

# ENERGOTEST

ROAD TEST LABORATORY

## Suppliers Tests - 2007 to 2016

### October-2007

No.	No. crt	Company	Product	Description
1	1	Advanced Transit Dynamics	TrailerTails™	Trailer boat tail
2	2	Doggett Entreprises	XADO	Engine oil additive
3	3	Dynamic Fuel Systems	Jetstar	Hydrogen fuel injection
4	4	Econoco	Econoco	Fuel saving device
5	5	Freight Wing	Trailer Skirts	Trailer side skirts
6	6	Laydon	Trailer Skirts	Trailer side skirts
7	7	Meka Form	Truck fender	Tractor drive axle fender
8	8	Michelin Canada	X-One Tires	Single wide tires XDA, XTA MRT, 445/50 R22.5
9	9	Passing Lane	Liberator Muffler	Muffler installed on tractor-semi-trailer 48,000 kg load, Cummins ISX
10	10			Muffler installed on tractor-semi-trailer 25,000 kg load, Cummins ISX
11	11			Muffler installed on tractor-semi-trailer 25,000 kg load Caterpillar C12
12	12	Transtex Composites	BoatTail	Trailer Boat Tail

### September-2008

13	1	Aero Industries	AeroTail	Boat Tail
14	2	AirFlow Déflecteur	Déflecteur AirFlow	Trailer axle deflector
15	3	Continental HDL Eco Plus	vs. Michelin traction	Low rolling resistance tires
16	4		vs. Bridgestone traction	
17	5	éco6 inc.	C2 Carbon combustion	Combustion enhancer
18	6	Econoco inc.	Econopro	Magnetic device
19	7	Evolu-tech	Fuelcat	Magnetic device
20	8	Freight Wing Inc.	Freight Wing Belly Fairing (3 prototypes)	Trailer side skirts
21	9			
22	10			
23	11	Grand Rock Company	QP Muffler	Mufflers
24	12		HF Muffler	
25	13	MANAC	Econair AFS	Airflow skirt
26	14	NM Engineered Solutions	TFCC Sytem	Exhaust manifold and turbocharger housing coating
27	15	Performance Energy Group, LLC	Ethos Fr	Fuel additive
28	16	Transtex Composite Inc.	MFS (3 prototypes)	Trailer skirts
29	17			
30	18			

### May-2009

31	1	Aero Industries	AeroTail 1	Self-deployable flexible boat tail, longer
32	2		AeroTail 2	Self-deployable flexible boat tail, shorter
33	3	Alutrec	Flatbed semi-trailer with aerodynamic underbody 53'	Versus Alutrec serial-production (48'), overall
34	4			Versus Alutrec serial-production (48'), energy intensity (per unit of carried payload)
35	5	CentraBalance	CentraBalance	Active wheel balancing device
36	6	Kalk Holdings Inc. DBA Forte Performance Systems	Forté Diesel Booster	Diesel fuel additive

37	7	Laydon Composites Ltd.	Trailer skirt	Version 1: 6.15 m long, 3.2 m from trailer first axle, 0.75 m height + Gap Deflector
38	8			Version 2: 7.62 Long, 2.4 m from trailer first axle; 0.75 m height
39	9			Version 3: 7.62 Long, 1.73 from trailer first axle, 0.88 m height
40	10	Tadger Group International	Everoil	Engine oil
41	11		Fuel Stat	Fuel saving device, antistatic type
42	12		Tadger	Fuel saving device, atomizer type
43	13		Everoil + Fuel Stat + Tadger	Combination of Everoil, Stat and Tadger
44	14	Transtex Composite Inc.	Trailer skirt	Trailer skirt for 53' van semi-trailer

### September-2009

45	1	Ayus Technology Corporation	Ayus Fuel Activation Device	Fuel saving device
46	2	ElCargo Fabrication inc.	Side Tarp System	Mechanized sealed side tarp system for dumper trailer
47	3	G.F.C. Planet Solution Inc.	Fuel conditioner	Fuel additive
48	4	J-P-L Vente et service (1981) Inc.	Tufoil	Engine, transmission, front axle bearings, and differential oil additive
49	5	Pro-Active-Research	Enviro-Clean	Fuel Additive (Algicide)
50	6	Ridge Corporation	Aerodynamic side skirts	Trailer skirt for 53' van semi-trailer 1st prototype
51	7			Trailer skirt for 53' van semi-trailer 2nd prototype
52	8	Silver Eagle Manufacturing Company	Aerodynamic mini-skirt trailer fairings with extension(s)	Trailer skirt for 53' van semi-trailer
53	9	Slipstream Aerodynamics LLC	Rear Trailer Fairings	Boat tail for 53' van semi-trailer (Canadian Regulation)
54	10	Suncor Energy Inc	Prototype 1 and Prototype 2	Synthetic Engine Oil
55	11	Taabs Wheel Balancers	Taabs Wheel balancers	Active wheel balancing device: on unbalanced wheels
56	12			Active wheel balancing device: on normal wheels
57	13	Transtex Composite Inc.	Aerodynamic Side Skirt	Trailer skirt for 53' van semi-trailer

### July-2010 (Stop-N-Go)

58	1	3245811 Canada Inc	Swepco	Engine, transmission, and differential oil and additive for diesel fuel
59	2	RM2J Inc.	FMZ	Electronic device used to efficiently regulate the available power of an engine based on transported load
60	3	Efficient Transport Solutions	Monovan composite dry van body	Dry Van Composite Box for straight trucks
61	4			
62	5			

### August-2010 (High speed)

63	1	Dieter's Metal Fabricating	Deflector	Trailer skirts for two-axle semi-trailer
64	2	Elcargo Fabrication Inc.	Multi-Flip	Tarp system for dump truck
65	3	Empire Hydrogène	Empire Hydrogen Fuel Enhancement System™	Hydrogen fuel injection
66	4	G.A. Pennell Motor Truck	Bully Dog Big Rig Programmer	Engine Control Module (ECM) Programmer
67	5	G.E.S. Petro Management Inc.	Formule KYO	Diesel fuel additive
68	6	Goodyear Canada Inc.	Dunlop Fuel Efficient Tire	Low rolling resistance tires compared to other low rolling resistance tires : Dunlop 11R 22.5 SP384 FM, SP456 FM, and SP193 FM vs. Yokohama 11R22.5 101 ZL, 703 ZL, and RY587
69	7	Green Genius Fuelsaver Inc	Green Genius Fuelsaver	Fuel saving device
70	8	Les Industries T.A.G. Ltée	Easy-Tarp	Tarp system for dumper trailer
71	9	Qualiplast	ThermoSkirts	Trailer skirts for two-axle semi-trailer
72	10	Ridge Corporation	Green Wing	Trailer skirts for two-axle semi-trailer
73	11	Transtex Composites	Générateur de vortex	Vortex generator for A-Train
74	12	VIP Products SA	Vipseal	Water-based sealant for tires injected through the valve

## May-2011

75	1	Alutrec Inc.	Capacity	Prototype aluminum flatbed trailer with an aerodynamic understructure: test at the same gross weight, overall
				Prototype aluminum flatbed trailer with an aerodynamic understructure: test at the same gross weight, energy intensity (per unit of carried payload)
				Prototype aluminum flatbed trailer with an aerodynamic understructure: Test at the same payload
76	2			Prototype aluminum flatbed trailer with an aerodynamic understructure: Test at the same payload
77	3	Mura Technologies Inc.	OXITRON	Fuel saving device
78	4	Ridge Corporation	Green Wing	Trailer skirt prototype for 53' van semi-trailer
79	5		Smart Wing	Trailer rear deflector prototype for 53' van semi-trailer
80	6	Rockyford Distributors	Krystaline Fuel Initiator	Fuel additive
81	7	Transtex Composite Inc.	Trailer skirt	Trailer skirt prototype for 53' refrigerated van semi-trailer
82	8			Trailer skirt prototype for 53' intermodal van semi-trailer (estimated result)
83	9	VIP Products SA	VIPSEAL	Water-based sealant for tires

## September-2011

84	1	Airman Inc.	AirWedge	Aerodynamic system for semitrailer underside
85	2	Fuel Sense	The Fuel Manager	Hydrogen generating module
86	3	Lubri-Lab Inc.	XTRA - Diesel	Fuel additive
87	4	Nitrochem Lubricants Inc. and EcoNitro Inc.	Nitro-9	Product line of fuel and oil treatments
88	5	Ola Breau	CERMA	Ceramic treatment for engine, differential and power steering

## May-2012

89	1	Action AST	Houle Seriflex	Tarp system for 37- foot dump trailers
90	2	CL2G Consulting	Fuel Factor	Fuel saving device
91	3	Counteract Balancing Beads	Counteract Balancing Beads	Automatic self-adjusting wheels balancing system
92	4	Eco-Tek Group	Clik product line	Fuel and oil treatments
93	5	Fastlane Products	Side Skirt Model no. S5322.	Trailer skirt for 53-foot van semi-trailer
94	6	Hendrickson Bumper and Trim	AERO CLAD® Bumper and Air Dam Design	Tractor bumper
95	7	JOFLOS	JOFLOS	Airfoils on the rear corners of the trailer
96	8	Jomini Tek	MotorSilk® One Step/Engine Treatment	Engine oil treatment
97	9			
98	10	Qualiplast	Alpha 2	Trailer skirt for 53-foot van semi-trailer
99	11	Transtex Composite	MFS 20.5 - 31	Trailer skirt for 53-foot van semi-trailer
100	12		MFS 21.6 - 30	

## September-2012

101	1	Aero Industries Inc.	Trailer Rear-end Device	Trailer rear deflector for 53-foot van semi-trailer
102	2	Airman Inc.	Wingman	Aerodynamic device for semi-trailer underside
103	3	Clear Sky Technology	HD Diesel Fuel Ionizer	Fuel saving device with rare earth metal magnets installed on both fuel lines
104	4	Eco-Diesel Technologies Inc.	UltraBurn PTI System 103	Fuel saving device that injects catalyst into air intake
105	5	Hendrickson Bumper and Trim	Prototype 1 : Tractor bumper without belly fairing	Tractor bumper
106	6		Prototype 2 : Tractor bumper with belly fairing	
107	7	JOFLOS	JOFLOS	Airfoils on the rear corners of the trailer
108	8	Revolution Oil Inc	Hi-Tek 25	Engine oil
109	9	Ridge Corporation	RAC0012 - Straight Angle Trailer Skirt	Trailer skirt for 53-foot van semi-trailer

110	10	Viro Inc.	Prototype	Hydrogen injection system
<b>May-June-2013</b>				
111	1	Hendrickson Trailer Commercial Vehicle Systems	The impact on fuel efficiency for empty, two-axle van semi-trailer	Front axle lift
112	2			Rear axle lift
113	3			Tire pressure from 100 psi (690 kPa) to 70 psi (483 kPa)
114	4	Oxygenia America	System FUELEX® OXYGENIA	Fuel-saving device
115	5	Ridge Corporation	Green Wing	Trailer skirts for semi-trailers
116	6		Smart Truck Undertray System	Aerodynamic device for semi-trailer underside
117	7		Ridge Vortex	Plastic vortex generators
<b>September-October-2013</b>				
118	1	Aperia Technologies Inc.	Halo Tire Inflator	Tire inflation device
119	2	Golfstream Aerodynamics	Side Skirt GS-003-PT Prototype 1	Trailer skirts for semi-trailers
120	3		Side Skirt GS-003-PT Prototype 2	
121	4	Ridge Corporation	Green Wing and Smart Wing Combination Prototype 1	Combination of trailer skirts and trailer rear deflector
122	5		Green Wing and Smart Wing Combination Prototype 2	
123	6	Shell Canada Products	Shell Diesel Extra	Diesel fuel
124	7	Vida Holdings Corp. Ltd.	Multi-chamber Catalytic Converter Prototype	Catalytic converter
125	8	ZEC Lubrication Inc.	APM PRO	Oil additive
<b>May-June-2014</b>				
126	1	DSG Power Systems Inc.	4+ Premium and 4+ Super Clean	Fuel additive
127	2	JOST International	SDR - System Drag Reduction	Trailer Roof Rear Diffusor
128	3	Lubrifix	DieselFlux®	Fuel additive
129	4	PE Fuels Canada	FCS-27	Fuel additive
130	5	Ridge Corporation	Green Wing Intermodal	Trailer skirt
131	6		Green Wing and 4-ft rear deflector	Combination of trailer skirts and trailer rear deflector
132	7		Green Wing and 3-ft rear deflector	Combination of trailer skirts and trailer rear deflector
<b>September-2014</b>				
133	1	Hendrickson Bumper and Trim	Bumper 1	Bumper prototypes for International tractors
134	2		Bumper 2	
135	3	Shell Global Solutions (US) Inc.	Shell HDEO 10W30 A (FL-23635)	Synthetic blend base Heavy Duty Engine Oils
136	4		Shell HDEO 10W30 B (FL-23636)	
137	5	Transtex Composite Inc.	T-30 Tail	Trailer rear deflector (boat tail)
138	6		Combination of T-30 Tail, G-30 Gap Reducer, and Edge 1932 Skirt	Combination of trailer rear deflector, gap reducer and trailer skirts
139	7	Xp Lab Inc.	Xp3	Diesel fuel additive
<b>May-June-2015</b>				
140	1	BASF CORPORATION	Transmission oil B	Experimental transmission and axle oils
141	2		Transmission oil C	
142	3		Axle Lube A	
143	4		Axle Lube B	
<b>September-2015</b>				
144	1	FuelAid Systems and Optimizers	FuelAid Optimizer	Fuel saving device
145	2	Forever Green	Fuel Software	Fuel saving device
146	3	XStream Trucking Inc.	GapGorilla	Gap reducer device: development test (non-standard)
<b>May-June-2016</b>				
147	1	Adecsia	SUPERTECH	Fuel saving device
148	2	Fleet Engineers Inc.	Aeroflap	Aerodynamic mud flaps (on tractor and trailer)
149	3	HSMA, LLC d/b/a Eco Flaps	Aerodynamic Splash Guard	Aerodynamic mud flaps (on tractor and trailer)

150	4	Vanguard National Trailer Corp.	Aerosail (Voyager)	Trailer skirt (two tests were conducted, for SmartWay verification)
151	5			
152	6	Xp Lab inc.	Xp3	Diesel Fuel Additive

### September-2016

153	1	Chevron Lubricants – Delo Global Brand	10W30 CK4 et 75W-80	Engine and transmission oil: Freightliner Cascadia	
154	2		5W30 CK4 et 75W-90 (deux essais)	Engine and transmission oil: Volvo VNL	
155	3			5W30 CK4	Engine oil: Kenworth T370
156	4			10W30 CK4	Engine oil: Kenworth K270
157	5				
158	6	DSI Canada	X-1R Lean Fuel Burn	Diesel fuel additive (four tests were conducted on two tests vehicles)	
159	7				
160	8				
161	9				
162	10	The Fuel Matrix LLC.	The Fuel Matrix	Diesel fuel additive (2 tests)	
163	11				



## Members Applied Engineering Program - 2007 to 2016

### October-2007

No.	No. crt	Description
1	1	Tractor-Trailer Gap Deflector
2	2	Suspended differential
3	3	Tank Fairing
4	4	Tractor-trailer Gap Fairing
5	5	Empty Chip Van - Influence of open doors
6	6	Influence of tire pressure for dual tires (85 vs. 100 psi)
7	7	Comparison between road train and two axles trailer
8	8	Comparison between road train and four axles trailer

### September-2008

9	1	Train: with skirts vs. without skirts
10	2	Heavy-duty Bumper
11	3	Container vs. Van
12	4	Trains, container vs. Van
13	5	Curtain vs. Van
14	6	B-Train axles up vs. axles down
15	7	Logging trailers long wood vs. short wood
16	8	Close distance
17	9	Biodiesel B5
18	10	Speed 95 km/h vs. 98 km/h
19	11	Speed 92 km/h vs. 98 km/h

### May-2009

20	1	3 axles van semi-trailer vs. 3 axles high-cube van semi-trailer	Overall Energy intensity (per unit of carried payload)
21	2	4 axle van semi-trailer with 2 axles down vs. 3 axles down, unloaded (result obtained from six runs, because of hieratic function of the engine of the test vehicle: doubtful runs have been eliminated)	
22	3	Alignment	Steer: -1/4", Drive Front: -1/4", Drive Rear: +1/4", Trailer: -1/4"
23	4	All equipped van semi-trailer (FreightWing Trailer Skirts, X-One XTE Tires, Gap Deflector) vs. normal	Overall Energy intensity (per unit of carried payload)
24	5	Gap reduced by 6" (informative, only 2 runs performed)	
25	6	RPM 1610 vs. 1400	
26	7	Tires on tractor drive axle	XDN2 445 vs. XDA 445
27	8		XDN2 455 vs. XDA 445
28	9		XDN2 455 vs. XDN2 445
29	10		XDN2 455 vs. 275/80 XDN2
30	11	Tire pressure	70 PSI vs. 100 PSI for an empty 4 axle van semi-trailer with 3 axles down (informative result, only the first two runs were considered in the final stage, due to cooling fan problems with the test vehicle during the last run)
31	12		120 PSI vs. 100 PSI for 4 axle van semi-trailer (tractor steer XZA3 275/80, drive XDA 445, trailer XZE 385/55 and 275/80)
32	13	Trailer skirts for 28'6" B-Train van pups (Transtex Composite Inc.)	
33	14	Tires XDN2 455 Tractor Drive and XTE 455 Trailer	vs. 275/80 XDN2 on tractor drive and 295/75 on trailer
34	15		vs. XDN2 455 on tractor drive and 295/75 on trailer

## September-2009

35	1	Idle: Engine versus APU Idle
36	2	Pilot pick-up signaling arrows system (MTQ-CGER): lower versus higher
37	3	SCR (Urea) 2010 Truck versus 2009 Truck
38	4	SCR (Urea) 2010 Truck: SCR On versus SCR Off
39	5	Trailer skirt for 53' van semi-trailer : Arrow position (closed angle in front, wide open in the back)
40	6	Trailer skirt for 53' van semi-trailer : Funnel position (wider in front, narrower in the back)
41	7	Trailer skirt for 4 axles 53' van semi-trailer

## July-2010 (Stop-N-Go)

42	1	Single-wide tires on drive axles for tractor	275/80 R22.5 XDN2 vs. 445/50 R 22.5 XDN2
43	2	Single-wide tires on drive axles for straight truck	11R 22.5 XZE vs. 455/55 R 22.5 XDN2

## August-2010 (High speed)

44	1	2010 Tractors vs. 2009 tractor (Volvo VNL D13 435 HP)	Freightliner Cascadia SCR (Detroit DD15 Blue-Tec 455 HP)
45	2		Kenworth T700 SCR (Cummins ISX 400 HP)
46	3		Volvo VN 670 SCR (D13 435 HP)
47	4	Cab deflector for day-cab tractor	
48	5	Tractor-semi-trailer equipped with single wide-base tires and trailer skirts	

## May-2011

49	1	Three-axle semi-trailer for intermodal applications equipped with trailer skirts and single wide-base tires versus a conventional semi-trailer
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## September-2011

50	1	Semi-trailer covered underside	
51	2	Prototype aerodynamic wedge semi-trailer	Versus normal wedge semi-trailer
52	3		Versus normal semi-trailer with skirts
53	4	Wheel mud flaps	
54	5	B-Train vs. a two-axle semi-trailer carrying the same payload	
55	6	Evaluation of the fuel consumption of tractors complying with EPA 2010 emission	Volvo vs. Kenworth T 700
56	7		Freightliner Cascadia vs. Kenworth T 700
57	8		International Prostar vs. Kenworth T 700
58	9		Volvo vs. International Prostar
59	10		Volvo vs. Freightliner Cascadia
60	11		Freightliner Cascadia vs. International Prostar

## September-2012

61	1	The influence of tire wear on fuel consumption	
62	2	The impact of lifting axles for empty four-axle van semi-trailer	One lift axle (the last three axles at the ground)
63	3		Two lift axles (the last two axles at the ground)
64	4		Two lift axles vs. one lift axle.
65	5	The efficiency of a gap deflector for a tractor – tanker semitrailer	
66	6	The impact of tractor-trailer gap on fuel consumption	60 in. (1524 mm) compared to 50 in. (1270 mm)
67	7		36 in. (914 mm) compared to 50 in. (1270 mm)
68	8	The influence of two different signalling arrows systems on the fuel consumption of a pilot van vehicle	System 1 with fairing vs. system 1 without fairing
69	9		System 1 without fairing vs. system 2
70	10		System 1 with fairing vs. system 2

## May-June-2013

71	1	The influence of recap tires on fuel consumption
72	2	The influence of single-wide tires on fuel consumption
73	3	Evaluation of OEM 6 x 2 tractors

74	4	Evaluation of 6 x 2 tractors modified from 6 x 4 tractors	Mod. 1: emptied rear housing, removed the drive shaft between front and rear housing, changed gears in the front housing but same ratio
75	5		Mod. 2: switched front and rear housing, emptied rear housing; gears not changed, same ratio
<b>September-October-2013</b>			
76	1	Comparison between European and North-American Tractors	
77	2	Evaluation of a propane system for light duty gasoline vehicles (Prins VSI-LPG system provided by Pro2 Conversion)	
78	3	Influence of stakes on fuel consumption for a tractor – logging trailer combination	
<b>May-June-2014</b>			
79	1	Comparison between tractor-LCV and tractor – semitrailer combination	
<b>September-2014</b>			
80	1	The efficiency of a gap deflector for a tractor-tanker semi-trailer	
81	2	The efficiency of trailer skirts for a tractor-tanker semi-trailer	
82	3	The efficiency of the combination of a gap deflector and trailer skirts for a tractor-tanker semi-trailer	
83	4	The impact of a tarp system on the fuel consumption of a tractor - flatbed semi-trailer	
84	5	The comparison of the constant high-speed fuel consumption of direct-drive and overdrive tractors	Volvo direct-drive vs. Volvo overdrive
			Peterbilt direct-drive vs. Volvo direct-drive
85	6	Comparison of dynamic performances and fuel consumption on various route profiles (Saguenay and Townes Pass) using a towing dynamometer	Volvo European vs. Volvo overdrive
			Volvo direct-drive vs. Volvo overdrive
			Peterbilt direct-drive vs. Volvo overdrive
<b>May-June-2015</b>			
86	1	The efficiency of wheel covers for a tractor-tanker semi-trailer	
87	2	The efficiency of airtabs for a tractor-tanker semi-trailer	
88	3	The efficiency of airtabs for a tractor-van-box semi-trailer	
89	4	The efficiency of Flow-Below device for a tractor-van-box semi-trailer	
90	5	Comparison of dynamic performances and fuel consumption on various route profiles (Saguenay / Townes Pass) using a towing dynamometer for two different ratings of the same engine: 425 HP vs 455 HP.	
<b>September-2015</b>			
91	1	Tires on tractor drive axle: X-Line Energy vs XDN2	
92	2	Misalignment (steer wheel alignment 0.31°, front drive axle tire slip angle -0.41°, rear drive axle thrust angle 0.38°)	
93	3	Tire pressure for X-Line Energy tires: 80 psi vs 100 psi	
94	4	Wheels misbalancing (tractor: steer left 5 oz, steer right 10 oz, drives all wheels: 5 oz; trailer: front left and rear right 15 oz, rear left and front right 10 oz).	
<b>May-June-2016</b>			
95	1	Automated transmission trucks fuel consumption comparison	
96	2	Impact of speed on fuel consumption: 98 km/h vs. 104 km/h	
97	3	Impact of speed on fuel consumption: 110 km/h vs. 104 km/h	
<b>Septembre-2016</b>			
98	1	Impact of engine programming on fuel consumption: 400 HP and 98 km/h vs. 450 HP and 105 km/h (two tests were conducted on two test vehicles).	
99	2		
100	3	Rear deflector for tanker semi-trail	