



WEAR	<b>SEVERE</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**MACK 913188**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Confirmez la source du lubrifiant utilisé pour l'appoint/remplissage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0094593</b>	---	---
Sample Date		Client Info		<b>04 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>2579</b>	---	---
Oil Age	hrs	Client Info		<b>1011</b>	---	---
Filter Age	hrs	Client Info		<b>1011</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

**WEAR**

Usure de la soupape d'échappement.

Iron	ppm	ASTM D5185(m)	>120	<b>26</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>▲ 14</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>6</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>14</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

**CONTAMINATION**

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Il n'y a aucun indice de contamination dans l'huile.

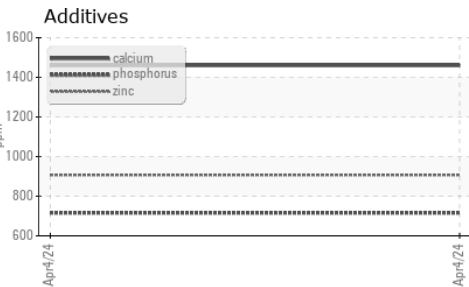
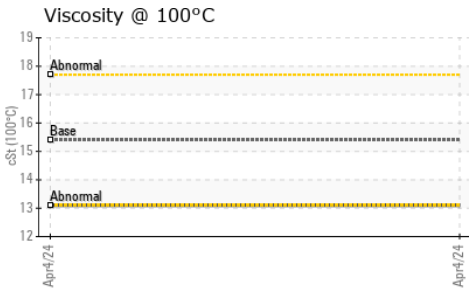
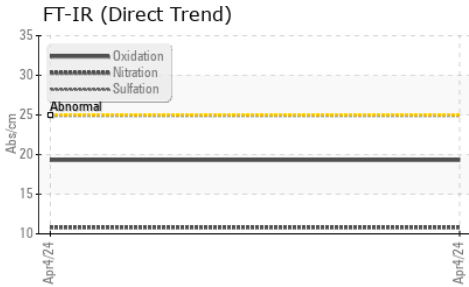
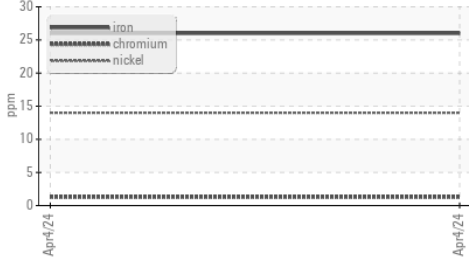
Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>11</b>	---	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>4	<b>0.6</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.8</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>24.9</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

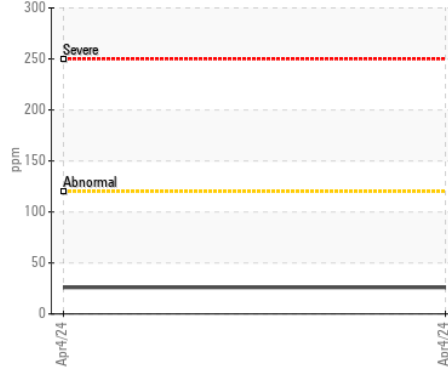
Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. L'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	---	---
Boron	ppm	ASTM D5185(m)	0	<b>49</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>117</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>736</b>	---	---
Calcium	ppm	ASTM D5185(m)	1070	<b>1460</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>716</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>907</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>2032</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.3</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.1</b>	---	---

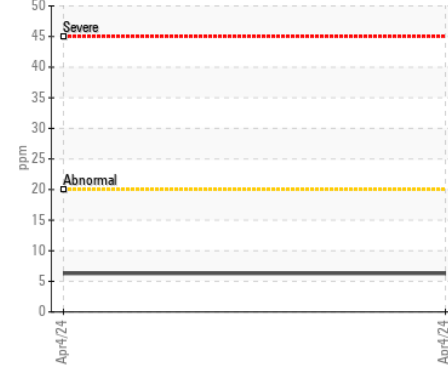
▲ Ferrous Alloys



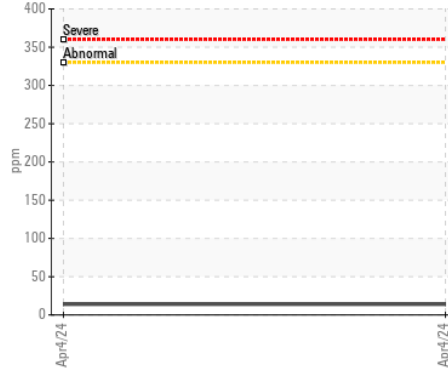
Iron (ppm)



