# brief brief

## LUBRICANTS FOR THE TRUCKING INDUSTRY



LUBRICANTS

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AN HF SINCLAIR BRAND

## BETTER LUBRICANTS. BETTER BUSINESS. FACT.

#### WHETHER YOU'RE OPERATING ONE TRUCK OR RUNNING A FLEET, THE CHALLENGE IS THE SAME. EFFICIENCY.

Margins are everything. Every minute a truck is off the road adds costs instead of driving profits. Every pause for maintenance costs you in parts, in labour and most of all, in lost time on the road.

The secret is to reduce running costs everywhere you can, from stretching oil drain intervals to the Big One – the total costs of fuel.

That's why using the wrong lubricants can be so costly – and why using the right ones is so valuable.

#### EFFICIENCY, POWERED BY PETRO-CANADA LUBRICANTS

Here's another fact. Every product in our latest line of heavy-duty diesel engine oils, gear oils and specialty fluids has been engineered specifically to make your trucking business more efficient and more profitable.

## READY FOR THE ROAD AHEAD

#### **HEAVY-DUTY DIESEL ENGINE OILS**

The performance of DURON<sup>™</sup> has been shaped by the ultra-tough demands of API CK-4 and FA-4, to make heavy-duty diesel engines more efficient.

The result – the most durable engine oils we've ever made.

DURON exceeds the toughest category tests of oil strength, including what you need most - better engine protection, longer time between oil drains, more reliable trucks even in extreme operating conditions - and more miles on every gallon of fuel.

#### **CNG/LNG ENGINE OIL**

DURON GEO provides exceptional engine protection and is specifically formulated for the high combustion temperatures in today's natural gas mobile engines as well as mixed fleets.

#### **GEAR OILS**

TRAXON<sup>™</sup> provides superb wear protection to extend equipment life and reduce maintenance costs.

#### GREASES

PRECISION<sup>™</sup> premium multi-application greases have been specially formulated for advanced protection.

#### **HYDRAULIC FLUIDS**

HYDREX<sup>™</sup> lasts longer and provides better wear protection. HYDREX means more uptime, increased productivity and better energy efficiencies.

#### **AUTOMATIC TRANSMISSION FLUIDS**

Petro-Canada Lubricants' ATF's excel in oxidation stability and low temperature performance to deliver essential wear protection and productivity benefits.

WE'RE VERY PLEASED WITH THE PERFORMANCE WE'VE EXPERIENCED WITH ALL DURON™ PRODUCTS WE'VE BOUGHT OVER THE YEARS.

Al Peavler, Owner, Peavler Trucking, Olney, IL

## DURON<sup>™</sup> THE TOUGHER. THE BETTER.

Keeping your business profitable, efficient and ahead of your competitors has never been tougher.

But tough is just the way we like it.

Driven by API CK-4 and FA-4, we've made DURON our most durable, most protective, most advanced product line ever.

DURON's ready to improve your reliability, extend your drain intervals\*, and cut your fuel costs - however extreme your operating conditions.

Because when you know your oil can handle extreme challenges, you know it can handle anything.

And DURON loves a challenge.

#### THE TOUGHER. THE BETTER."

\* Extending drains should always be undertaken in conjunction with an oil analysis program.



## **EXTREME PERFORMANCE** WHERE YOU SEE THESE SYMBOLS

DURON oils have advanced across a whole range of performance and protection measures. Look for the performance symbols on DURON labels.





DURABILITY





EXTREME TEMPERATURE





"We made the commitment to Petro-Canada Lubricants for two reasons. We chose based on our confidence in the advanced engine protection technology. Secondly, and equally important to us, is how Petro-Canada Lubricants stood out as an innovative supplier that could do more, acting as a true partner."

CHRIS IVESON, DIRECTOR OF MAINTENANCE, CHALLENGER



## DURON- STRONGER IN EVERY WAY LAST GENERATION API CJ-4 vs. API CK-4

 $\checkmark$ 

**Engine Protection** 

15% Improvement in engine protection

as demonstrated in the MACK T-12 Test.

API CK-4 & FA-4 Specification limit DURON-E 15W-40 (API CJ-4)

DURON HP 15W-40 (API CK-4)

## Engine Protection

41% Improvement in tappet wear as demonstrated in one of the toughest industry tests – Cummins ISB.

