



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



Machine Id  
**CATERPILLAR WL0388**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

**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
Sample Number		Client Info		<b>GFL0113472</b>	GFL0091100	GFL0091097
Sample Date		Client Info		<b>05 Mar 2024</b>	01 Dec 2023	08 Sep 2023
Machine Age	hrs	Client Info		<b>12028</b>	11525	11041
Oil Age	hrs	Client Info		<b>503</b>	484	650
Filter Age	hrs	Client Info		<b>503</b>	484	650
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

**WEAR**

Usure de piston.

Iron	ppm	ASTM D5185(m)	>100	<b>15</b>	12	17
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>▲ 31</b>	10	17
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

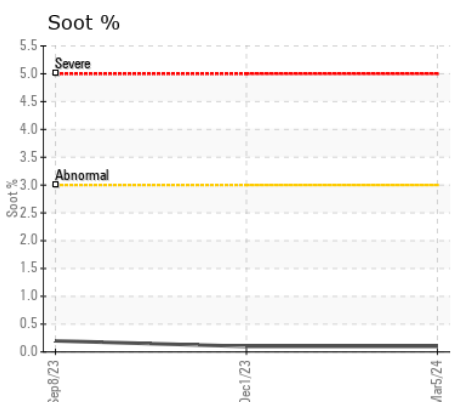
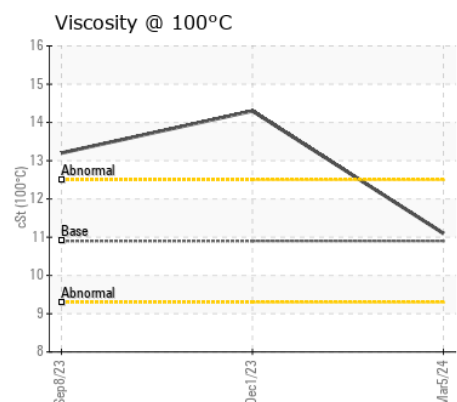
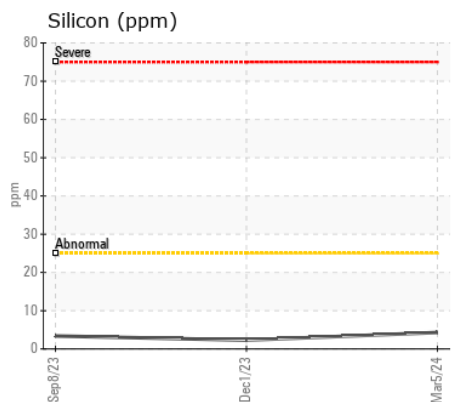
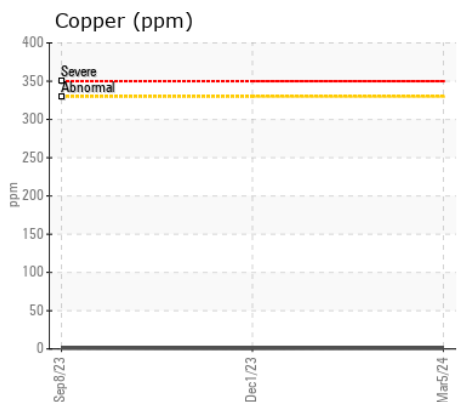
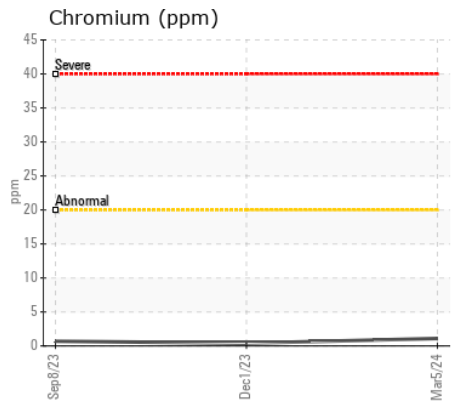
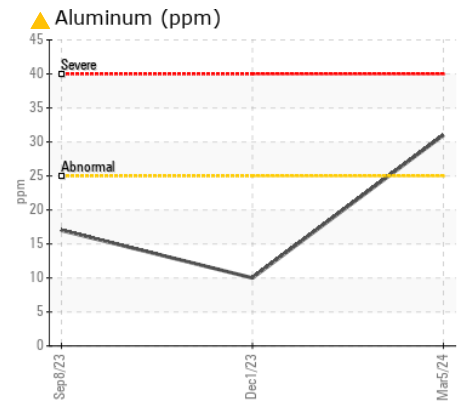
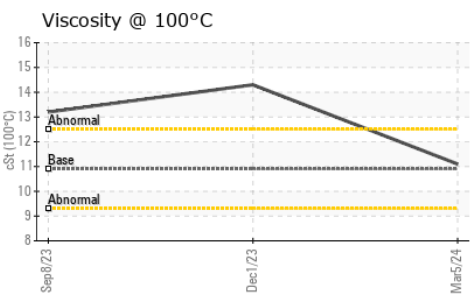
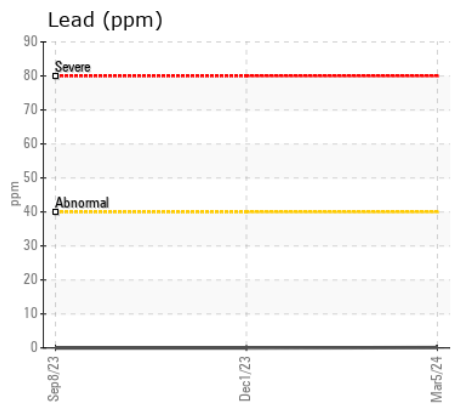
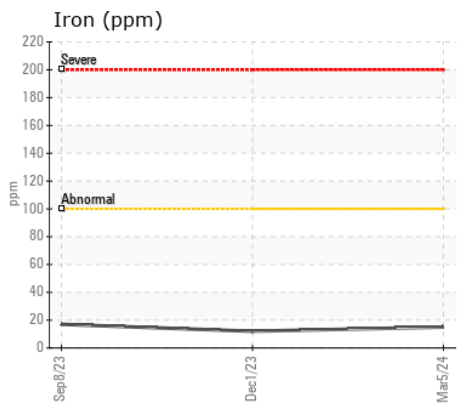
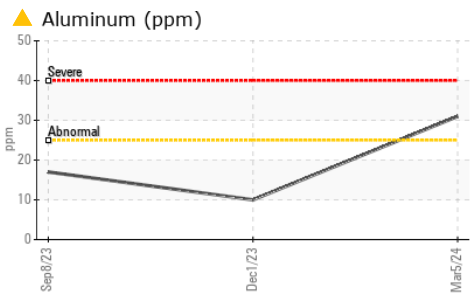
Il n'y a aucun indice de contamination dans l'huile.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	1
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.1	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.8</b>	7.5	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>18.6</b>	18.6	18.3
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	5
Boron	ppm	ASTM D5185(m)	250	<b>12</b>	3	12
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>57</b>	57	11
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>878</b>	921	78
Calcium	ppm	ASTM D5185(m)	3000	<b>1002</b>	1102	2038
Phosphorus	ppm	ASTM D5185(m)	1150	<b>978</b>	1011	968
Zinc	ppm	ASTM D5185(m)	1350	<b>1115</b>	1202	1050
Sulfur	ppm	ASTM D5185(m)	4250	<b>2687</b>	2672	3115
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.6</b>	15.1	15.7
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.1</b>	14.3	13.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0113472  
**Lab Number** : 02620780  
**Unique Number** : 5737890  
**Test Package** : MOB 1  
**Received** : 08 Mar 2024  
**Tested** : 08 Mar 2024  
**Diagnosed** : 08 Mar 2024 - Kevin Marson

**GFL Environmental 791MAT - Matane**  
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 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.