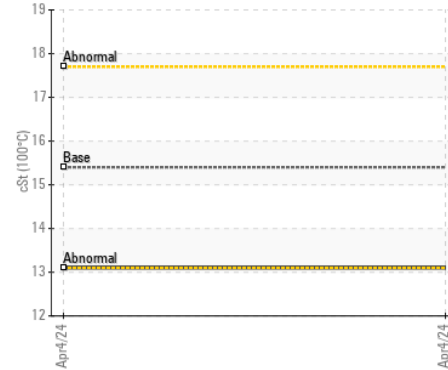
Aluminum (ppm)



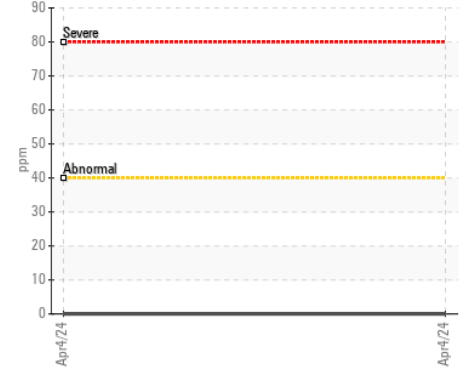
Copper (ppm)



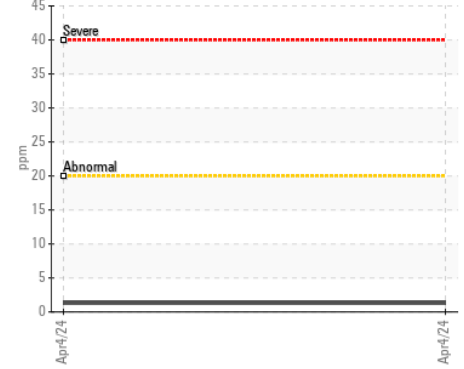
Viscosity @ 100°C



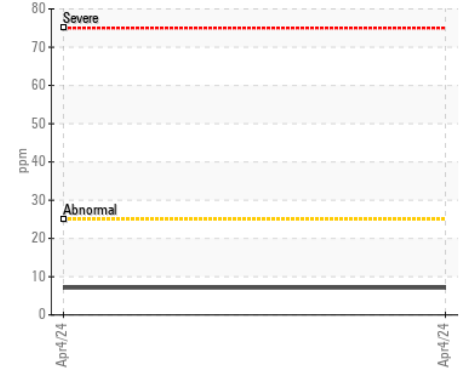
Lead (ppm)



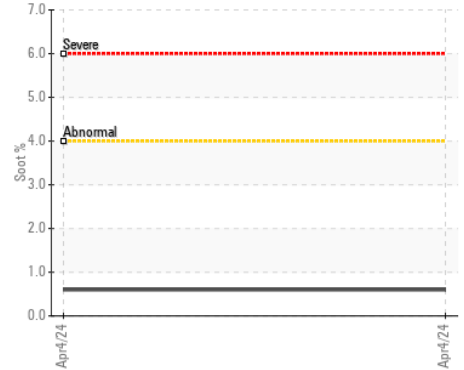
Chromium (ppm)



Silicon (ppm)



Soot %



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0094593  
**Lab Number** : 02629531  
**Unique Number** : 5762663  
**Test Package** : MOB 1

**Received** : 17 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 18 Apr 2024 - Kevin Marson

**GFL Environmental 791MAT - Matane**  
 29 rue Brilliant  
 Matane, QC  
 CA G4W 0J7  
 Contact: B Berube  
 bberube@matrec.ca

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

T:  
F: