

Machine Id  
**831037**  
Component  
**Diesel Engine**  
Fluid  
**RDL-3647 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0112450</b>	GFL0044545	---
Sample Date		Client Info		<b>18 Jun 2024</b>	03 Oct 2022	---
Machine Age	kms	Client Info		<b>75133</b>	0	---
Oil Age	kms	Client Info		<b>0</b>	0	---
Filter Age	kms	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	<b>22</b>	8	---
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	2	---
Lead	ppm	ASTM D5185(m)	>40	<b>11</b>	<1	---
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	1	---
Tin	ppm	ASTM D5185(m)	>15	<b>1</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---

**CONTAMINATION**

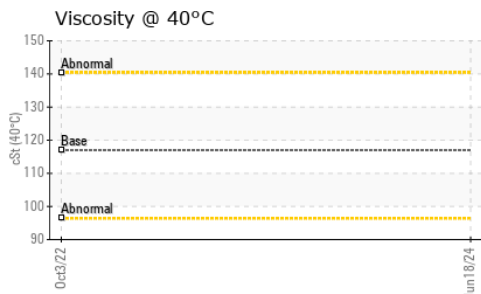
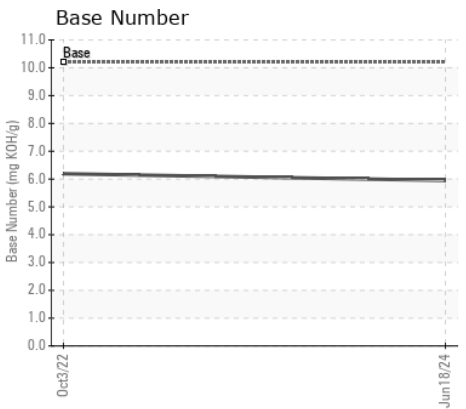
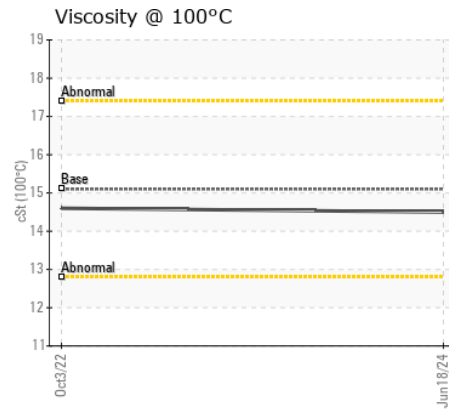
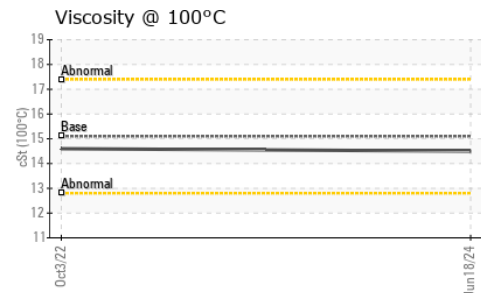
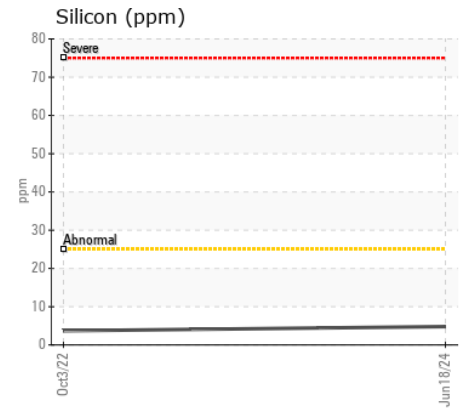
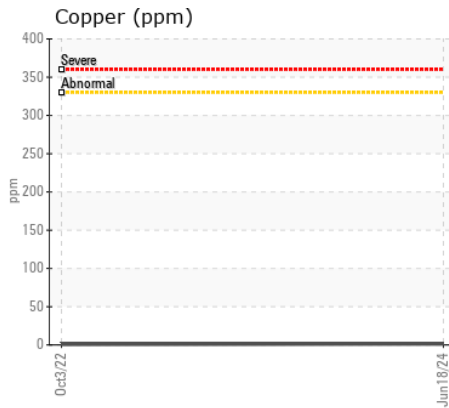
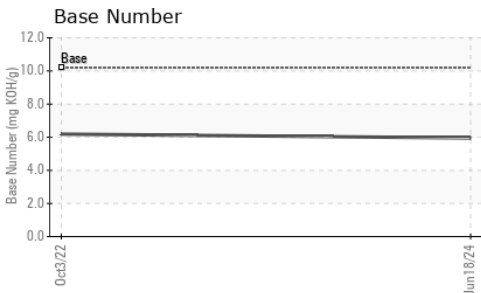
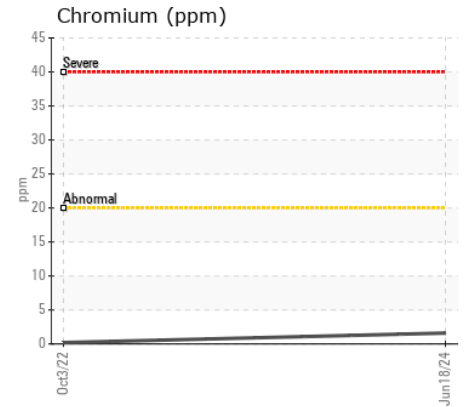
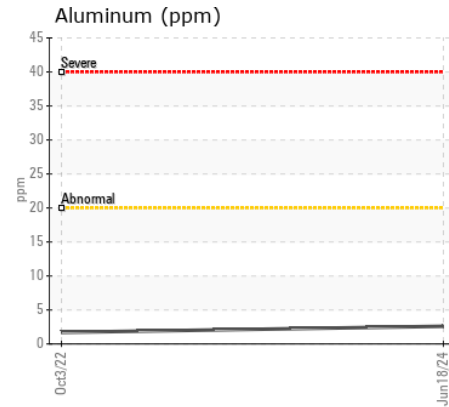
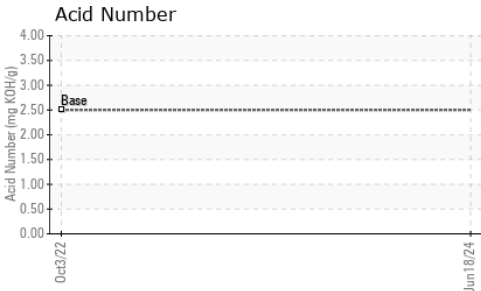
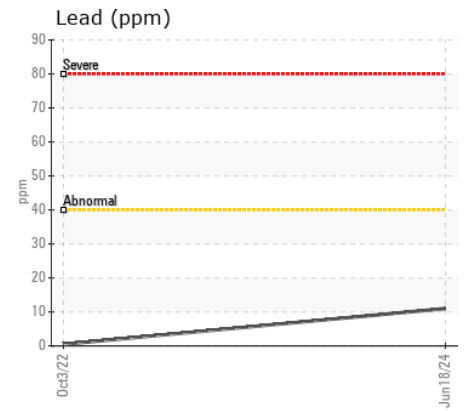
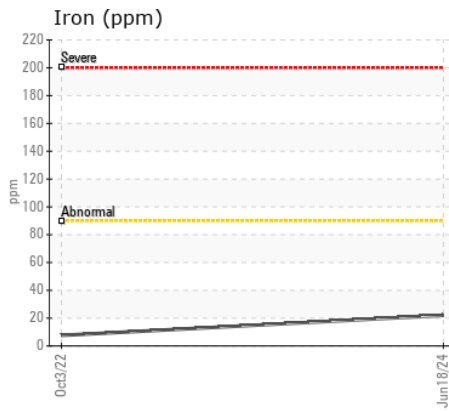
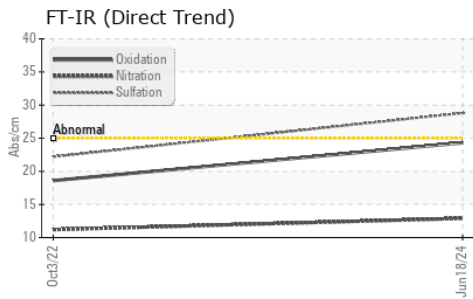
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>5</b>	4	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	---
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	ASTM D7844*	>6	<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.9</b>	11.2	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>28.8</b>	22.2	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---

