

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 two industry trucks – one diesel, one propane autogas – go head to head in a savings comparison? This report examines that exact scenario, featuring two trucks operated by Delta Liquid Energy, a California propane company. Delta tracked and supplied the data for this comparison, and a detailed cost analysis was conducted.

THE STUDY

Between 2014 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.

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

THE RESULTS

Across the board, the propane autogas truck was better for the company's bottom line than the diesel model, in terms of fuel and maintenance savings. The numbers below represent the results of the two vehicles on each side of the comparison.

OVERVIEW

Fuel	Maintenance Cost / Mile	Fuel Cost / Mile	Total Cost / Mile
Propane Autogas	\$0.25	\$0.231	\$0.480
Diesel	\$0.37	\$0.548	\$0.936

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.

THE TRUCKS

To make a fair and informative evaluation, this analysis compares two similar trucks – one propane autogas and one diesel, with the same make and same model year.

PROPANE AUTOGAS

2014 FREIGHTLINER S2G 8.0L



DIESEL

2014 FREIGHTLINER M2 ISL9



See back for a more detailed analysis of the data.



A Closer Look at Propane Autogas Savings

While the average total cost-of-ownership data for each truck tells a compelling story about propane autogas savings, a deeper dive into the two vehicles studied reveals the true propane autogas advantage.



MAKING SENSE OF FUEL COSTS

In order to accurately account for fluctuating fuel costs from year to year and market to market, an average price per gallon was established using national four-year average fuel prices of diesel and propane autogas. Fuel for the propane autogas vehicle cost the company less than fuel for the diesel vehicle. In fact, the 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
257	Propane Autogas	50,551	202,797	152,246	\$0.85	3.676	\$0.231
252	Diesel	53,992	133,672	79,680	\$2.77	5.054	\$0.548



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.

MAINTENANCE COSTS

Truck Number	Fuel	Odometer Start	Odometer Stop	Total Miles	DEF	Total Maintenance	Price Per Mile
257	Propane Autogas	50,551	202,797	152,246	-	\$37,821.30	\$0.25
252	Diesel	53,992	133,672	79,680	\$2.79	\$29,583.28	\$0.37

The data collected on these two nearly identical 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 the cost-benefits of propane autogas vehicles, 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