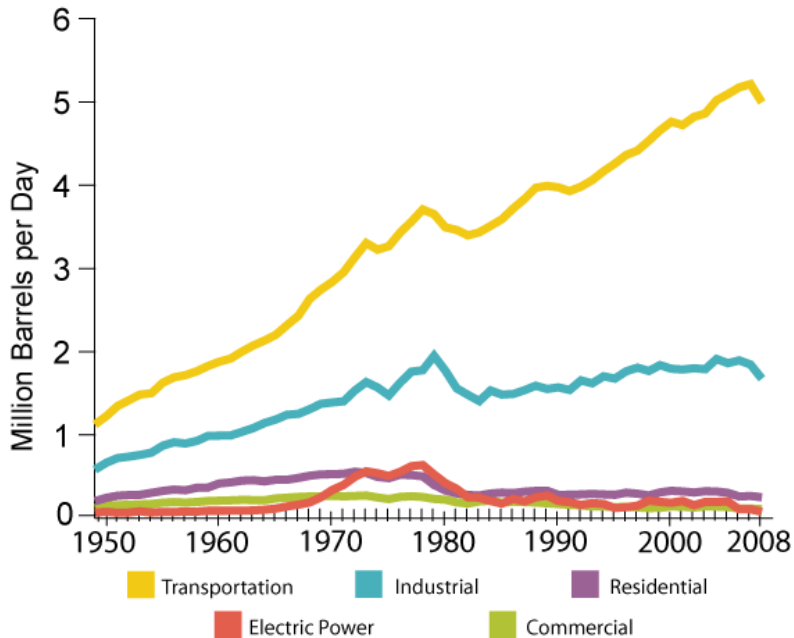


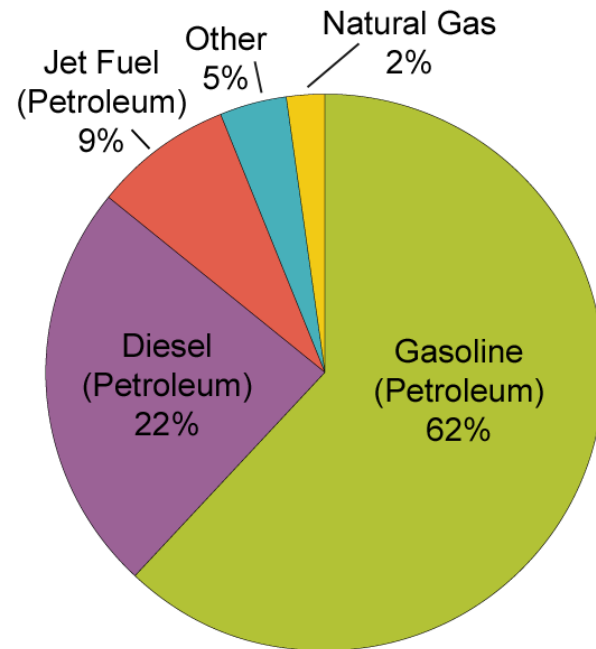
- The cat-cracking process breaks up heavier fuels. Diesel fuel and heating oil are the product of severe catalytic cracking and want to change back into something heavier.
- Heat from an engine accelerates the production of solids - gums, varnishes and sludge's that will plug filters, strainers, nozzles, and injectors. 93% of what clogs filters is re-polymerization of the fuel.
- ProOne Fuel Maximizer addresses these issues ..

Petroleum Consumption by Sector, 1949-2008



Source: Energy Information Administration, *Annual Energy Review 2008*, Tables 5.13a, 5.13b, 5.13c, and 5.13d (June 26, 2009).

Fuel Used for Transportation, 2007



Note: Due to rounding, data may not sum to exactly 100%.
Source: U.S. Department of Energy, *Transportation Energy Data Book Edition 28* (2009).

Fuel Maximizer

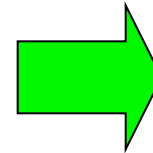
**MFC Marine
Fuel Conditioner**

**More efficient
combustion to
produce more
energy and less
emissions per unit
of fuel burned**



How it Works

- Breaks down large fuel particles so the fuel burns more efficiently
- Lowers the temperature at which soot burns.
- Accelerates the combustion rate of hard-to-burn hydrocarbon molecules
- Dramatically reduces ash and unburned carbon in the exhaust system



More efficient combustion which produces more energy and less emissions per unit of fuel burned.

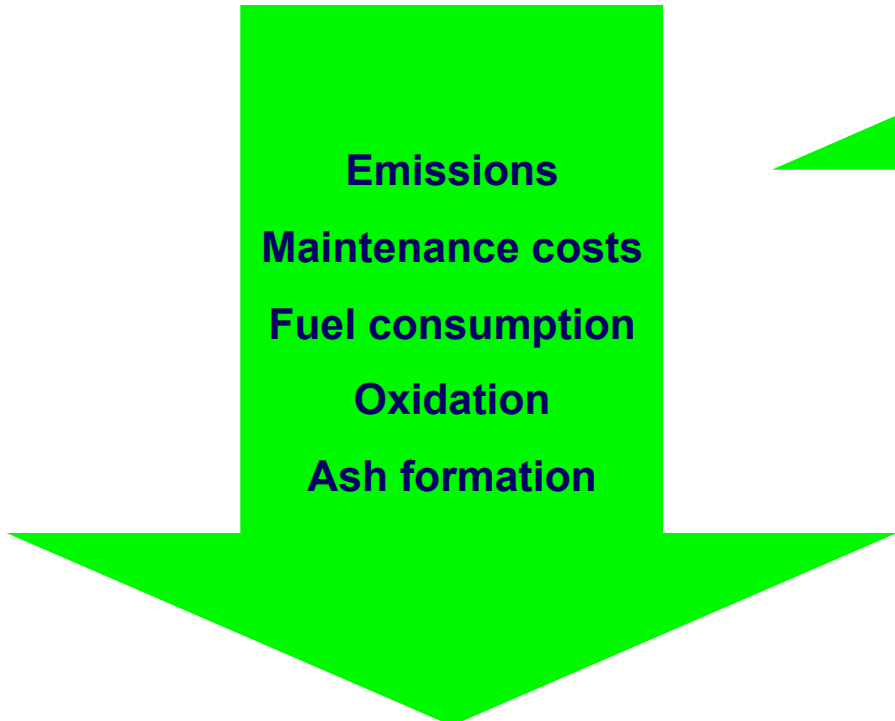


Fuel Maximizer



ProOne Fuel Maximizer is a Fuel Catalyst (Diesel and HFO)

- **Reduces Emissions**
- **Reduces Maintenance Costs**
- **Reduces Fuel Consumption**
- **Cleans the Fuel System**
- **Adds Lubricity to Diesel Fuels**
- **Increases BTU's of the Fuel**
- **Decreases Oxidation of Diesel Fuel**
- **Improves Performance**



Emissions
Maintenance costs
Fuel consumption
Oxidation
Ash formation



Lubricity
BTU' s
Performance
Cleaning

What Makes Fuel Maximizer Different ?

- Captures more of the energy of the fuel, allowing an increase in Power, Efficiency and Cleanliness.
- Is EPA tested.
- Has been tested at world-renowned South West Research Institute for fuel economy, emissions and manufacture (OEM) acceptability.
- Has been proven to work with BioDiesel applications. B20 biodiesel mixture has been tested with the product and has proven reduction in NOx particulates as well as Nox gases.
- Is very effective in Diesel and Heavy Fuel Oil (HFO) applications.



Vs. Regular Fuel Treatments



Regular Fuel Treatments

ProOne Fuel Maximizer

Most Fuel Treatments are made of:

- Sulfur
- Hydrogen
- Carbon
- Nitrogen
- Oxygen

.. the exact same constituents as fuel

Does not contain these ingredients

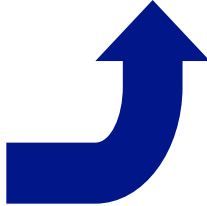
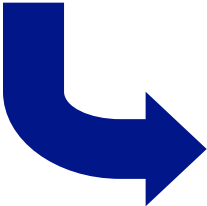
Designed to clean the fuel system.

Also, cleans, but is designed to make fuels more efficient

Do not need EPA Certification for approval.

EPA Registered, after review of fuel economy, emissions and manufacture (OEM) acceptability

EGR Valve



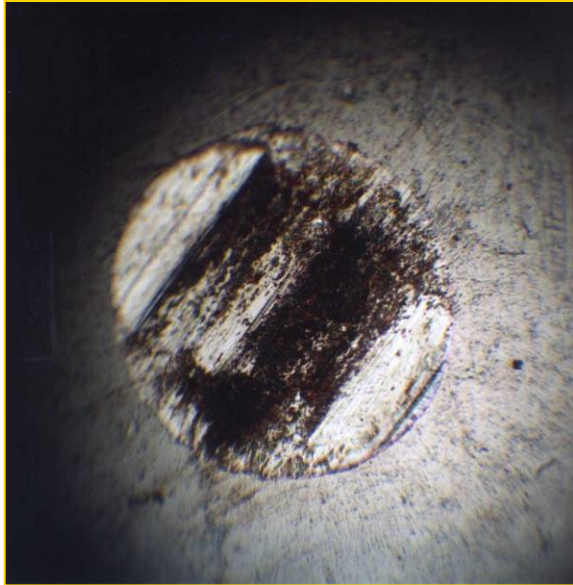
Cleans Carbon Deposits



BEFORE



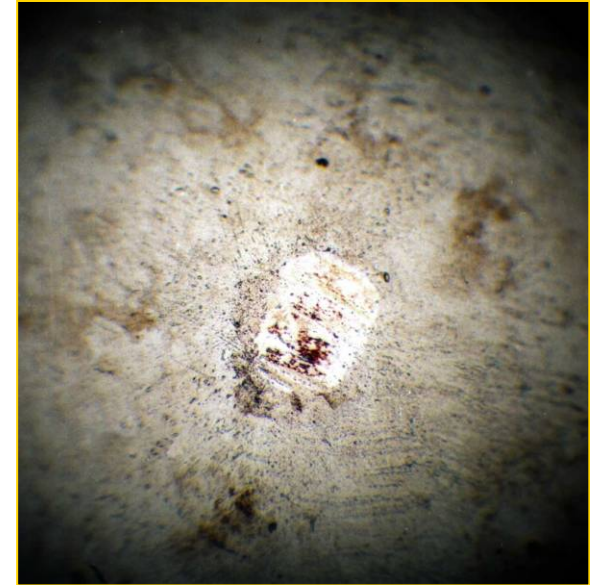
AFTER



Fail MWSD

Mean Wear Scar Diameter

0.57mm



Pass MWSD

Mean Wear Scar Diameter

0.35mm

Conclusion: Improves lubricity in fuel.

SCUFFING LOAD BALL ON CYLINDER LUBRICITY EVALUATOR

TEST RESULTS

Base Diesel Fuel: 2750

Fuel Maximizer 1 to 3000 ratio: 4550

Typical Pass = > 3100

Fail Criteria = <3100

Conclusion:

When added to a low lubricity fuel, Fuel Maximizer provides excellent anti-wear performance

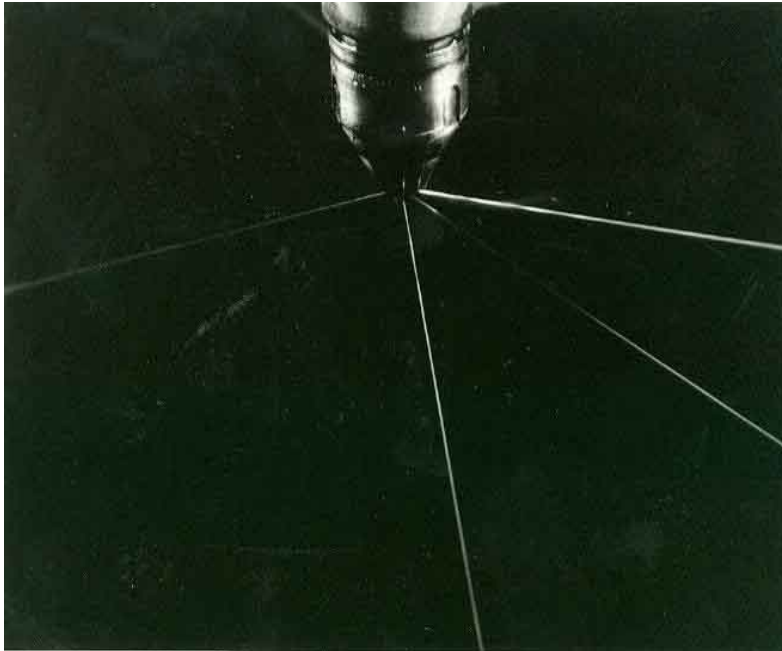


With Fuel Maximizer

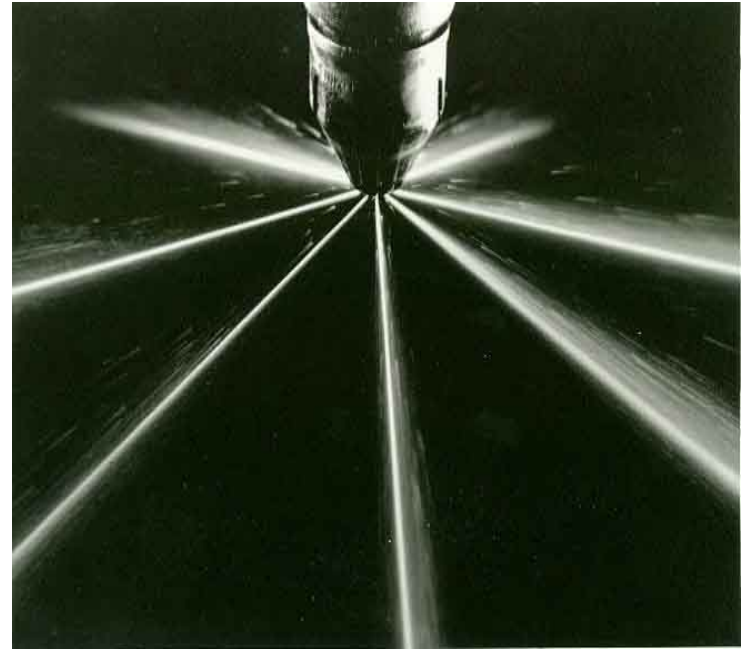


Without Fuel Maximizer

Injector Cleaning



Before Fuel Maximizer



After Fuel Maximizer

TEST SUMMARY

Engines: Two (2) Cummins ' 88 L10 engines operated in tandem
Cylinders, Displacement: 6 Cylinders, 10 L Displacement

Speed: 2300 RPM

Load: 50 – 60 HP

Test Cycle: 15 second cycle – one engine driving, the other being driven. The roles are reversed for each subsequent 15 second cycle.

Duration: 125 hours

Passing Criteria: Average Injector Plunger Rating ≤ 10
Average Injector Flow loss $\leq 6\%$



Cummins L10 Injector Depositing Test



Fuel	Untreated/ Treated	Engine	Plunger Rating	% IMPROVEMENT
CAT	None	Rear	26.3	62%
CAT	1:2000	Rear	9.9	
CAT	None	Front	22.4	61%
CAT	1:2000	Front	8.6	
CAT	None	Front	21.8	61%
CAT	1:2000	Front	8.4	
CAT	None	Rear	23.0	74%
CAT	1:2000	Rear	5.9	



FAIL

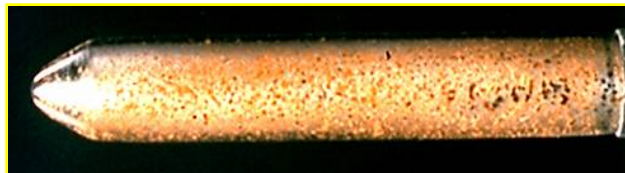
**Without Fuel
Maximizer**



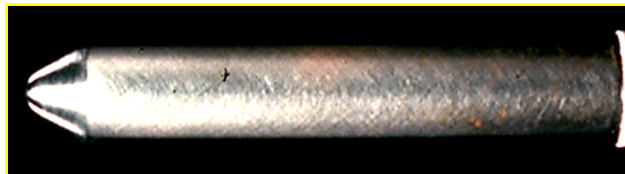
PASS

**With Fuel
Maximizer**

Additive	NACE Visual Rating	% Rust
Base Fuel A	E	75-100%
Fuel A + Fuel Maximizer @ 1:2000 ppm w/w	B	<10%
Fuel A + Fuel Maximizer @ 1:1000 ppm w/w	A	None
Base Fuel B	D	50-75%
Fuel B + Fuel Maximizer @ 1:2000 ppm w/w	B+	<1%



‘E’ NACE RATING



‘A’ NACE RATING

CONCLUSIONS

Provides superior anti-corrosion protection in extremely severe diesel fuels. Ensures anti-rust protection to storage facilities, fuel handling systems, and end user’ s diesel engines.

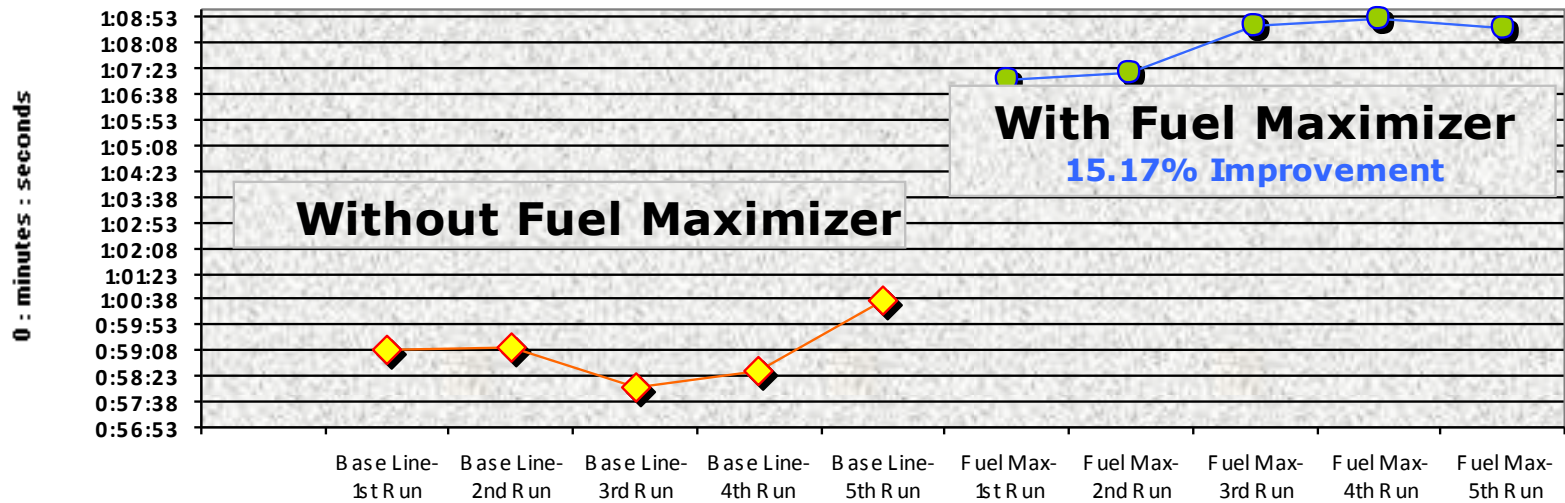


SAE J1321 Fuel Consumption Stationary Test



MPG+ SAE J1321 Fuel Consumption Test Results

*J Engine Tested: Cummings N14 with #2 Sinclair Diesel
10Z to 23 gallons of Fuel*

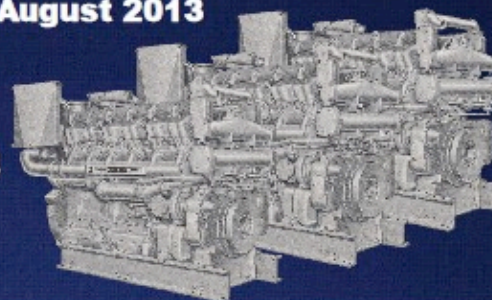




**Eagle Ridge Energy
Denton, Texas Unit #26**

Fuel Maximizer Results August 2013

CATERPILLAR D398



June 23rd to July 19th 2013 - Before ProOne

- 26 Day operation
- 54,490 Gallons of diesel used
- 2096 Gallons per day

July 20th to August 3rd After ProOne

- 15 Day operation
- 28,123 Gallons of diesel used
- 1875 Gallons per day



\$718.25 per day SAVED!!

- ✓ 11.18% Fuel Savings in same location
- ✓ 221 gallons of fuel per day less

Total Savings on 28 Days of Operation

28 days x \$718.25 = \$20,111 - \$3,000 (ProOne) = **\$17,111**

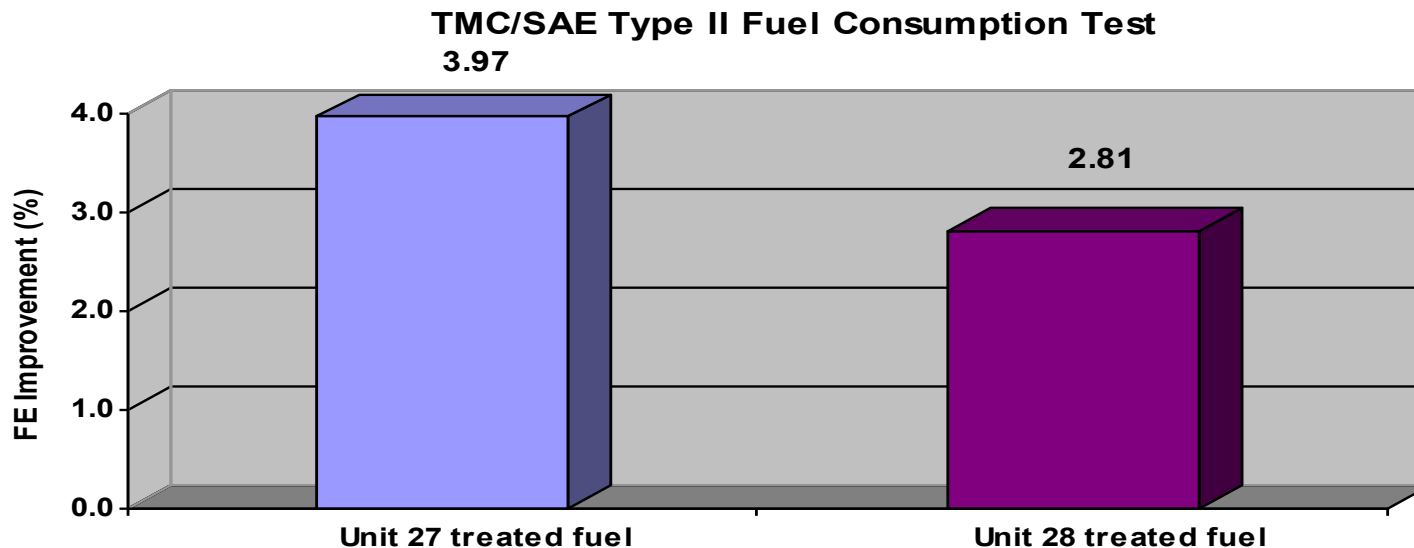
SAE J1321 “Joint TMC/SAE Fuel Consumption Test Procedure – Type II

Three (3) Freightliner trucks equipped with Detroit DD60 engines from an in-use fleet were used for this testing. The trucks were numbered as follows:

Unit 27 – Test truck, starting mileage of 337,000 miles

Unit 28 – Test truck, starting mileage of 603,000 miles

Unit 31 – Control Truck, starting mileage of 332,000 miles



OXIDATION STORAGE STABILITY TEST

TEST PARAMETERS

Base Fuel: Commercial #2 Diesel Fuel
 Temperature: 95°C (203°F)
 Test Duration: 16 Hours
 Test Conditions: Bubble oxygen through sample at a rate of 3 liter/hour



Performance Criteria: Amount of insolubles and fuel color change

OXIDATION STORAGE STABILITY TEST

ASTM D2274

RESULTS

	Fuel Color (D1500)		Total Insolubles (mg/100 ml)
	<u>Initial</u>	<u>Final</u>	
Base Fuel A	<1.5	<2.0	0.16
Fuel A + Fuel Maximizer @ 1:1000	<1.5	<2.0	0.03
Base Fuel B	<1.5	<2.0	0.23
Base Fuel B + Fuel Maximizer @ 1:1500	<1.0	<1.5	0.14
Base Fuel B + Fuel Maximizer @ 1:2000	<1.0	<1.5	0.12

Typical Pass/ Fail Criteria No Harm



CUMMINS FUEL FILTER COMPATIBILITY TEST

TEST PARAMETERS

Filter Used:	Fleetguard F105d and F1212
Base Fuel:	Low sulfur Reference Diesel (LSRD-4) with and without 1% distilled water added
Acina Cycle:	Filters filled with fuel and stored for three (3) weeks at 160°F. Additive treated at two (2) times recommended treat rate.
Performance:	Pressure drop measured before and after acina at 20, 60 and 100 gallons per hour.

RESULTS

	<u>GPH</u>	<u>CHANGES</u>
Base Fuel	20	None
	60	None
	100	None
Base Fuel + Fuel Maximizer @ 1:500	20	None
	60	None
	100	None
Base Fuel + 1% Water	20	None
	60	None
	100	None
Base Fuel + 1 % water + Fuel Maximizer @ 1:500	20	None
	60	None
	100	None

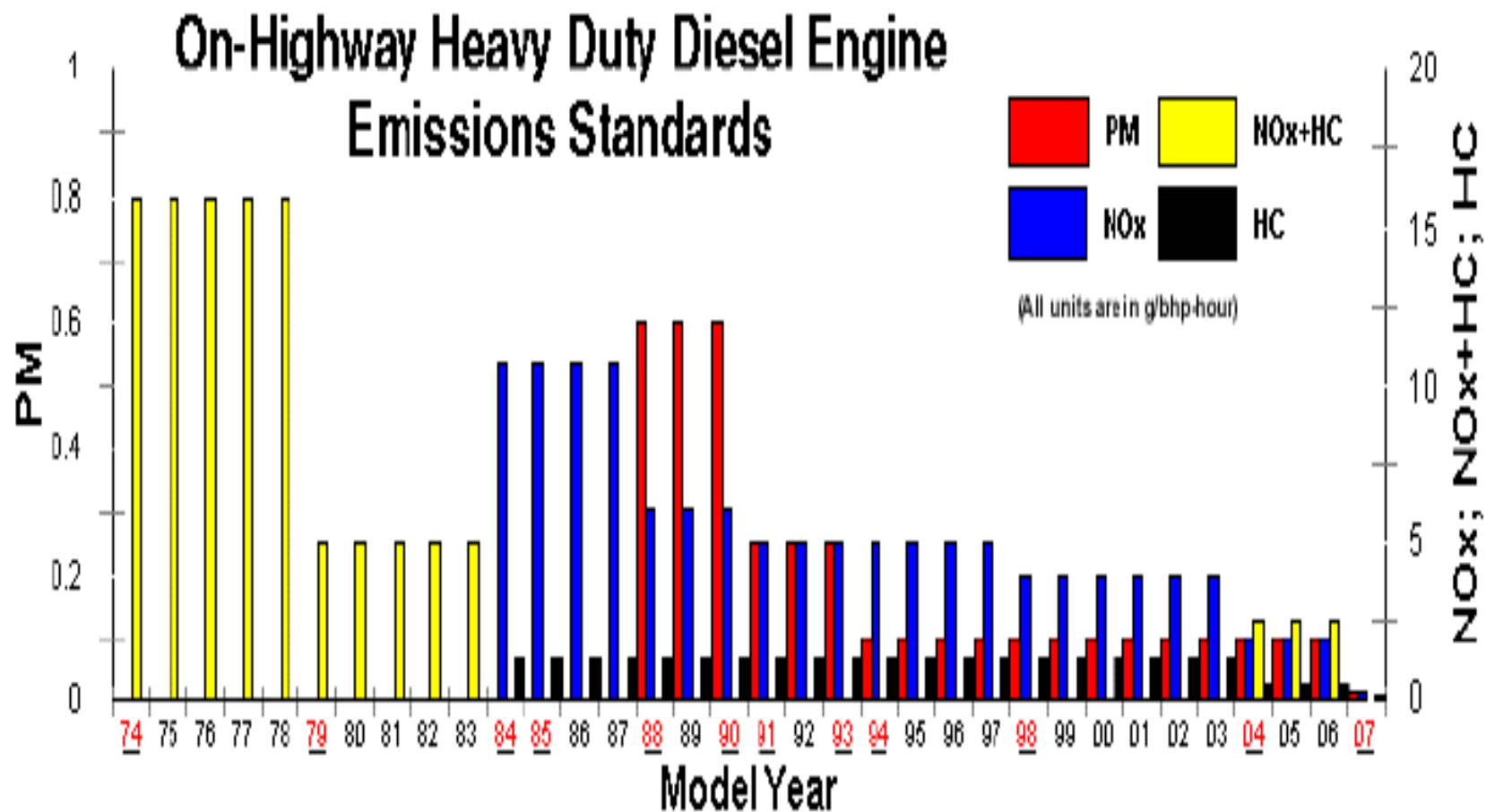
CONCLUSIONS

Fuel Maximizer is completely compatible with diesel fuel filters and will not harm their performance by increasing the pressure drop or restriction across the filter. No signs of residue form on the filter media. The plastic material joining the filter media and the metal end plates remains unchanged.

RESULTS

	<u>FAIL/PASS</u>
Change in Elongation	
Low Swell Nitrile	PASS
Medium Swell Nitrile	PASS
Fluoroelastomer	PASS
Change in Tensile Strength	
Low Swell Nitrile	PASS
Medium Swell Nitrile	PASS
Fluoroelastomer	PASS
Change in Volume	
Low Swell Nitrile	PASS
Medium Swell Nitrile	PASS
Fluoroelastomer	PASS
Change in Hardness	
Low Swell Nitrile	PASS
Medium Swell Nitrile	PASS
Fluoroelastomer	PASS
Surface Cracks	NONE

Conclusion: Fuel Maximizer is compatible with elastomers and seal materials typically found in diesel engines and will not harm their performance.





NOx Testing with Biodiesel



N.O.X. Reduction Case Study: Clark County School Buses (Bio Diesel Fuel)

<u>Unit Number: 24801 "Electronic C Series Engine"</u>					<u>Unit Number: 24501 "Electronic B Series Engine"</u>				
Test	Date	Mileage	Nox		Test	Date	Mileage	Nox	
Baseline:	2/18/2004	15577	505 ppm		Baseline:	2/18/2004	22467	529 ppm	
First Test	3/16/2004	16899	370 ppm		First Test	3/16/2004	24055	361 ppm	
		Traveled	Reduced				Traveled	Reduced	
		1322	135 ppm				1588	168 ppm	
<u>Unit Number: 96939 "Mechanical C Series Engine"</u>					<u>Unit Number: 97602 "Mechanical B Series Engine"</u>				
Test	Date	Mileage	Nox		Test	Date	Mileage	Nox	
First	2/18/2004	110,486	385 ppm		First	2/18/2004	127,352	479 ppm	
Second	3/16/2004	112,638	432 ppm		Second	3/16/2004	128,445	567 ppm	
Third	4/7/2004	119,354	100 ppm		Third	4/7/2004	134,558	461 ppm	
		Traveled	Reduced				Traveled	Reduced	
		8,868	285 ppm				7,206	18 ppm	

Standardized emissions tests conducted by: Battelle Columbus Division

Engine: Superior Model 2406D/Mitsubishi Model S6U-PTA, 4-stroke, 6-cylinder, 4300 cubic-inch diesel engine rated at 1,400 brake-horsepower and 1,200 r.p.m. at full load, run at 85% load to artificially create a particulate emissions problem.

Measurable and reproducible results:

- CO emissions reduced by 10 percent,
- HC emissions reduced by 9 percent,
- Particulate carbon reduced by 26 percent,
- Particulate emissions reduced by 43 percent,
- No increase in NOx emissions

Note: ProOne Fuel Maximizer offers a unique, cost-effective means to reduce diesel engine particulate emissions without aggravating NOx emissions or diminishing fuel economy.



Before Fuel Maximizer



After Fuel Maximizer

200 hours of run time..

AUTOMOTIVE

Automotive Diesel Applications



Maximizes Complete Combustion

From passenger car to light trucks, Fuel Maximizer maximizes power & economy for diesel applications. With fuel prices in a constant flux, Fuel Maximizer helps today's new generation of electronically controlled, low emission, high speed, high horsepower diesel engines by ensuring complete combustion while reducing emissions.

FLEETS

Over the Road Diesel Applications



Get more Productivity from your Fleet

Today we have a new generation of electronically controlled, low emission, high speed and high horsepower diesel engines. The reason for this new technology is the need for diesel engines to meet the Clean Air acts of 1998, 2002 & 2007. They are accomplishing this by using electronic injectors and by changing the diesel fuel we are presently burning.

Fuel Maximizer helps that diesel fuel burn more efficiently.

TRANSIT

Transit Diesel Applications

Clean, Soot Free Busses



Fuel Maximizer saves transit companies thousands of dollars in fuel consumption and maintenance costs and, at the same time, reduces exhaust emissions. Incomplete combustion leads to problems in bus engines, including soot formation, carbon deposits, black smoke and corrosion. Transit and owner operators can reduce soot formation, extend maintenance intervals, and reduce the need for major component overhauls by using Fuel Maximizer.

INDUSTRIAL



OIL & GAS



Industrial applications include Construction Equipment, Mining, Agriculture, Oil Drilling, Off Shore Drilling, Generation units and more. The EPA is proposing new emission standards for non-highway diesel engines used in construction, agricultural and industrial operations. Fuel Maximizer can help oil and gas developers reduce emissions while drilling in the mountains and oceans around the world and at the same time keep their diesel engines running cleaner and longer.

Mining and Marine



Improves the combustion of all grades of heavy, residual fuel oils, translating into reduced fuel consumption, better boiler performance at reduced levels of excess air, less particulate emissions and reduced maintenance requirements. By eliminating soot and black smoke at the source, Fuel Maximizer HFO reduces carbon deposits and improves thermal efficiency of heat exchangers. Maintenance schedules can also be extended. Safe to use with all boilers.

For standard grades of marine residual fuel oils, the recommended dosage rate of Fuel Maximizer HFO is 1: 5,000. During the first week of treatment, a higher dosage rate of 1:4,000 is recommended. For an initial treatment, include enough Fuel Maximizer HFO to dose the untreated fuel already in the fuel system and tanks, in addition to dosing the incoming delivery of fuel oil.

Dosing Ratio

Dosing ratio: 1:3,000

oz./gal.

- 1oz treats 23 gallons of fuel
- 1 gallon treats 3,000 gallons of fuel
- 55 gallons (drum) treats 165,000 gallons of fuel

ml/Liter

- 29.6 mL treats 87 Liters of fuel
- 3.79 Liters treats 13,638 Liters of fuel
- 208 Liter (Drum) treats 750,106 Liters of fuel



Is Fuel Maximizer Safe to Use?



- Consists of a non-toxic, organo-iron compound dissolved in aromatic solvent. The only elements in Fuel Maximizer are carbon, hydrogen and iron.
- Produces no harmful incremental emissions as a by-product, unlike many fuel additives.
- The only by-products of its combustion are carbon dioxide, water and iron oxides, all of which are harmless to humans.
- Should be handled using the normal precautions associated with any solvent or fuel.

MFC Marine Fuel Conditioner



Designed to meet new MARPOL/IMO and ULSD mandates. Helps the fuel burn cleaner to increase cetane number, reduce emissions and improve fuel performance.