**FLUID CONDITION**

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<b>9</b>	2	---
Boron	ppm	ASTM D5185(m)	50	<b>10</b>	10	---
Barium	ppm	ASTM D5185(m)	5	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>57</b>	51	---
Manganese	ppm	ASTM D5185(m)	0	<b>1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	560	<b>618</b>	517	---
Calcium	ppm	ASTM D5185(m)	1510	<b>1735</b>	1510	---
Phosphorus	ppm	ASTM D5185(m)	780	<b>786</b>	678	---
Zinc	ppm	ASTM D5185(m)	870	<b>1002</b>	849	---
Sulfur	ppm	ASTM D5185(m)	2040	<b>2015</b>	1946	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.3</b>	18.6	---
Acid Number (AN)	mg KOH/g	ASTM D974*	2.5	<b>3.67</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	10.2	<b>5.95</b>	6.19	---
Visc @ 40°C	cSt	ASTM D7279(m)	117.0	<b>118</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	<b>14.5</b>	14.6	---
Viscosity Index (VI)	Scale	ASTM D2270*	134	<b>124</b>	---	---



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 550 - Rocky View County**  
**Sample No.** : GFL0112450 **Received** : 25 Jun 2024 **220 Carmek Blvd**  
**Lab Number** : 02643951 **Tested** : 26 Jun 2024 **Rocky View County, AB**  
**Unique Number** : 5801490 **Diagnosed** : 26 Jun 2024 - Wes Davis **CA T1X 1X1**  
**Test Package** : MOB 2 ( Additional Tests: KV40, TAN Auto, TAN Man, VI, Visual ) **Contact: GFL Calgary**  
**calgarymaintenance@gflenv.com**

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: (403)369-6163**