



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



Machine Id  
**920035**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0113021</b>	GFL0065044	---
Sample Date		Client Info		<b>29 May 2024</b>	20 Dec 2022	---
Machine Age	hrs	Client Info		<b>21759</b>	2049	---
Oil Age	hrs	Client Info		<b>603</b>	2049	---
Filter Age	hrs	Client Info		<b>603</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Not Changed	---
Filter Changed		Client Info		<b>Changed</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>14</b>	30	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>5	<b>1</b>	<1	---
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	6	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	3	---
Copper	ppm	ASTM D5185m	>330	<b>1</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

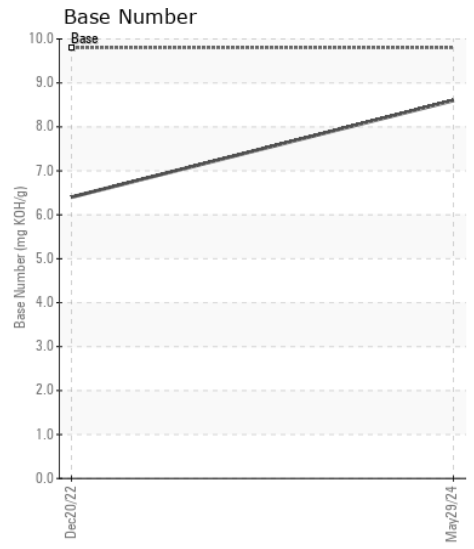
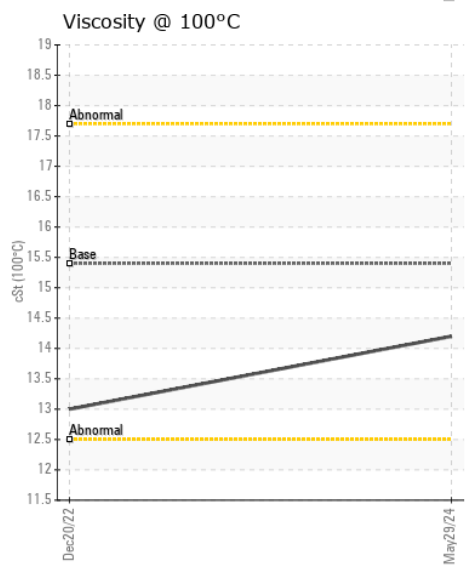
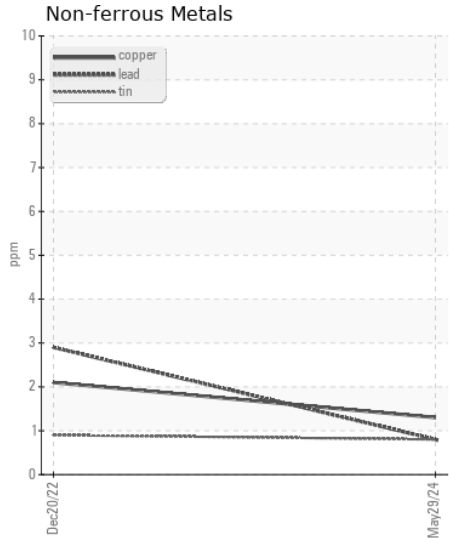
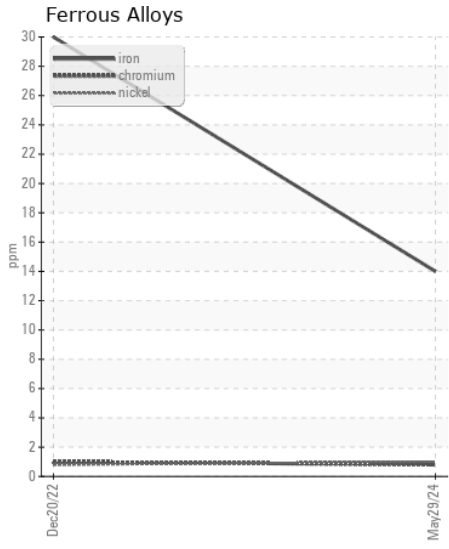
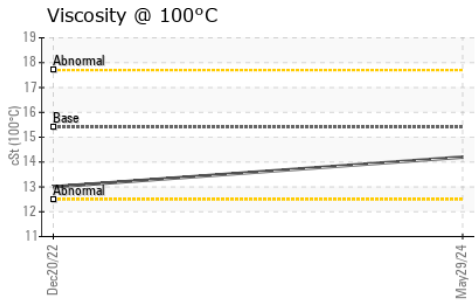
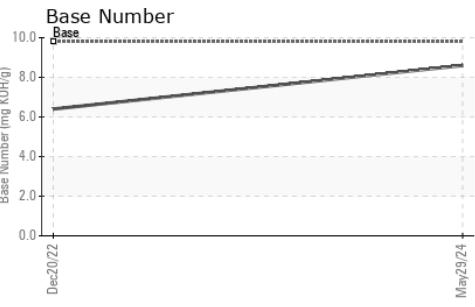
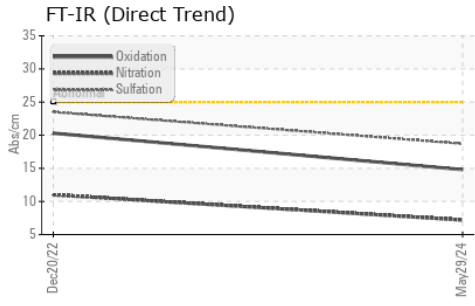
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	---
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	>4	<b>0.3</b>	1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.2</b>	11.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	23.5	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	6	---
Boron	ppm	ASTM D5185m	0	<b>6</b>	82	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m	60	<b>82</b>	62	---
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	1010	<b>1298</b>	931	---
Calcium	ppm	ASTM D5185m	1070	<b>1370</b>	1082	---
Phosphorus	ppm	ASTM D5185m	1150	<b>1401</b>	982	---
Zinc	ppm	ASTM D5185m	1270	<b>1666</b>	1209	---
Sulfur	ppm	ASTM D5185m	2060	<b>4358</b>	3338	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.8</b>	20.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.6</b>	6.4	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.2</b>	13.0	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0113021 **Received** : 03 Jun 2024  
**Lab Number** : 06197327 **Tested** : 04 Jun 2024  
**Unique Number** : 11059450 **Diagnosed** : 04 Jun 2024 - Sean Felton  
**Test Package** : FLEET

**GFL Environmental - 924 - Madison HC**  
 300 Raemisch Road  
 Waunakee, WI  
 US 53597  
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To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)