



USURE	<b>ANORMAL</b>
CONTAMINATION	<b>NORMAL</b>
ÉTAT DU FLUIDE	<b>NORMAL</b>

Identité de la machine

**FREIGHTLINER 4097**

Composant

**Moteur diesel**

Fluid

**PETRO CANADA DURON SHP 10W30 (--- LTR)**

**RECOMMENDATION**

Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Numéro d'échant.		Client Info		<b>PC0083212</b>	PC0066408	PC0066147
Date d'échant.		Client Info		<b>13 Nov 2023</b>	17 May 2023	16 Feb 2023
Âge d la Machine	hrs	Client Info		<b>180945</b>	107027	53398
Âge de l'huile	hrs	Client Info		<b>73924</b>	53623	53398
Âge du filtre	hrs	Client Info		<b>73924</b>	53623	53398
Huile changée		Client Info		<b>Changed</b>	Changed	Changed
Filtre changé		Client Info		<b>Changed</b>	Changed	Changed
Statut de l'échant.				<b>ABNORMAL</b>	NORMAL	NORMAL

**USURE**

Usure de segment.

Fer	ppm	ASTM D5185(m)	>80	<b>57</b>	46	66
Chrome	ppm	ASTM D5185(m)	>5	<b>▲ 8</b>	4	4
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	1
Titane	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Argent	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminium	ppm	ASTM D5185(m)	>30	<b>23</b>	33	61
Plomb	ppm	ASTM D5185(m)	>30	<b>1</b>	2	4
Cuivre	ppm	ASTM D5185(m)	>150	<b>46</b>	99	144
Étain	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	2	4
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**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.

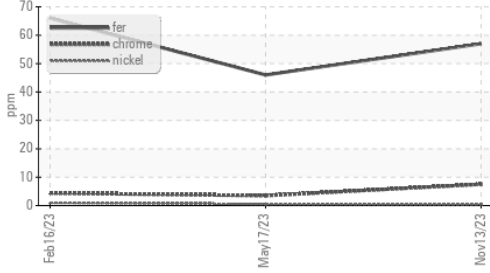
Silicium	ppm	ASTM D5185(m)	>20	<b>9</b>	5	8
Potassium	ppm	ASTM D5185(m)	>20	<b>48</b>	63	141
Essence		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
L'eau		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
% de suie	%	ASTM D7844*	>3	<b>1.4</b>	0.7	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.5</b>	10.3	12.3
Sulfatation	Abs/.1mm	ASTM D7415*	>30	<b>25.0</b>	22.5	26.0
Eau émulsifiée	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**ÉTAT DU FLUIDE**

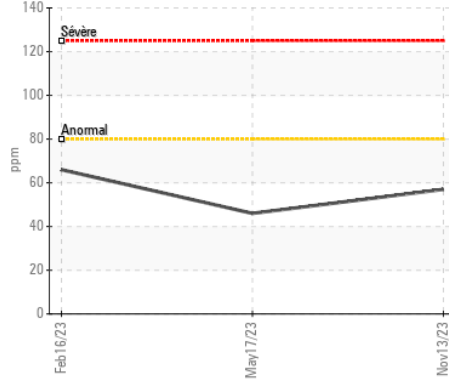
l'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	4	6
Bore	ppm	ASTM D5185(m)	2	<b>4</b>	7	28
Baryum	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdène	ppm	ASTM D5185(m)	50	<b>61</b>	62	45
Manganèse	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	2	5
Magnésium	ppm	ASTM D5185(m)	950	<b>961</b>	934	555
Calcium	ppm	ASTM D5185(m)	1050	<b>1205</b>	1344	1908
Phosphore	ppm	ASTM D5185(m)	995	<b>948</b>	1031	784
Zinc	ppm	ASTM D5185(m)	1180	<b>1174</b>	1166	872
Soufre	ppm	ASTM D5185(m)	2600	<b>1893</b>	1817	1626
Oxydation	Abs/.1mm	ASTM D7414*	>25	<b>22.0</b>	21.2	27.4
Visc 40°C	cSt	ASTM D7279(m)	80.1	<b>78.6</b>	72.9	68.9
Visc 100°C	cSt	ASTM D7279(m)	12.00	<b>11.6</b>	11.0	10.4
Indice de viscosité (VI)	Scale	ASTM D2270*	144	<b>140</b>	140	137

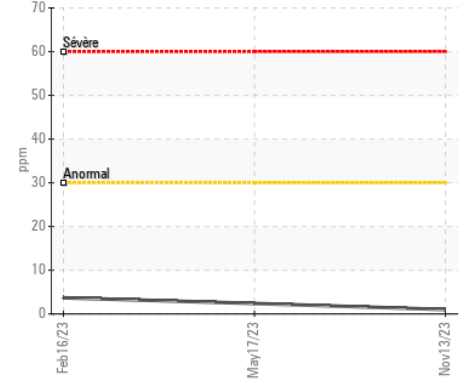
▲ Alliages ferreux



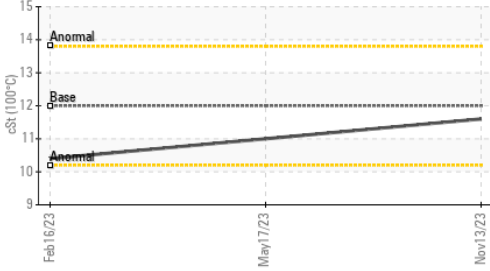
Fer (ppm)



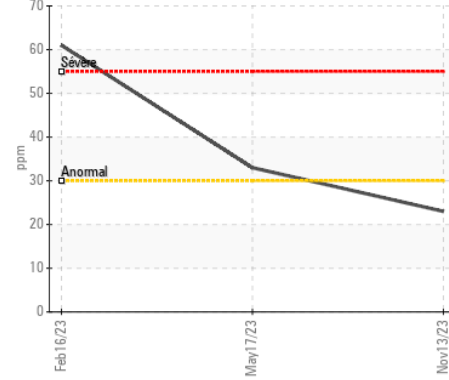
Plomb (ppm)



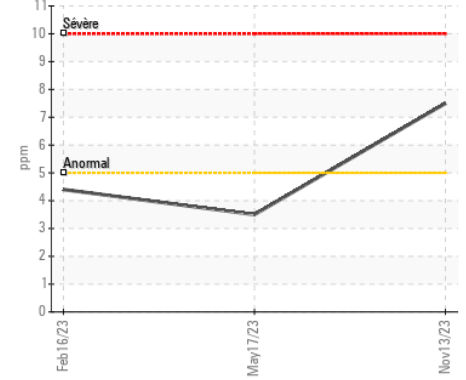
Viscosité 100°C



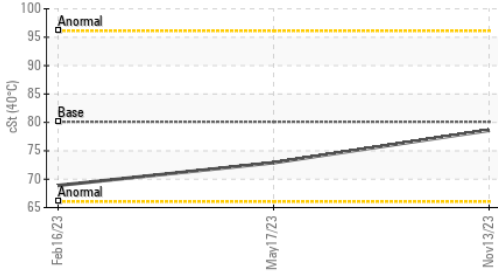
Aluminium (ppm)



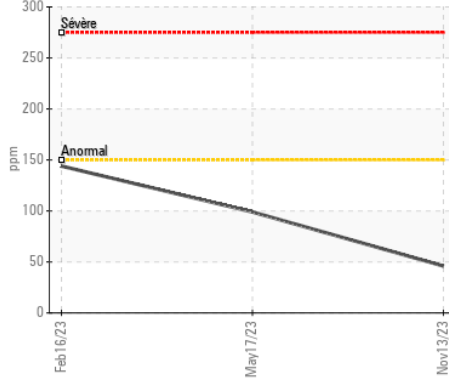
▲ Chrome (ppm)



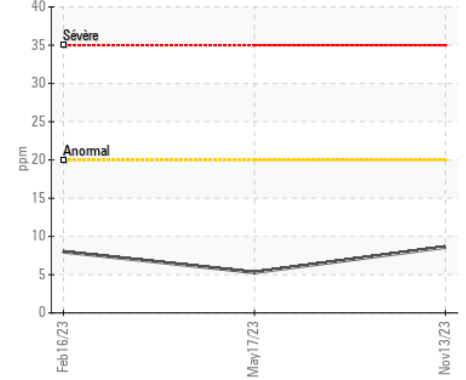
Viscosité 40°C



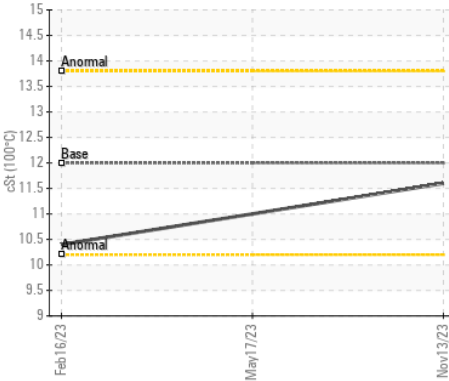
Cuivre (ppm)



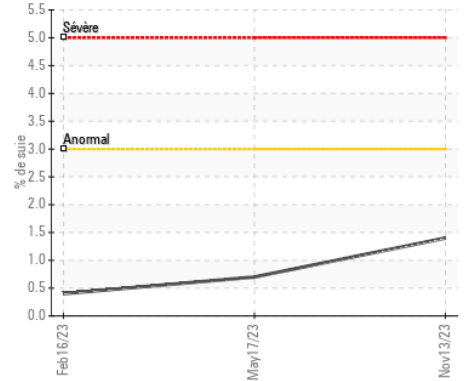
Silicium (ppm)



Viscosité 100°C



% de suie



**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : PC0083212 **Reçu** : 16 Jan 2024  
**N° de laboratoire** : 02608894 **Diagnostiqué** : 16 Jan 2024  
**Numéro unique** : 5709980 **Diagnostiqueur** : Kevin Marson  
**Analyse** : MOB 1 ( Additional Tests: KV40, VI )

**LOCATION BROSSARD INC**  
 2190 HYMUS  
 DORVAL, QC  
 CA H9P 1J7  
 Contact: Shawn Lamoureux  
 slamoureux@brossard.com

Pour discuter ce rapport, contacter le service à la clientèle au 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 La validez de los resultados y la interpretación se basan en la muestra y la información proporcionada.

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F: