



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



Machine Id  
**501037**  
Component  
**Diesel Engine**  
Fluid  
**CASTROL 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0100849</b>	GFL0100826	GFL0085796
Sample Date		Client Info		<b>22 Feb 2024</b>	13 Dec 2023	11 Oct 2023
Machine Age	kms	Client Info		<b>827942</b>	0	785681
Oil Age	kms	Client Info		<b>0</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	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>8</b>	7	11
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>3</b>	3	▲ 9
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	1	3
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	1	1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

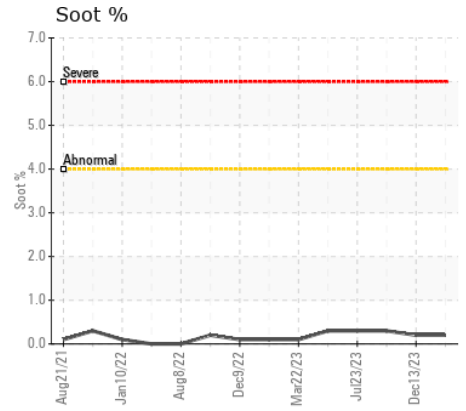
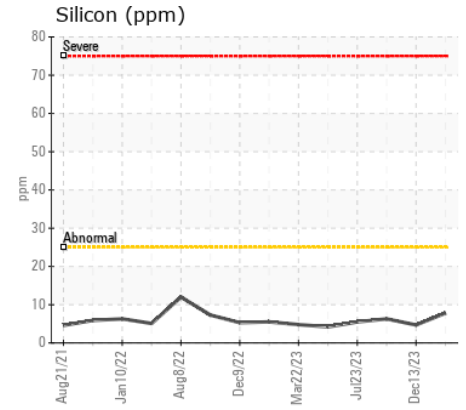
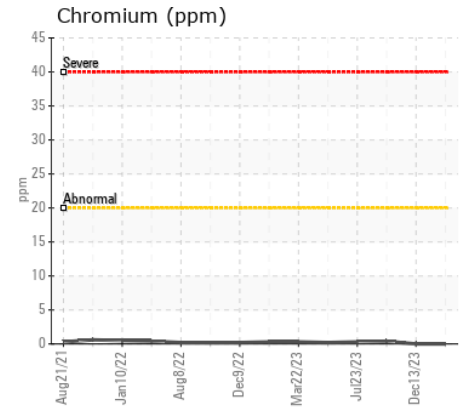
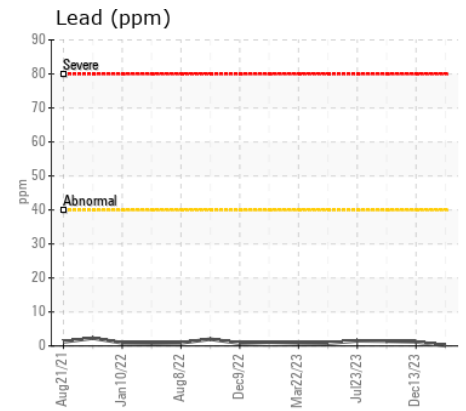
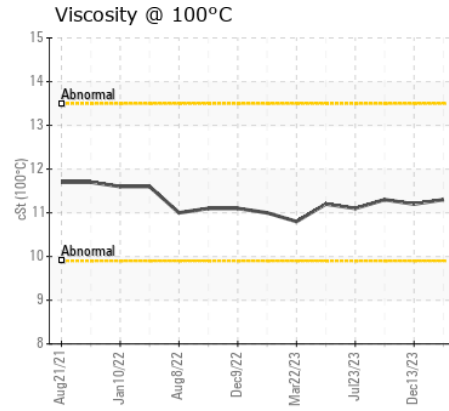
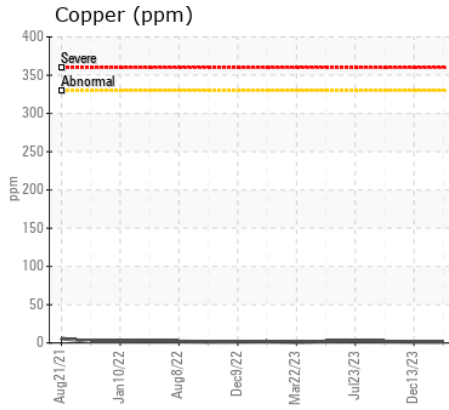
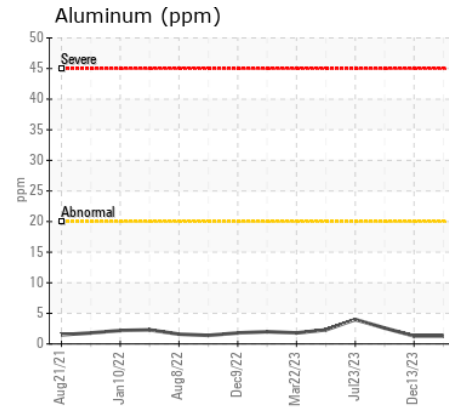
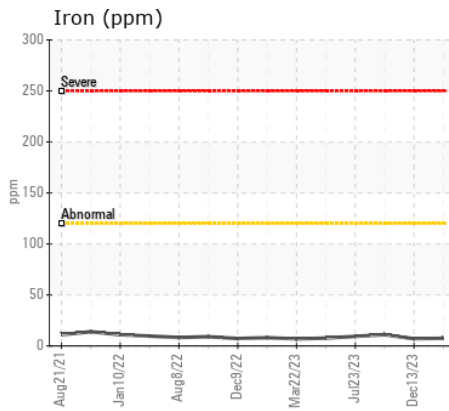
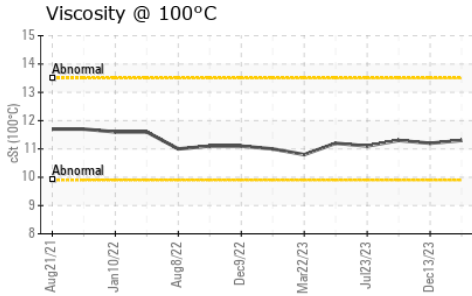
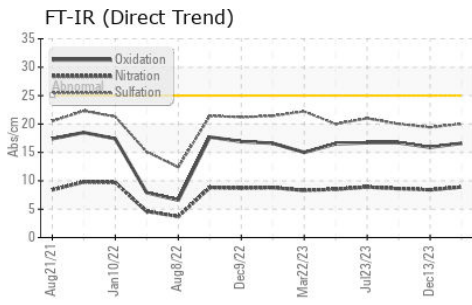
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>8</b>	5	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	3
Fuel		WC Method	>3.0	<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*	>4	<b>0.2</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.9</b>	8.4	8.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.0</b>	19.4	20.0
Emulsified Water	scalar	Visual*	>0.2	<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>3</b>	3	4
Boron	ppm	ASTM D5185(m)		<b>2</b>	2	2
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>60</b>	62	62
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>987</b>	1020	1019
Calcium	ppm	ASTM D5185(m)		<b>1087</b>	1109	1108
Phosphorus	ppm	ASTM D5185(m)		<b>971</b>	1017	1035
Zinc	ppm	ASTM D5185(m)		<b>1198</b>	1237	1248
Sulfur	ppm	ASTM D5185(m)		<b>2326</b>	2498	2515
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.6</b>	15.9	16.7
Visc @ 100°C	cSt	ASTM D7279(m)		<b>11.3</b>	11.2	11.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0100849  
**Lab Number** : 02637839  
**Unique Number** : 5787001  
**Test Package** : MOB 1  
**Received** : 28 May 2024  
**Tested** : 28 May 2024  
**Diagnosed** : 28 May 2024 - Wes Davis

**GFL Environmental - 520 - Winterburn**  
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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.