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THE GRAVIMETRIC EFFECT OF A RENTAR IN-LINE FUEL CATALYST ON PARTICULATE MATTER (PM) AFTER 100 HOURS OF CHASSIS DYNAMOMETER OPERATION

Olson-ECologic Engine Testing Laboratories, LLC

EPA and CARB Recognized Engine Emission Laboratory

Cummins N-14 Diesel Engine Operating on California No. 2 Diesel Fuel

Results:

- UDDS – HD Transient Cycle (“city driving”)
 - 6.1% Reduction in Particulate Matter (PM)
- Steady-State 55 MPH (“highway driving”)
 - 9.4% Reduction in Particulate Matter (PM)
- NYC BUS Transient Cycle
 - 3.4% Reduction in Particulate Matter (PM)

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EFFECT OF THE RENTAR IN-LINE FUEL CATALYST ON ELEMENTAL AND ORGANIC CARBON PARTICULATES

ETS, a Division of Olson Engineering

EPA and CARB Recognized Engine Emission Laboratory

Cummins N-14 Diesel Engine Operating on No. 2 Diesel

Results:

- 31.3% Elemental Carbon Reduction
- 16.3% Organic Carbon Reduction
- 19.0% Total Carbon Reduction

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TRUESDAIL
LABORATORIES, INC.

VOLITILE ORGANICS

Truesdail Laboratories, Inc.

Independent Testing, Forensic Science and Environmental Analyses

Bag Samples were taken from an operating Cummins 855 off chassis engine operating in a laboratory cell. Two bag samples were taken before the installation of the Rentar Fuel Catalyst and two bag samples were take after the installation of the Rentar Fuel Catalyst.

Results:

- Benzene 35.4% Reduction
- Toluene 36.1% Reduction
- Xylenes 46.2% Reduction
- Ethylbenzene 48.4% Reduction
- Acetone 16.7% Reduction
- Acetalhydes 36.0%
- 1-ethly-2methly benzene 48.9%
- 1,2,3, tri-methylbenzene 58.7% Reduction

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DIOXIN AND FURAN ANALYSIS

STL Severn Trent Laboratory – Sacramento, California

Analytical results for the samples received under chain of custody by Severn Trent Sacramento laboratory

Results:

The conclusion is that no dioxin and furan were detectable as a result of engine operation with the Rentar device installed.