

## Diesel truck testing

### Road tests

\*Method of test - start at filling station, fill to a recorded level, drive (without HHO) a loop and check the fuel usage, drive (with HHO) the same loop and check fuel usage.

Date	Conducted by & witnessed by	Vehicle Year	Vehicle Type - load/no load	Engine Type and Size	Engine mileage	Type of HHO Generator	* MPG without HHO	* MPG with HHO	MPG Difference	% Increase	Comments
12/1/2009	Stan W. & Dave M./driver	1984	Ford 700 Series, single axel tractor - empty/no trailer	8.2 L Detroit Diesel, turbocharged, rebuilt, standard trans	250,000	Sid cell 36 without dryer, 3 L/M	12.9	19	6.1	47.3%	Driver said the engine had very noticeable increase in power.
12/17/2009	Stan W. & truck owner was driver	1982	Peterbuilt 2 axel dump - empty/no load	Large 12+ L Cummings diesel, turbocharged, rebuilt, standard trans	320,000	Sid cell 21 with dryer, 3 L/M	6.3	8.6	2.3	36.5%	Driver said the engine had noticeable increase in power. (For years this truck has achieved about 6 mpg, empty)
1/7/2010	Stan W. & Dave M./driver	1988	GMC single alex bucket truck-very heavy truck with full tools and materials	8.2 L Detroit Diesel, turbocharged, rebuilt, auto trans	93,000, this bucket truck engine has had many years of use as a stationary bucket truck and is near the end of its use.	Sid cell 21 with dryer, 3 L/M	7.1	10	2.9	40.8%	Driver said the engine had a noticeable increase in power. The loop had many steep hills. On the first steep upgrade, with full throttle (without HHO) the auto trans down shifted 3 times. On the second trip, with full throttle (with HHO) the auto trans did not down shift on that same section. On the steepest section, with full throttle (without HHO) the truck slowed to 20mph. On the second loop at the same section, with full throttle (with HHO) the truck slowed to 22mph.
1/8/2010	Stan W. & Dave M./driver	1988	GMC single alex bucket truck-very heavy truck with full tools and materials	8.2 L Detroit Diesel, turbocharged, rebuilt, auto trans	93,000	Sid cell 21 with dryer, 3 L/M	9.3	12.8	3.5	37.6%	This is the same truck that was tested on 1/7/2010, this test course was mostly flat.