



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>GFL0121135</b>	GFL0103117	GFL0103098
Sample Date		Client Info		<b>10 May 2024</b>	09 Feb 2024	24 Nov 2023
Machine Age	hrs	Client Info		<b>3151</b>	2646	2186
Oil Age	hrs	Client Info		<b>505</b>	600	484
Filter Age	hrs	Client Info		<b>505</b>	600	484
Oil Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>17</b>	15	23
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>5	<b>3</b>	8	▲ 32
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	4	17
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	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**

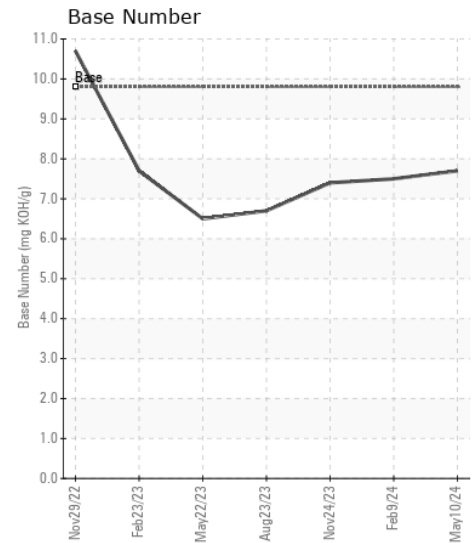
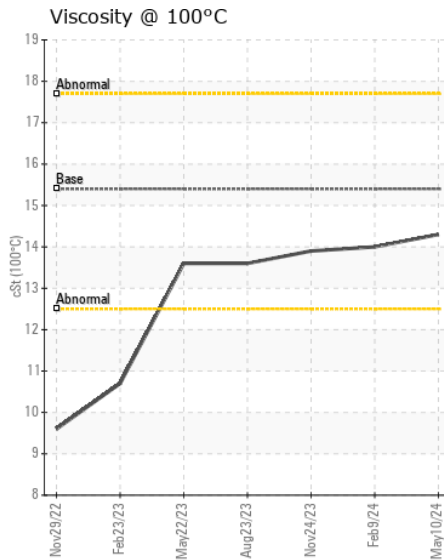
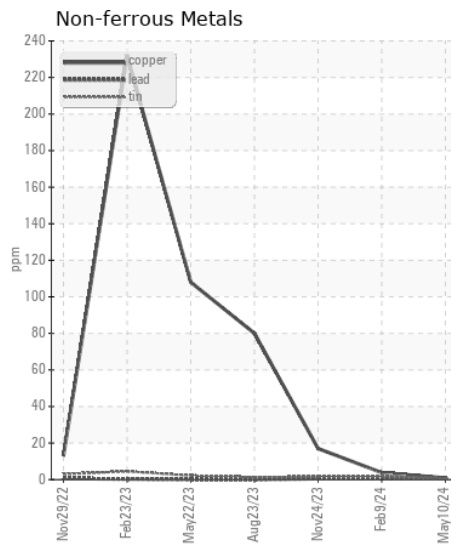
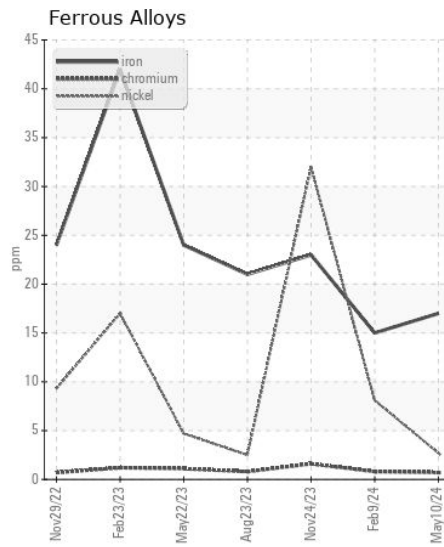
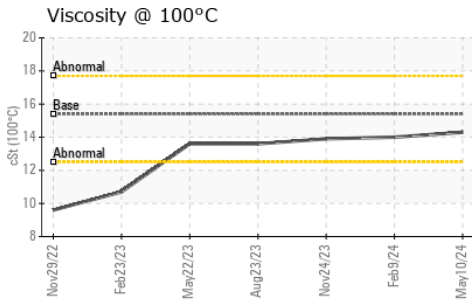
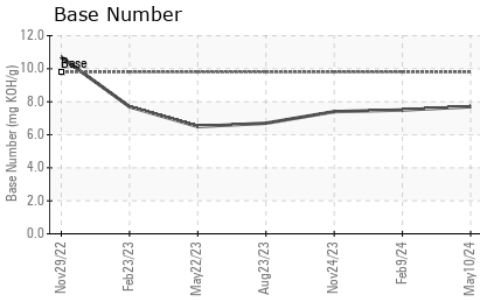
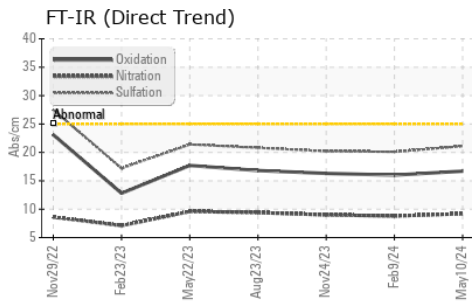
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	5	8
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	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>0.8</b>	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	8.8	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.1</b>	20.1	20.2
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>3</b>	<1	3
Boron	ppm	ASTM D5185m	0	<b>8</b>	<1	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	13	<1
Molybdenum	ppm	ASTM D5185m	60	<b>65</b>	58	61
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	1010	<b>1056</b>	892	954
Calcium	ppm	ASTM D5185m	1070	<b>1200</b>	1017	1070
Phosphorus	ppm	ASTM D5185m	1150	<b>1117</b>	991	941
Zinc	ppm	ASTM D5185m	1270	<b>1367</b>	1136	1205
Sulfur	ppm	ASTM D5185m	2060	<b>3614</b>	3221	3070
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.7</b>	16.0	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.7</b>	7.5	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.3</b>	14.0	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0121135  
**Lab Number** : 06176881  
**Unique Number** : 11022934  
**Test Package** : FLEET

**Received** : 13 May 2024  
**Tested** : 14 May 2024  
**Diagnosed** : 14 May 2024 - Wes Davis

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

Contact: Jaf Finney  
 jfinney@gflenv.com  
 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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