



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



Machine Id  
**901143**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (42 LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0118911</b>	GFL0094418	GFL0086774
Sample Date		Client Info		<b>07 May 2024</b>	02 Apr 2024	22 Dec 2023
Machine Age	hrs	Client Info		<b>90940</b>	12119	11572
Oil Age	hrs	Client Info		<b>0</b>	700	600
Filter Age	hrs	Client Info		<b>0</b>	700	600
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)	>120	<b>5</b>	10	5
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>1</b>	1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	4	4
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

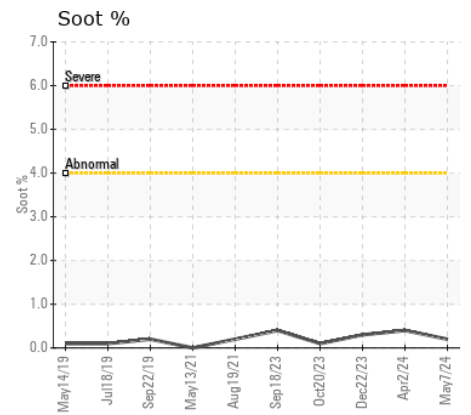
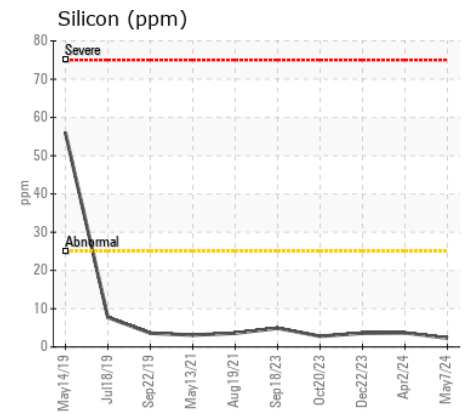
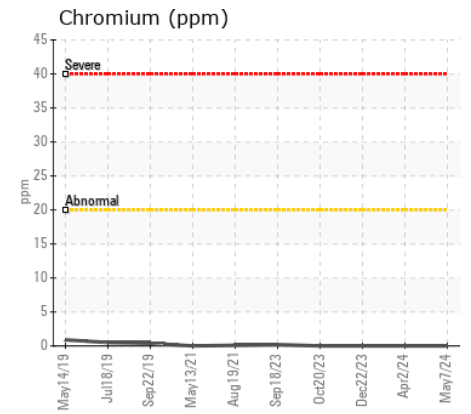
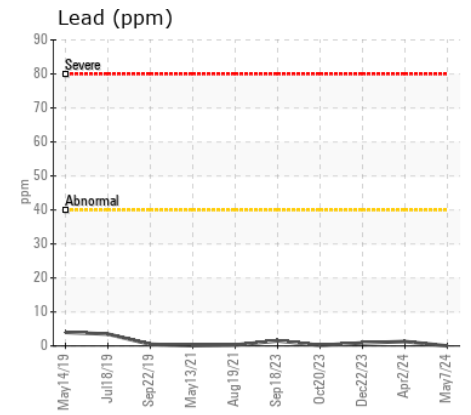
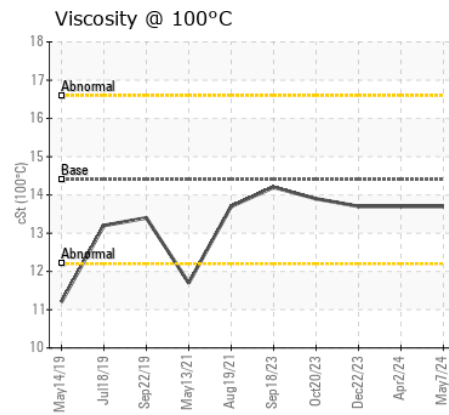
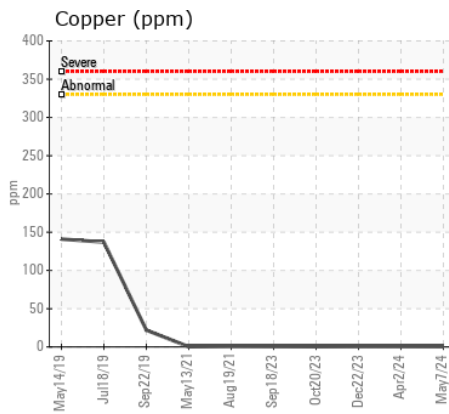
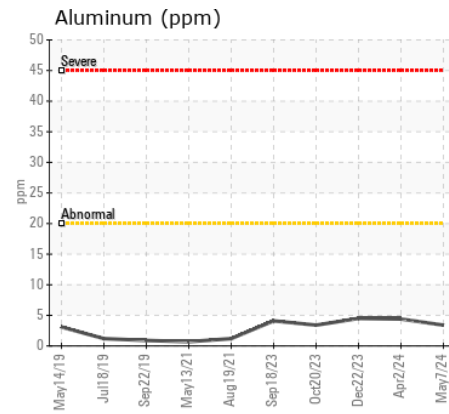
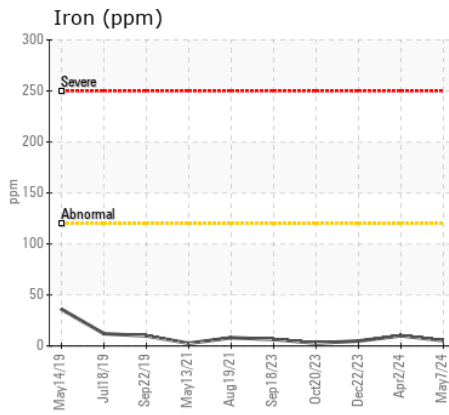
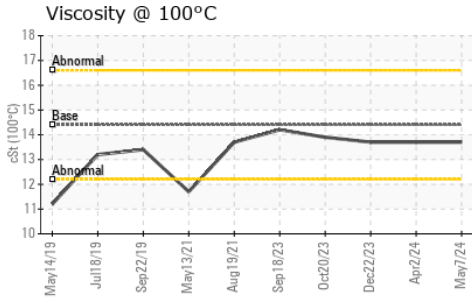
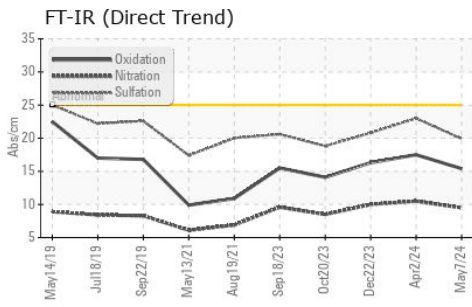
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2
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>	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.5</b>	10.5	10.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.9</b>	23.0	20.8
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>4</b>	6	4
Boron	ppm	ASTM D5185(m)	250	<b>45</b>	28	33
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>90</b>	88	87
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	450	<b>103</b>	81	71
Calcium	ppm	ASTM D5185(m)	3000	<b>2164</b>	2105	2142
Phosphorus	ppm	ASTM D5185(m)	1150	<b>969</b>	924	934
Zinc	ppm	ASTM D5185(m)	1350	<b>1160</b>	1126	1141
Sulfur	ppm	ASTM D5185(m)	4250	<b>2925</b>	2634	2926
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.4</b>	17.5	16.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	<b>13.7</b>	13.7	13.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0118911  
**Lab Number** : 02634056  
**Unique Number** : 5775209  
**Test Package** : MOB 1  
**Received** : 08 May 2024  
**Tested** : 08 May 2024  
**Diagnosed** : 08 May 2024 - Wes Davis

**GFL Environmental - 222 - Sandhill**  
 SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCE ROAD  
 ORANGEVILLE, ON  
 CA L9W 3X5  
 Contact: GLENN COOK  
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 T: (519)940-4167  
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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.