#### 

Durability 12% Improvement in soot handling as demonstrated in the MACK T-11 test. **V** Engine Protection

51% Improvement in cam lobe wear as demonstrated in one of the toughest industry tests – Cummins ISB.

#### Extreme Temperatures

6% Improvement in cold temperature start up as demonstrated @ -20°C / -4°F in the Cold Crank test.

#### Durability

33% Improvement in shear stability to deliver better stay in grade durability as demonstrated in field tests.

## \*Shear Stability does not have a specification limit, and is represented as such on the spider diagram.

Extended Drains\* 19% Improvement in ability to neutralize acids within the oil (TBN) to deliver extended drain capabilities.

#### DURON SAVES YOU MONEY. WE'RE READY TO PROVE IT.

#### BRING US YOUR CHALLENGES. THE TOUGHER. THE BETTER."

Whatever your challenges, Petro-Canada Lubricants is ready to prove that DURON heavy-duty diesel engine oils can increase your reliability and reduce your costs. IT'S PROOF TIME.

#### THE DURON CHALLENGE



#### PREMIUM HEAVY-DUTY DIESEL ENGINE OILS



#### **COMPLIMENTARY** DRUM OF DURON



USED OIL ANALYSIS THROUGHOUT THE CHALLENGE



EXPERT SUPPORT THROUGHOUT THE CHALLENGE

**100%** OF OPERATORS THAT TOOK THE CHALLENGE SAW THE BENEFITS

CHALLENGE US TODAY AT **DURONCHALLENGE.COM** 

## **EXTREME PERFORMANCE**

#### MAXIMUM DURABILITY



#### **OXIDATION CONTROL.**

High operating temperatures can lead to increased oil thickness and deposit formation

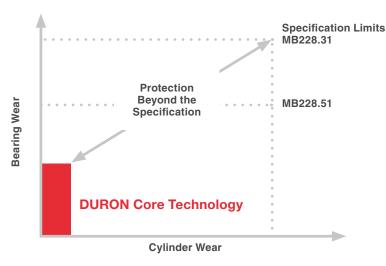
#### **AERATION CONTROL.**

Air bubbles can form in oil preventing the ability of the oil film to protect engine parts, potentially causing wear and maintenance/ repair costs

#### SHEAR STABILITY.

Under stress, large viscosity modifier molecules may 'shear', causing the oil to lose control of viscosity and drop out of grade which could compromise protection DURON engine oils outperformed both the API CK-4 and FA-4 specifications and the previous generation DURON product line across a number of the toughest durability tests tied to oxidation control, shear stability and aeration control.

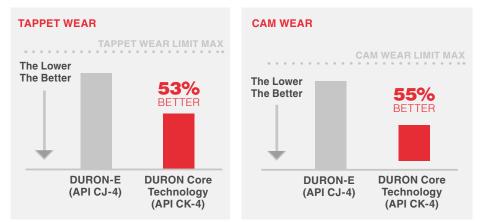
#### **OM501LA ENGINE TEST PART OF MB228 SPECIFICATION**



#### **BEYOND INDUSTRY STANDARDS**

In both bearing and cylinder wear control, DURON Core Technology performs far beyond industry standards.

DURON engine oils provide our highest ever levels of engine protection to deliver maximum uptime for your fleet. The proof? Look at DURON's performance in the Cummins ISB wear test, one of the toughest engine performance tests in the whole PC-11 category. DURON proves performance well below the specification limit.



DURON API CK-4 is a significant upgrade in performance compared to DURON API CJ-4 as demonstrated in the Cummins ISB test that means ultimate engine protection.



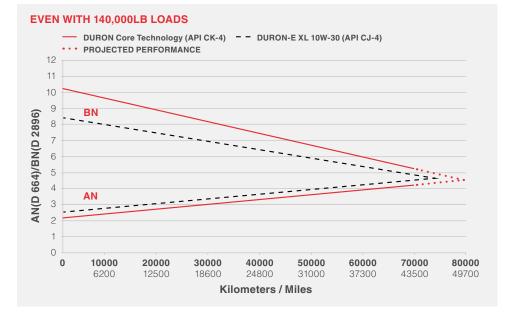


## **EXTREME PERFORMANCE**



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.

