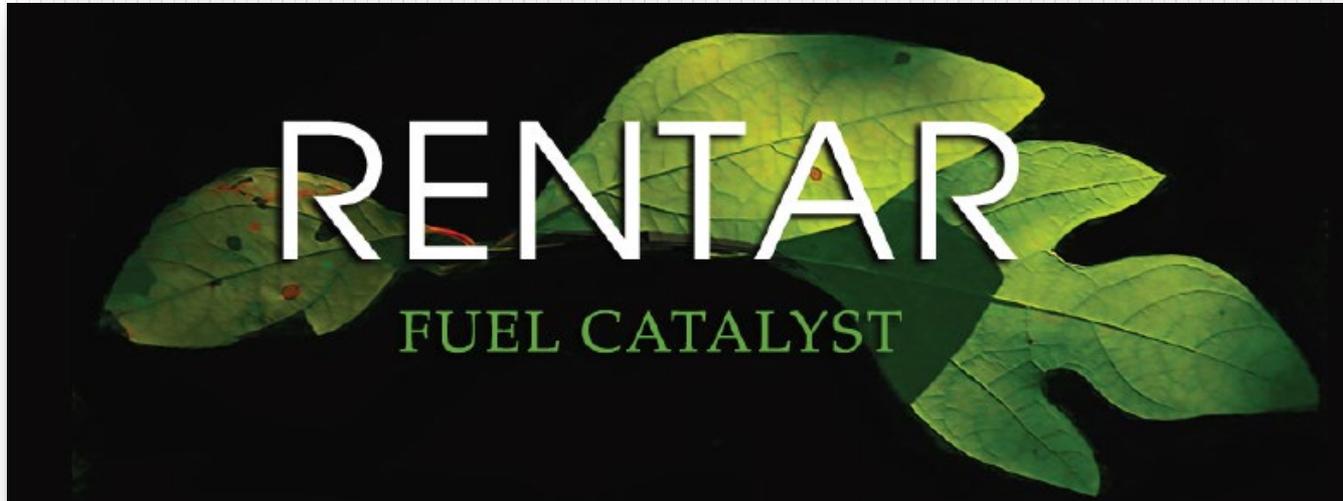


Generator / Genset Applications



Sole Source Technology with 33 Issued Patents



Energy and Emission Solutions

Rentar Fuel Catalyst is Independently Verified to:



- Reduce Fuel Consumption And Extend Range 2.0% To 12.0%
- Reduce Oil Fired Furnace Fuel Consumption 7.0% To 30.0%
- Reduce Greenhouse Gases (NO_x, CO and CO₂) Up To 19.2%
- Reduce Particulate Matter (PM) Up To 58.2%
- Reduce Black Smoke (Opacity) Up To 44.8%
- Extend Engine Life Between Engine Rebuilds 20% to 50%
- Reduce Organic And Elemental Carbon Up To 35.0%
- Reduce Volatile Organics up to 63.0%

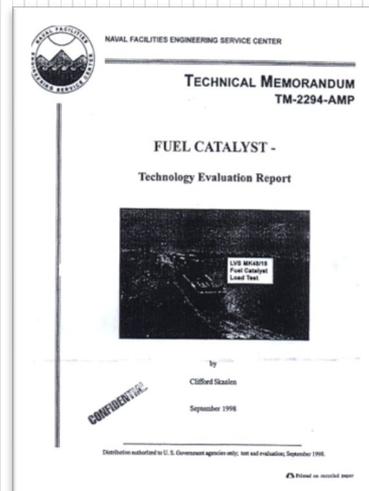
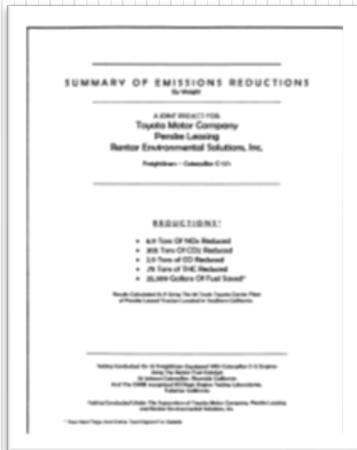
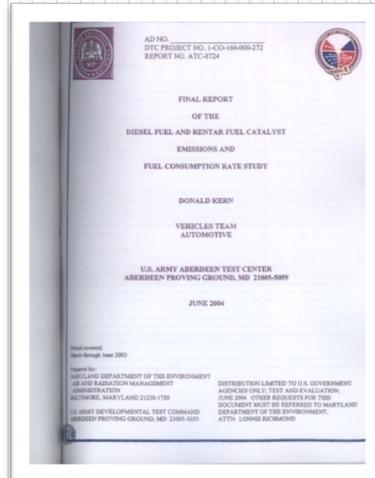
Results vary based on the applications, type of engine and type of fuel utilized

Benefits of the Rentar Fuel Catalyst to the Generator / Genset Industry

- Reduces Fuel Consumption
- Increases Payload Per Gallon / Liter
- Reduces Greenhouse Gas Emission
- Extends Engine Life
- Extends Oil Life
- Reduces Engine Maintenance
- 10Year Warranty
- Easy to Install
- Pays for Itself in Fuel Savings in 3 to 12 Months



Rentar Is Independently Verified By:



- Southwest Research Institute
- EPA & CARB Recognized Laboratories
- Aberdeen Proving Grounds
- Olson Ecological Laboratories
- Virginia Tech University
- SGS, SA
- Vale Mining
- Yamana Gold
- Vulcan Materials
- CEMEX



Improve Payload Per Gallon / Liter

Reduce Fuel Consumption and Exhaust Pollution

Extend Engine and Oil Life



Extend Engine Life 20% Between Rebuilds

Testimonial Letters



Date: 02/05/2012

To whom so ever it may concern

This is to certify that HBL -Rentar Fuel Catalyst having following specifications have been installed at Tata Motors Ltd., Lucknow plant

Sr No.	Model No.	Qty	Mounted on Equipment
1	HBEN 2012	02 Nos.	1010 KVA Cummins DG
2	HBEN 2012	02 Nos.	1010 KVA Cummins DG

Since the installation, Fuel catalysts are performing to our satisfaction at above mentioned DG sets. We are pleased to confirm that we have achieved saving of 15.57% on specific fuel consumption.

For M/s. Tata Motors Ltd.


S. M. Singh
DGM – Plant Services

TATA MOTORS LIMITED
Chhat Industrial Area Lucknow 226 019
Tel: 91 522 2818012-2818033 2818032 Fax: 91 522 2818246
Registered Office: Bumbay House 24 Homi Modi Street Mumbai 400 001



Mahindra & Mahindra Ltd
Agri Development Centre
Tractor Division
Kichha Road, Lalpur (Rudrapur)
Dist. Uttam Singh Nagar – 203143
Tel : 91-5944- 28723 / 25
Fax: 91-5944-28724

Ref no: MBM/RDP/HBL/1204/24 Date: 24th April'12

TO WHOM SO EVER IT MAY CONCERN

This is to certify that HBL RENTAR fuel catalyst has been installed on our generators and boiler applications.

The performance of HBL RENTAR Fuel Catalyst has been good and about 6% HSD saving achieved.

We appreciate the green energy efforts of M/S HBL Power System LTD. towards reducing the fuel consumption and carbon emission.




Registered Office: Gateway Building Apollo Bunder, Mumbai-400001.
Phone:2202 1051 Fax : (022) 2202 8780 / 8990

YAMANAGOLD | **15 ANOS**

March 21st 2019

We at Mineração Maracá Indústria e Comércio, a YAMANAGOLD job site, have successfully piloted the Rentar fuel catalyst model HBEN 2012 on our CAT 785C haul trucks with results that surpassed our objectives for fuel efficiency with a payback of less than a year. As a result, we have purchased the Rentar fuel catalyst for installation on our fleet.

We are pleased with the support from SOTREQ, our Rentar dealer, and from the direct relationship with the manufacturer itself. We are also pleased with the trouble-free performance of the catalysts, to date.

We are looking forward to our continued use of the Rentar fuel catalysts.




Fabio Gonçalves
Maintenance Coordinator
Tel: +55 62 3383-4049

YAMANAGOLD **15 ANOS**

Mineração Maracá Indústria e Comércio
Rodovia GO 347 s/n – Fazenda Genesepo
Alto Horizonte GO – Brasil
76560-000
<http://www.yamano.com>

Automotive Research Association of India is co-operative industrial research association by the automotive industry with the Ministry of Industries, Government Of India



Testing Conducted on 6SL8800TA 200 KW Kirloskar 250 Genset Engine

Tested with ISO: 8178 D2 - 5 Mode Test Protocol

3.04% Fuel Improvement

58.2% Reduction of Particulate Matter

7.9% NO_x Reduction

35.4% CO Reduction

15.4% Hydrocarbon Reduction

See Test Study



World's Largest Inspection and Technology Verification Company



SGS Verifies a 17.05% Fuel Reduction*,
a 27.5% Reduction of NO_x
and 32.5% Reduction of CO.



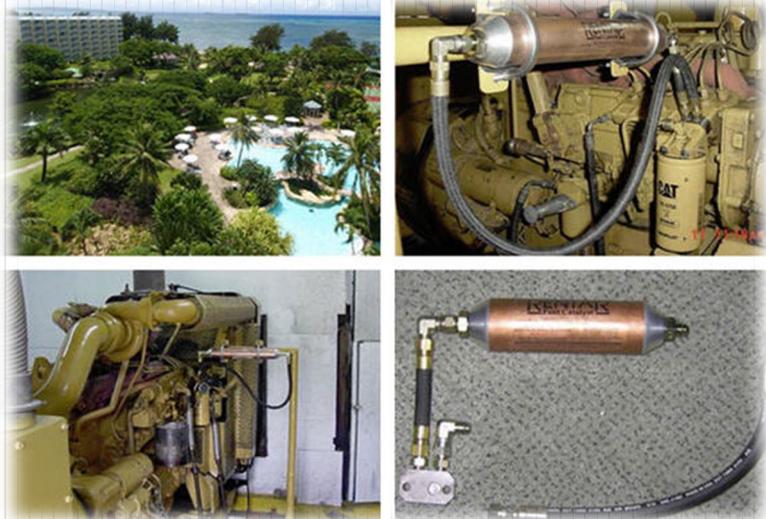
- Over 97,000 employees
- Over 2,600 offices and laboratories worldwide
- Conducted an emissions study on the Rentar fuel catalyst in 2016
- World's largest inspection and technology verification company

* Computed by Carbon Balance



Generators / Gensets

Genset with Cat 3306 Engine | Saipan
5.3% Improvement in Fuel Efficiency



Genset with Cat 3516 Engine | Alaska
6.1% Improvement in Fuel Efficiency





31.1% Average Improvement in Kilowatts Per Gallon



Summary of Findings

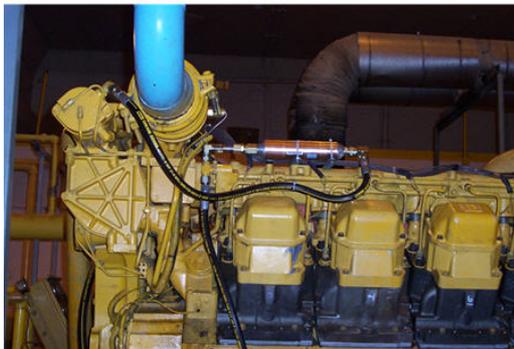
The test was performed at the CEMEX Plant at Terminal Varreux (Port au Prince) Haiti. The test was managed, and all data was collected by CEMEX technicians. The generator used was a Caterpillar 3406 C.

A baseline was created, the catalyst was installed (a conditioning clean-out period was observed) and “post” data information was gathered.

The data collected demonstrated a **31.1% average improvement in Kilowatts per Gallon**

BASE-LINE (Before Installation) December 2015 January 2016 February 2016 March 2016 Base-line Average	7.29 KW per Gallon 8.17 KW per Gallon 8.19 KW per Gallon <u>8.72</u> <u>KW per Gallon</u> 8.09 KW per Gallon
April 2016	Installation of the Rentar Fuel Catalyst
Conditioning Period April 2016 May 2016	
POST DATA (After Installation) June 2016 July 2016 August 2016 September 2016 October 2016 Post Data Average Improvement In Kilowatt Per Gallon	8.85 KW per Gallon 11.9 KW per Gallon 10.71 KW per Gallon 11.81 KW per Gallon 10.61 KW per Gallon 31.1%

Generators / Gensets



Stationary Generators Fuel Consumption Reduced 4% to 12%

Caterpillar 777D

Schedule of Annual Fuel Savings at Various Fuel Cost Using the Rentar Fuel Catalyst



*Assuming the Caterpillar 777D
Consumes 20 GPH / 20 Hours per Day / 6 days per Week / 50 Weeks per Year*

<u>Per Gallon Price</u>	<u>\$4.00</u>	<u>\$6.00</u>	<u>\$8.00</u>	<u>\$10.00</u>	<u>\$12.00</u>
2% Savings =	\$ 9,600	\$14,400	\$19,200	\$24,000	\$28,800
4% Savings =	\$19,200	\$28,800	\$38,400	\$48,000	\$57,600
6% Savings =	\$28,800	\$43,200	\$57,600	\$72,000	\$86,400
8% Savings =	\$38,400	\$57,600	\$76,800	\$96,000	\$115,200



22.1% Fuel Improvement

Summary of Findings

Hanson Aggregate conducted fuel economy studies. They solely managed and collected the data. The results are reported below.

At the Wickenburg, AZ quarry facility, Hanson Aggregate managed the creation of a baseline/ installation of the Rentar Fuel Catalyst under supervision of Mark Jaynes and collection of the "post" data.

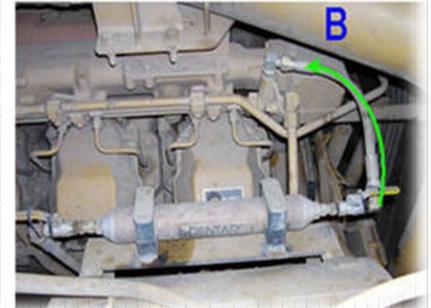
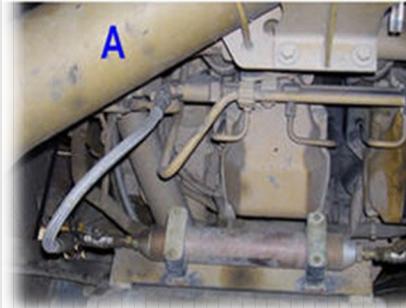
The result, as documented in the attached report/ due to the Rentar Fuel Catalyst is a **22.1% average improvement in fuel consumption on a Caterpillar 3406 gen-set.**

Heavy Duty Equipment

Wheel Loader 980H with Cat C15 | USA
5.6% Improvement in Fuel Efficiency



Cat 797B with Cat 3524B Engine | Chile
6.3% Improvement in Fuel Efficiency





Return-on Investment (ROI)

VALE S.A. (SOSSEGO MINE)

Actual

CAT 793D (CAT3516B)	Liters	US\$0.59/L (\$ cost)	4% fuel reduction (\$ savings)	5.29% fuel reduction (\$ savings)	7% fuel reduction (\$ savings)
Hourly	157.33 L	\$92.82	\$3.71	\$4.91	\$6.50
Day – 12 hours	1,887.96	1,114	44.56	59.00	78.00
Month – 30 days	57,426	33,881	1,355	1,792	2,372
Year	689,106	406,573	16,263	21,508	28,460
Five Years	3,445,531	2,032,863	81,315	107,538	142,300
10 Years	6,891,062	4,065,726	162,629	215,077	284,601

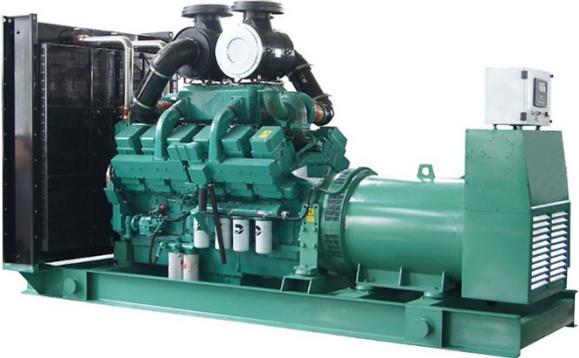
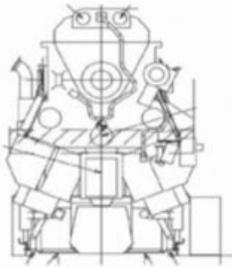
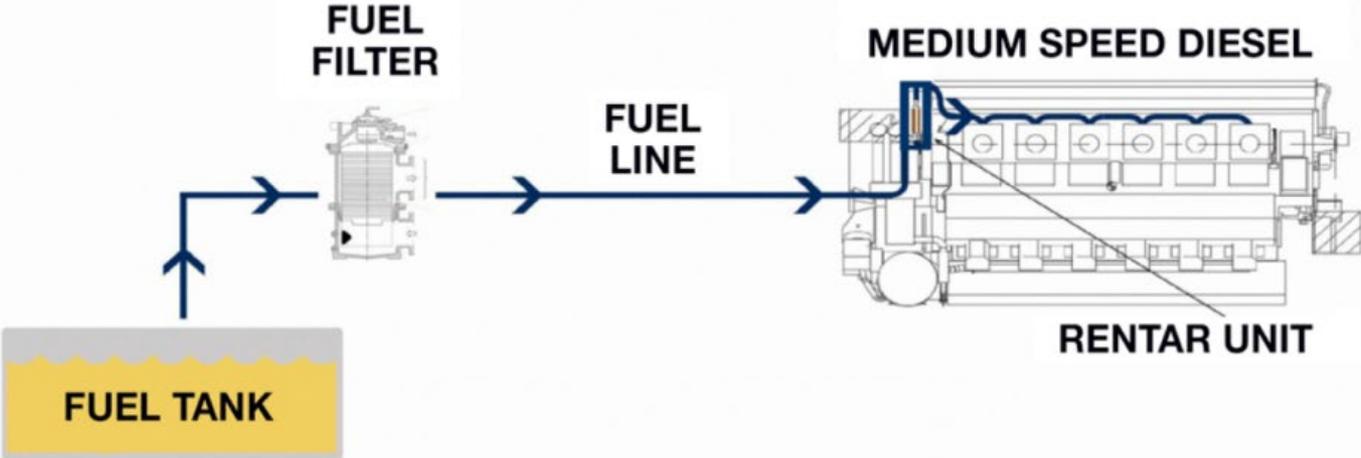
Approximate time to payback for a haul truck at SOSSEGO Mine is 5.6 months*

* Using a total product cost of US\$10,000 for two Rentar fuel catalysts on a CAT 793D haul truck at 5.29 percent fuel reduction

The CAT 793D haul truck requires two HBEN2012 units at an MSRP of US\$ 5,000 per unit.



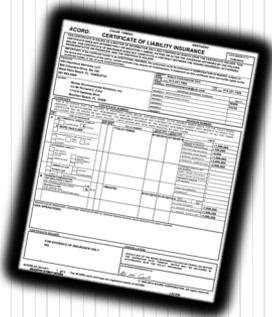
Simple Installation



Credentials



World's 4th Largest Caterpillar Dealer
 A Rentar Distributor
 400 Offices - 4300 Employees



\$2 Million International
 Product Liability Insurance



Export-Import Bank of the United States
 Official Export Credit Agency



California Resource Board
 Executive Order (CARB)

Rentar Case Studies

CASE STUDY



COVANTA ENERGY

Covanta Holding Corporation (NYSE: CVA) is an international owner and operator of Energy-from-Waste power generation projects converting municipal solid waste into renewable energy for numerous communities throughout the United States. 2009 consolidated operating revenues were \$1.55 billion with \$397 million in operating cash flow and adjusted EBITDA of \$515 million.



Installed Rentar Fuel Catalyst on entire fleet of heavy-duty diesel vehicles at 28 plants around the United States.

- 5% reduction in fuel consumption.
- 43.6% reduction in CO2 emissions.
- 75.9% reduction in CO.
- 47.7% reduction in NOx
- 52.6% reduction in particulate matter.

CASE STUDY



U.S. ARMY

Located in Hartford County, Maryland on 79,000 acres with research capabilities in Automotive; Environmental Effects & Technologies; Fire Control; Firepower; Support and Survivability/Lethality; Warfighter & Support Equipment.



The Aberdeen Test Center tested Rentar units on a Navistar International 359.9 cu. in., 170 hp. diesel engine and reported the following:

- 3.6% Fuel Consumption improvement.
- 3.6% Extended Range improvement.
- 12% NOx improvement.
- 14% CO₂ improvement.
- 17.4% CO improvement.
- 12.6% HC improvement.
- 10.9% O₂ improvement.

CASE STUDY



TOYOTA

Toyota Motor Company, established in 1937, is today the world's largest automobile manufacturer by sales (7,051,000 units FY 2009), with 320,808 employees building autos under the DAIHATSU, HINO, LEXUS and TOYOTA brands.

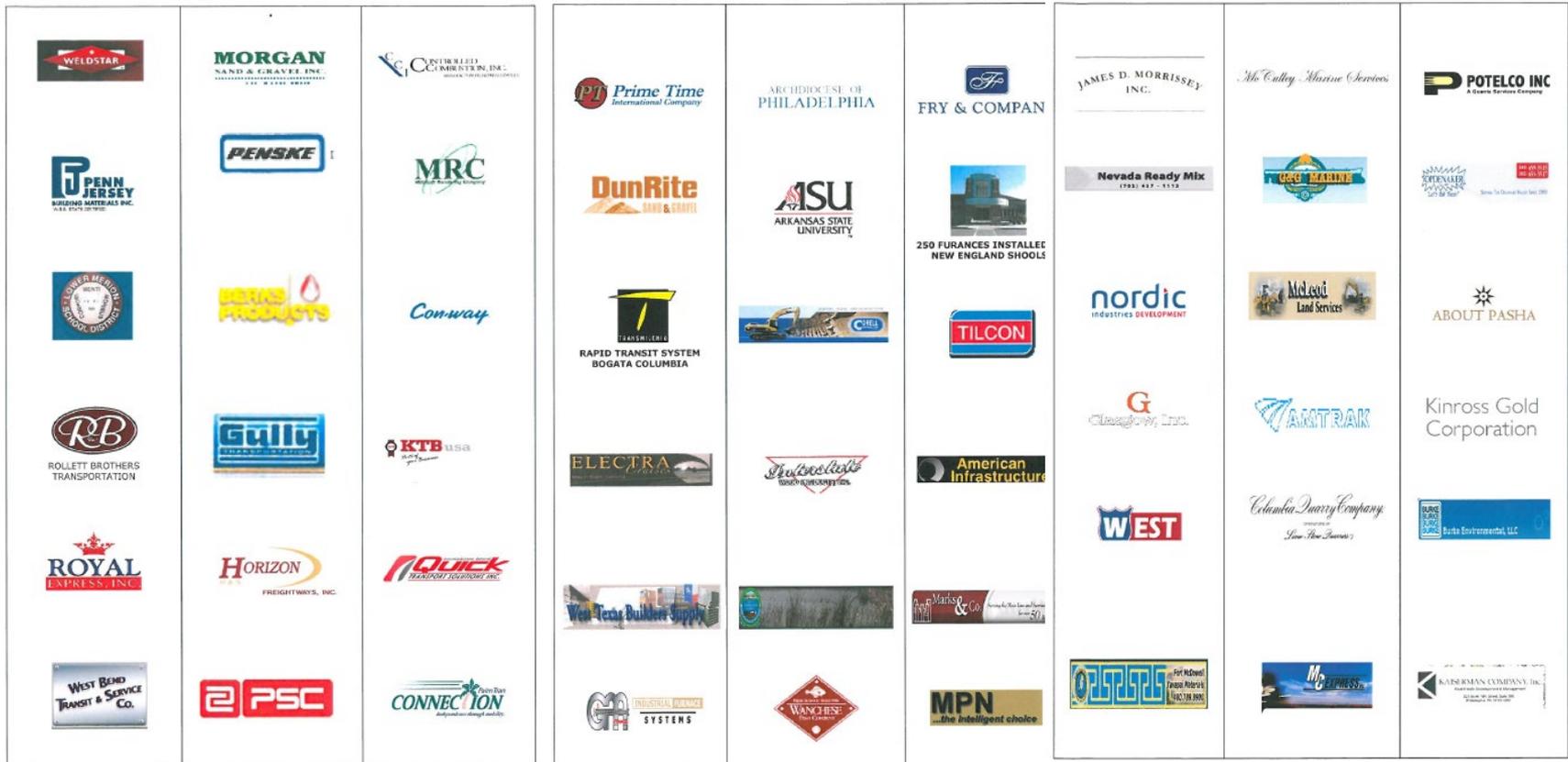


Toyota has installed Rentar Units of all their auto transport trucks operating in the Port(s) of Long Beach & Los Angeles with the following results:

STEADY STATE (Highway Driving)

- 11.3% Fuel Consumption improvement.
- 42.2% Particulate Matter improvement.
- 9.7% CO₂ improvement.
- 33.5% Carbon Monoxide improvement.
- 36.8% Total Hydrocarbon improvement.

Logo's of Rentar Fuel Catalyst Purchasers





THANK YOU

Rentar Environmental Solutions, Inc.
Manufacturer of the Rentar Fuel Catalyst

Contact: Joel Ratner - Telephone: (561) 790-0093

Email: JoelRatner@Rentar.com

Website: DieselCatalyst.com