

Chornco is Results Driven

The following excerpts are representative samples taken from archived laboratory testing and field trial reports. The complete reports may be available upon application to Chornco. Enquire by emailing info@chornco.com.

1. US Marine Operations CA

After 3.3 million gallons of diesel fuel burned, average saving for the fleet was 15.69%.

2. US Coast Guard

Use of the product resulted in clearing the fuel contamination, provided a better throttle response, improved cold start-up, cleaner injector tips and increased fuel economy.

3. Labtest Hong Kong (member of BSI and ASI)

Under the test environment the result shows a saving of 15.93%. During the testing, the driver experienced the vehicle engine running smoother with more power.

4. Kharkov State Academy of Railway Transport

Fuel savings: 9%.

Injector life extended by 13 times on Diesel Locomotive Engines.

Emissions reduction between 30% and 50%.

Reduced Maintenance on valves, exhaust manifolds and piston rings.

5. Department of Transport – Kiev

Fuel savings on Ikarus buses and trucks averaged 13.2%.

Drivers noted a decrease in temperatures and an increase in power.

6. Queens University Belfast – School of Mechanical and Process Engineering

Improved torque 6-9% and 20-30% faster fuel burn, conducive to better and lower emissions on a two-stroke engine test.

13% fuel savings on a 12-month overland vehicle test.

7. Parker Drilling

Average fuel savings across Caterpillar Diesel Engine site machines:- 18%.

74°F reduction in exhausts manifold temperature.

45°F reduction in Hydraulic Oil temperature on right angle drives.

8. Olsen Engineering Inc. Test vehicle Peugeot 505 Turbo Diesel:

Mileage increase 4.1%.

Particulate emissions: -10.63%.

Carbon Monoxide: -31.53%.

Oxides of nitrogen: - 3.62%.

Hydrocarbons: -65.66%.

Cetane rating: +4.1%.

9. Isle of Man Government

IOM Department of Agriculture, Fisheries and Forestry.

The following observations were made: Tanks and filters free from previous contamination, improved all around performance with noticeable reduction in turbo-lag, fuel savings estimated in excess of 8%. Engine oil cleaner and rocker arms clear of sludge.

10. California Environmental Engineering

Test vehicle Mercedes Benz 300D.

Fuel savings: 4.1%.

Particulate emissions: -44.83%.

Carbon Monoxide: -20%.

Oxides of nitrogen: - 7.40%.

Hydrocarbons: -13.00%.

Carbon Dioxide: -4.1%

11. Singapore Institute of Standards and Industrial Research

Test bed vehicle run at high speed.

Carbon Monoxide: -25%.

Total Hydrocarbons: -58%.

Carbon Dioxide: -17%.

Air/Fuel Ratio: -14%.

Dust Emission: -46%.

Oxides of Nitrogen: -39%.

Sulphur Emissions: -75%.

Sulphur Dioxide: insignificant.

12. New Zealand Army

Mercedes Unimog 1700L truck with the engine flushed and cleaned with new fuel lines and fuel tank.

Fuel savings 6.9%.

Mercedes Unimog 1700L truck with the engine flushed and cleaned with new fuel lines and fuel tank on Dynamometer Test – time limited.

Fuel savings at completion: 5.6% with the trend rising.

Power gain: +2Kw.

Exhaust manifold temperature: -20°C.

13. Toll Rail – New Zealand

Fuel Lubricity - Wear Scar testing to ASTM D2783.

When compared to straight diesel the #2082 treated fuel resulted in the following improvements:

Wear scar Length reduction: 16%.

Wear scar Width reduction: 12%.

14. Interislander Ferry's

M.V. Arahura Passenger car ferry:

Fuel reduction: 7%. - (926,000 litres)

679 Tonnes of carbon saved

2,463 Tonnes of CO2 emissions saved.

15. Interislander Tug and Tractor Fleet

Long term testing on equipment exhaust smoke opacity.

Reductions across the fleet from -20% to -59%.

16. Solid Energy

Huntly Coal Mine.

Bulk storage diesel fuel tank heavily microbial contaminated.

Treatment with #2082 quickly cleared the contamination without the use of a toxic biocide.

17. Tanzania Zambia Railway Authority

General Electric (GE) - 7FDL12 Locomotive.

Fuel consumption reduction: 14.425%.

(2.5 million litres)

Improved power performance.

18. Works Infrastructure

A range of tests over a series of vehicles/machines.

Average fuel savings: 10.64%.

Exhaust smoke opacity reduced: 50%.

Bulk storage fuel tank clear of contamination.

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19. Ulsterbus / Northern Ireland Railways

Ulsterbus is the government owned bus service in Northern Ireland. The Technical Department of Ulsterbus/NI Railways, and Queens University Belfast – School of Mechanical and Process Engineering, tested the fuel additive product, evaluating its effect on exhaust emissions.

Six representative fleet vehicles were used. Loaded tests were performed on a Clayton model CT250-8K chassis dynamometer. The emissions measurements were taken on a Richard Oliver Ltd. Multi-gas Exhaust Analytical System set to measure CO₂, CO, HC and NO_x.

For emissions reduction comparisons, three makes of EEC approved catalytic converters were tested concurrently with the product tests.

The results demonstrated that use of the fuel additive reduced the hydrocarbon emissions from the treated vehicle by approximately 90% when compared to the vehicle without additive or catalytic converter.

Performance results were similar between the fuel additive and the most widely used catalytic converter. "This is an extremely good result, matching the performance of the catalyst without the expense of fitting them to a bus". Comparisons were made between the cost of fitting the catalysts and using the fuel additive. The fuel additive could be used for over 5 years before it equalled the cost of fitting one catalyst to one vehicle.

20. Cathay Pacific

Hong Kong Airport - Ground support equipment.

Average emissions reduction: -48%.

21. Fiji Government

Public Works Department support vehicles.

Average fuel consumption reduction: -10.36%.

22. Power Hire and K2 Environmental Ltd
CAT V12 900Kw Diesel Generator.

Particulate emissions reduction: -68%.

Power output performance: +14%.

23. Isle of Man Fire and Rescue Services

Bulk fuel storage tank cleaned of sludge and bacterial contamination.

Average fleet fuel savings: 16.73%.

24. Argos Helena

52-metre, 1,425 tonne Long-liner fishing vessel.

Using Chornco #2083 negated the need to purchase expensive Kerosene.

Additional five days of fishing.

Smoother and cooler running engines.

The normal 12,000-hour service running to 54,000 hours currently with little carbon build-up.

Necessary fuel filter changes from weekly to once in six months.

Major reduction in smoke emissions under full power operations

25. General Motors Corporation

"We have completed the laboratory analysis of the fuel and oil conditioner. Results indicate that these are highly refined petroleum products of good quality and we cannot foresee any harmful effects from their use in EMD engines".

"Customer use of these products has no effect whatsoever on the EMD warranty, our warranties cover material and workmanship only".

General Sales.

26. Caterpillar

"We have tested the fuel conditioners and were technically satisfied by the results. We endorse the usage of these products, as they are not harmful, and effectively eliminate the formation of sulphuric acid, which is the primary cause of engine wear. Where fuel and oil additives made by other manufacturers are used in Caterpillar products the Caterpillar warranty is not affected because of their use".

Corporate fluids Group

27. Technical Vehicle Board – Germany

"The tested material does not contain any harm doing ingredients that would exclude the usage in any petrol or gasoline engine".

28. New Zealand Department of Scientific Industrial Research

"The infra-red spectrum of the product shows that it is a primary hydrocarbon in composition. The sample was ashed and found to contain very little residue (0.004%). The result for ash indicates that the product is free from additives containing inorganic substances".

29. Kundana Gold Mine – Australia

Trials were conducted over a six-month period to assess levels of exhaust emissions and fuel consumption. Six pieces of machinery were monitored. Data was recorded both before and after the application of the fuel additive.

The exhaust emissions study monitored two gases:

Reduction of Nitric Oxides: -38%.

Reduction of Carbon Monoxide: -20%.

Results provided sufficient evidence for management to apply for ventilation exemption under mines regulation (10.52).

Fuel consumption was reduced by 2%-10% with a weighted average of 4.8%.

30. Ministry of Defence – Vietnam

Fuel savings: -10%.

Hydrocarbon emissions: -30%.

Carbon monoxide emissions: -31%.

31. Republic of the Philippines

Department of Environment and Natural Recourses.

1. Mass rate of particulate matter emission: 32.5% - 39% reduction.

Sulphur Dioxide emission: 54.5% reduction.

32. Soo Line Railroad

Fuel savings: 5.4%

The results represented a net saving of \$1M.