



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



Area  
**GFL218**  
Machine Id  
**231006**  
Component  
**Natural Gas Engine**  
Fluid  
**NOT GIVEN (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0124645</b>	GFL0103074	GFL0099460
Sample Date		Client Info		<b>30 May 2024</b>	27 Nov 2023	24 Oct 2023
Machine Age	kms	Client Info		<b>31598</b>	17795	15299
Oil Age	kms	Client Info		<b>17794</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>50	<b>9</b>	7	12
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>9	<b>1</b>	1	1
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>35	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

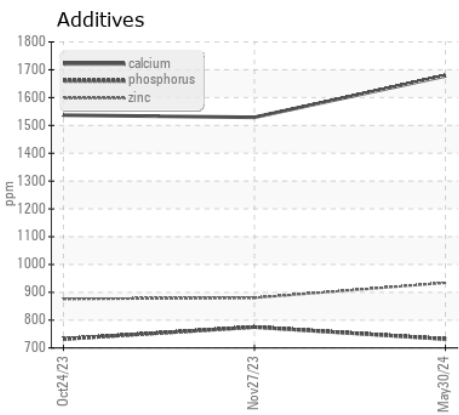
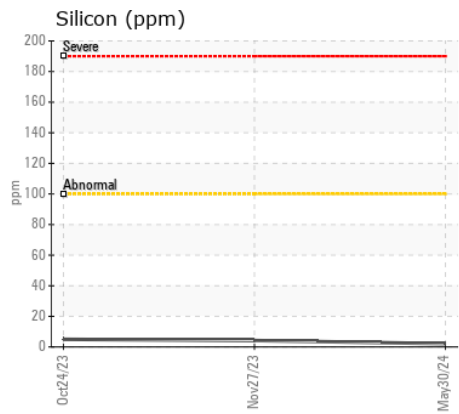
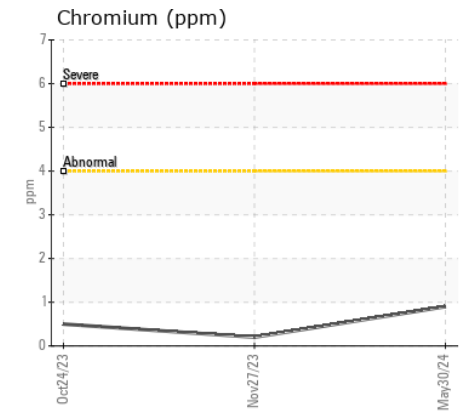
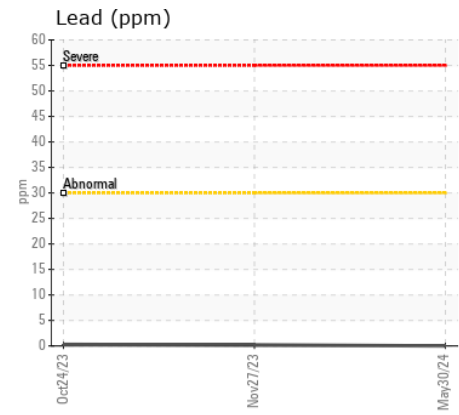
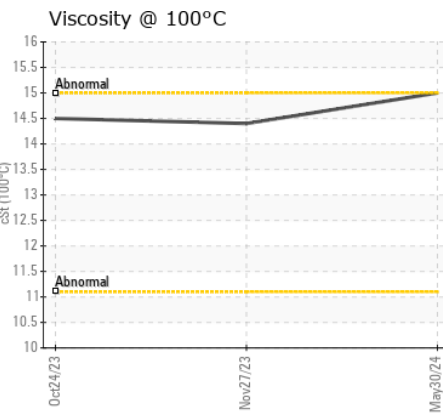
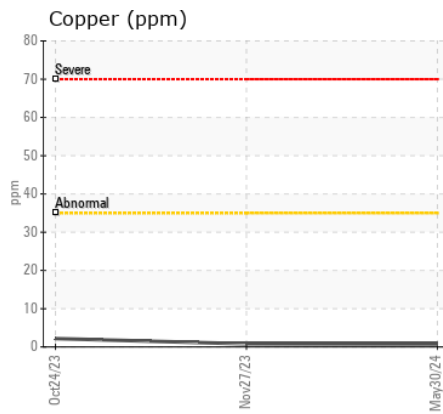
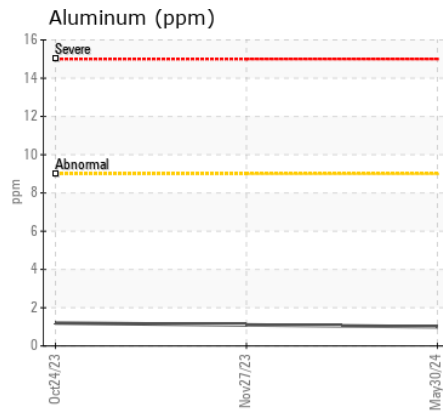
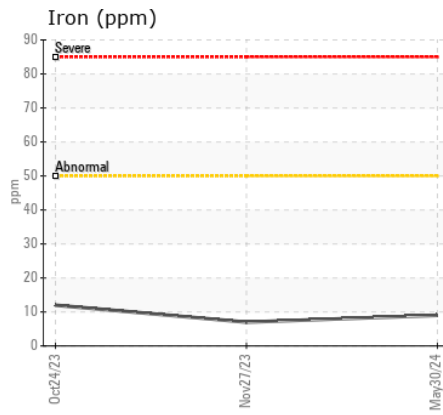
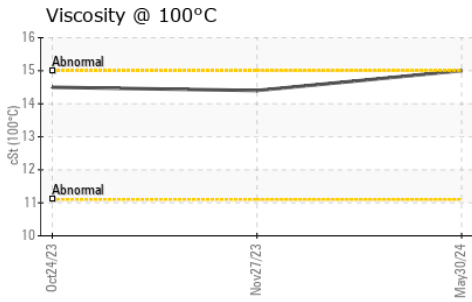
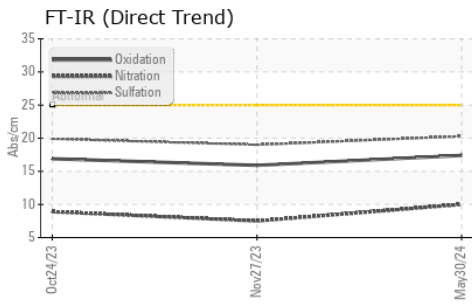
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	<b>2</b>	4	5
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.0</b>	7.5	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.3</b>	19.0	19.9
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>5</b>	5	6
Boron	ppm	ASTM D5185(m)		<b>21</b>	30	21
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)		<b>54</b>	49	54
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>599</b>	560	553
Calcium	ppm	ASTM D5185(m)		<b>1678</b>	1529	1537
Phosphorus	ppm	ASTM D5185(m)		<b>732</b>	775	732
Zinc	ppm	ASTM D5185(m)		<b>934</b>	880	876
Sulfur	ppm	ASTM D5185(m)		<b>2100</b>	2026	1974
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.4</b>	15.9	16.9
Visc @ 100°C	cSt	ASTM D7279(m)		<b>15.0</b>	14.4	14.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0124645 **Received** : 03 Jun 2024  
**Lab Number** : 02639312 **Tested** : 03 Jun 2024  
**Unique Number** : 5788474 **Diagnosed** : 03 Jun 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**GFL Environmental - 225 - COT(D2)**  
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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.