



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

Machine Id  
**5614**  
 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>GFL0100837</b>	GFL0100861	GFL0085833
Sample Date		Client Info		<b>15 Mar 2024</b>	23 Oct 2023	16 Jun 2023
Machine Age	hrs	Client Info		<b>35105</b>	1610466	1587741
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>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>20</b>	34	47
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	1
Lead	ppm	ASTM D5185(m)	>40	<b>3</b>	6	20
Copper	ppm	ASTM D5185(m)	>330	<b>7</b>	9	10
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	2
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

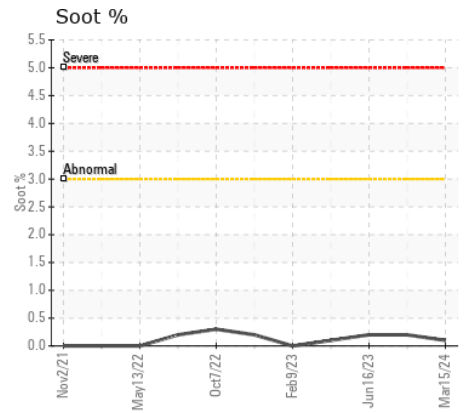
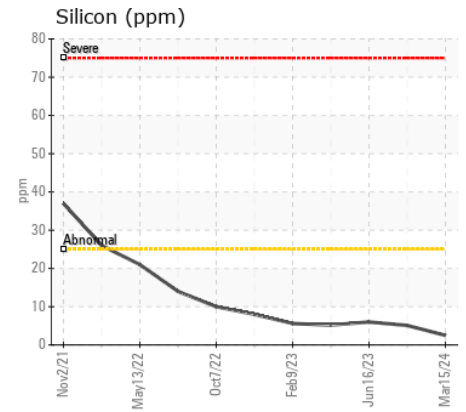
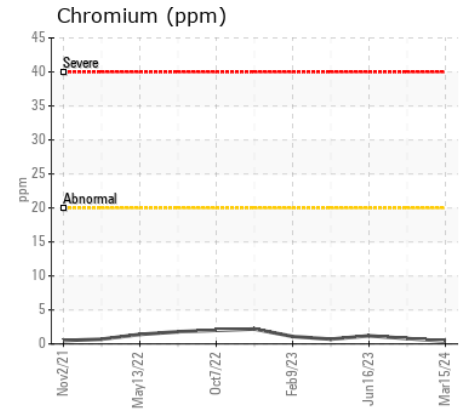
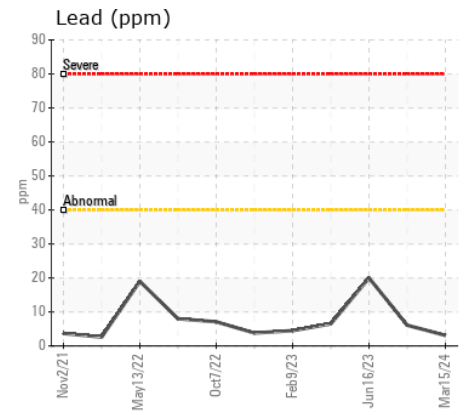
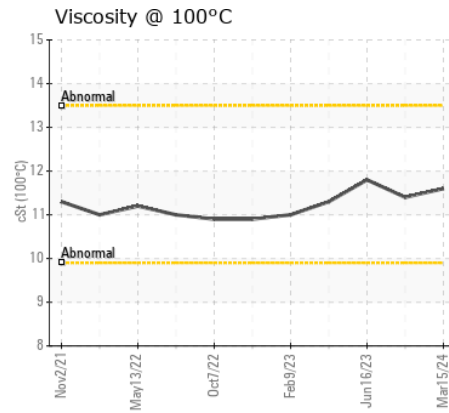
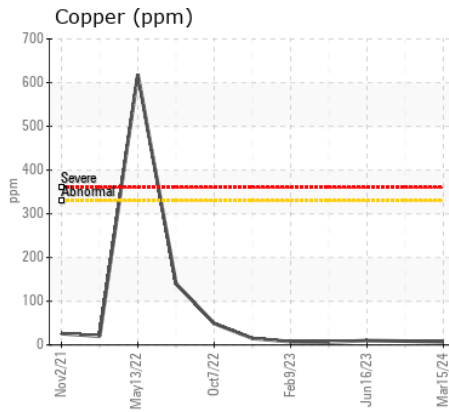
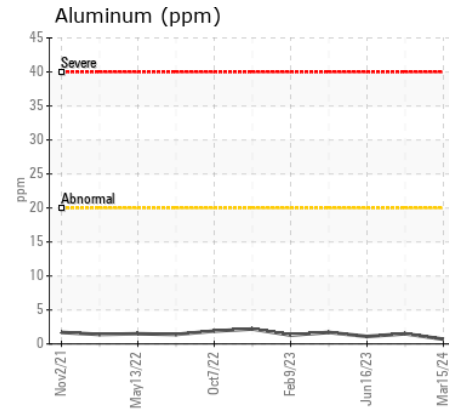
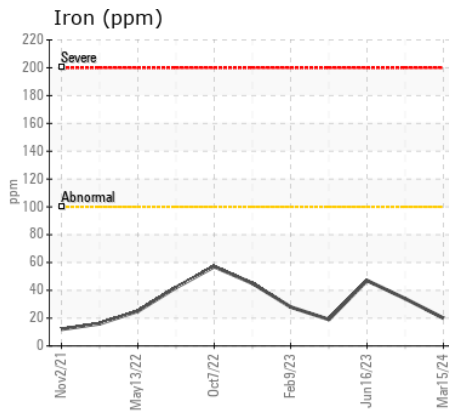
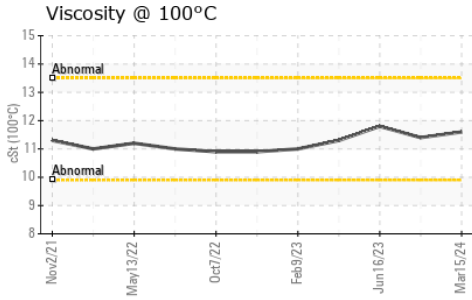
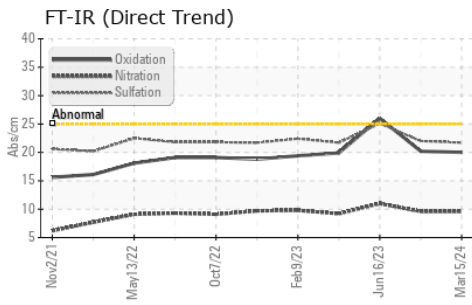
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	5	6
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Fuel		WC Method	>5	<b>&lt;1.0</b>	0.8	<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>	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.6</b>	9.6	11.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.7</b>	22.0	25.1
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>2</b>	2	2
Boron	ppm	ASTM D5185(m)		<b>1</b>	2	6
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>60</b>	58	63
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>987</b>	960	1053
Calcium	ppm	ASTM D5185(m)		<b>1091</b>	1038	1164
Phosphorus	ppm	ASTM D5185(m)		<b>981</b>	952	1069
Zinc	ppm	ASTM D5185(m)		<b>1218</b>	1187	1283
Sulfur	ppm	ASTM D5185(m)		<b>2392</b>	2267	2352
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.0</b>	20.2	26.0
Visc @ 100°C	cSt	ASTM D7279(m)		<b>11.6</b>	11.4	11.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0100837  
**Lab Number** : 02637897  
**Unique Number** : 5787059  
**Test Package** : MOB 1

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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.