



Machine Id  
**413148**  
Component  
**Diesel Engine**  
Fluid  
**SAE 5W30 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0027447</b>	---	---
Sample Date		Client Info		<b>07 Sep 2023</b>	---	---
Machine Age	hrs	Client Info		<b>544</b>	---	---
Oil Age	hrs	Client Info		<b>544</b>	---	---
Filter Age	hrs	Client Info		<b>544</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

Metal levels are typical for a components first oil change.

Iron	ppm	ASTM D5185(m)	>120	<b>42</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>7</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>1</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>7</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>3</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>131</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>5</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---

### CONTAMINATION

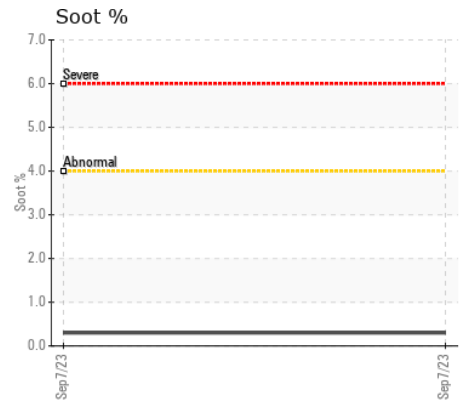
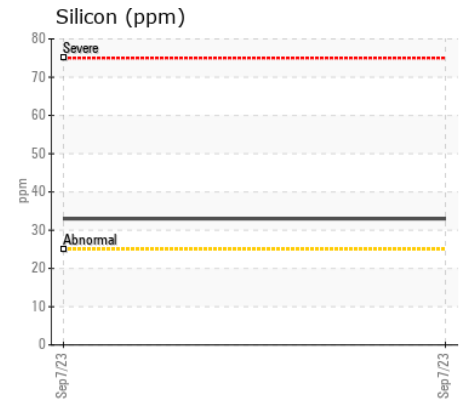
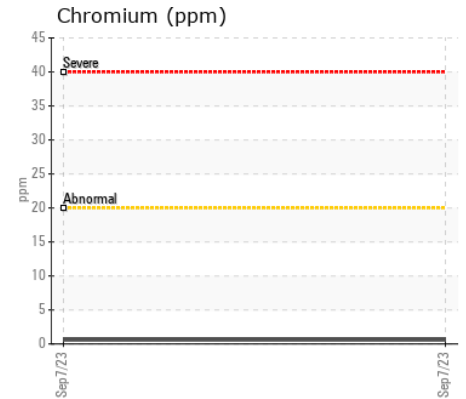
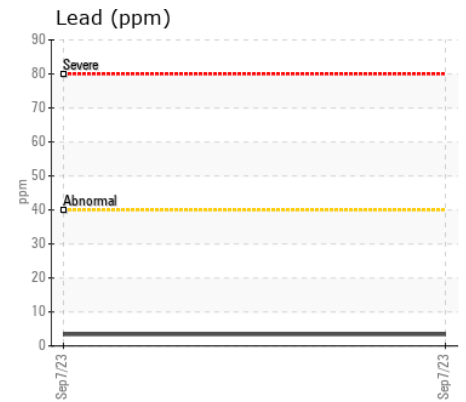
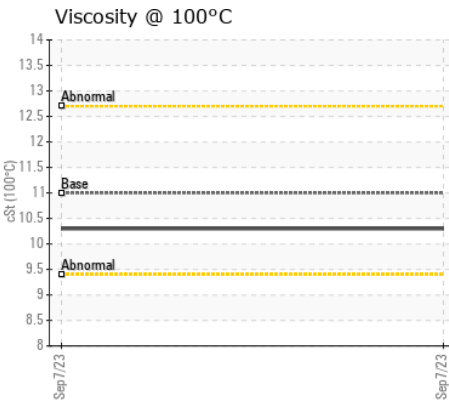
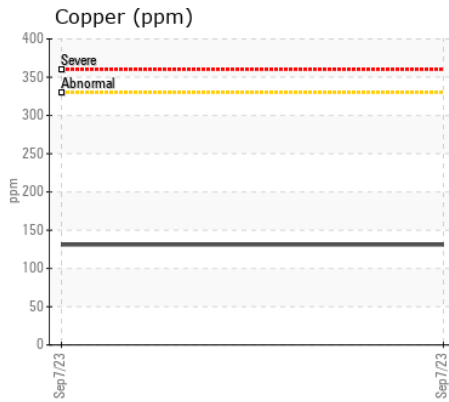
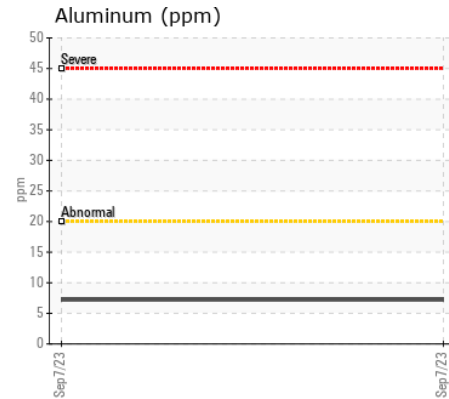
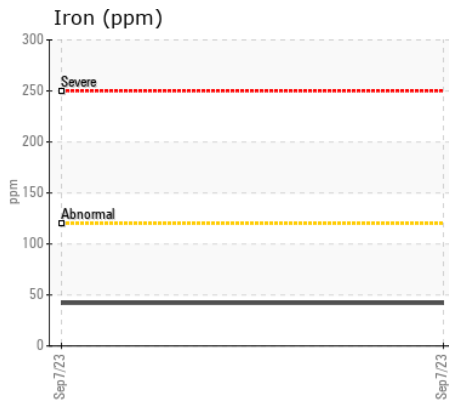
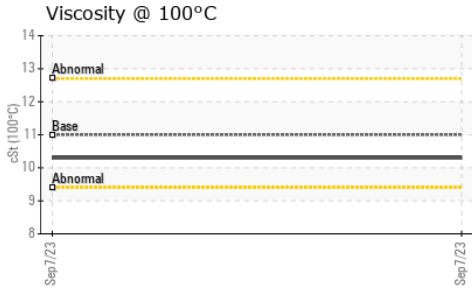
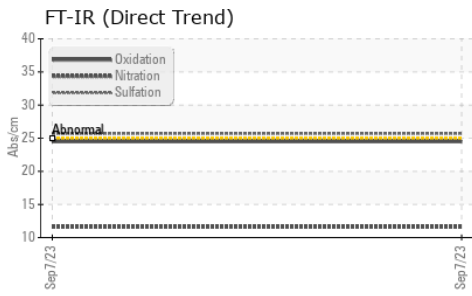
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>33</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>22</b>	---	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	ASTM D7844*	>4	<b>0.3</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.6</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.7</b>	---	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	---	---

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>5</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>114</b>	---	---
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185(m)		<b>119</b>	---	---
Manganese	ppm	ASTM D5185(m)		<b>4</b>	---	---
Magnesium	ppm	ASTM D5185(m)		<b>765</b>	---	---
Calcium	ppm	ASTM D5185(m)		<b>1490</b>	---	---
Phosphorus	ppm	ASTM D5185(m)		<b>784</b>	---	---
Zinc	ppm	ASTM D5185(m)		<b>886</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>2042</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.5</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	<b>10.3</b>	---	---



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0027447  
**Lab Number** : 02581226  
**Unique Number** : 5642291  
**Test Package** : MOB 1

**Received** : 11 Sep 2023  
**Tested** : 12 Sep 2023  
**Diagnosed** : 13 Sep 2023 - Kevin Marson

**GFL Environmental - DO NOT USE**  
 9401 Trans Canada Hwy  
 Chemainus, BC  
 CA V0R 1K4  
 Contact: service

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.

T:  
F: