَرِيْهِ مَينَ مِنْ مِي عِيمِ Rural Areas Electricity Company s.a.o.c



### To Whom It May Concern

Ref. RAEC/N/ 4-33 /06 13 December 2006

### Subject: Firepower FP4000

This will attest that Oman's Rural Areas Electricity Company has in November 2006 completed testing of the Firepower FP4000 fuel additive in a diesel generator application at our Madha facility. Prior to testing, tamper-proof digital flow meters were installed to ensure the accuracy of test data. Additionally, security cameras were put in place to monitor the test environment. The exercise was carried out over a period of three weeks with fuel usage and kwh output monitored and validated by Rural Areas Electricity Company staff.

At the conclusion of the trial period, the additive treatment produced a fuel savings of 22% over that recorded at the outset of testing. Additionally, opacity measurements recorded emission reductions of 66%.

Based upon these test results Rural Areas Electricity Company is now initiating a program to treat our entire power generation network (presently 65 facilities) with the Firepower FP4000 product.

Sincerely,

Hamed Salim Al-Magdheri Dy. General Manager - North



ص.ب: ١١١١. الرمز البريدي: ١٣٣. الخوير سليط نية عمييان. هاتف: ١٤٤٧٣٢٠٠ . فاكس: ١٤٤٧٣٢٤٤/٢٤٤٧٣٢٠ . س.ت:٢٠٥٨٥ . س.ت:٢٠٥٨٥ . المركز البريدي: ٢٠٤٥/١٥٤٩ . س.ت:٢٠٥٨ . المركز البريدي: ٢٠٤٥/١٥٤٩ . س.ت:٢٠٥٨ . المركز البريدي: ٢٠٤٥/١٥٤٩ . المركز البريدي: ٢٠٤٥/١٥٤٩ . المركز البريدي: ٢٤٤٧٣٢٤٤ . المركز البريدي: ٢٤٤٧٣٢٤٤ . البريدي: ٢٤٤٧٣١٤٤



# FICEPOWEC

INTERNATIONAL

### Performance technology for a better planet

Sultanate of Oman Muscat Municipality Directorate General of Cransport





### إلى عن يشعه الأب

To Whom It May Concern Subject: Firepower FP4000

الموضوع مطول فابر باور اف بي 4000

قد أكملت في شهر إبريل 2007م اختيارا قامت به Muscat المثنارا المامت به 2007م اختيارا قامت به Municipality has in April 2007 completed testing of the Firepower إلى وقود الديرال المستخدم في شاحتني نقل لدينا "FP4000 fuel additive in two of our diesel powered trucks with the following results.

The addition of Firepower FP 4000 to the diesel fuel used by these trucks produced an average fuel savings of 15% and reduced the exhaust emissions an average of 55%.

Based upon these test results Transport Muscat Municipality is now initiating a program to treat our entire fleet with the Firepower FP4000 product.

This will attest that The Directorate بهذا تركد بأن المديرية العامة النقليات بيلدية مسقط وذلك بإضافة محلول الوقود فاير باور أف بي

وقد كانت النتائج كالتألي :

عند اضافة محلول فاير باور أف بي 4000 إلى وقود الديزل المستخدم لدي هاتين الشاحنتين فقد حصلنا على توفير في الوقود بمعدل بلغت تسبته 15% كما نتج عن نتك تخفيض الغازات المنيعثة من العادم بمعدل نسبته 55%.

وبناء على هذه النثائج فأن هذه المديرية قد بدأت بوضع برنامج لمعالجة أسطول الشاحنات لنيها يمنتج فاير باور أف بي 4000.

