

# **Motor Oil Additive Analysis**

#### **Project Scope:**

Fuel Freedom International, LLC of Altamonte Springs, Florida has requested that Ecochek conduct an independent, scientific, research analysis on motor oil additives. This scientific analysis will be conducted under guidelines furnished by Fuel Freedom International, LLC and The U. S. Government, (GSA, General Services Administration). Data collected from this project will be used to determine any increased performance values or benefits achieved from using motor oil additives. Any analysis, or data derived from this research shall be considered proprietary, and the sole property of Fuel Freedom International, LLC.

#### **Method of Analysis:**

1. A total of three (3) automobiles were used in this experiment. Each automobile used in this study had more than 25,000 miles in odometer readiness. Test vehicles used are described as follows:

#### Vehicle 1

1.1. (1) Four cylinder engine. A 1981 Jeep CJ 7, with a 151 cubic inch displacement engine, manual shift transmission. Tires were Pathfinder Radial APR, with a treadwear rating of 260, temperature B traction A. Standard tire pressure of 35 psi was maintained throughout the study. This vehicle was driven over a course of local mileage. Course duplication of base line data and after additive was almost exact. Beginning odometer reading 90,100.0 miles.

#### Vehicle 2

1.2. (1) Eight cylinder engine. A 1993 Lincoln Town Car, with a 4.6 liter engine, auto transmission. Tires were Michelin XW4, with treadwear rating of 520, temperature B and traction A. Standard tire pressure of 35 psi was maintained through the study. This vehicle was driven over a local course. Beginning odometer reading of 98,300.0 miles.

#### Vehicle 3

- 1.3. (1) Eight cylinder engine. Also was a 1993 Lincoln town Car, with a 4.6 liter engine, automatic transmission. Tires were Michelin XW4, with a treadwear rating of 520, temperature B and traction A. Standard pressure of 35 psi was maintained throughout the study. This vehicle was driven over long range highway miles. Beginning odometer reading of 174,953.0 miles.
- 2. Data for base line analysis was obtained from 400 miles actual usage over actual road conditions.
- 3. After base line data had been obtained and properly documented, the automobiles were serviced at Jiffy Lube. This service included oil and oil filter change. Two ounces of MPG-EXTreme<sup>TM</sup> Oil Additive/qt. were added to the oil at oil change. This procedure was supervised and documented by the individual driver and Jiffy Lube personnel.
- 4. Data was again collected, and documented for a period of 400 miles over actual road conditions and of a similar course. Only Vehicle One (1) posted an immediate mileage/gal. improvement.
- 5. Based on previous experience and experimentation, performance value should increase after 400 miles usage of the oil additive. Both Vehicle Two (2) and Three (3) exhibited this same trend, with best performance increases obtained after 1200 to 1300 miles use after the MPG-EXTreme<sup>TM</sup> Oil Additive was added.
- 6. Very limited knowledge about the chemical nomenclature, or the physical attributes of MPG-EXTreme<sup>TM</sup> Oil Additive product was known. Information was maintained as proprietary, and supplied on a "Need to Know" basis. Also, this product was not analyzed, or reverse-engineered.

# Comparative Chart of Gasoline Mileage Before and After Using MPG-EXTreme<sup>™</sup> Oil Pressure Additive

	Initial MPG	$\begin{array}{c} \text{MPG with} & \text{MPG Increase} \\ \text{MPG-EXTreme}^{^{^{\text{TM}}}} \end{array}$		% Increase
Vehicle 1	17.20	19.48	2.20	+13.26
Vehicle 2	21.27	23.00	1.73	+ 8.13
Vehicle 3	22.56	24.76	2.20	+ 9.75

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### **Summary**

Several observations were made during the course of this study. First and foremost, the study reveals documented evidence of increased gas mileage in all three Test Vehicles. Other noteworthy observations must include Vehicle 1, a four-cylinder engine showed immediate improvement in gas mileage with addition of MPG-EXTreme<sup>TM</sup> Oil Additive at oil change. Both Test Vehicles 2 and 3, (eight cylinders) responded much slower. No increase in gas mileage was noted before 1200 - 1300 miles after addition of MPG-EXTreme<sup>TM</sup> Oil Additive was added to the oil at oil change. No maintenance was performed on any of the Test Vehicles.



# **ECOCHEK**

### **ADDENDUM**

# **MPG-EXTreme Oil Additive**

This addendum covers continued independent analysis of MPG-EXTreme<sup>TM</sup> Oil Additive for Fuel Freedom International, LLC of Altamonte Springs, Florida. Previous collection of data analysis from the original study consisted of performance values taken after 400 road miles of testing. Data collected from the original study showed an immediate gas mileage increase of 13.26% of Test Vehicle #1. Subsequently, this addendum evaluates extended road mileage testing to further analyze extended performance of the Test Vehicle treated with MPG-EXTreme<sup>TM</sup> Oil Additive.

Test Vehicle #1 continued to reach 29.61% increase in gas mileage. This increase was incremental on a tankfill by tankfill basis, with the last two tankfills producing almost the same 29.6% increase. This increase occurred after an additional 651 road miles of testing. Total test mileage on Test Vehicle #1 was 1147 miles.

# **Test Vehicle #1**

Initial	Avg. MPG	% Increase	Avg. MPG	% Increase
MPG	After 400 Miles	After 400 Miles	After 1151 Miles	After 1151 Miles
17.2	19.48	13.26	22.39	29.59