

Area  
**[1287960]**  
Machine Id  
**114026**  
Component  
**Diesel Engine**  
Fluid  
**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>GFL0118537</b>	---	---
Sample Date		Client Info		<b>03 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>412</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>N/A</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>200	<b>43</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>30	<b>4</b>	---	---
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m)	>30	<b>46</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>2</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

**CONTAMINATION**

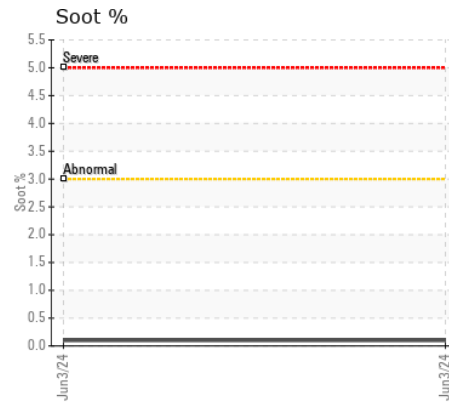
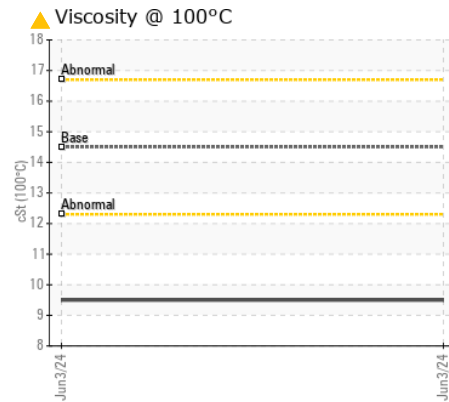
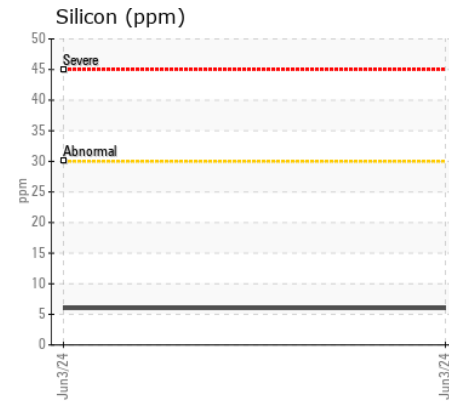
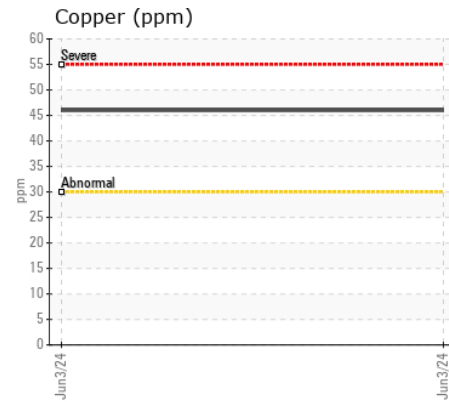
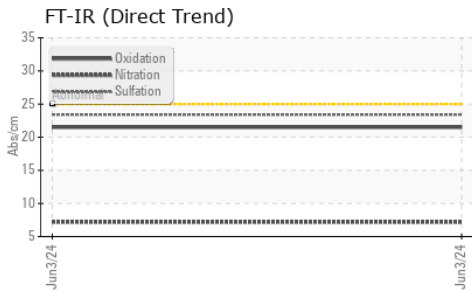
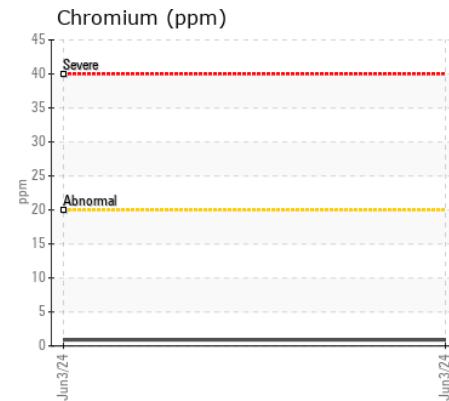
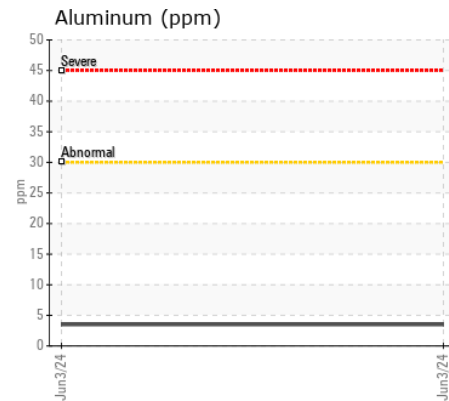
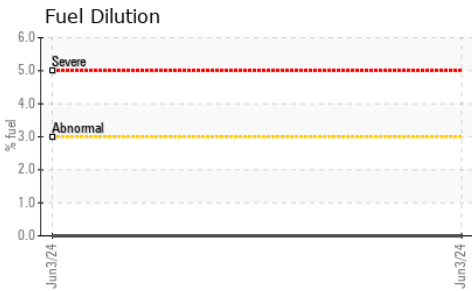
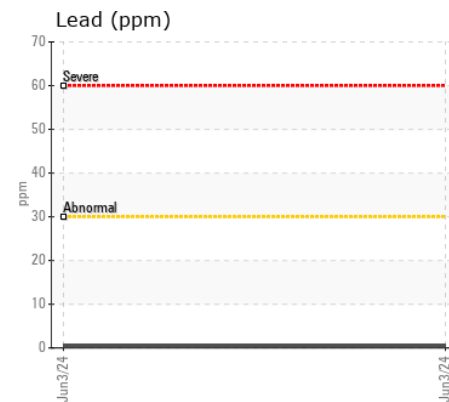
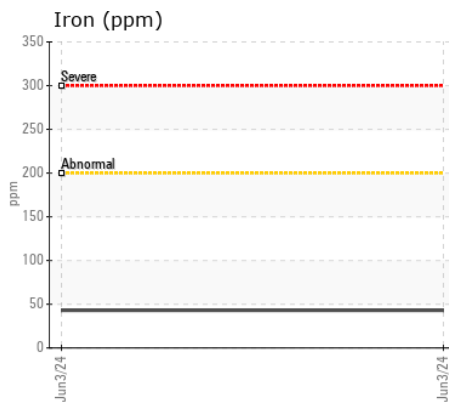
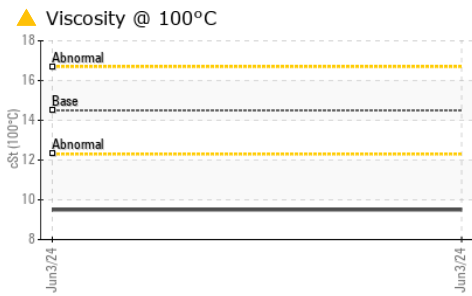
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>30	<b>6</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>13</b>	---	---
Fuel	%	ASTM D7593*	>3.0	<b>0.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.2</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.4</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

**FLUID CONDITION**

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>57	<b>5</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>54</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>41</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>3</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>503</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1687</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>761</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>863</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>1969</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>21.5</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	<b>▲ 9.5</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0118537 **Received** : 05 Jun 2024  
**Lab Number** : 02639762 **Tested** : 06 Jun 2024  
**Unique Number** : 5788924 **Diagnosed** : 07 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 207 - Pickering SW**  
 1034 TOY AVENUE, PICKERING YARD  
 PICKERING, ON  
 CA L1W 3P1  
 Contact: Ian Patton  
 ipatton@gflenv.com  
 T: (905)831-6297  
 F: (905)426-3577

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.