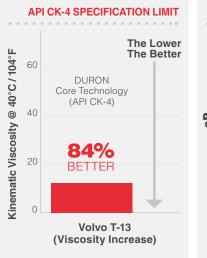


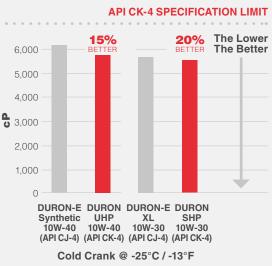


#### EXTREME HIGH AND LOW TEMPERATURE PERFORMANCE

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.



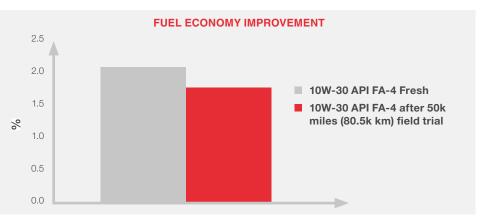




#### ENHANCED FUEL ECONOMY



Fuel. A massive variable cost. Improvements to fuel economy go straight to your bottom line. Using lower viscosity engine oils can help boost fuel economy throughout the drain interval without compromising engine protection. That's just good for business.



#### NEW AND RETAINED FUEL ECONOMY

Even after 50k miles (80.5k km) on the oil, DURON Core Technology API FA-4 10W-30 delivers up to 1.8% better fuel economy (vs. an SAE 15W-40 API CJ-4)

#### SUSTAINABILITY



Improving fuel economy is one of several ways to run more sustainably – both economically and environmentally. The growing awareness of societal impact on the environment has also increased demand for fuel saving initiatives, and legislation and more stringent emission targets are changing the requirements for the next class of engine oil categories. The best-fit Petro-Canada Lubricants engine oils and lubricants can optimize your fleet efficiency, enabling you to focus on environmental social governance (ESG) goals, or the measure of the long-term environmental, social and governance factors that are often overlooked during traditional financial analyses.

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.



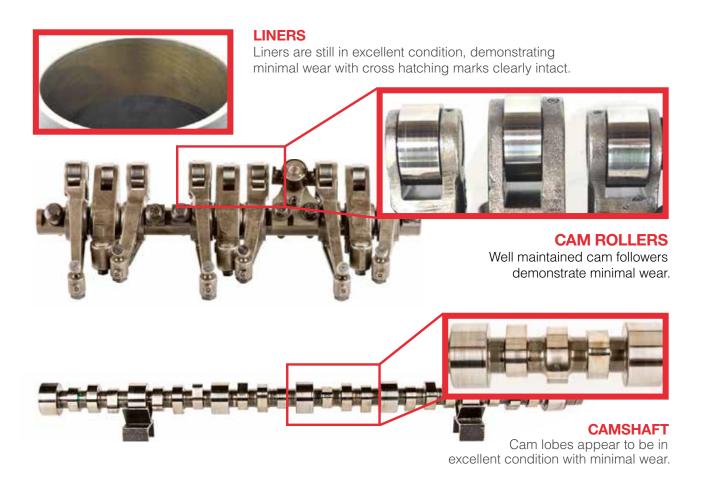
The DURON on-road product line delivers immediate efficiency gains, including the potential for extended drain intervals\* and fuel savings both for older trucks (using DURON API CK-4 products) and the latest, most advanced trucks which can utilize DURON Advanced and save even more.

		Durability	Engine Protection	Extended Drain	Extreme Temperature	Fuel Economy	Sustainability
DURONHP High Performance	<b>DURON HP</b> 15W-40 CK-4	<b>\</b>	<b>V</b>				
DURONshp	<b>DURON SHP</b> 15W-40 CK-4		00	<u>ه</u>			
Super High Performance	<b>DURON SHP</b> 10W-30 CK-4		00		**		\$
	<b>DURON UHP</b> 10W-40 CK-4	<ul><li>♥</li><li>♥</li><li>♥</li></ul>	000	<b>♦ ♦ ♦</b>	***		
DURONUHP	<b>DURON UHP E8</b> 10W-40 CK-4	•	000		***		
Ultra High Performance	<b>DURON UHP</b> 5W-30 CK-4	♥ ♥ ♥	000		**		\$\$
	<b>DURON UHP E8</b> 5W-30 CK-4	<ul><li>♥</li><li>♥</li><li>♥</li><li>♥</li></ul>	000		**		\$\$
DURON	DURON ADVANCED 10W-30 FA-4	<b>*</b>	00		24 27		\$\$\$
ADVANCED	DURON ADVANCED 5W-30 FA-4	<ul><li>♥</li><li>♥</li><li>♥</li><li>♥</li></ul>	000		╈╈		\$\$\$

\*Extending drains should always be undertaken in conjunction with an oil analysis program.

#### **STRONGER IN EVERY WAY** DURONCORE TECHNOLOGY IN ACTION

COMPONENT WEAR – 2014 CUMMINS ISX 15.0L ENGINE AFTER HALF A MILLION MILES IN THE FIELD



## TRAXON

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#### EXTENDS YOUR EQUIPMENT LIFE AND REDUCES MAINTENANCE

Petro-Canada Lubricants' TRAXON is your best choice for a premium multigrade line of gear oils. TRAXON gear oils are specially formulated to provide excellent shear stability and longer oil life for exceptional long-lasting protection to help you extend equipment life and reduce downtime and maintenance costs.

YOUR ULTIMATE PROTECTION PLAN.





## **TRAXON E** SYNTHETIC

A premium line of synthetic lubricants formulated to meet the "Genuine Roadranger" extended drain and warranty performance requirements set by Eaton Corporation (for transmissions) and Dana CVSD Corporation (for axles).



## **TRAXON** SYNTHETIC

Year-round full synthetic gear oils formulated to provide extended drain capabilities and outstanding temperature protection in extreme cold weather conditions.



#### **TRAXON XL** SYNTHETIC BLEND

These multigrade gear oils deliver excellent low temperature protection, better shear stability and longer oil life for exceptional long-lasting protection.



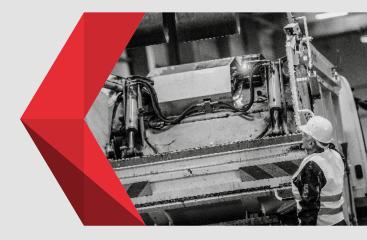
## TRAXON

Formulated to provide exceptional long-lasting wear protection, these multigrade gear oils extend equipment life and reduce downtime and maintenance costs.



Suitable for Volvo I-Shift and Mack mDrive synchronized automated manual transmission applications and can be used in a range of existing and new vehicles using ZF transmissions, including those fitted with ZF-Intarders.







## PROTECT YOUR FLEET. DRIVE YOUR PRODUCTIVITY.



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

#### **WHEEL BEARINGS**

• PRECISION Synthetic EP00



#### DIFFERENTIALS AND AXLES

- TRAXON 80W-90, 85W-140
- TRAXON XL Synthetic Blend 80W-140, 75W-90
- TRAXON E Synthetic 75W-90, 80W-140
- TRAXON Synthetic 75W-90



#### KING PIN & FIFTH WHEEL

- PRECISION XL 3 Moly EP1 & EP2
- PEERLESS OG2 or OG2 Red
- VULTREX<sup>™</sup> G-124



#### CLUTCH BEARINGS

- PRECISION Synthetic
- PRECISION XL EP
- PRECISION SYNTHETIC 220

\*Extending drain intervals should always be undertaken in conjunction with an oil analysis program. 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 for more information and our complete product listing.



Fleets that know lubricants matter choose Petro-Canada Lubricants. Our complete heavy-duty lubricant product line has a global reputation for performance levels so high, it makes fleets more reliable and businesses more profitable.

**DURON™** is our most durable heavy-duty diesel engine oil product line ever – ready to take you further between oil drains\* and help you use less fuel across your whole fleet. Sustainability at its best.



