



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



Machine Id  
**1117M**  
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>GFL0101003</b>	GFL0101069	GFL0092776
Sample Date		Client Info		<b>17 May 2024</b>	12 Feb 2024	26 Oct 2023
Machine Age	hrs	Client Info		<b>11721</b>	0	11721
Oil Age	hrs	Client Info		<b>10764</b>	0	11721
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	SEVERE

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>8</b>	3	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>30	<b>3</b>	1	1
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>30	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

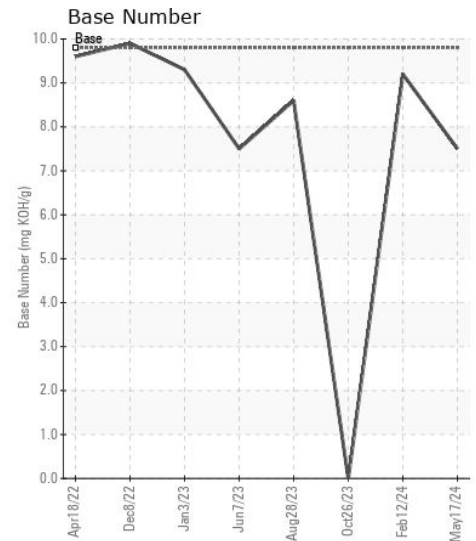
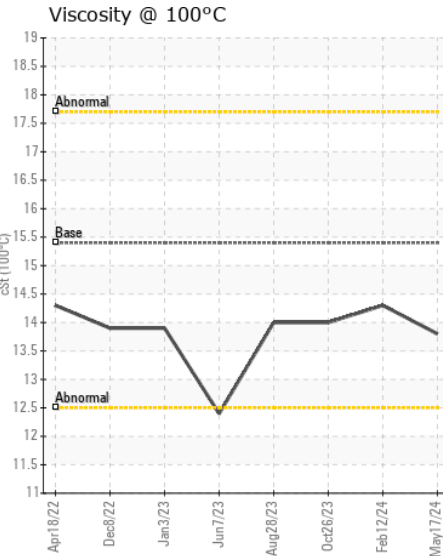
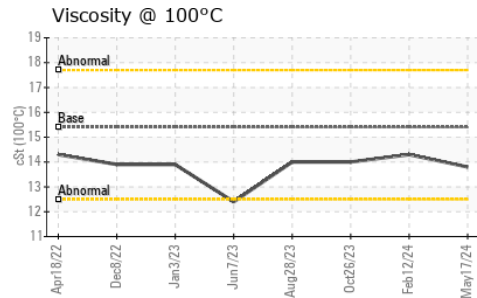
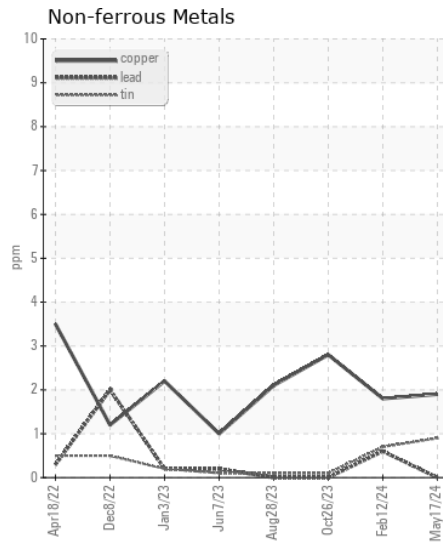
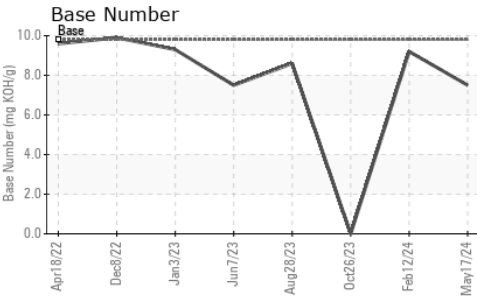
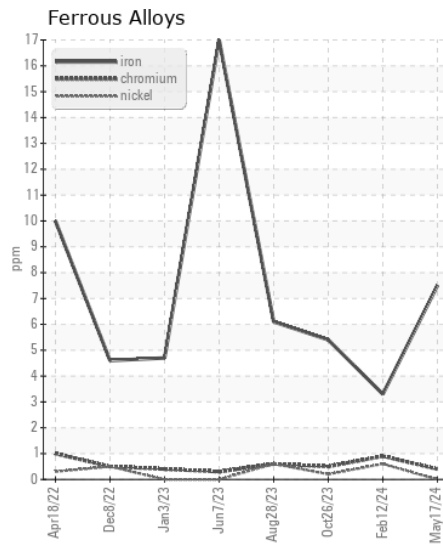
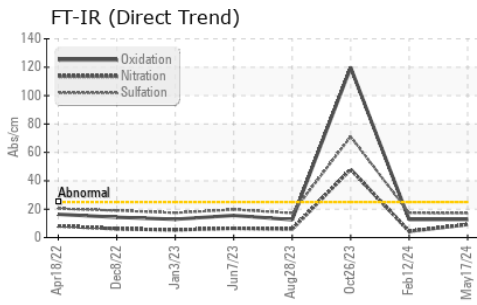
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	<b>7</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	2
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.1	▲ 8.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.2</b>	4.4	48.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>17.0</b>	17.3	71.1
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>2</b>	0	0
Boron	ppm	ASTM D5185m	0	<b>5</b>	4	3
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	4
Molybdenum	ppm	ASTM D5185m	60	<b>61</b>	59	75
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	1010	<b>937</b>	908	1060
Calcium	ppm	ASTM D5185m	1070	<b>1032</b>	1010	1250
Phosphorus	ppm	ASTM D5185m	1150	<b>997</b>	999	1107
Zinc	ppm	ASTM D5185m	1270	<b>1214</b>	1138	1372
Sulfur	ppm	ASTM D5185m	2060	<b>3338</b>	3536	3528
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.8</b>	12.7	119.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>7.5</b>	9.2	▲ 0.0
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	14.3	14.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0101003  
**Lab Number** : 06188932  
**Unique Number** : 11045684  
**Test Package** : FLEET

**Received** : 23 May 2024  
**Tested** : 24 May 2024  
**Diagnosed** : 24 May 2024 - Wes Davis

**GFL Environmental - 455 - Flint**  
 2051 W. Bristol Rd  
 Flint Township, MI  
 US 48507  
 Contact: MARK WOMBLE  
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 T: (586)825-9514  
 F:

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)