



DP WORLD

Caucedo

**Dominican Republic
Santo Domingo, DR**

Fuel Economy Savings and CO2 Reduction Study

Purpose of Test

To Track Fuel Economy, With and Without The Rentar Fuel Catalyst

Type of Testing

Generator Set with a Cat 3412 engine. Baseline Vs. With Rentar Fuel Catalyst



Prepared by

**DPW Terminals
Caucedo**

Date of Test

Comparison Study
3/23/2011 to 4/14/2011

Test Protocol

DPW ZFMC, Caucedo Terminal selected a gen-set with a Cat 3412 engine at 1800 revolutions.

Gallons and hourly usage were gathered for phase 1 and phase 3. DPW Caucedo supplied the fuel and hourly usage in each phase.

The gen-set operated under similar conditions and in similar weather throughout the duration of the fuel economy study. At the conclusion of the Comparison Study, the gallon per hour were compared, prior to fuel catalyst installation.

Testing Time Line

Phase 1 – 1/1/2011 to 3/22/2011

Baseline information was collected on the gen-set

Phase 2 – 3/23/2011 to 4/7/2011

Break-in Period (250 hrs) – The Rentar Fuel Catalyst was installed.

Phase 3 – 4/8/2011 to 4/14/2011 7 days

Data was collected from the gen-set that is now operating with the fuel catalyst in place for comparison to the baseline data.

Data was collected over 7 days during which a total of 95 Hrs were accumulated.

Note: This Phase 3 is still in development, due to the short period of comparison.

Base Line is 8.5 GPH as of March 22, 2011

	Date	Gallons Used	Hours Used	GPH	% Savings	
1	April 8, 2011	180	24	7.50	12%	
2	April 9, 2011	111	17	6.53	24%	
3	April 10, 2011	131	18	7.28	15%	
4	April 11, 2011	90	10	9.00	-5%	
5	April 12, 2011	0	0	0.00	0%	
6	April 13, 2011	0	0	0.00	0%	
7	April 14, 2011	170	26	6.54	24%	

Average and results

Date	Gallons Used	Hours Used	GPH	% Savings	
14-Apr	682	95	7.18	16.0%	

The above summary information was gathered, supervised and provided by DPW ZFMC Caucedo Terminal in a spread sheet that shows the individual gen-set GPM a daily basis for time frame show.





Overview

DP World is one of the largest marine terminal operators in the world, with 49 terminals and 9 new developments and major expansions across 31 countries(1). Its dedicated, experienced and professional team of nearly 30,000 people serves customers in some of the most dynamic economies in the world.

DP World aims to enhance customers' supply chain efficiency by effectively managing container, bulk and other terminal cargo.

The company constantly invests in terminal infrastructure, facilities and people, working closely with customers and business partners to provide quality services today and tomorrow, when and where customers need them.

In taking this customer-centric approach, DP World is building on the established relationships and superior level of service demonstrated at its flagship Jebel Ali facility in Dubai, which has been voted "Best Seaport in the Middle East" for 16 consecutive years.

In 2010, DP World handled nearly 50 million TEU (twenty-foot equivalent container units) across its portfolio from the Americas to Asia. With a pipeline of expansion and development projects in key growth markets, including India, China and the Middle East, capacity is expected to rise to around 92 million TEU by 2020, in line with market demand.

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