



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

Identité de la machine

**F90209**

Composant

**Moteur diesel**

Fluid

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

**RECOMMENDATION**

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Numéro d'échant.		Client Info		<b>PC0064486</b>	PC0053129	PC0037873
Date d'échant.		Client Info		<b>26 Feb 2024</b>	09 Nov 2021	28 Jul 2021
Âge d la Machine	hrs	Client Info		<b>1113</b>	790	702
Âge de l'huile	hrs	Client Info		<b>0</b>	0	0
Âge du filtre	hrs	Client Info		<b>0</b>	0	0
Huile changée		Client Info		<b>N/A</b>	N/A	N/A
Filtre changé		Client Info		<b>N/A</b>	N/A	N/A
Statut de l'échant.				<b>ABNORMAL</b>	NORMAL	NORMAL

**USURE**

All component wear rates are normal.

Fer	ppm	ASTM D5185(m)	>100	<b>20</b>	12	45
Chrome	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Titane	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Argent	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminium	ppm	ASTM D5185(m)	>20	<b>3</b>	2	4
Plomb	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	2
Cuivre	ppm	ASTM D5185(m)	>330	<b>1</b>	<1	2
Étain	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Métal blanc	scalar	Visual*	NONE	<b>NONE</b>	---	---
Bronze	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

Test for glycol is positive. There is a light concentration of glycol present in the oil. There is a moderate concentration of water present in the oil.

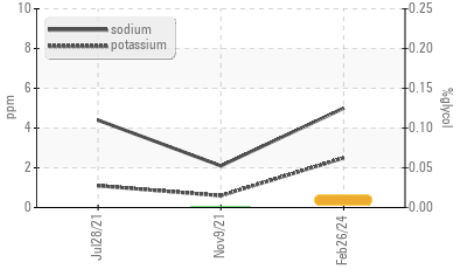
Silicium	ppm	ASTM D5185(m)	>25	<b>3</b>	3	3
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	1
Essence		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Eau	%	ASTM D6304*	>0.2	<b>NEG</b>	0.051	NEG
ppm d'eau	ppm	ASTM D6304*	>2000	<b>---</b>	514.8	---
Glycol	%	ASTM D7922*		<b>▲ 0.016</b>	0.0	NEG
% de suie	%	ASTM D7844*	>3	<b>0.4</b>	0.2	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.4</b>	5.3	6.4
Sulfatation	Abs/.1mm	ASTM D7415*	>30	<b>18.3</b>	19.0	19.2
Limon	scalar	Visual*	NONE	<b>NONE</b>	---	---
Débris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Saleté	scalar	Visual*	NONE	<b>NONE</b>	---	---
Apparence	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odeur	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Eau émulsifiée	scalar	Visual*	>0.2	<b>▲ .2%</b>	.1%	NEG

**ÉTAT DU FLUIDE**

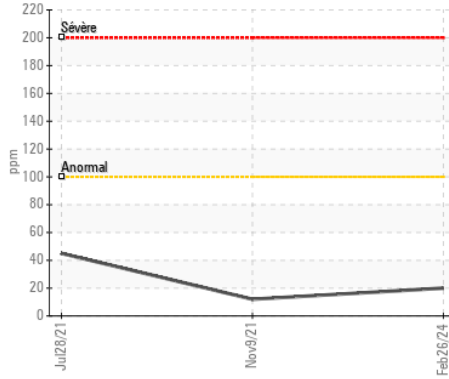
The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>158	<b>5</b>	2	4
Bore	ppm	ASTM D5185(m)	250	<b>3</b>	2	5
Baryum	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdène	ppm	ASTM D5185(m)	100	<b>58</b>	59	59
Manganèse	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnésium	ppm	ASTM D5185(m)	450	<b>938</b>	1017	980
Calcium	ppm	ASTM D5185(m)	3000	<b>1106</b>	1053	1137
Phosphore	ppm	ASTM D5185(m)	1150	<b>995</b>	1072	1085
Zinc	ppm	ASTM D5185(m)	1350	<b>1151</b>	1222	1229
Soufre	ppm	ASTM D5185(m)	4250	<b>2729</b>	2695	2689
Oxydation	Abs/.1mm	ASTM D7414*	>25	<b>13.2</b>	13.2	13.8
Visc 40°C	cSt	ASTM D7279(m)	115	<b>99.3</b>	103	103
Visc 100°C	cSt	ASTM D7279(m)	14.4	<b>14.4</b>	14.8	14.9
Indice de viscosité (VI)	Scale	ASTM D2270*	126	<b>149</b>	149	150

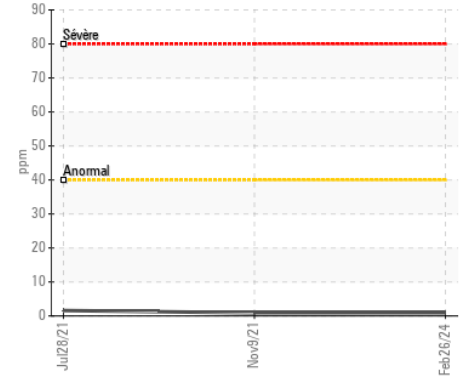
▲ Contamination par le glycol



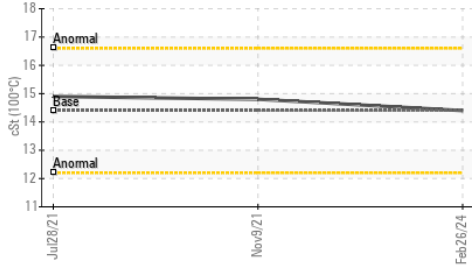
Fer (ppm)



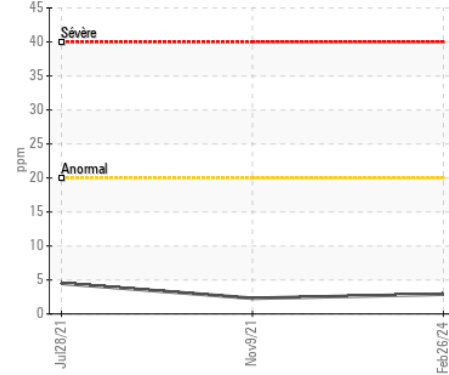
Plomb (ppm)



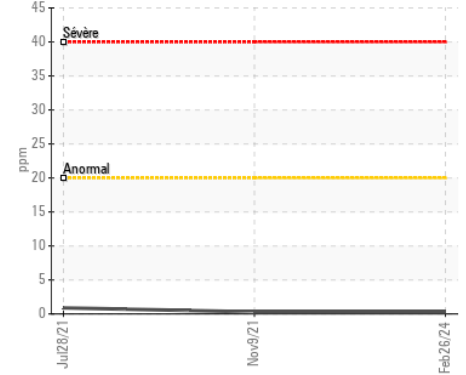
Viscosité 100°C



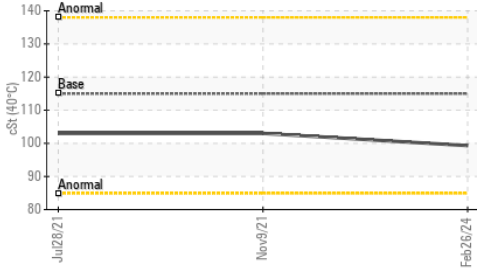
Aluminium (ppm)



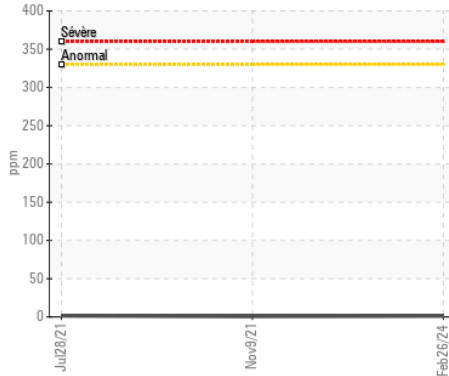
Chrome (ppm)



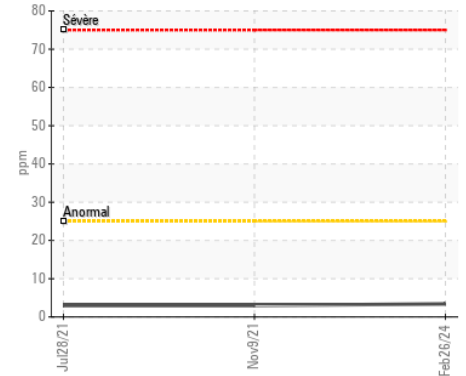
Viscosité 40°C



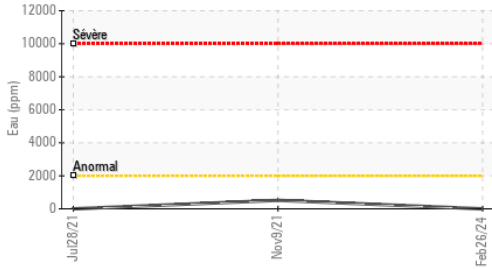
Cuivre (ppm)



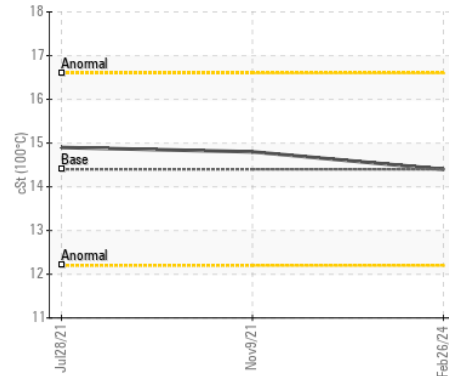
Silicium (ppm)



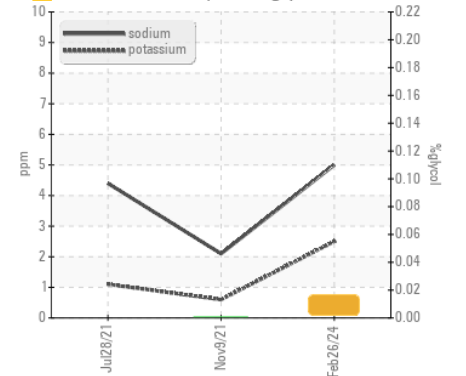
Eau (KF)



Viscosité 100°C



▲ Contamination par le glycol



**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : PC0064486  
**N° de laboratoire** : 02618279  
**Numéro unique** : 5735389  
**Analyse** : MOB 1 ( Additional Tests: Glycol, KF, KV40, VI, Visual )

**LES ENTREPRISES MICHAUVILLE INC.**  
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 MONT ST-HILAIRE, QC  
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 Contact: Martin Trudel  
 mtrudel@michaudville.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: