



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

Machine Id  
**813015**  
 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>GFL0121142</b>	GFL0121135	GFL0103117
Sample Date		Client Info		<b>28 May 2024</b>	10 May 2024	09 Feb 2024
Machine Age	hrs	Client Info		<b>3229</b>	3151	2646
Oil Age	hrs	Client Info		<b>600</b>	505	600
Filter Age	hrs	Client Info		<b>600</b>	505	600
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>18</b>	17	15
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	3	8
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	1
Copper	ppm	ASTM D5185m	>330	<b>1</b>	<1	4
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

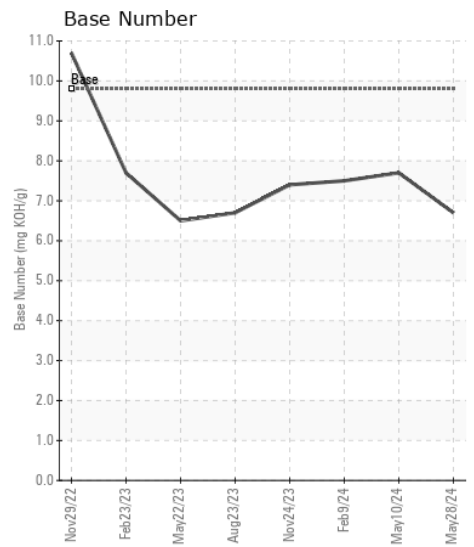
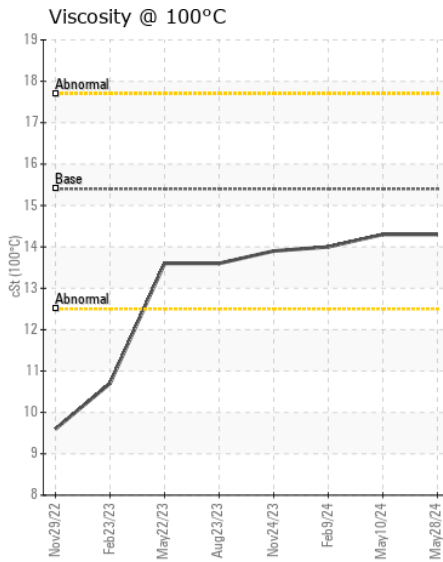
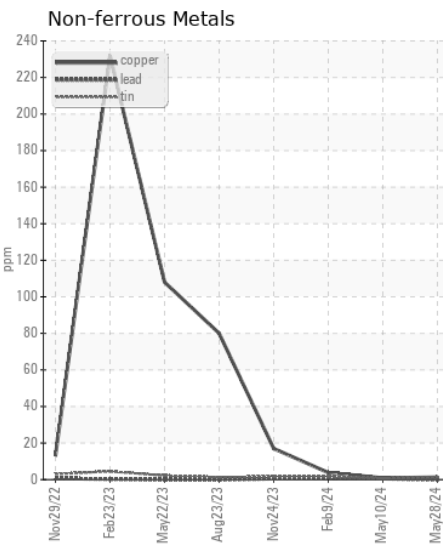
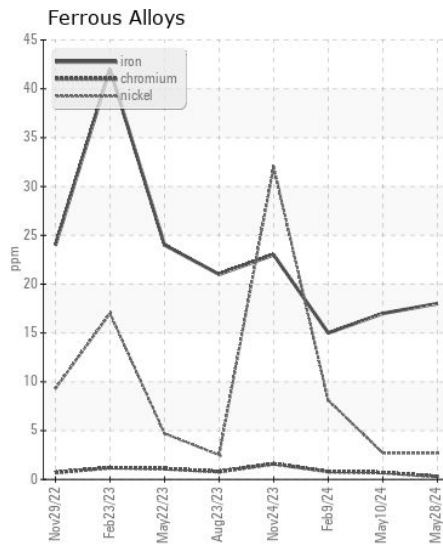
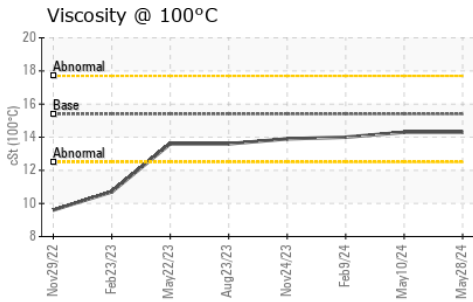
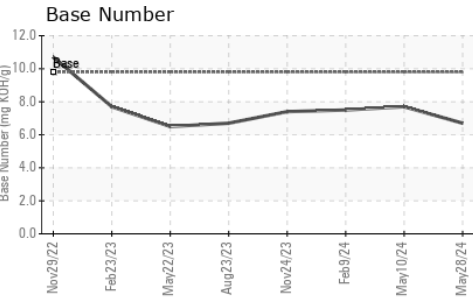
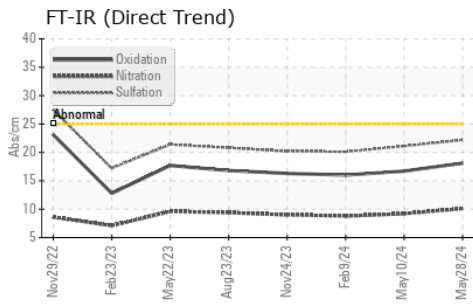
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	7	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>4	<b>0.7</b>	0.8	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.1</b>	9.2	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	21.1	20.1
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	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>	3	<1
Boron	ppm	ASTM D5185m	0	<b>9</b>	8	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	13
Molybdenum	ppm	ASTM D5185m	60	<b>64</b>	65	58
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1010	<b>994</b>	1056	892
Calcium	ppm	ASTM D5185m	1070	<b>1117</b>	1200	1017
Phosphorus	ppm	ASTM D5185m	1150	<b>1097</b>	1117	991
Zinc	ppm	ASTM D5185m	1270	<b>1307</b>	1367	1136
Sulfur	ppm	ASTM D5185m	2060	<b>3364</b>	3614	3221
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.1</b>	16.7	16.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.7</b>	7.7	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.3</b>	14.3	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0121142  
**Lab Number** : 06195276  
**Unique Number** : 11057399  
**Test Package** : FLEET

**Received** : 30 May 2024  
**Tested** : 31 May 2024  
**Diagnosed** : 31 May 2024 - Wes Davis

**GFL Environmental - 683 - Ruckersville Hauling**  
 261 INDUSTRIAL DR  
 Ruckersville, VA  
 US 22698

Contact: Jaf Finney  
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 T: (434)990-4972

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)

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