

# FLEET RELIABILITY FROM END TO END



LUBRICANTS

AN HF SINCLAIR BRAND



AN HF SINCLAIR BRAND

**> NO INDUSTRY  
GIVES ITS VEHICLES,  
MACHINERY AND  
LUBRICANTS A  
TOUGHER TIME  
THAN THE REFUSE  
HANDLING  
SECTOR.<**

**> WE HAVE COMPLETE FAITH IN <**  
PETRO-CANADA LUBRICANTS OILS

Matthew Kraatz, Fleet Manager, GFL Environmental Inc.

Waste trucks and hydraulic vacuum trucks work ten hours a day, up to seven days a week, often with endless stop-starts and hours of idling. Waste station compactors and balers operate non-stop under huge loads, with hydraulics exposed to extreme outdoor conditions.

Downtime impacts reliability and profits. Which is why in the waste industry, perhaps more than any other, the right lubricants and fluids can make a big impact on both productivity and profitability.

**> OPERATIONAL RELIABILITY  
STARTS AND STOPS HERE.**

# HEAVY-DUTY ENGINE OILS

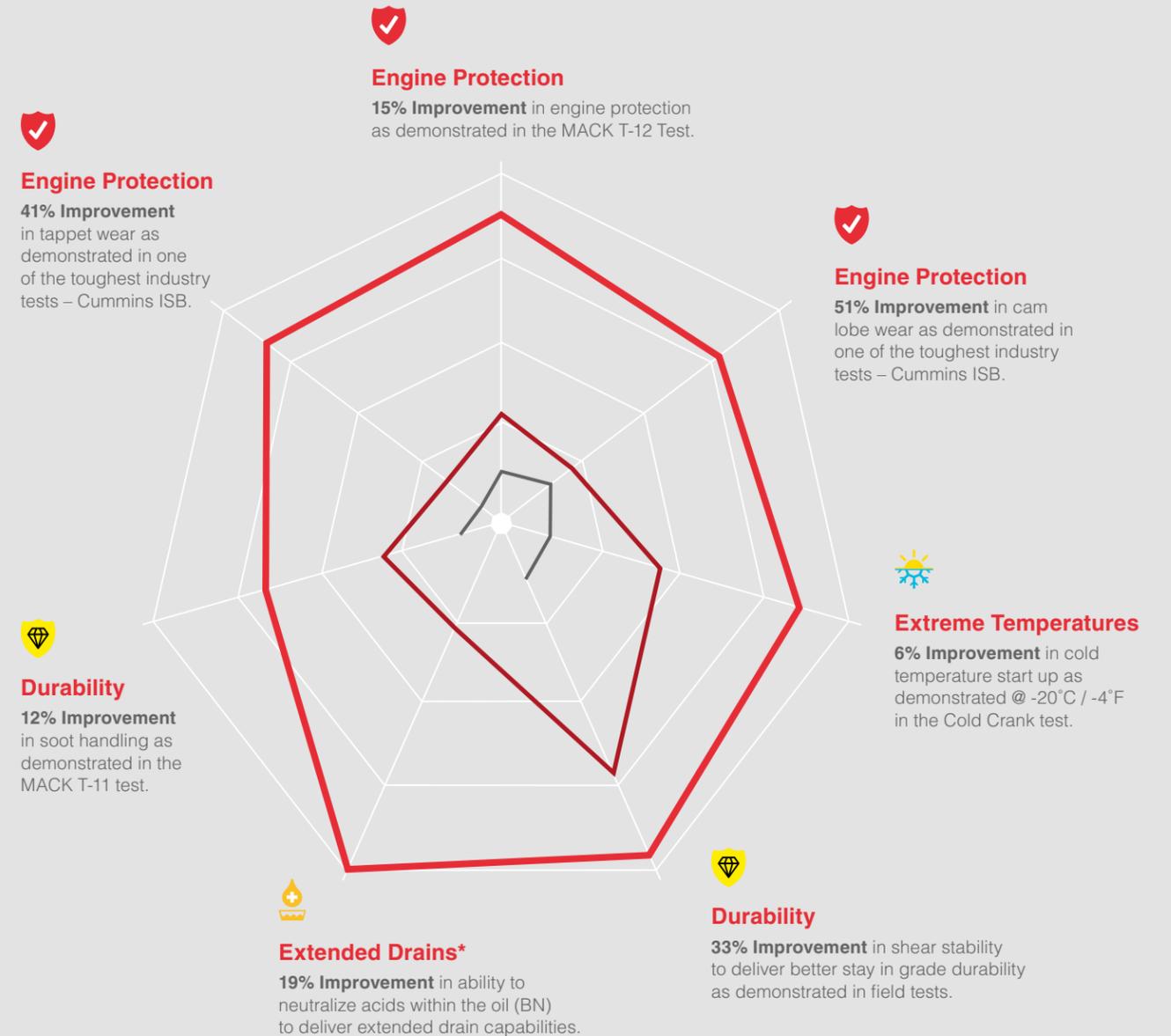
## DURON™ THE TOUGHER. THE BETTER.™

- 
**MAXIMUM OIL DURABILITY**  
 When ordinary oils weaken, Petro-Canada Lubricants' DURON stays strong, outperforming the toughest specifications tied to oxidation control, shear stability and aeration control.
- 
**MAXIMUM ENGINE PROTECTION**  
 DURON keeps your engine strong for longer, with exceptional performance in wear tests such as the Cummins ISB, one of the toughest tests in the category.
- 
**EXTENDED DRAINS\***  
 Longer drains mean more uptime, to keep you working and productive.
- 
**EXTREME HIGH AND LOW TEMPERATURE PERFORMANCE**  
 Whether extreme heat or cold threatens your reliability, DURON is designed to perform and protect in extreme climatic conditions.
- 
**ENHANCED FUEL ECONOMY**  
 Fuel is money. DURON's advanced, highly protective lower viscosity oils are designed to reduce friction and boost fuel efficiency.
- 
**SUSTAINABILITY**  
 DURON can help support your sustainability goals - it keeps you on the road for longer by extending drains and moving to lower viscosity reduces fuel consumption.

\*Extending drain intervals should always be undertaken in conjunction with an oil analysis program



## HIGHER PERFORMANCE ALL ROUND



\*Base Number (BN) does not have a specification limit, and is represented as such on the spider diagram.



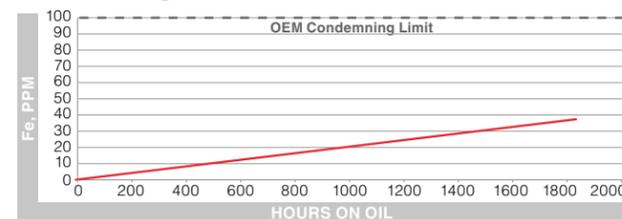
# BEYOND 1,600 HOURS CONTINUOUS OPERATION

## MAXIMUM ENGINE PROTECTION



DURON engine oils provide our highest ever levels of engine protection to deliver maximum up-time for your vehicles. Need proof? Look at DURON's performance in **real world** trials with one of the world's top waste fleets. DURON proves performance well below the OEM condemning limit.

### Cummins Engine



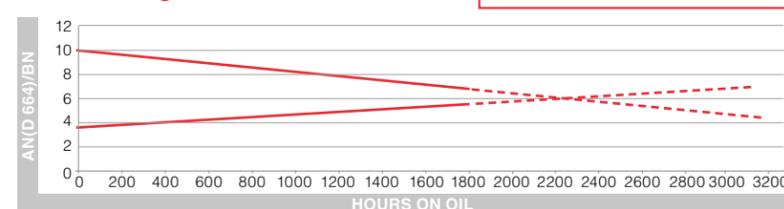
Demonstrates excellent wear protection with < 40 ppm Fe well beyond 1600 hours.

## MAXIMUM EXTENDED DRAINS



More uptime between oil drains adds value to the bottom line. DURON engine oils deliver extended drain capabilities with no compromise to reliability and engine protection, even up to 1900 hours.

### Cummins Engine

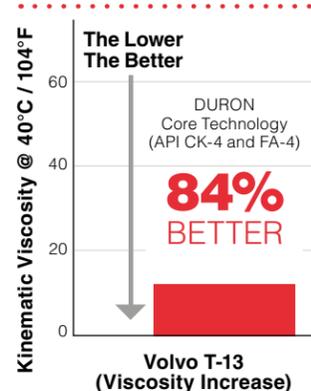


## EXTREME HIGH AND LOW TEMPERATURE PERFORMANCE

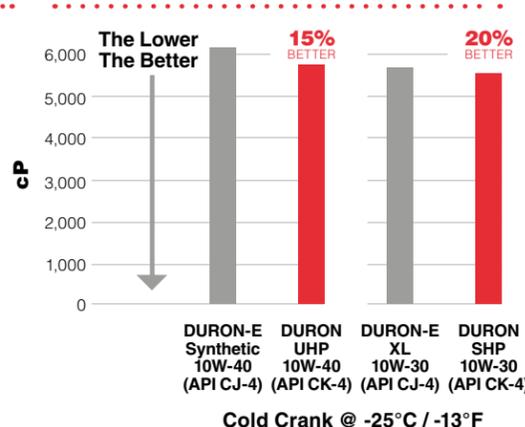


It may be -40°C/°F or even 50°C/122°F outside. It could even get up to 500°C/932°F in the engine. That's no match for DURON. We've built our reputation on superior performance at every temperature extreme – and DURON sets new standards.

### API CK-4 & FA-4 SPECIFICATION LIMIT



### API CK-4 & FA-4 SPECIFICATION LIMIT



# CNG/LNG ENGINE OILS

## DURON GEO LD. SAVINGS, NO MATTER WHAT FUEL POWERS YOUR FLEET.

### APPROVED BY CUMMINS

Compressed Natural Gas/Liquefied Natural Gas (CNG/LNG) mobile engines in refuse fleet vehicles need DURON GEO LD engine oils. And with DURON GEO formulated for heavy-duty diesel and gasoline engines too, whatever the mix of your refuse fleet, DURON GEO has it covered.

### EXCEEDS OEM REQUIRED TESTS

- › DURON GEO LD 15W-40 and 10W-30 have Cummins CES 20092 approvals
- › Fully back serviceable to CES 20085 specifications
- › API CK-4/SN licensed and approved by other major diesel engine OEMs including Detroit Diesel, Mack, Volvo and Renault

For engines requiring Cummins CES 20074 approvals, use SENTRON VTP 10W-40.

### ADVANCED ENGINE PROTECTION

Help engines maintain optimal power and fuel economy thanks to high resistance to nitration and oxidative thickening.

### EXTENDED DRAIN INTERVALS

Drain interval extensions up to 1000 hours\* are fully possible with DURON GEO LD without compromising engine wear or performance.

With outstanding stability in the toughest conditions, DURON GEO LD can help keep your fleet efficient and on the road.

\*Extending drain intervals should always be undertaken in conjunction with an oil analysis program



# AUTOMATIC TRANSMISSION FLUIDS

## DURADRIVE™ HD SYNTHETIC 668

### AUTOMATIC TRANSMISSION FLUID

#### Factory fill for Allison Transmission worldwide\*

Nothing protects the Allison transmissions in your refuse vehicles like Petro-Canada Lubricants' DURADRIVE HD SYNTHETIC 668.

Allison introduced the TES 668™ specification to give their world class automatic transmissions the best protection and performance. Now Allison have tested DURADRIVE HD SYNTHETIC 668, evaluated it, approved it, and made the decision to fill DURADRIVE HD SYNTHETIC 668 in every on-highway Allison TES 668™ specified transmission that leaves every Allison factory worldwide.

#### DURADRIVE HD SYNTHETIC 668

is fully back serviceable to transmissions requiring TES 295® fluids\*.

So all the performance Allison demands for their new transmissions, you can have in yours. Also now with formal Volvo 97341 AT 101 (STD 1273.41) approval. Additional OEM approvals and recommended applications included in OEM chart at the back of the brochure.



\*In all transmissions requiring TES 668™ specified fluids, with the exception of TC10® transmissions

**DURABILITY**  
Excellent oxidation control helps shield components from damage caused by sludge, varnish and corrosion; leading to improved fluid and transmission component life

**PERFORMANCE ENHANCEMENT**  
Anti-shudder and torque control; leading to smoother acceleration even under demanding conditions

**EQUIPMENT PROTECTION**  
Improved wear protection and component life; leading to greater transmission longevity and asset value

TES 295®, TC10® and TES 668™ are trademarks of Allison Transmission, Inc.

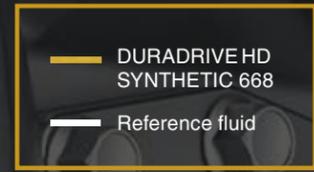
## PERFORMANCE THAT EXCEEDS EXPECTATIONS

You can see for yourself how the results stack up to make **DURADRIVE HD SYNTHETIC 668** the choice for Allison factory fill fluid and the best choice for you.

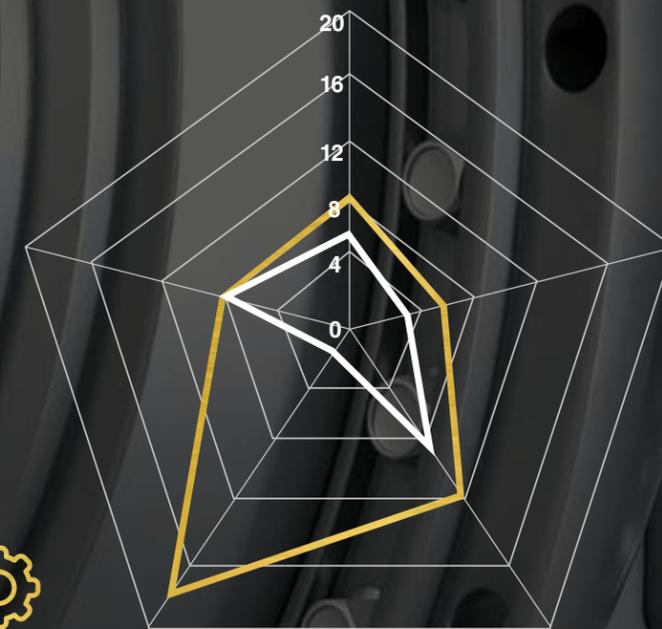
It's about respect. And now we'll earn yours.



2 times better oxidation control than reference fluid (ABOT test)



Exceptional volatility control enabled by our unique 99.9% pure base oil quality



Excellent oil thickening control – double that of the reference fluid (ABOT test)



Outstanding anti-shudder durability – 13 times better than reference fluid



Wear protection improvement vs. reference fluid (FZG ASTM D5182 test)

#### DURADRIVE HD SYNTHETIC BLEND ATF

DuraDrive Heavy-Duty (HD) Synthetic Blend ATF is the preferred fluid during the base and extended warranty period for the Voith Turbo DIWA® transmissions in North America.

Approved for: Voith (H55.6336.xx DIWA Service Bulletin 013 and 118, formerly G1363) 72,000 mile and ZF TE-ML 14B extended drain applications. Additional recommended applications included in OEM chart at the back of the brochure.

#### DURADRIVE HD LONG DRAIN ATF

Full synthetic formulation approved for maximum drain in Voith transmissions. Excellent wear protection, oxidation control, wide temperature performance and friction durability demonstrated in extensive rig testing and field trials. Approved for ZF TE-ML 14C, 20C (extended drain), Volvo STD 1273.41 - transmission oil 97341 (AT101), Voith 150.014524.xx (maximum drain, 180K km) xx- VTI-DIWA Service Bulletins 013 and 118 and others. Additional recommended applications included in OEM chart at the back of the brochure.

# HYDRAULIC FLUIDS

## HYDREX™ HYDRAULIC FLUIDS RAISE YOUR GAME

Up to 3x\* longer fluid life.

Up to 2x\* better wear protection.

Your fleet can't work without their hydraulic systems. Nothing protects them like Petro-Canada Lubricants' HYDREX.

The combination of ultra-pure, high quality base oils and advanced additives delivers anti-wear protection so effective, it can last 3x longer than competitors and provide double the protection, even in systems exposed to temperature extremes.

Keep your hydraulics working with reliability and precision with HYDREX.



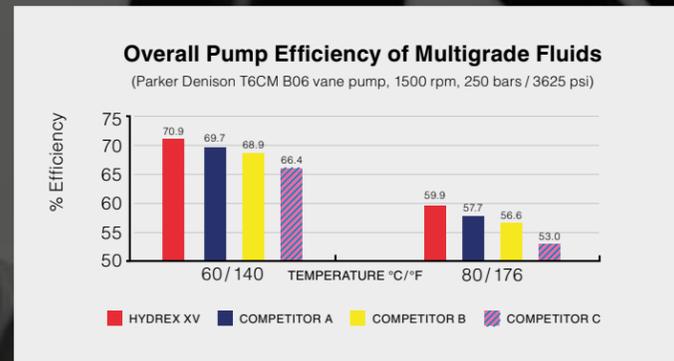
\*In comparison to leading North American hydraulic oil brands.

### HYDREX XV ALL-SEASON

Performance from -34°C/-29°F to 90°C/194°F.\*

Using semi-synthetic base-oil technology, HYDREX XV delivers top-tier wear protection and oil life across a true all-season temperature range. Excellent shear stability plus a high Viscosity Index means optimal fluid viscosity at all temperatures, for:

- increased hydraulic pump and system efficiencies
- lower energy consumption
- reduced carbon dioxide emissions



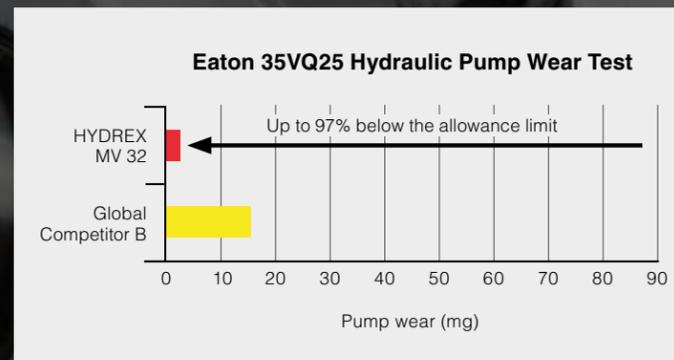
\*Based on Petro-Canada Lubricants' definition of mobile equipment applications.

### HYDREX MV

Fluid life 3x longer than competitors.

To protect against wear across high and low temperatures, reduce the need for seasonal change-outs and consolidate inventory, you need HYDREX.

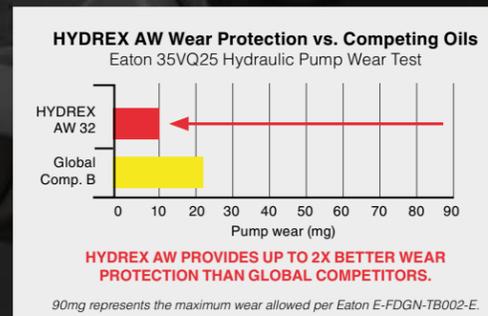
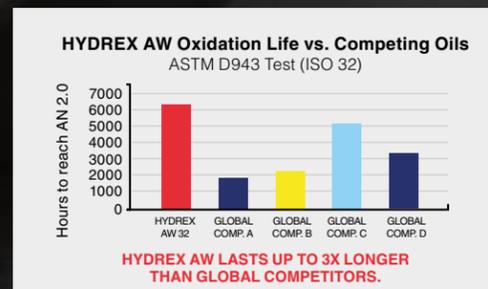
With proven wear protection, HYDREX MV prolongs equipment life, giving you the confidence to run your machines to get the productivity you need. Lasting up to 3x longer than competitors (up to 7,000 hours before the condemning limit in ASTM D943), drain interval extensions become real. Available in ISO 22, 32, 46 and 68 grades.



### HYDREX AW

Superior wear protection and oil life.

When you want to cut equipment wear, HYDREX AW delivers. It's the high-performance, anti-wear hydraulic fluid designed to exceed the demands of advanced hydraulic systems in refuse equipment. It protects against oil degradation and oxidation and extends the life of your pump. By minimizing oxidation and sludge, HYDREX AW also provides long oil life – so you can operate longer without interruption. Available in ISO 22, 32, 46, 68, 80 and 100 grades.



# BIODEGRADABLE HYDRAULIC FLUIDS

## ENVIRON™ BIODEGRADABLE HYDRAULIC FLUIDS

### PROTECTION WITHOUT COMPROMISE

More and more, environmental responsibility will matter for refuse fleet operators. The future-proof solution is ENVIRON.

Petro-Canada Lubricants' ENVIRON line of inherently and readily biodegradable hydraulic oils is free of heavy metals, non-toxic, and recyclable – yet with all the performance you need. It's protection for your fleet, and the world it operates in.



### ENVIION MV R READILY BIODEGRADABLE HYDRAULIC FLUID

- › Year-round protection in any conditions
- › Excellent equipment protection in demanding extremes; extends equipment life leading to lower costs of operation and ownership
- › Superior oxidation and thermal stability compared to vegetable oil based and unsaturated ester products
- › Exceeds the ready biodegradability requirement of 60% within a 28-day period according to OECD 301B
- › Available in ISO 32 and 46 grades



### ENVIION MV INHERENTLY BIODEGRADABLE HYDRAULIC FLUID

- › Excellent all season performance allowing hydraulic systems to start easily in temperatures as low as -36°C/-33°F
- › Exceptional lubrication of hydraulic components operating at high temperatures
- › Available in ISO 32 and 46 grades



### ENVIION AW INHERENTLY BIODEGRADABLE HYDRAULIC FLUID

- › Exceptional performance, lasting far longer than competitive conventional products
- › Maintains excellent anti-wear, rust and corrosion protection to meet the rigorous demands of refuse fleets everywhere
- › Available in ISO 32, 46 and 68 grades



# PERFORMANCE GREASES

In every waste fleet, effective grease performance can make a real impact on uptime and running costs. PRECISION™ and PEERLESS™ do exactly that, with formulations that reduce operating costs and provide long service protection over a wide temperature range.

## PRECISION

### TRUSTED PROTECTION AND PERFORMANCE

Petro-Canada Lubricants' **PRECISION EP lithium greases** give you improved resistance to water washout, longer life under extreme conditions and outstanding resistance to shearing. PRECISION XL EP1, 2 and Synthetic have NLGI's GC-LB certification. PRECISION XL EP00 and XL EP000 also have excellent low-temperature mobility.

#### PRECISION SYNTHETIC EP00

- Exceptional wear protection for refuse truck rear-end and hub assemblies
- Wide operating temperature range: -40°C/-40°F to 170°C/338°F

#### PRECISION XL EP1, EP2, EP00, EP000

- PRECISION XL EP1 and EP2 recommended for heavy-duty and general purpose bearings.
  - PRECISION XL EP2 designed for low or high speed applications
  - PRECISION XL EP1 designed for applications with centralized lubrication systems
  - PRECISION XL EP000 for protection in leaky or poorly sealed gearboxes

#### PRECISION XL 3 MOLY EP1/EP2

- Performance lithium greases compounded with 3% molybdenum disulphide, suited for tough, heavy-duty shock loaded equipment in off-highway applications



PRECISION Synthetic, PRECISION Synthetic 220, PRECISION XL EP2 and PRECISION XL EP1 all meet NLGI Automotive Service Classification GC-LB for wheel bearing and chassis lubrication.

## PEERLESS

### DEMAND THE BEST

Premium multi-application calcium sulphonate complex greases formulated to reduce your operating costs and provide extended protection in high temperatures or wet conditions.

#### PEERLESS OG2 RED

- This multi-application, long-life grease is formulated for the lubrication of loaded bearings, universal joints and chassis, in industry, transport, marine and offshore applications
- Exceeds the NLGI's GC-LB certification for performance in automotive and heavy-duty chassis applications, U-joint greasing and wheel bearing lubrication, and now with enhanced NLGI High Performance Multiuse (HPM) Certification

#### PEERLESS 3 MOLY 322

- Increased protection for longer in severe heavy-duty use, with molybdenum disulphide to protect through cold, heat and water
- Ideal for applications with low speed, severe, heavy-duty applications in which high temperatures are encountered and wear protection is critical



PEERLESS LLG, OG1, OG2 and OG2 Red all meet NLGI Automotive Service Classification GC-LB for wheel bearing and chassis lubrication.



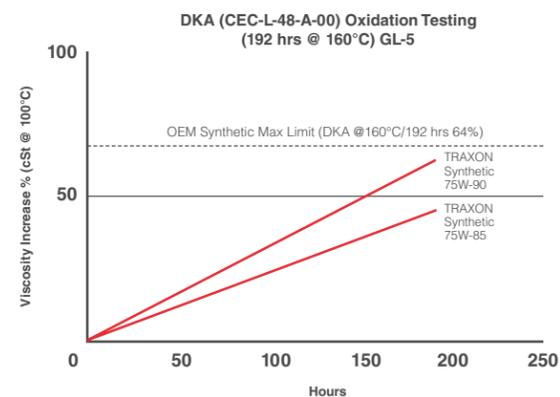
PEERLESS OG2 Red meets the standard for NLGI High Performance Multiuse (HPM) Certification.

# AXLE/MANUAL TRANSMISSION FLUIDS

## TRAXON™ AXLE/MANUAL TRANSMISSION FLUIDS

**Put more life in your axles and manual transmissions.**

You need your equipment to last. With excellent shear stability and outstanding oil life, Petro-Canada Lubricants' TRAXON takes wear protection up a gear. The TRAXON line can help extend the life of your axles in every vehicle in your refuse fleet, reduce downtime and maintenance costs, and deliver what matters most – better bottom-line performance. Top OEM approvals including Eaton, Dana, Meritor and others.



› In the DKA oxidation test, product performance is measured by how much harmful viscosity increase will occur over time.

› TRAXON Synthetic 75W-90 and 75W-85 both meet the OEM full synthetic requirements by remaining below the maximum limit for the entire duration of the test.



## › TRAXON E SYNTHETIC

Premium line of heavy-duty, extreme pressure, synthetic hypoid gear and manual transmission fluids formulated to meet the “Genuine Roadranger” extended drain and warranty performance requirements set by Eaton Corporation (for transmissions) and Dana CVSD Corporation (for axles). Hypoid axle gear fluids are available in 75W-90 and 80W-140 grades as well as a manual transmission fluid.



## › TRAXON SYNTHETIC

Full synthetic formula for excellent year-round protection in extreme weather conditions. Hypoid axle gear fluids available in 75W-85, 75W-90, for many axle OEM equipment such as Mack/Volvo, Meritor, ZF and others with synthetic extended drain capabilities. Also available in a manual transmission SAE 50 grade and suitable for many manual transmissions including equipment such as Mack/ Volvo, Meritor, Eaton and others with synthetic extended drain capabilities.



## › TRAXON XL SYNTHETIC BLEND

Hypoid axle gear fluids offering excellent low temperature protection, better shear stability and long oil life. Delivers outstanding, long-lasting protection, in 75W-90 and 80W-140 grades. Suitable for use in OEM equipment including Mack/Volvo, Meritor, ZF and others.



## › TRAXON

Multigrade hypoid gear axle fluids formulated for long-lasting wear protection. Extends equipment life to maximize productivity and reduce downtime. Available in 80W-90 and 85W-140 grades. Suitable for Mack/Volvo, Meritor, ZF and other OEM equipment.



For a full list of OEM approvals, please review the OEM chart at the back of the brochure.

# PROTECT YOUR FLEET. RAISE YOUR RELIABILITY.



AN HF SINCLAIR BRAND

Refuse fleets need maximum reliability, but their tough working conditions can place significant stress on the fluids and greases designed to protect the equipment.

Petro-Canada Lubricants' high-performance products have been specially designed and proven to outlast these tough conditions, keep equipment moving, and your operations more productive and profitable.

## HYDRAULIC SYSTEM

- HYDREX AW and MV
- ENVIRON AW and MV
- ENVIRON MV R



## BEARINGS AND PINS

- PRECISION Synthetic and XL EP
- PEERLESS OG



## GEARBOX

- TRAXON E SYNTHETIC 75W-90, 80W-140
- TRAXON SYNTHETIC 75W-90
- TRAXON XL SYN BLEND 75W-90, 80W-140
- TRAXON 80W-90, 85W-140



## TRANSMISSION

- DuraDrive HD Synthetic 668 ATF
- DuraDrive HD Synthetic Blend ATF
- DuraDrive HD Long Drain ATF
- TRAXON E Synthetic MTF
- TRAXON Synthetic MTF 75W-80
- TRAXON Synthetic CD-50



## ENGINE CRANKCASE

- DURON HP
- DURON SHP
- DURON UHP
- DURON GEO



## COOLANT SYSTEM

- HD Expert Premium
- HD Expert Extra

\*Note: These are general guidelines containing select Petro-Canada Lubricants products that may be most suitable for your fleet. You should always follow your OEM recommendations. Please contact a Petro-Canada Lubricants representative or visit our website, [lubricants.petro-canada.com](http://lubricants.petro-canada.com) for more information and our complete product listing.

# PETRO-CANADA LUBRICANTS. PROUD TO BE AN HF SINCLAIR BRAND.

Choosing the Petro-Canada Lubricants brand gives you access to the resources and global supply chain of a world leader, HF Sinclair. We are an independent petroleum refiner and producer of high-quality lubricants and specialty products, with facilities across North America and Europe. That global reach and logistical support is there for every customer.

## UNRIVALLED TECHNICAL EXPERTISE

Petro-Canada Lubricants products have been performing in the toughest industries and applications for more than 30 years. They're tested in the most extreme conditions and surpass the most demanding Original Equipment Manufacturer (OEM) standards, to make you more successful.

## NEXT LEVEL CUSTOMER SUPPORT

When other suppliers are pulling back from customer support, HollyFrontier is investing in it. We're 100% committed to working with you as a partner and supporting you wherever you are, whenever you need it.

## BUSINESS MADE EASY

Time is money, so we make it easy to do business with us. By doing the simple things brilliantly, we set you free to grow your business.

# 360 TECHNICAL EXPERTISE.

## THE COMPLETE SUPPORT SERVICE.

From smart product selection tools to performance-optimizing oil diagnostics and industry-leading reliability services, no one offers a support package like 360 Technical Expertise. Choose Petro-Canada Lubricants, and it's all yours, to make your life easier and your business more successful.

### OIL DIAGNOSTICS

State of the art oil analysis and diagnostics. **Maximize your equipment reliability and efficiency to save you money.**



### SAVING SOLUTIONS

Work with our experts to create a product optimization strategy. **Uncover real, measurable and sustainable cost and productivity savings.**



### TARGETED TRAINING

Learn from the best in the industry. **Elevate your teams to tackle any challenge.**



### RELIABILITY SERVICES

One of the most comprehensive reliability service offerings, from equipment inspections and optimization to storage assessments. **Everything you need to maximize your productivity and uptime.**



### PRODUCT SELECTOR

Finding the right product for your application has never been easier. **Get the answers you need, fast.**



### CERTIFIED CLEAN

Meet and exceed OEM and industry cleanliness requirements. **We can provide Guaranteed Cleanliness Filtration.**



For more about services:  
[lubricants.petro-canada.com](http://lubricants.petro-canada.com)

# APPROVED FOR YOUR EQUIPMENT BY THE WORLD'S OEMs

## HEAVY-DUTY ENGINE OIL Recommended Applications

Products		DURON HP 15W-40		DURON SHP 15W-40		DURON SHP 10W-30		DURON UHP 10W-40		DURON UHP 5W-40		DURON UHP 0W-30		DURON UHP 0W-40	
	ACEA	✓	E7, E9	✓	E7, E9	✓	E7, E9	✓	E7, E9	✓	E7, E9				
	API	★	CK-4 / SN	★	CK-4 / SN	★	CK-4 SN*	★	CK-4 / SN	★	CK-4 SN	•	CK-4 / SN	•	CK-4 / SN
	Allison Transmission									★	TES 439				
	Caterpillar	✓	ECF-3, TO-2	✓	ECF-3, TO-2	✓	ECF-3, TO-2	✓	ECF-3, TO-2	✓	ECF-3, TO-2	•	ECF-3, TO-2	•	ECF-3, TO-2
	Cummins	★	CES 20086	★	CES 20086	★	CES 20086	★	CES 20086	★	CES 20086	•	CES 20086	•	CES 20086
	Detroit Diesel	★	DFS 93K222	★	DFS 93K222	★	DFS 93K222	★	DFS 93K222	★	DFS 93K222				
	Deutz	★	DQC III-18 LA	★	DQC III-18 LA			★	DQC III-18 LA						
	Ford	★	WSS-M2C171-F1	★	WSS-M2C171-F1	★	WSS-M2C171-F1	★	WSS-M2C171-F1	★	WSS-M2C171-F1				
	GM	•	9985930	•	9985930	•	9985930	•	9985930						
	JASO	•	MA2, DH-1, DH-2	•	MA2, DH-1, DH-2	•	MA2, DH-1, DH-2	•	MA2, DH-1, DH-2	•	MA2, DH-1, DH-2	•	MA2	•	MA2
	Mack	★	EOS-4.5	★	EOS-4.5	★	EOS-4.5	★	EOS-4.5	★	EOS-4.5				
	MAN	•	3575, 3275-1	•	3575, 3275-1							•	3575		
	Mercedes-Benz	★	228.31	★	228.31	★	228.31								
	MTU	★	Type 2.1	★	Type 2.1			•	Type 2.1	•	Type 2.1				
	Renault	★	RLD-3	★	RLD-3	★	RLD-3	★	RLD-3	★	RLD-3				
	Volvo	★	VDS-4.5	★	VDS-4.5	★	VDS-4.5	★	VDS-4.5	★	VDS-4.5				

\* Use of a diesel engine oil for gasoline applications may compromise the life of the emissions device. Please refer to the owner's manual to ensure proper oil is used.

★ Approved for Use | • Suitable for Use | ✓ Meets Specifications

## CNG/LNG Recommended Applications

Products		DURON GEO LD 15W-40		DURON GEO LD 10W-30		Products		DURON GEO LD 15W-40		DURON GEO LD 10W-30	
		✓	E7, E9	✓	E7, E9		★	EOS-4.5	★	EOS-4.5	
		★	CK-4/SN	★	CK-4/SN		✓	228.31			
		✓	ECF-3	✓	ECF-3		✓	TYPE 2.1			
		★	CES 20092, CES 20086	★	CES 20092, CES 20086		★	RLD-3	★	RLD-3	
		★	DFS 93K222	★	DFS 93K222		★	VDS-4.5	★	VDS-4.5	
		•	DH-2	•	DH-2						

★ Approved for Use | • Suitable for Use | ✓ Meets Specifications

## GREASES Recommended Applications

Products	NLGI Grade	Composition	Operating Temperature Range (°C)	Application
PRECISION Synthetic	1	Lithium Complex (Colour = Gold)	-40 to 170	Specially designed to provide protection over a wide range of operating temperatures, for all-season protection. Delivers excellent cold weather protection without compromising high temperature performance.
PRECISION XL EP1	1	Lithium Complex (Colour = Green)	-25 to 160	Specially designed for automotive wheel bearings, chassis points on on-road and off-road vehicles.
PRECISION Synthetic EP00	00	Lithium Complex (Colour = Gold)	-40 to 170	Semi-fluid synthetic grease that is specifically designed for lubricating truck/trailer wheel-end bearings.
PRECISION SYNTHETIC 220	2	Lithium Complex (Colour = Gold)	-30 to 170	Specially formulated to lubricate equipment in cold environments. It is intended for applications requiring a stiffer consistency or a higher viscosity than PRECISION Synthetic.
PRECISION XL EP2	2	Lithium Complex (Colour = Green)	-20 to 160	Specially designed for automotive wheel bearings, chassis points on on-road and off-road vehicles.
PEERLESS 3 MOLY 322	2	Calcium Sulphonate Complex (Colour = Grey)	-15 to 170	Recommended for low speed, severe, heavy-duty applications in which high temperatures are encountered and wear protection is critical under conditions of heavy load, shock loading and vibration. An excellent option for fifth wheels on over-the-road Class 8 trucks.
PEERLESS OG1	1	Calcium Sulphonate Complex (Colour = Tan)	-30 to 163	Recommended for applications requiring water resistance. Effective at resisting changes in consistency and still providing rust protection.
PEERLESS OG2	2	Calcium Sulphonate Complex (Colour = Tan)	-25 to 163	Recommended for applications requiring water resistance. Effective at resisting changes in consistency and still providing rust protection.
PEERLESS OG2 Red	2	Calcium Sulphonate Complex (Colour = Red)	-25 to 163	Recommended for applications requiring water resistance. Effective at resisting changes in consistency and still providing rust protection. Dyed red for applications requiring greater grease visibility.

## GEAR OILS / MANUAL TRANSMISSION FLUIDS Recommended Applications

Products	TRAXON 80W-90	TRAXON 85W-140	TRAXON XL Synthetic Blend 75W-90	TRAXON XL Synthetic Blend 80W-140	TRAXON Synthetic 75W-85	TRAXON Synthetic 75W-90	TRAXON E Synthetic 75W-90	TRAXON E Synthetic 80W-140	TRAXON E Synthetic MTF	TRAXON Synthetic CD-50	TRAXON Synthetic MTF 75W-80
API GL-4										✓	✓
API GL-5	✓	✓	✓	✓	✓	✓	✓	✓			
API MT-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bosch TE-ML 08											•
CNH MAT 1316	•	•									
CNH MAT 3511		•		•		•					
Dana CVSD SHAES 256 Rev E (EATON TCMT0020-EN U.S Listed)							★				
Dana CVSD SHAES 429 Rev A* (EATON TCMT0020-EN U.S Listed)							★	★			
Detroit Diesel DFS93K219.01							✓				
Eaton PS-164 Rev 7 (obsolete)										•	
Eaton PS-386 ** (TCMT0020-EN U.S Listed)								★			
Ford M2C-94A / M2C-197A	•										
Ford M2C-200B and M2C-201A			•			•					
International TMS 6816 / Navistar MPAPS B-6816 Type I							✓				
International TMS 6816 / Navistar MPAPS B-6816 Type II								✓		•	
Iveco 18-1807 MGS-1											•
John Deere JDM J11E	•	•	•	•	•	•					
Navistar MPAPS B-6821							✓	✓			
Mack GO-J	★	★	★	★		★		★			
Mack GO-J Plus								★			
Mack TO-A Plus									★	•	
MAN 342 Typ M1 (obsolete)	★	•		•		★	•	•			
MAN 342 Typ M2	★			•		★					
MAN 341 Typ Z4***											★
Meritor 0-76-A (obsolete)		✓									
Meritor 0-76-B (obsolete)				✓				✓			
Meritor 0-76-D (obsolete)	✓										
Meritor 0-76-E (obsolete)			✓			✓	✓				
Meritor 0-76-Q (obsolete)						•					
Meritor 0-76-N (obsolete)							★				
Meritor 0-76-R (obsolete)								•			
Meritor 0-80 (obsolete)								•			
Meritor 0-81								★	•		
Meritor 0-94	✓	✓	✓	✓	✓	✓	✓	✓			
Meritor 0-95						★	★	★			
SAE J2360 ****	★ PRI GL 1253	★ PRI GL 1252	★ PRI GL 1254	★ PRI GL 0891	★ PRI GL 1013	★ PRI GL 1251	✓	✓			
Scania STO 1.0 (axles)											
Scania STO 1.0 (axles and gearboxes/MT)	✓		✓					✓			
Volvo Std 1273.05 - 97305									•	•	
Volvo Std 1273.07 - 97307									•	•	
Volvo Std 1273.10 - 97310	•	•	•	•	•	•					
Volvo Std 1273.12 - 97312					•	•					
Volvo Std 1273, (15-18 & 19) - 973 (15,18 and 19)									•		
Voith Retarder Class B											•
ZF TE-ML - 01L, 02L, 13 (where stipulates ZF TE-ML 02L), 16K											★ (ZF002286)
ZF - Freedom Line (ZF-AS Tronic)- Applications											✓
ZF - Ecolite, Ecomid, Etronic- Applications											✓
ZF TE-ML - 17B	★ (ZF000764 and ZF003389)						★ (ZF002212)				
ZF TE-ML - 05A, 12M, 16B, 19B, 21A	★ (ZF000764 and ZF003389)										
ZF TE-ML - 05A, 12M, 16D, 21A		★ (ZF000778 and ZF003390)		★ (ZF002287)							
ZF TE-ML - 05A, 16B, 21A							★ (ZF002212)				

\* Products meeting these specifications are required as part of the Eaton "Genuine Roadranger" extended drain and warranty performance requirements set by Eaton Corporation (for transmissions) and Dana CVSD Corporation (for axles).

\*\* For use in Eaton transmissions such as UltraShift Plus, Fuller Advantage Series (FAS), FR and RT Series.

\*\*\* Approval from MAN North America only

\*\*\*\* SAE J2360 global standard (formerly MIL-PRF-2105E).

★ Approved for Use | • Suitable for Use | ✓ Meets Specifications

## AUTOMATIC TRANSMISSION FLUIDS Recommended Applications

OEM SPECIFICATION	DuraDrive HD Synthetic 668	DuraDrive HD Long Drain ATF	DuraDrive HD Synthetic Blend ATF
	This ATF is suitable for use in heavy duty fleets for extended oil drain intervals. Refer to the OEM oil drain interval recommendations for your application and service type.	This ATF is suitable for use in heavy duty fleets for extended oil drain intervals. Refer to the OEM oil drain interval recommendations for your application and service type.	This ATF is suitable for use in heavy duty fleets for standard and extended oil drain intervals. Refer to the OEM oil drain interval recommendations for your application and service type.
Allison TES 668™	Approved (AN668-10012020)	-	-
Allison C-4 (legacy)	-	-	C-4 29493700
Voith H55.6335.xx (standard drain, 60K km)	Approval Pending	-	Approved
Voith H55.6336.xx (extended drain, 120K km)	-	-	Approved
Voith 150.014524.xx (maximum drain, 180K km) xx- VTI-DIWA Service Bulletins 013 and 118	-	Approved	-
ZF TE-ML 14A (standard drain)	SFU	-	-
ZF TE-ML 14B (extended drain)	-	-	Approved (ZF004790)
ZF TE-ML 03D, 04D, 17C	-	-	Approved (ZF004790)
ZF TE-ML 16L (obsolete)	-	-	SFU
ZF TE-ML 14C, 20C (extended drain)	-	Approved (ZF004791)	-
ZF TE-ML 04D, 16M, 16S, 25C	-	Approved (ZF004791)	-
MAN 339 Typ V2, Z2	-	-	SFU
MAN 339 Typ Z3, Z12	-	Approved (TUC 1463/19)	-
Mercedes-Benz MB 236.1/ .5/ .6/ .7	-	-	SFU
Mercedes-Benz MB 236.92	Approval Pending	Approval Pending*	-
Volvo STD 1273.41 - transmission oil 97341 (AT101)	Approved (#97341-086)	Approved (#97341-079)	SFU
Caterpillar TO-2 (obsolete)	-	-	SFU
Ford MERCON® V	-	-	SFU
GM DEXRON®-III(H), -III(G), -II(E), or -II	-	-	SFU

• Always consult your vehicle owner's manual for specific transmission fluid recommendations

• TES 668™ is a trademark of Allison Transmission, Inc.

• MERCON® is a registered trademark of Ford Motor Company.

• DEXRON® is a registered trademark of General Motors LLC.

## SPECIALTY HYDRAULIC FLUIDS Recommended Applications

Products	ENVIRON AW 32	ENVIRON AW 46	ENVIRON AW 68	ENVIRON MV 32	ENVIRON MV 46	ENVIRON MV R 32	ENVIRON MV R 46
Bosch Rexroth	•	•	•	•	•	•	•
Denison HF-0, HF-1, HF-2	★	★	★	★	★	★	★
Eaton Brochure 03-401-2010	★	★	★	★	★	★	★
DIN 51524 Part 2 HLP	✓	✓	✓				
DIN 51524 Part 3 HVLP				✓	✓	✓	✓
ISO 6743/4 Type HM (ISO 11158 HM)	✓	✓	✓				
ISO 6743/4 Type HV (ISO 11158 HV)				✓	✓	✓	✓
WGK (German Water Hazard Classification) of 1	✓	✓	✓	✓	✓	✓	✓

• Formulated for both indoor and outdoor seasonal use in piston, gear and vane hydraulic pumps found in industrial plant and mobile equipment used in environmentally sensitive areas

• Can be used in systems equipped with fine porosity filters down to 3 microns, there will be no loss of additives or filter plugging

• Can be used in hydraulic pumps with silver bearings such as Lucas pumps because they will not displace the silver in these bearings, as they do not contain zinc-based anti-wear additives

★ Approved for Use | • Suitable for Use | ✓ Meets Specifications

### HYDRAULIC FLUIDS Recommended Applications

Products	HYDREX AW 22	HYDREX AW 32	HYDREX AW 46	HYDREX AW 68	HYDREX AW 80	HYDREX AW 100	HYDREX MV 22	HYDREX MV 32	HYDREX MV 46	HYDREX MV 68	HYDREX XV All Season
Bosch Rexroth	•	★	★	★	•	•	•	•	•	•	•
Denison HF-0, HF-1, HF-2	•	★	★	★	•	•	•	★	★	★	★
Dynex	•	•	•	•	•	•	•	•	•	•	•
Eaton E-FDGN-TB002-E	★	★	★	★	•	★	★	★	★	★	★
Hydreco	•	•	•	•	•	•	•	•	•	•	•
Karl Meyer	•	•					•	•	•	•	
Komatsu	•	•	•	•	•	•	•	•	•	•	•
Link-Belt											★
McCloskey			•								
Oilgear	•	•	•	•	•	•	•	•	•	•	•
Racine	•	•	•	•	•	•	•	•	•	•	•
Sauer-Danfoss	•	•	•	•	•	•	•	•	•	•	•

★ Approved for Use | • Suitable for Use | ✓ Meets Specifications

### HYDRAULIC FLUIDS Recommended Applications

Products	HYDREX AW 22	HYDREX AW 32	HYDREX AW 46	HYDREX AW 68	HYDREX AW 80	HYDREX AW 100	HYDREX MV 22	HYDREX MV 32	HYDREX MV 46	HYDREX MV 68	HYDREX XV All Season
Skyjack		★	★	★					•		
Voith 3625-006072		•									
Voith 3625-006073		•									
Voith 3625-006101						•					
Voith 3625-006208			•								
Voith 3625-006209			•								
Voith 3625-008426		•									
Industrial Standards											
DIN 51524 Part 2 HLP	✓	✓	✓	✓	•	✓					
DIN 51524 Part 3 HVLP							✓	✓	✓	✓	✓
ISO 11158 HM	✓	✓	✓	✓	•	✓					
ISO 11158 HV							✓	✓	✓	✓	✓
ASTM D6158 HM	✓	✓	✓	✓	•	✓					
ASTM D6158 HV							✓	✓	✓	✓	✓
AIST 126 and 127		•	•	•				•	•	•	•
JCMAS HK		•	•					•	✓		✓

★ Approved for Use | • Suitable for Use | ✓ Meets Specifications

# PETRO-CANADA LUBRICANTS NO-NONSENSE WARRANTY

“We will repair damaged equipment, or replace damaged equipment parts resulting from a failure due to defects of the Petro-Canada Lubricants product, as long as the lubricant is used in accordance with your equipment manufacturer’s and our recommendations.”

**IT’S MORE THAN JUST A WARRANTY. IT’S A COMMITMENT.**

To learn more about how Petro-Canada Lubricants can help your business visit: [lubricants.petro-canada.com](https://lubricants.petro-canada.com) or contact us at [lubecsr@HFSinclair.com](mailto:lubecsr@HFSinclair.com)

Committed to the disciplined operation of our business.



AN HF SINCLAIR BRAND