



Machine Id  
**WL0056**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

### RECOMMENDATION

Nous vous recommandons de vidanger l'huile de ce composant si vous ne l'avez pas déjà fait. 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>GFL0118322</b>	GFL0067515	GFL0067491
Sample Date		Client Info		<b>11 Apr 2024</b>	27 Feb 2024	01 Sep 2023
Machine Age	hrs	Client Info		<b>19189</b>	0	17700
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

Usure de cylindre, de vilebrequin ou d'arbre à cames.

PQ		ASTM D8184*	>50	<b>0</b>	0	---
Iron	ppm	ASTM D5185(m)	>51	<b>▲ 111</b>	▲ 88	25
Chromium	ppm	ASTM D5185(m)	>11	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>31	<b>6</b>	4	2
Lead	ppm	ASTM D5185(m)	>26	<b>5</b>	3	<1
Copper	ppm	ASTM D5185(m)	>26	<b>8</b>	3	<1
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

Légère concentration de carbone/suie dans l'huile.

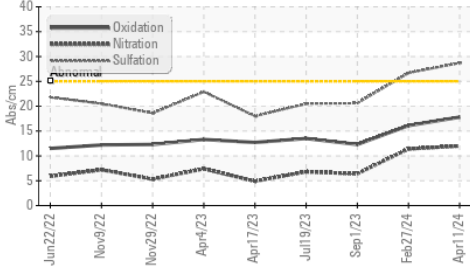
Silicon	ppm	ASTM D5185(m)	>22	<b>4</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2
Fuel		WC Method	>2.1	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.21	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	0.0	NEG
Soot %	%	ASTM D7844*	>3	<b>▲ 4.4</b>	▲ 3.8	1.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.0</b>	11.4	6.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>28.7</b>	26.7	20.6
Emulsified Water	scalar	Visual*	>0.21	<b>NEG</b>	.2%	NEG

### FLUID CONDITION

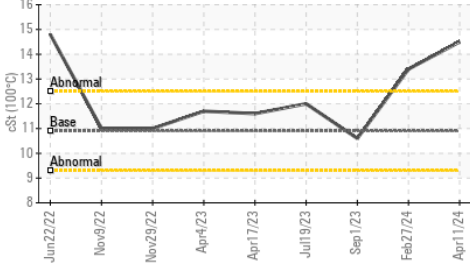
La viscosité de l'huile est supérieure à la normale. La viscosité de l'échantillon se situe dans la portée de l'SAE 40; nous vous conseillons de vérifier. l'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Boron	ppm	ASTM D5185(m)	250	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>61</b>	58	52
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>986</b>	926	852
Calcium	ppm	ASTM D5185(m)	3000	<b>1238</b>	1214	1245
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1010</b>	992	1040
Zinc	ppm	ASTM D5185(m)	1350	<b>1235</b>	1195	1149
Sulfur	ppm	ASTM D5185(m)	4250	<b>2343</b>	2527	2583
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.8</b>	16.1	12.3
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>▲ 14.5</b>	▲ 13.4	10.6

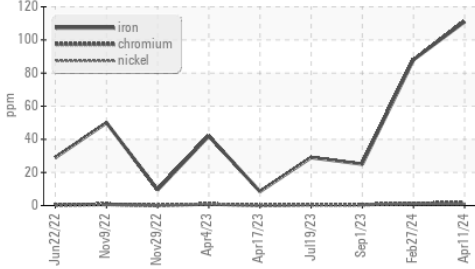
▲ FT-IR (Direct Trend)



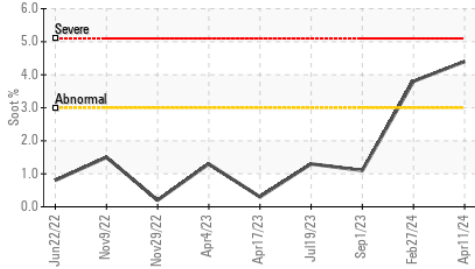
▲ Viscosity @ 100°C



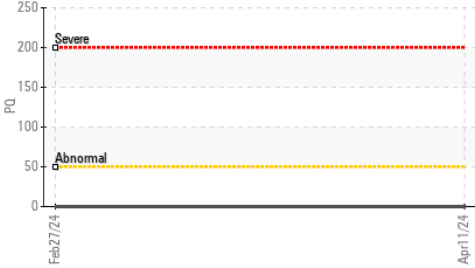
▲ Ferrous Alloys



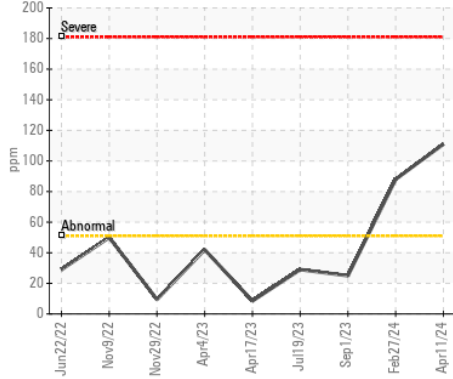
▲ Soot %



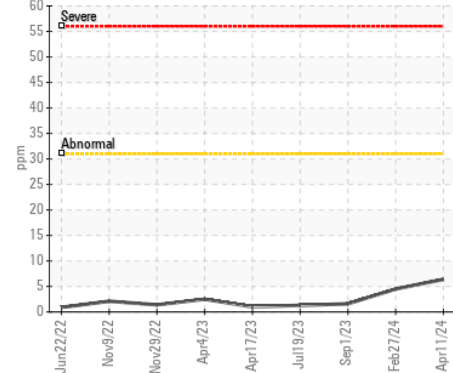
PQ



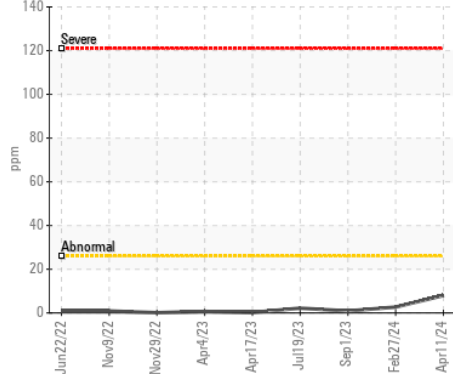
▲ Iron (ppm)



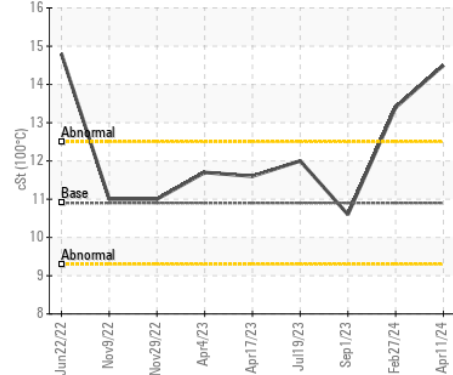
▲ Aluminum (ppm)



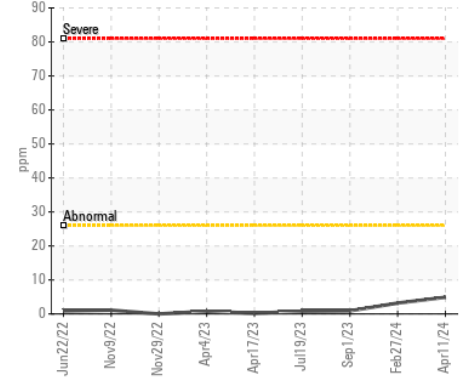
▲ Copper (ppm)



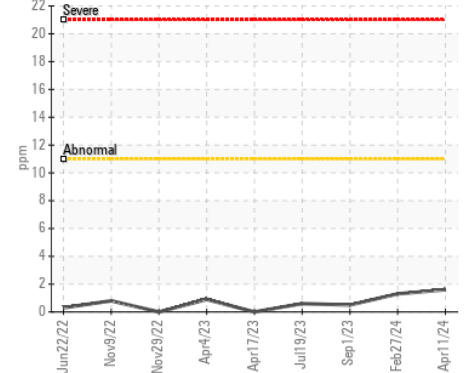
▲ Viscosity @ 100°C



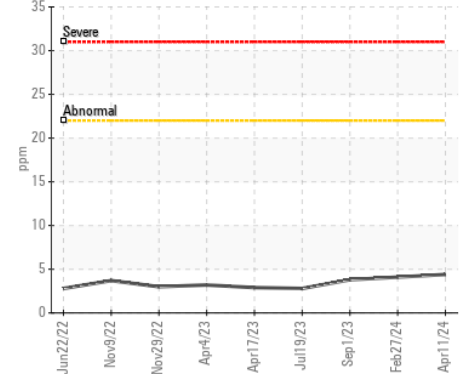
▲ Lead (ppm)



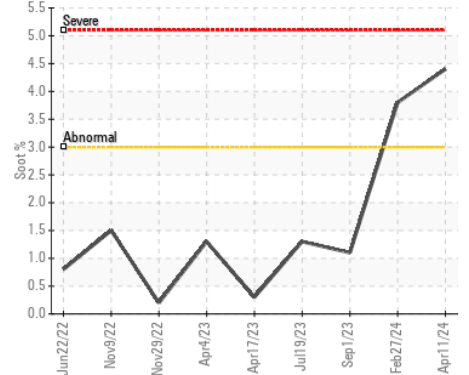
▲ Chromium (ppm)



▲ Silicon (ppm)



▲ Soot %



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0118322  
**Lab Number** : 02628704  
**Unique Number** : 5761836  
**Test Package** : MOB 1 ( Additional Tests: PQ )

**GFL Environmental - 743 - Montreal Est CD Processing**  
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 Montreal, QC  
 CA H1B 1B4  
 Contact: Patrick Beaulieu  
 patrick.beaulieu@gflenv.com

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: