

Propane vs Diesel

HOW PROPANE AUTOGAS SAVES INDUSTRY FLEETS MORE MONEY.

Many industry fleet owners already understand that propane autogas can generate better savings than other fuels. So, what happens when six industry trucks – three diesel, three propane autogas – go head to head in a savings comparison? This report examines that exact scenario, featuring vehicles operated by Blossman Gas. The company tracked and supplied the data for this comparison, and a detailed cost analysis was conducted.

THE STUDY

Between 2016 and 2020 the company recorded two important data points: **1) how much fuel the vehicles consumed during their lifecycle, and 2) how many miles they traveled within that timeframe.** This produced an accurate miles-per-gallon calculation for each vehicle.

Records were also collected on the preventative maintenance and repairs of the engines and fuel systems.

THE RESULTS

Across the board, propane autogas was better for the company's bottom line than diesel in both fuel and maintenance savings.

OVERVIEW

Fuel	Maintenance Cost / Mile	Fuel Cost / Mile	Total Cost / Mile
Propane Autogas	\$0.063	\$0.204	\$0.267
Diesel	\$0.124	\$0.434	\$0.571

These numbers validate the savings that propane industry fleets can achieve after switching to propane autogas. When multiplied across thousands of miles and an entire fleet of vehicles, the savings add up fast.

See back for a more detailed analysis of the data.

THE TRUCKS

To make a fair and informative evaluation, this analysis compares six similar trucks, all within two model years of each other.



3 2017 FORD F-750 WITH 6.8L V10



3 2016, 2018 KENWORTH T370 WITH PX9



A Closer Look at Propane Autogas Savings

A deeper dive into the numbers behind Blossman's fuel and maintenance costs reveal exactly how three propane autogas vehicles are saving the company more than its three comparable diesel-fueled vehicles.



MAKING SENSE OF FUEL COSTS

When examining the fuel expenses for the vehicles, fuel for the propane autogas vehicles cost the company less than fuel for the diesel vehicles. In fact, the average fuel price per mile for propane autogas was less than half of that for diesel.

FUEL COSTS							
Truck Number	Fuel	Odometer Start	Odometer Stop	Total Miles	Price / Gallon	MPG	Price Per Mile
2909	Propane Autogas	10,241	75,459	65,218	\$0.85	4.230	\$0.201
2955	Propane Autogas	6,217	113,241	107,024	\$0.85	4.889	\$0.174
2959	Propane Autogas	16,598	82,706	66,108	\$0.85	3.591	\$0.237
2990	Diesel	7,055	55,249	48,194	\$2.77	5.883	\$0.471
2822	Diesel	10,090	189,361	179,271	\$2.77	7.822	\$0.354
2810	Diesel	3,267	136,259	132,992	\$2.77	5.818	\$0.476



TRACKING MAINTENANCE SAVINGS

To compare maintenance costs, all invoices were collected for every preventative maintenance service as well as all engine and fuel system related repairs. This included diesel particulate matter filter replacements and diesel exhaust fluid, as well as propane fuel pump replacements. Even on a per mile basis, the maintenance costs of diesel far outpaced those for propane autogas.

MAINTENANCE COSTS							
Truck Number	Fuel	Odometer Start	Odometer Stop	Total Miles	DEF	Total Maintenance	Price Per Mile
2909	Propane Autogas	10,241	75,459	65,218	-	\$4,426.17	\$0.068
2955	Propane Autogas	6,217	113,241	107,024	-	\$7,810.31	\$0.073
2959	Propane Autogas	16,598	82,706	66,108	-	\$3,244.56	\$0.049
2990	Diesel	7,055	55,249	48,194	\$2.79	\$3,598.79	\$0.075
2822	Diesel	10,090	189,361	179,271	\$2.79	\$21,586.77	\$0.120
2810	Diesel	3,267	136,259	132,992	\$2.79	\$23,639.22	\$0.178

The data collected on these six similar vehicles offers propane industry fleet managers a clear reason to switch to propane autogas – it's better for your bottom line, and for the industry.

FOR MORE INFORMATION

To learn more about propane-powered vehicles for your fleet, visit Propane.com.

THE PROPANE EDUCATION & RESEARCH COUNCIL was authorized by the U.S. Congress with the passage of Public Law 104-284, the Propane Education and Research Act (PERA), signed into law on October 11, 1996. The mission of the Propane Education & Research Council is to promote the safe, efficient use of odorized propane gas as a preferred energy source.

1140 Connecticut Ave. NW, Suite 1075 / Washington, DC 20036 / P 202-452-8975 / F 202-452-9054