A Case Study Measuring Fuel Economy in a Heavy-Duty Diesel Vehicle Treated with Power Service Diesel Injector & DPF Flush

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POWER SERVICE® Diesel Additives

A CASE STUDY MEASURING FUEL ECONOMY IN A HEAVY-DUTY DIESEL VEHICLE TREATED WITH POWER SERVICE DIESEL INJECTOR & DPF FLUSH

Abstract

This case study evaluated the effect of a single application of Power Service Diesel Injector & DPF Flush on the fuel economy of a 2024 Peterbilt 579 heavy-duty diesel truck. The vehicle operated exclusively on a consistent highway route between Houston and Weatherford, Texas, accumulating 6,944 miles over the study period. Fuel economy was first measured across five tanks of untreated diesel fuel, averaging 5.90 miles per gallon (mpg). After both fuel tanks were treated with a total of 52 ounces of Diesel Injector & DPF Flush (1:500 ratio), mileage was tracked across four additional tanks. Post-treatment fuel economy averaged 8.25 mpg, representing a 39.77% improvement. These findings suggest that a single dose of the additive can produce a substantial and sustained increase in fuel efficiency in heavy-duty diesel applications.

Objective

This case study aimed to evaluate the impact a single dose of Power Service Diesel Injector & DPF Flush would have on the fuel economy of a 2024 Peterbilt 579 heavy-duty diesel truck.

Materials

2024 Peterbilt 579 diesel truck, 52 ounces of Power Service Diesel Injector & DPF Flush 1:500 treatment ratio, mileage tracking chart.

Methods

1. During the initial phase, five tanks of untreated diesel fuel were driven and mileage tracked at each fuel fill-up.

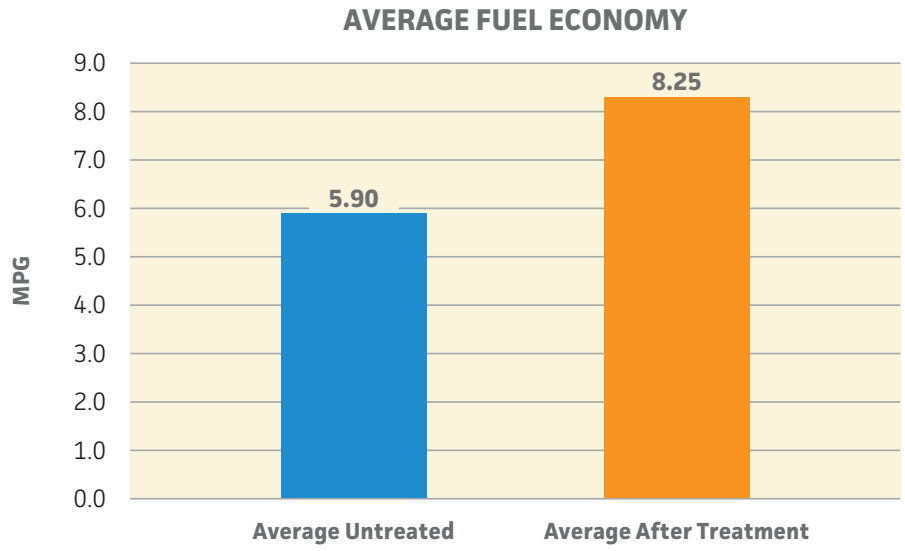
2. During the treated phase, each of the two fuel tanks were treated with 26 ounces (52 ounces total) of Power Service Diesel Injector & DPF Flush (1:500 treatment ratio) on the sixth fill-up.
3. Four more tanks of fuel with no additive were driven and mileage tracked at each fuel fill-up.
4. Mileage data was compiled and averaged.

Results

Over the course of the case study, the diesel truck was driven exclusively on the highway. The same route was driven each day from Houston, TX, to Weatherford, TX. The vehicle was driven 6,944 miles total during the case study.

		STARTING MILEAGE	ENDING MILEAGE	GALLONS OF FUEL	MPG CALCULATED
UNTREATED FUEL	Tank 1	52,088	52,698	99	6.16
	Tank 2	52,698	53,268	99	5.76
	Tank 3	53,268	53,878	101	6.04
	Tank 4	53,878	54,468	99	5.96
	Tank 5	54,468	55,028	100	5.60
ONE TANK OF DIDF	Tank 6	55,028	55,638	99	6.16
UNTREATED FUEL	Tank 7	55,638	56,260	97	6.41
	Tank 8	56,260	57,160	95	9.47
	Tank 9	57,160	58,110	96	9.90
	Tank 10	58,110	59,032	99	9.31

AVERAGE MPG Untreated	AVERAGE MPG Treated	% IMPROVEMENT
5.90	8.25	**39.77**



Conclusions

1. Untreated fuel mileage
    a. The five tanks of untreated diesel fuel averaged 5.90 miles per gallon.
    b. The vehicle traveled 2,940 miles
    c. The mpg for each tank ranged from 5.60 mpg at the lowest and 6.16 mpg at the highest.
2. Treated fuel mileage
    a. The average miles per gallon of one tank of treated fuel and four untreated tanks was 8.25 miles per gallon.
    b. The vehicle traveled 4,004 miles
    c. The mpg for each tank ranged from 6.16 mpg at the lowest and 9.90 mpg at the highest.
3. Overall conclusions
    a. Fuel economy improved 39.77% after both fuel tanks were treated once with Power Service Diesel Injector & DPF Flush 1:500 treatment ratio.
    b. These findings suggest that a single application of Power Service Diesel Injector & DPF Flush resulted in significant and sustained improvement in fuel economy in this heavy-duty diesel vehicle.