



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



Machine Id  
**911046**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0097282</b>	GFL0097250	GFL0064881
Sample Date		Client Info		<b>13 Feb 2024</b>	29 Nov 2023	30 Aug 2023
Machine Age	hrs	Client Info		<b>2275</b>	1891	0
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	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	<b>14</b>	7	14
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	2	1
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

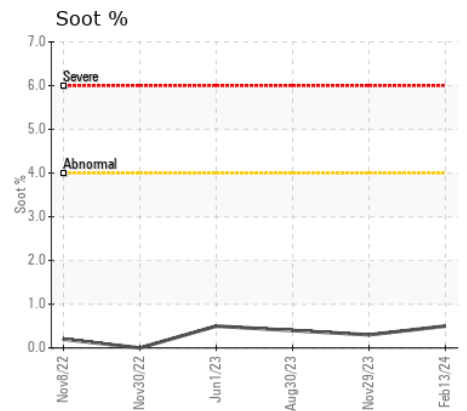
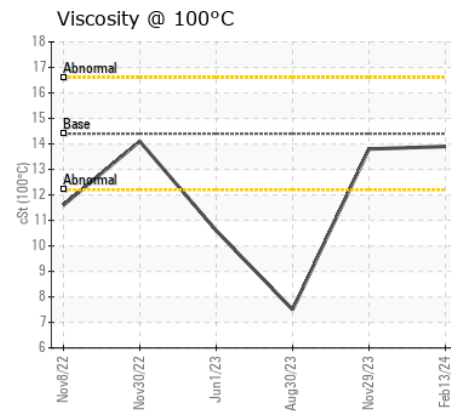
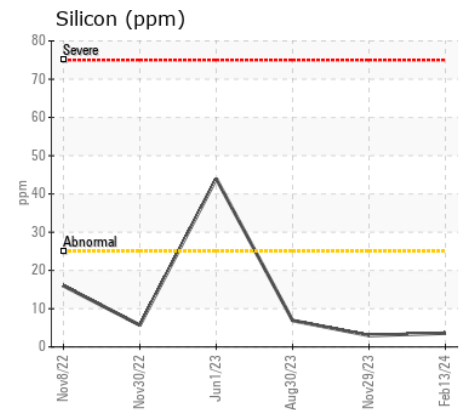
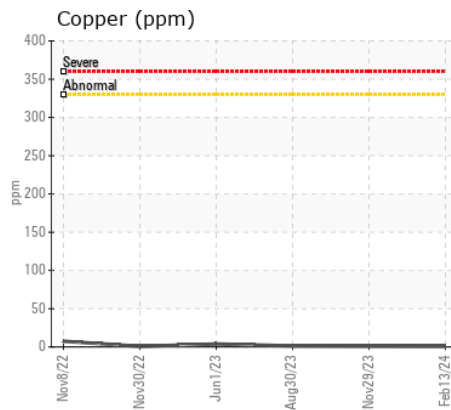
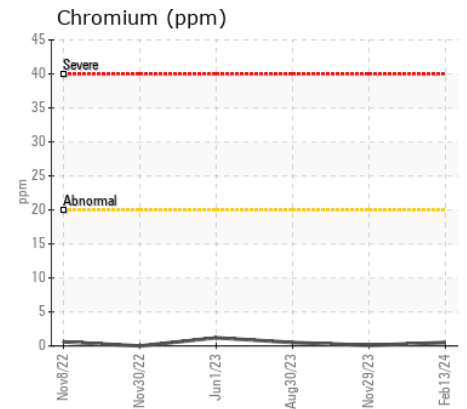
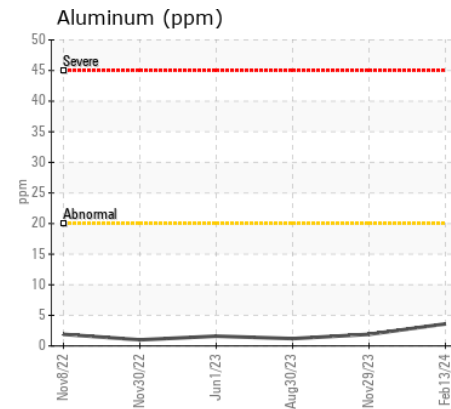
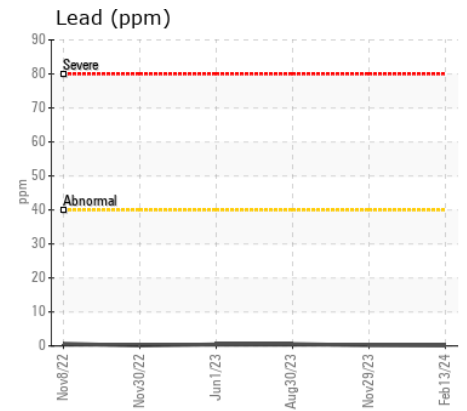
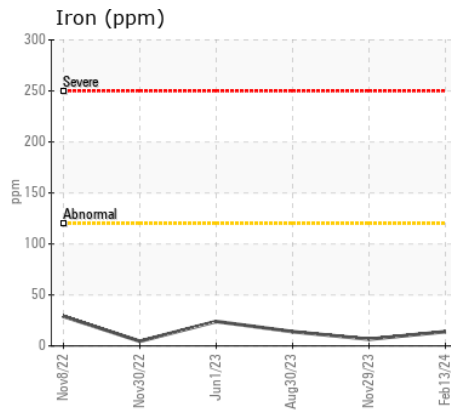
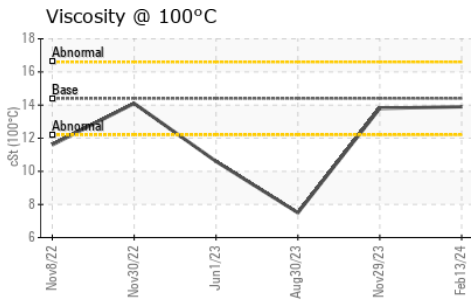
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>4</b>	3	7
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	1	3
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	0.7	▲ 21.1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>4	<b>0.5</b>	0.3	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.8</b>	6.6	9.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.2</b>	19.3	26.4
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)	>158	<b>2</b>	2	4
Boron	ppm	ASTM D5185(m)	250	<b>3</b>	8	4
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>58</b>	57	39
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>949</b>	917	625
Calcium	ppm	ASTM D5185(m)	3000	<b>1071</b>	1076	721
Phosphorus	ppm	ASTM D5185(m)	1150	<b>999</b>	956	686
Zinc	ppm	ASTM D5185(m)	1350	<b>1161</b>	1137	770
Sulfur	ppm	ASTM D5185(m)	4250	<b>2617</b>	2479	1676
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.6</b>	15.1	28.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.9</b>	13.8	▲ 7.5



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0097282  
**Lab Number** : 02618597  
**Unique Number** : 5735707  
**Test Package** : MOB 1  
**Received** : 28 Feb 2024  
**Tested** : 28 Feb 2024  
**Diagnosed** : 28 Feb 2024 - Wes Davis

**GFL Environmental - 558 - Grand Prairie**  
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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.