# 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 EP2 and Synthetic have NLGI's GC-LB certification.

#### **PRECISION SYNTHETIC**

- > Longer life under extreme conditions and outstanding resistance to shearing.
- Wide operating temperature range: -40°C/-40°F to 170°C/338°F

#### PRECISION SYNTHETIC EP00

- Designed primarily for the lubrication of truck/trailer wheel-end bearings and leaky gearcases
- Wide operating temperature range: -40°C/-40°F to 170°C/338°F

#### PRECISION XL EP1 and XL EP2

- Recommended for heavy-duty and general purpose bearings.
- > Designed for low or high speed applications

#### **PRECISION SYNTHETIC 220**

- Formulated to lubricate equipment in extreme cold environments and intended for applications requiring a stiffer consistency or a higher viscosity than PRECISION Synthetic.
- Wide operating temperature range: -35°C/-31°F to 170°C/338°F



NLGI MATOROTIC WHEEL BEARMER & CHARGES LUBRICANT GC-LB

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

Carries the NLGI GC-LB for performance in heavy-duty chassis applications and wheel bearing lubrication, and also has the new 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 and LLG meet the standard for NLGI High Performance Multiuse (HPM) Certification. **SION** 

## AUTOMATIC TRANSMISSION FLUIDS

Petro-Canada Lubricants' ATFs represent a careful balance of properties needed to meet and exceed the requirements of automatic transmissions. Petro-Canada Lubricants' ATFs excel in oxidation stability, low-temperature fluidity and wear protection to deliver the performance you require and the increased productivity you want.



#### DURADRIVE™ HD SYNTHETIC BLEND ATF

Petro-Canada Lubricants offers ATFs specifically formulated for commercial and heavy-duty applications. 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 SYNTHETIC 668

Full synthetic heavy-duty automatic transmission fluid for severe duty and extended drain intervals, specifically designed and approved for use in transmissions requiring Allison TES 668<sup>™</sup> fluids (Approval # AN668-10012020). Backwards compatible to Allison TES 295<sup>\*</sup> fluids.

#### DURADRIVE HD LONG DRAIN ATF

A full synthetic formulation, DuraDrive HD Long Drain ATF is approved for maximum drain in Voith transmissions. Excellent wear protection, oxidation control and friction durability demonstrated in extensive rig testing and field trials. Enhanced thermal and oxidative stability together with reliable high and low temperature properties delivers excellent performance in a wide range of transmissions. Approved for: Voith (150.014524.xx DIWA Service Bulletins 013 and 118) maximum drain of 180,000 km. Additional recommended uses in OEM chart.

Petro-Canada Lubricants also offers automatic transmission fluids for DEXRON -VI, ATF+4°, MERCON -V and MERCON -LV applications.

MERCON" is a registered trademark of Ford Motor Company. DEXRON" is a registered trademark of General Motors LLC. ATF+4" is a trademark of FCA US LLC, used under license. TES 295" and TES 668" are trademarks of Allison Transmission, Inc.

## DRIVING BIGGER SAVINGS

DURON GEO LD engine oils are designed for today's Compressed Natural Gas/Liquefied Natural Gas (CNG/LNG) mobile engines that are powering savings in fuel costs for transit authorities, cement mixers, refuse fleets and even long-haul vehicles.

NOW, DURON GEO LD ALSO PROVIDES PREMIUM PERFORMANCE FOR HEAVY-DUTY DIESEL AND GASOLINE ENGINES.



#### EXCEEDING ALL OEM-REQUIRED TESTS

Not only have DURON GEO LD 15W-40 and 10W-30 earned Cummins CES 20092 approvals, they are fully backserviceable to CES 20085 specifications. DURON GEO LD oils are also API Service CK-4/SN licensed and approved by other major diesel engine OEMs like Detroit Diesel, Mack, Volvo and Renault. For engines requiring Cummins CES 20074 approvals, use SENTRON VTP 10W-40.

#### ALL-WEATHER PERFORMANCE

In cold temperatures, DURON GEO LD pumps quickly and easily through the engine, providing exceptional protection against wear and tear that can occur if the oil thickens at low temperatures. DURON GEO LD also performs well in high operating temperatures, providing exceptional shear stability and stay-in-grade capability.

#### DURON GEO LD PROTECTS YOUR INVESTMENT

You've made the investment in natural gas, now it's important to protect that investment as best you can. With DURON GEO LD you get a premium oil and all the benefits it provides extended drain intervals\*, best-inclass all-weather performance, and proven performance technology for exceptional engine protection and stay-in-grade capability.