MFC Marine Fuel Conditioner

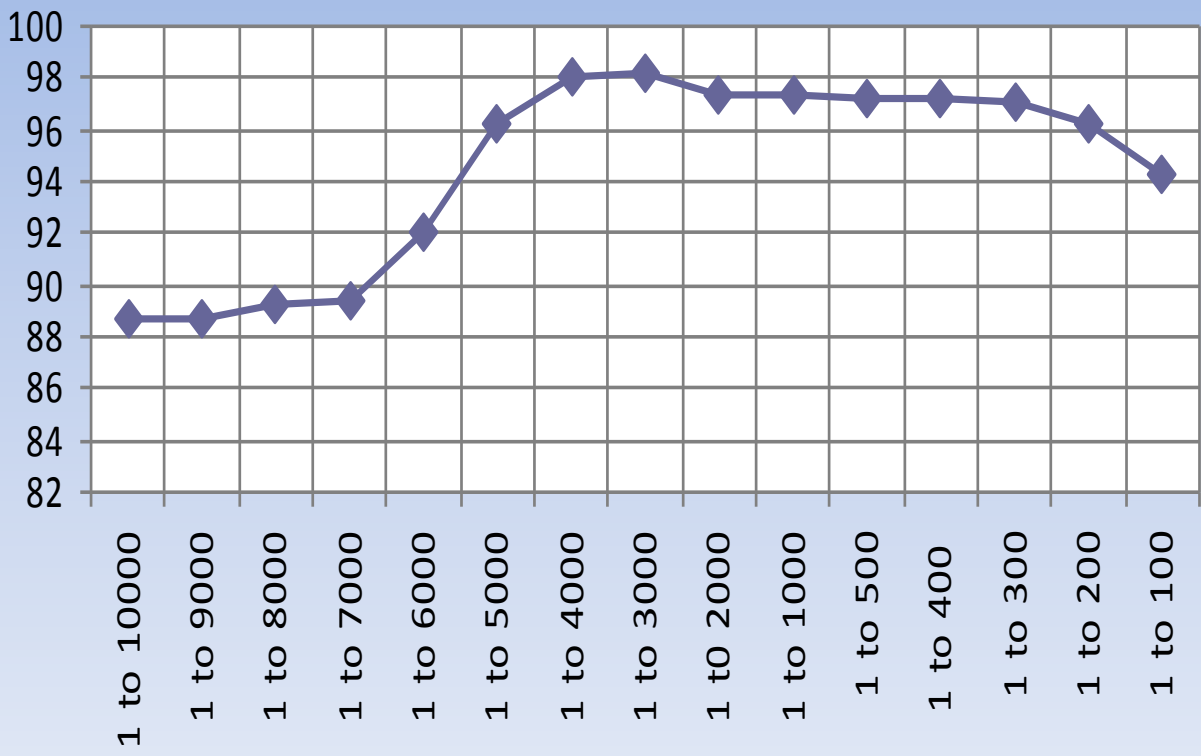


- ✓ Meets new MARPOL/IMO and ULSD standards
- ✓ Reduces exhaust emissions
- ✓ Improves fuel economy
- ✓ Typically increases cetane number by 2
- ✓ L10 superior detergency
- ✓ Water dispersant to help safely remove water
- ✓ Controls algae
- ✓ Antioxidants protect thermal and oxidative stability
- ✓ Improves lubricity
- ✓ Corrosion inhibitor
- ✓ Superior low temperature additive handling properties

40CFR80.591 Compliance statement. The sulfur content of this diesel fuel does not exceed 15 ppm.

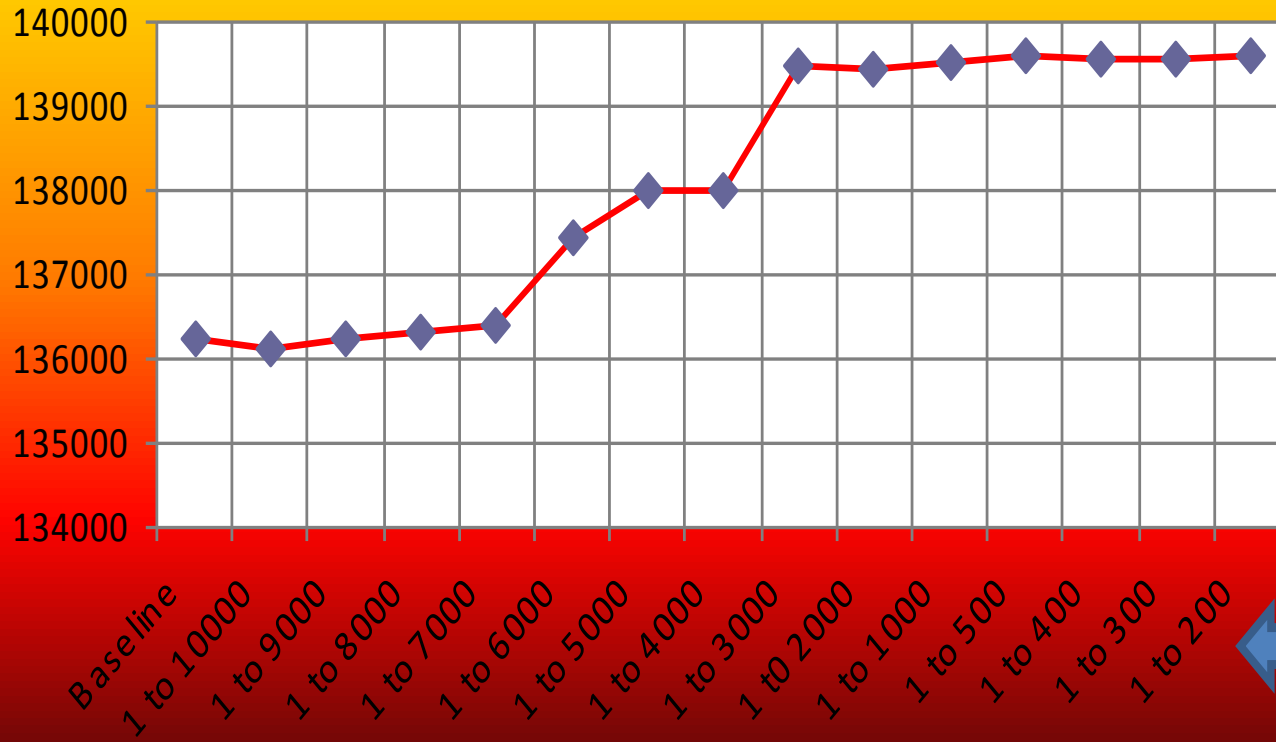
Cylinder Testing

% of Burn in Cylinder



← Ratio of MFC

BTU's per Pound



Ratio of MFC