



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



Machine Id  
**MACK 425116 (S/N 1M2AX13C3FM027864)**  
Component  
**Diesel Engine**  
Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0109554</b>	---	---
Sample Date		Client Info		<b>18 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>3866</b>	---	---
Oil Age	hrs	Client Info		<b>600</b>	---	---
Filter Age	hrs	Client Info		<b>600</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>Changed</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

**WEAR**

All component wear rates are normal.

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

**CONTAMINATION**

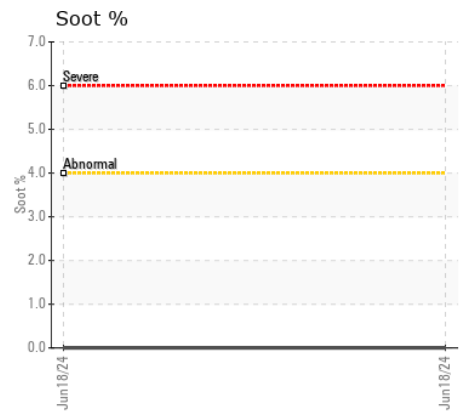
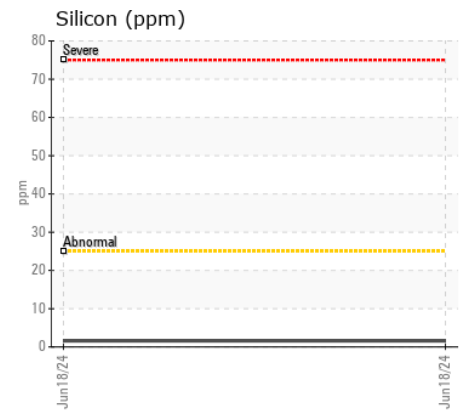
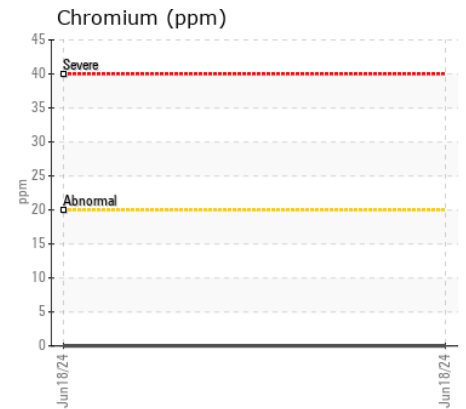
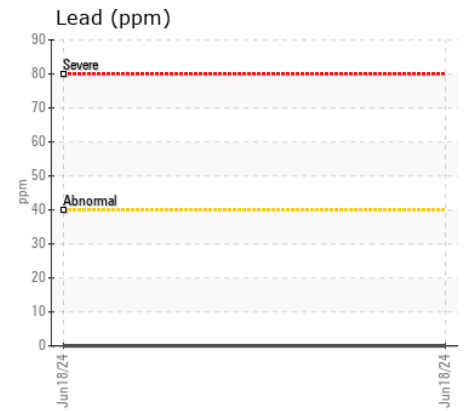
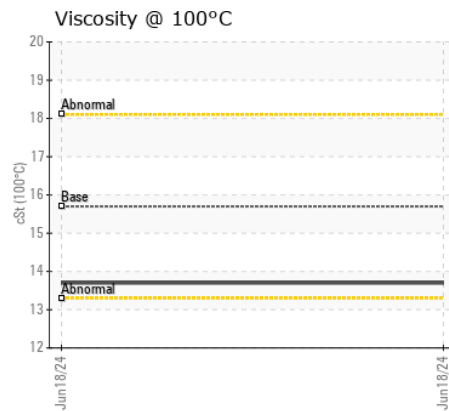
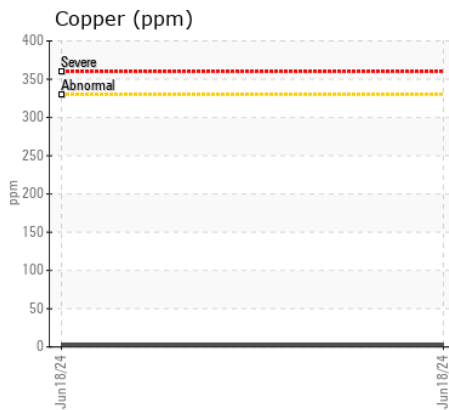
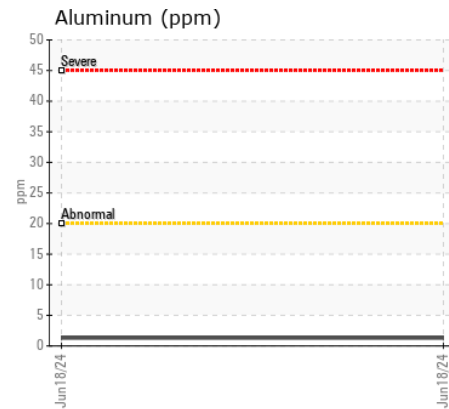
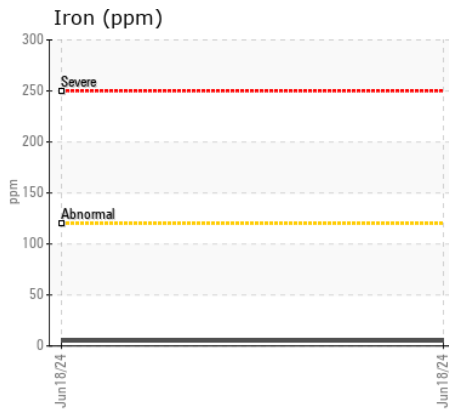
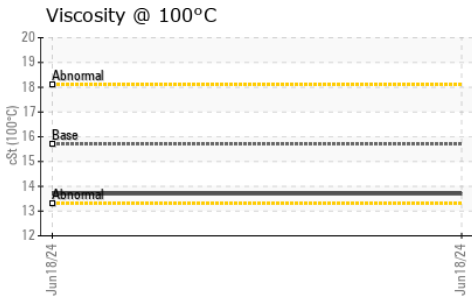
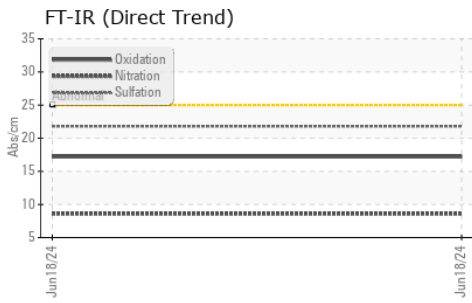
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>3</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</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.6</b>	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.8</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>3</b>	---	---
Boron	ppm	ASTM D5185(m)	35	<b>141</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	10	<b>12</b>	---	---
Calcium	ppm	ASTM D5185(m)	2340	<b>1992</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1110	<b>911</b>	---	---
Zinc	ppm	ASTM D5185(m)	1210	<b>1109</b>	---	---
Sulfur	ppm	ASTM D5185(m)	3890	<b>2789</b>	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.2</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	<b>13.7</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0109554  
**Lab Number** : 02643619  
**Unique Number** : 5801158  
**Test Package** : MOB 1

**GFL Environmental Inc. - 536 - Fort frances**  
 Fire #174 Hwy 11/71  
 Fort Frances, ON  
 CA P9A 3M2  
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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.