P.C. Box : 536 At Modi Al-Kabir, Poster Code : 117, Sukarone of Orion Fac 24815123, Telex : 5532 MALAGNA CN, Tel. - 24817235 / 24817237 / 24817929

مراب ۱۹۳۱ کسروی کی فرم فریدی ۱۹۴۰ کی دو ۱۹۳۰ میداد ۱۹۳۰ میداد ۱۹۳۰ ۱۹۳۰ میداد ۱۹۳۰ ۱۹۳۰ ۱۹۳۰ ۱۹۳۰ ۱۹۳۰ ۱۹۳۰ ۱



"The evaluation of the product was conducted last November 1999 and has shown a remarkable improvement in fuel economy and reduction of emission levels. Engine power is 20% average improvement..."







### **NEW ZEALAND ARMY**

Army General Staff, (Logistic Executive), Messines Army Centre, Private Bag 901, UPPER HUTT

13810-01/2/SQ&EA

Telephone:

(04) 5275227

Cellphone:

(025) 456663

Facsimile:

(04) 5275637

Mr Bruce Bellve International Sales Manager TLC Manufacturing and Development Ltd. P.O. Box 15300 WELLINGTON

Dear Bruce,

Thank you very much for your efforts in assisting the New Zealand Army with preparing the M113 Armoured Personnel Carrier fleet for deployment to East Timor. Your Propower Auto Tune (Engine Flushing and Fuel System Flushing) service made a marked improvement in performance by improving the Engines power output and reducing the running temperature. Reduced exhaust emissions also resulted from the Propower Auto Tune.

I am interested in pursuing the possibility of introducing this equipment into Army as part of the operational vehicle servicing programme in the future.

K.M. BARCLAY Lieutenant Colonel

Standards, Quality and Engineering Authority

5

November 1999



# TEPOWER

INTERNATIONAL

Performance technology for a better planet



### WESTERN AUSTRALIAN TRANSLATION SERVICE

16 Woburn Way Kelmscott WA 6111 Telephone: 61-08 - 9390 725 Facsimile: 61-08 - 9390 72:

### Let's see, then, the overall identity of the tests in detail, for every vehicle.

1\* TAXI [Constantinos Liagkris]: Toyota Corona Avensis / Model 5-1998 / 722,563 kilometres.

Average consumption before the use of the Firepower-pill: 9.8 lit./100 km.

Average consumption after the use of the Firepower-pill:8.1 lit/100 km.: -17.35%

Exhaust fumes	Before the use of Firepower pill	After the use of Firepower pill	Result
CO2	3.7%	1.4%	-62.16%
co	0.027%	0.016%	-40.74%
NO	37 ppm	15 ppm	-59.46%
NOX	39 ppm	16 ppm	-58.97%
RUSS	1.1%	0.7%	-54.55%

### 2nd TAXI [Christos Zorbas]:

Toyota Corona Avensis D4D / Model 3-2003 / 213,143 kilometres.

Average consumption before the use of the Firepower-pill: 8.6 lit./100 km.

Average consumption after the use of the Firepower-pill: 7.2 lit/100 km.: -16.28%

Exhaust fumes	Before the use of Firepower pill	After the use of Firepower pill	Result
CO2	2.9%	1.0%	-65.25%
CO	0.017%	0.001%	-94.12%
NO	176 ppm	77 ppm	-24.43%
NOX	185 ppm	81 ppm	-24.33%
RUSS	0.6%	0.5%	-16.67%

### 3<sup>rd</sup> TAXI [Aggelos Hasapoglou]:

Mercedes CDI 270 / Model 2-2002 / 350,507 kilometres.

Average consumption before the use of the Firepower-pill: 7.8 lit./100 km.

Average consumption after the use of the Firepower-pill: 7.0 lit/100 km.: -10.26%

Exhaust fumes	Before the use of	After the use of	
	Firepower pill	Firepower pill	Result
CO2	2.1%	1.9%	-9.52%
CO	0.013%	0.005%	-61.54%
NO	192 ppm	162 ppm	-15.63%
NOX	202 ppm	1170 ppm	-15.84%
RUSS	1.5%	0.1%	-93.33%



This is to certify that this is an accurate translation of a copy of a document provided to Calliope Sofianopoulos, translator. NAATI, Registration Number 17918. Total of ten (10) pages.



# Trepower

INTERNATIONAL

### Performance technology for a better planet





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### LABTEST HONG KONG LTD

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Frembors of Argencen Ethiopeti Standards Institute American Society for Testing and Materials Entitle Standards Institute Erick Standards address Hong Keng Accordion of Certification Estural Hong Keng Teys Countil

Report No.: ITS2003724

### Section A - Vehicle

: Private car Class Registration Mark : EG1971 : Peugeot Make Mode 1 : 405 SRI

: CW3R000029 Engine No.

: VF315BD6409409770 Chassis No. Colour : Blue / Blue

: Saloon Body type Year of manufacture : 1989 : 1905 c.c. Cylinder capacity

Mileage (before test) : 21069 km

### Section B - Tent route

Started from Labtest ===> Cost le Pent Road ===> Lung Cheung Road
Tong Road ===> Eastern Harbour Crossing ===> Island Eastern Forr Cor Tong Road ===> Eastern Harbour Crossing

Wan ===> Shek 0 ===> Repulse Bay Road ===> Wong Nai Chung hab Road ==> Wang Nai Chung hab Road ==> Fastern Harbour Crossing ==> Western Corridor Wan ===> Shek 0 ===> Repulse Bay Road ===> wong National Corridor Eastern Corridor ===> Eastern Harbour Crassing ==>> Hestern Corridor Tate's Cairn Tunnel ===> Tolo Harbour Road ===>> Sheung She Wan Tuen Long ===> Tuen Mun Road ===> Choung She Wan Teles Ended at Labtest.

- Find out the fuel consumption before adding the petrol pills under the specified test conditions. (Two trips)
- 2. Add petrol pills according to the instruction (use one pill for each 8 US gallons of fuel [gasoline], equivalent to 30 litres).
- Find out the fuel consumption after adding the petrol pills under the specified test conditions. (Two trips)
- Observe the test data and then conduct the comparison.

### Results

Before adding the petrol pill: 8.35 km/litre

After adding the petrol pill : 9.68 km/litre

Improvement : 15.93%

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Report No.: 1TS2003724

### Observation

During the testing, the test driver experienced what the ed81,44 vehicle run smoother and more powerful after podding the pethol

### Conclusion

Under the above test environment, the result shows a saving

after adding the petrol pill in the test vehicle.

The result reflects our findings and the distance in the result reflects our findings and the distance in the result reflects our findings and the distance in the result reflects our findings and the distance in the result reflects our findings and the result reflects our findings are result reflects our findings and the result reflects our findings are result reflects our findings and the result reflects our findings are result reflects our findings and the result reflects our findings are result reflects our findings are result reflects our findings are result result reflects our findings are result result. To Lo Co LEGAL OFFE PAGE 3 OF 3

PREPARED AND CHECKED BY : FOR LABTEST HK LTD.

LABTEST TONG KONG

LTD.

CHAPMAN C.M. CHAN GENERAL MANAGER

INSPECTION & TECHNICAL SERVICE DIVISION



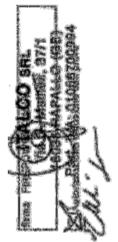
# FICEPOVES

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# SUMMARY OF TEST RESULTS EUROPE 2004

FUEL SAVING	47%	10.6%	29.9%	28.35%	18.13%	10%	10.82%
DISTANCE	55km	48.8	53.3km	53km	37km	16km	55km
KMS	48380	665202	65507	876351	76790	18983	121247
DESCRIPTION	Purge + FP4000	FP4000	Purge + FP4000	Purge + FP4000	Purge + FP4000	FP4000	Purge + FP4000
VEHICLE	Citroen Berlingo Van	Volvo Truck	Mercedes Truck	Scania Truck	Iveco Truck	Iveco Truck	Volvo FH16
COMPANY	Belgacom	Belgo Milk	Coca Cola Enterprises, Belgium	CRA Transport	Fire Service Depart, of Forli	ECOGE	MACELLARI
COUNTRY	Brussels	Brussels	Belgium	Italy	Italy	Italy	Italy
DATE	17/5/04	17/05/04	21/05/04	25/05/04	26/05/04	28/04/04	29/04/04





MINISTERUL ADMINISTRAȚIEI ȘI INTERNELOR

Exemplar nr. Nr. 953.089 Bucuresti.

BAZA CENTRALĂ PENTRU ASIGURAREA TEHNICĂ A MISIUNILOR

Către,

S.C. FIREPOWER ROMANIA S.R.L. Domnului Director General ADRIAN COTIGĂ

Urmare a ofertei dumneavoastră prezentată conducerii M.A.I. referitoare la tehnologia și produsele de tratare a carburantului și uleiului de motor în domeniul transporturilor rutiere, în cadrul unității noastre s-a început derularea programului de încercări pe un autovehicul cu capacitate cilindrică mare și cu un rulaj de peste 150.000 km efectivi.

Prin amabilitatea dumneavoastră, specialiști din cadrul firmei S.C. FIREPOWER ROMANIA S.R.L., la solicitarea noastră, au efectuat două tratamente specifice, obținându-se următoarele rezultate:

a) la un rulaj de 117 km : consum normat = 47 l motorină

consum real = 41 l motorină

economie

= 61 motorină

b) la un rulaj de 772 km : consum normat = 309 l motorină

consum real = 290 1 motorină

economie

= 19 I motorină

În speranța colaborării cu firma dumneavoastră ne exprimăm disponibilitatea de a continua colaborarea și în viitor pe baza ofertelor venite din partea firmei dumneavoastră.

DIRECTO

Cu stimă,



### MINISTRY OF ADMINISTRATION AND INTERIOR AFFAIRS

MAIN BASE FOR TECHNICAL ASSISTANCE OF MISSIONS

> Copy no. 1 Ref no: 953.084 Bucharest Date 19.04.2004

TO:

SC FIREPOWER ROMANIA SRL

ATTN TO:

Mr. ADRIAN COTIGA General Manager

Further to your offer, presented to the MA & I - MINISTRY OF ADMINISTRATION AND INTERIOR AFFAIRS leaders, regarding Firepower technology and conditioners for treating the fuel used in road transport industry, we initiated a test program using a big engine cc vehicle having 150.000 km mileage.

Further to our request, the specialist belongs to SC FIREPOWER ROMANIA SRL carried out two times the fuel treatments, having been recorded the following test results:

a) after 117 km fuel consumption without treatment = 47 litres of diesel fuel fuel consumption with treatment = 41 litres of diesel fuel

fuel saving = 6 litres of diesel fuel

b) after 772 km fuel consumption without treatment = 309 litres of diesel fuel

fuel consumption with treatment = 290 litres of diesel fuel fuel saving = 19 litres of diesel fuel

We express our full availability to develop a collaboration with your company, based on your offers.

I remain,

### Yours faithfully

Managing Director

Colonel PRISECARU DUMITRU



Republic of the Philippines
Department of the Interior and Local Government
National Police Commission
NATIONAL HEADQUARTERS, PHILIPPINE NATIONAL POLICE
LOGISTICS SUPPORT SERVICE

Camp Crame, Quezon City

### **MEMORANDUM**

FOR

DL

FROM

D, LSS

SUBJECT

Evaluation Result of Power Pills FE-3

DATE

JUL 02 2001

### References:

- Attached Memo from Chief, TMD this Service relative to the conduct of technical evaluation on Power Pills FE-3 (Fuel Conditioner and Lead Substitute) (Tab "A").
- Brochures of Power Pills FE-3 (Tab "B").
- As a backgrounder, "C" TMD this Service conducted testing on Mitsubishi 6x6 truck with engine #sD23-28999 and Nissan Dida patrol jeep bearing engine #6D14-929824, both organic vehicles of the aforecited Division from 25 28 June 2001.
- Based on result of evaluation conducted the above-cited fuel conditioner and lead substitute (Power Pills FE-3) provides the following benefits:
  - a. Better acceleration or improves engine power
  - b. Quicker power engine start
  - Reduces carbon monoxide emission (with active anti-pollution agent)
  - d. Quieter/better engine idling, thus lesser gas consumption
  - Lesser engine tune-ups due to complete engine combustion and lesser carbon build-up in the cylinder head.
  - f. It decreases engine noise level or pinging at high altitude drive.
  - 4. For your information.





# Trepower

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### HEADQUARTERS RESEARCH AND DEVELOPMENT CENTRE ARMY SUPPORT COMMAND, PHILIPPINE ARMY Camp Alejandro B Melchor Sr Libis, Quezon City

PTB, DQA

07 February 2002

### REPORT OF TEST PD-ORD-2K1-12

SAMPLE:

Power Pill FE-3 (Fuel Conditioner)

PROPONENT:

New Image International

SUBMITTED BY:

OACOCS, PA

REFERENCES:

a. Letter from ACOCS dated 24 August 2001

Test Procedure for Fuel Conditioner, POWER PILL FE-3

PURPOSE:

Test

REQUEST:

Product Development

FINDINGS:

TYPE OF TEST VEHICLE USED: M35A2, 21/2 Ton Cargo Truck, 6X6

NUMBER OF CYLINDER:

Six (6) Cylinder In-Line

VEHICHEL GROSS WEIGHT: FUEL:

5,500 Tons Diesel

LOAD:

Five (5) persons

TEST PARAMETER	RESULTS			
I. STATIC PERFORMANCE TEST:	WITHOUT POWER PILL FE-3	WITH POWER PILL FE-3		
Test Venue	RDC, ASCOM, PA, Libis Q.C.	RDC, ASCOM, PA, Libis Q.C.		
Total no. of hr Engine Idling	One (1)	One (1)		
Total Fuel Consumed, Li	2.495	2.085		
Initial Engine Temp Reading, <sup>0</sup> F	120	120		
Final Engine Temp Reading, <sup>0</sup> F	160	160		
% FUEL SAVINGS		16.43		
II. ROAD PERFORMANCE TEST:  A. CITY DRIVING:				
Test Venue	Metro Manila	Metro Manila		
Total Distance Traveled, Km	53.452	53.452		
Total Fuel Consumed, Li	18.2	15.41		
Rate of Veh Consumption, Km/Li	2.936	3,468		
Initial Engine Temp. Reading <sup>0</sup> F	120	120		
Final Engine Temp Reading, <sup>0</sup> F	160	160		
% FUEL SAVINGS		18.12		



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TEST PARAMETER	RESULTS			
B. UPHILL/DOWNHILL DRIVING:	WITHOUT POWER PILL FE-3	WITH POWER PILL FE-3		
Test Venue	RDC to Tanay Rizal and	RDC to Tanay Rizal and		
	vice-versa	vice-versa		
Total Distance Traveled, Km	105.616	105.777		
Total Fuel Consumed, Li	27.47	22.5		
Rate of Veh Consumption, Km/Li	3.844	4.701		
Initial Engine Temp. Reading <sup>0</sup> F	120	120		
Final Engine Temp Reading, <sup>0</sup> F	160	160		
% FUEL SAVINGS		22.29		
C. HIGHWAY DRIVING:				
Test Venue	RDC to Sto. Tomas Batangas and	RDC to Sto. Tomas Batangas		
	vice-versa	and vice-versa		
Total Distance Traveled, Km	127.19	127.351		
Total Fuel Consumed, Li	34.45	29.20		
Rate of Veh Consumption, Km/Li	3.692	4.361		
Initial Engine Temp. Reading <sup>9</sup> F	120	120		
Final Engine Temp Reading, <sup>0</sup> F	160	160		
% FUEL SAVINGS		18.12		
D. ROUGH ROAD DRIVING:				
Test Venue	Moncada Tarlac	Moncada Tarlac		
Total Distance Traveled, Km	52.647	52.647		
Total Fuel Consumed, Li	17.23	14.67		
Rate of Veh Consumption, Km/Li	3.055	3.588		
Initial Engine Temp. Reading <sup>0</sup> F	120	120		
Final Engine Temp Reading, <sup>0</sup> F	160	160		
% FUEL SAVINGS		17.45		
III. SMOKE EMISSION TEST:				
Test Venue	RDC, ASCOM, Libis Q.C.	RDC, ASCOM, Libis Q.C.		
Opacity Reading				
Trial 1	76.4	32.4		
Trial 2	74.8	46.4		
Trial 3	82.3	58.4		
Trial 4	77.4	33.5		
Average	77.72	42.67		
% FUEL SAVINGS		45.09		

/F. ACCELERATION TEST:

2 A State Care



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IV. ACCELERATION TEST:	WITHOUT POWER PILL FE-3			WITH PO	OWER PIL	L FE-3
Test Venue	CALABARZON, BATANGAS			CALABARZON, BATANGAS		
Required Speed, Eph	0-45	0-60	0-80	0-45	0-60	0-80
Trial 1. Sec	17.29	27.7	39.88	12.95	22.21	36.17
Trial 2. Sec	15.53	27.68	40.88	16.8	22.52	38.34
Trial 3. Sec	16.44	26.22	41.42	13.21	22.82	36.48
Average Sec	16.42	27.2	40.72	13.32	22.64	36.99
% Increased				18.88	16.76	9.16

### III. REMARKS/OBSERVATIONS

The test vehicle, M35A2, 21/2 Ton Cargo Truck, 6 X 6 with Power Pill FE-3 (Fuel Conditioner) exhibited the following:

- 1. Easy start-up of engine
- 2. Less engine vibration
- 3. Boosting engine power by remarkable increased in acceleration.
- 4. Reduction in smoke emission level.
- 5. Engine temperature running normal.

### NOTES

1. Results are valid only on samples submitted.

Jatevinin & B Yop Chemist 2 C. PTB, DQA

BUHAY

Report is not valid if there are erasures/alterations and without RDC dry seal.

PERFORMED BY:

Juniez. Orlando O

REVIEWED BY

olicarni (Adlacem P

Chief, Cay Supply, DOA

CERTIFIED CORRECT:

Coldnet S (OSC) PA Confusadin Officer





EXCELLENCE DEMANDS EXPERTISE

### CERTIFICATION

	Pick-U	o (720)	Sentra B14	
Emission Level     Power @ 100 kms	Before	After	Before	After
	63%	46%	44 %	36 %
	48 secs.	40 secs.	36 secs.	30 secs.
Fuel Cost per Liter     Kms. per Full Tank	P/ 1.30	<b>P/ 1.00</b>	P/ 2.06	P/ 1.64
	480 kms.	681.6 kms	280 kms	380.8 kms.
5. Kms. Savings	-	42 %	-	36 %

This certification is issued for whatever purpose it may serve to the supplier. Signed on February 8, 2000 in the city of Makati, Metro Manila.

> Angel N. Gonzales National Service Manager

Cc: ANG, NSD

2274 Pasong Tamo Extension, Makati City • Tel. Nos.: 816-70-73; 816-70-74 (connecting all depts.) Telex: 22089 UNI PH Fax No. (632) 816-70-82







Fuel \$/ Litre \$1.00

### **SAVINGS**

	CAR PILL	TRUCK PILL
Fuel (Litres)	60	250
Emissions (Co Tonnes)	0.06	0.27
Rate of Fuel Savings	20%	20%
Rate of Emission Savings	50%	50%
Value of Savings	\$12.00	\$50.00

### **COSTS**

Total Cost	\$1.50	\$6.25
Savings	\$10.50	\$43.75
Per annum	\$546.00	\$31,937.50
Cost %	2.50%	

<sup>\*</sup> Savings per annum based on each car using one tank per week, and each truck using one average tank (500L) per day