DURON GEO LD engine oils have earned the demanding Cummins CES 20092 approval and they are backserviceable to CES 20085 specifications. With suitability in both heavyduty diesel and gasoline engines, DURON GEO LD is an ideal choice for ultimate protection in mixed fleets.

#### START PURE. FINISH STRONG

Like all DURON heavy-duty engine oils, DURON GEO LD engine oils begin with high quality, pure base oils and are specially formulated to deliver better performance and longer-lasting protection. In the end, better base oils mean better performance, so your entire fleet of engines get the ultimate in performance benefits from your oil.

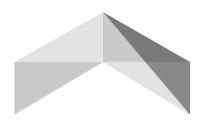
## ADVANCED ENGINE **PROTECTION**

Using consistently high quality engine oils can help engines maintain optimal power and fuel economy. With its high resistance to nitration and oxidative thickening, DURON GEO LD protects your mobile engines.

EXTENDED DRAIN INTERVALS

DURON GEO LD engine oils retain their fresh oil properties longer, making it possible for you to safely extend your drain intervals up to 1000 hours\* without the risk of increased engine wear and sluggish performance. Your trucks can spend more time on the road and you save on costly downtime and manpower. DURON GEO LD engine oils retain their fresh oil properties longer, making it possible for you to safely extend your drain intervals up to 1000 hours\* without the risk of increased engine wear and sluggish performance. Your trucks can spend more time on the road and you save on costly downtime and manpower.

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



## RAISE YOUR GAME

#### WITH HYDREX, YOU CAN REDUCE MAINTENANCE AND MECHANICAL FAILURES, AND PROLONG THE LIFE OF YOUR EQUIPMENT.

Proven to provide up to 2x' better wear protection than global competitors, its combination of pure base oils and carefully selected additives delivers exceptional anti-wear protection. HYDREX lasts up to 3x' longer than global competitors extending drain intervals and reducing time and money spent on fluid change-outs. Designed for hydraulic systems exposed to wide temperature ranges, HYDREX increases equipment precision and responsiveness even in the toughest conditions.



<sup>1</sup>Measured against leading North American hydraulic oil brands.





## **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



## APPROVED FOR YOUR ENGINES BY THE WORLD'S OEMS

#### HEAVY-DUTY DIESEL ENGINE OIL Recommended Applications

Product	S		JRONHP W-40		JRON SHP W-40		JRON SHP W-30		IRON UHP W-40		IRON UHP /-30		JRON UHP V-40		JRON UHP V-30 / 0W-40	AD	JRON DVANCED V-30	AE	JRON DVANCED W-30		IRON UHP 5W-30		RON UHP 10W-40
ACEA	ACEA	~	E7, E11	~	E7, E9	~	E7, E9							~	E4, E7, E8, E11	~	E4, E7, E8, E11						
Allison Transmission.	Allison											*	TES 439										
AND INCOME.	API	*	CK-4/SN	*	CK-4 / SN	*	CK-4 SN*	*	CK-4 / SN	*	CK-4 SN*	*	CK-4 SN	•	CK-4 / SN	*	FA-4	*	FA-4	*	CK-4	*	CK-4
CAT	Caterpillar	v	ECF-3, TO-2	~	ECF-3, TO-2	•	ECF-3, TO-2					~	ECF-3	~	ECF-3								
	Cummins	*	CES 20086	•	CES 20086	*	CES 20087	*	CES 20087	*	CES 20086**	*	CES 20086**										
DAE	DAF	~	Standard Drain	~	Standard Drain	•	Standard Drain	~	Standard Drain	•	Standard Drain	•	Standard Drain							~	Standard and Extended Drain	~	Standard and Extended Drain
	Detroit Diesel	*	DFS 93K222			*	DFS 93K223	*	DFS 93K223	*	DFS 93K222**	*	DFS 93K222**										
	Deutz	*	DQC III-18 LA	*	DQC III-18 LA			*	DQC III-18 LA											*	DQC III-18 LA**	*	DQC III-18 LA**
<b>S</b>	Ford	*	WSS- M2C171-F1			~	WSS- M2C214-B1	~	WSS- M2C214-B1														
GM	GM	•	9985930	•	9985930	•	9985930	•	9985930														
JASO	JASO	•	MA2, DH-1 DH-2	•	MA2	•	MA2, DH-1 DH-2	•	MA2														
maen	Mack	*	EOS-4.5							*	EOS-4.5**	*	EOS-4.5**										
MAR	MAN	•	3575, 3275-1	•	3575, 3275-1							•	3575							•	3677/3775	•	3775
() Mercedes-Benz	Mercedes- Benz	*	228.31	*	228.31	*	228.31													*	228.52** 228.31	*	228.52** 228.31
	MTU	*	Type 2.1	*	Type 2.1			•	Type 2.1			•	Type 2.1							*	Type 3.1**	*	Type 3.1**
C RENALLY TRUCKS	Renault	*	RLD-3							*	RLD-3**	*	RLD-3**										
SCANIA	Scania																			~	LDF-4	~	LA
0	Volvo	*	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.

\*\* Approval pending.



#### HYDRAULIC FLUIDS Recommended Applications

Products	HYDREX AW 32	HYDREX AW 46	HYDREX AW 68	HYDREX MV 32	HYDREX MV 46	HYDREX MV 68	HYDREX XV All Season
Bosch Rexroth	*	*	*	•	•	•	•
Denison HF-0, HF-1, HF-2	*	*	*	*	*	*	*
Eaton E-FDGN-TB002-E	*	*	*	*	*	*	*

★ Approved for Use | ♦ Recommended for Use

#### **CNG/LNG** Recommended Applications

Products		DURO LD 15	DNGEO W-40	DURON GEO LD 10W-30				
ACEA	ACEA	v	E7, E9	~	E7, E9			
	API	*	CK-4/SN	*	CK-4/SN			
CAT	Caterpilla	~	ECF-3	~	ECF-3			
	Cummins	*	CES 20092, CES 20086	*	CES 20092, CES 20086			
District Distant	Detroit Diesel	*	DFS 93K222	*	DFS 93K222			
JASO	JASO	•	DH-2	•	DH-2			

Products		DURC LD 15	DN GEO W-40	DURON GEO LD 10W-30				
mad	Mack	*	EOS-4.5	*	EOS-4.5			
() Nerrodes-Benz	Mercedes- Benz	~	228.31					
tu 🦰	MTU	¥	TYPE 2.1					
PROVALLAR TROCKS	Renault	*	RLD-3	*	RLD-3			
0	Volvo	*	VDS-4.5	*	VDS-4.5			

#### **GEAR OILS** Recommended Applications

Products	TRAXON 80W-90	TRAXON 85W-140	TRAXON XL Synthetic Blend		TRAXON Synthetic	TRAXON Synthetic	TRAXON Synthetic	TRAXON E Synthetic	TRAXON E Synthetic	TRAXON Synthetic	TRAXON Synthetic
API GL-4			75W-90	80W-140	75W-85	75W-90	75W-90	80W-140	MTF	CD-50 ✓	MTF 75W-80
API GL-5	✓	✓	✓	✓	✓	~	✓	~			
API MT-1	✓	✓	✓	✓	✓	✓	✓	✓	✓	1	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 TOMTOD20 EN U.S Listed)							*	*			
Detroit Diesel DFS93K219.01							~	^			
Eaton PS-164 Rev 7 (obsolete)	ĺ									•	
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								·	1	•	
Iveco 18-1807 MSG-1									·	-	•
John Deere JDM J11E	•		•			•					
Navistar MPAPS B-6821	·	•	•		•	•	~	✓			
Mack GO-J	*	+	÷	*		*		*			
Mack GO-J Plus		*	*	~		*	*	*			
Mack GO-J Flus Mack TO-A Plus							*		+		
MAN 342 Typ M1 (obsolete)	*	-		•		*			*		
	*	•		•		*	•	•			
MAN 342 Typ M2 MAN 341 Typ Z4***	*			•		*					
											*
Meritor 0-76-A (obsolete)		v		✓				✓			
Meritor 0-76-B (obsolete)	<i>(</i>			•				v			
Meritor 0-76-D (obsolete)	v		~			✓	~				
Meritor 0-76-E (obsolete)			v			•	v				
Meritor 0-76-Q (obsolete)						•					
Meritor 0-76-N (obsolete)							*				
Meritor 0-76-R (obsolete)								•			
Meritor 0-80 (obsolete)								•			
Meritor 0-81	<i>,</i>		,			1	1		*	•	
Meritor 0-94	~	~	✓	✓	~	✓	✓	✓			
Meritor 0-95			1 DDI OL 0700	L DDL OL		*	*	*			
SAE J2360 ****	* PRIGL 0794 and 0919	* PRIGL 0795 and 0920	★ PRI GL 0/96 and 0951	* PRI GL 0891	★ PRI GL 1013	★ PRI GL 0841	~	~			
Scania STO 1:0 (axles)		✓		✓							
Scania STO 1:0 (axles and gearboxes/MT)	✓		✓			$\checkmark$					
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)- Applicatons											✓
ZF -Ecolite, Ecomid, Etronic- Applicatiions											✓
ZF TE-ML - 17B	★ (ZF000764 and ZF003389)					★ (ZF002212)					
ZF TE-ML - 05A, 12M, 16B, 19B, 21A	* (ZF000764					,					
ZF TE-ML - 05A, 12M, 16D, 21A	and ZF003389)	★ (ZF000778		★ (ZF002212)							
		and ZF003390)		~ (21 UUZZ IZ)		+ (7E000040)					
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 | • Suitable for Use | • Meets Specification (for use)

