



# RAPPORT D'ANALYSE D'HUILE

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

Secteur  
**[49246]**  
 Identité de la machine  
**901030**

Composant  
**Moteur diesel**  
 Fluide  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Numéro d'échant.		Client Info		<b>CU0021665</b>	CU0017533	CU0016104
Date d'échant.		Client Info		<b>22 Nov 2023</b>	15 Feb 2022	15 Sep 2020
Âge d la Machine	hrs	Client Info		<b>0</b>	0	0
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

Tin ppm levels are abnormal. Slide bearing wear is indicated.

Fer	ppm	ASTM D5185(m)	>100	<b>31</b>	24	21
Chrome	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titane	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Argent	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Plomb	ppm	ASTM D5185(m)	>40	<b>4</b>	4	4
Cuivre	ppm	ASTM D5185(m)	>330	<b>2</b>	2	2
Étain	ppm	ASTM D5185(m)	>15	<b>▲ 46</b>	3	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Métal blanc	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Bronze	scalar	Visual*	NONE	<b>NONE</b>	---	---

## CONTAMINATION

There is no indication of any contamination in the oil.

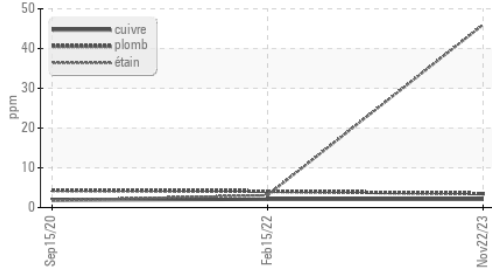
Silicium	ppm	ASTM D5185(m)	>25	<b>7</b>	7	6
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Essence		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
L'eau		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
% de suie	%	ASTM D7844*	>3	<b>0</b>	0	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.0</b>	6.9	5.9
Sulfatation	Abs/.1mm	ASTM D7415*	>30	<b>20.5</b>	21.5	22.4
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>NEG</b>	NEG	NEG

## ÉTAT DU FLUIDE

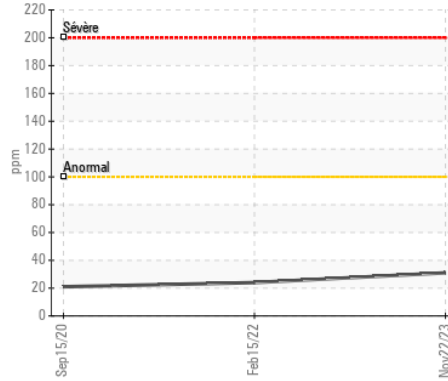
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)	>158	<b>5</b>	5	4
Bore	ppm	ASTM D5185(m)	250	<b>60</b>	54	57
Baryum	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	0	<1
Molybdène	ppm	ASTM D5185(m)	100	<b>38</b>	39	41
Manganèse	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnésium	ppm	ASTM D5185(m)	450	<b>626</b>	575	502
Calcium	ppm	ASTM D5185(m)	3000	<b>1498</b>	1768	1840
Phosphore	ppm	ASTM D5185(m)	1150	<b>794</b>	1052	960
Zinc	ppm	ASTM D5185(m)	1350	<b>911</b>	1229	1110
Soufre	ppm	ASTM D5185(m)	4250	<b>2208</b>	2774	2570
Oxydation	Abs/.1mm	ASTM D7414*	>25	<b>17.1</b>	17.4	20.2
Indice d'acidité	mg KOH/g	ASTM D974*		<b>1.58</b>	---	---
Indice d'alcalinité	mg KOH/g	ASTM D2896*	8.5	<b>8.60</b>	---	---
Visc 100°C	cSt	ASTM D7279(m)	14.4	<b>13.4</b>	13.3	13.0

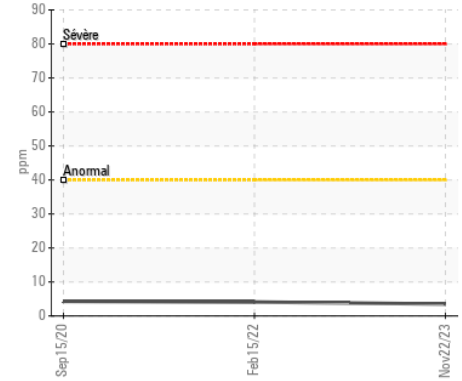
▲ Métaux non-ferreux



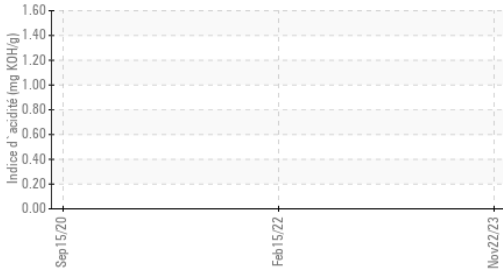
Fer (ppm)



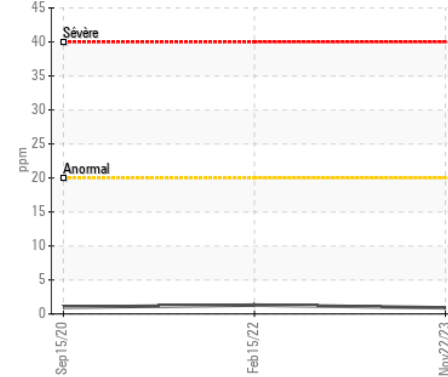
Plomb (ppm)



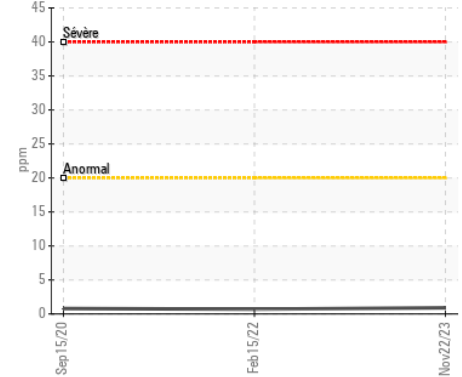
Indice d'acidité



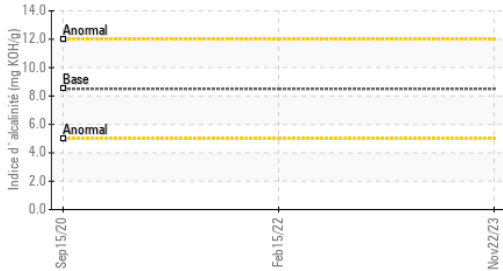
Aluminium (ppm)



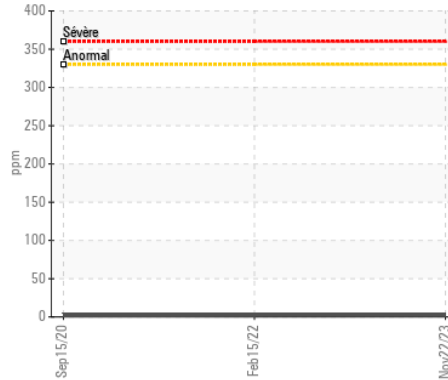
Chrome (ppm)



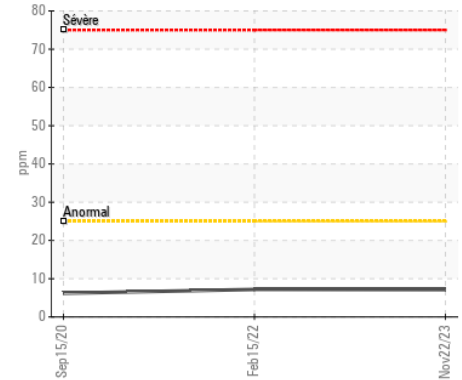
Indice d'alcalinité



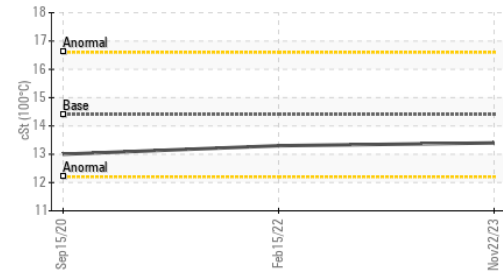
Cuivre (ppm)



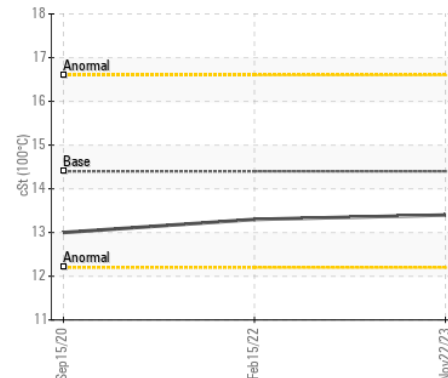
Silicium (ppm)



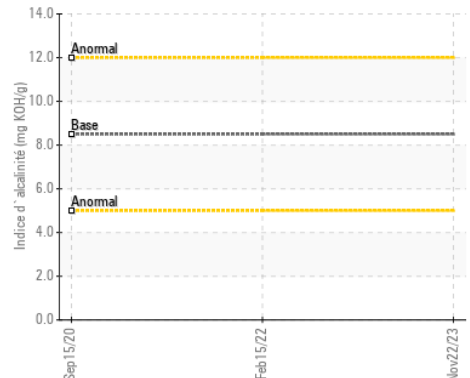
Viscosité 100°C



Viscosité 100°C



Indice d'alcalinité



ISO 17025:2017  
Accredited  
Laboratory

**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **CUMMINS EASTERN CANADA INC.**  
**N° d'échantillon** : CU0021665 **Reçu** : 23 Nov 2023 122 CLYDE AVENUE  
**N° de laboratoire** : 02598322 **Diagnostiqué** : 24 Nov 2023 MOUNT PEARL, NL  
**Numéro unique** : 5683402 **Diagnostiqueur** : Kevin Marson CA A1N 4S3  
**Analyse** : MOB 2 ( Additional Tests: TAN Man ) Contact: DARRYL CAREY

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.

DARRYL.CAREY@CUMMINS.COM

T: (709)747-1135

F: (709)747-1084