#### **GREASES** Recommended Applications

Products	NLGI Grade	Composition	Operating Temperature Range (°C)	Application	Certification
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 outstanding cold weather performance without compromising high temperature lubrication.	NLGI GC-LB
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.	NLGI GC-LB
PRECISION Synthetic EP00	00	Lithium Complex (Colour = Gold)	-40 to 170	Semi-fluid grease. Specifically designed for lubricating truck/trailer wheel-end bearings.	
PRECISION Synthetic 220	1	Lithium Complex (Colour = Gold)	-35 to 170	Formulated to lubricate equipment in extreme cold environments. Intended for applications wrequiring a stiffer consistency or a higher viscosity than PRECISION Synthetic.	NLGI GC-LB
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.	NLGI GC-LB
PEERLESS LLG	2	Calcium Sulphonate Complex (Colour = Burgundy)	-20 to 200	Recommended for "sealed-for-life" bearings, other high temperature and long-life applications. Designed to match the performance of Polyurea greases.	NLGI GC-LB NLGI HPM
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.	NLGI GC-LB
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.	NLGI GC-LB
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.	NLGI GC-LB NLGI HPM
PEERLESS 3 MOLY 322	2	Calcium Sulphonate Complex (Colour = Grey)	-15 to 170	Recommended for grease lubricated pins, joints, bushings and bearings of machinery found in industrial plants, agriculture, off-highway, construction and mining industries, and an excellent option for fifth wheels on over-the-road Class 8 trucks.	

#### AUTOMATIC TRANSMISSION FLUIDS Recommended Applications

OEM SPECIFICATION	DuraDrive HD Synthetic Blend ATF	DuraDrive HD Long Drain ATF	DuraDrive HD Synthetic 668
	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.	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.
Allison TES 668"	-	-	Approved (AN668-10012020)
Allison C-4 (legacy)	C-4 29493700	-	-
Voith H55.6335.xx (standard drain, 60K km)	Approved	-	SFU
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	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 236.9	-	Approved	-
Mercedes-Benz MB 236.92	-	-	Approved
Volvo STD 1273,41 - transmission oil 97341 (AT101)	SFU	Approved (#97341-079)	-
Caterpillar TO-2 (obsolete)	SFU	-	-
Ford MERCON® V	SFU	-	-
GM DEXRON®-III(H), -III(G), -II(E), or -II	SFU	-	-

They can also be used as hydraulic or power steering fluids.  $\ensuremath{\mathsf{SFU}}$  = Suitable for use.

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

### OUR NO-NONSENSE LUBRICANTS WARRANTY

Petro-Canada Lubricants will repair damaged equipment, or replace damaged equipment parts resulting from a failure due to defects of the Petro-Canada lubricant, 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** or contact us at **lubecsr@HFSinclair.com** 

Committed to the disciplined operation of our business.





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