



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

Machine Id  
**411035**  
 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>GFL0103984</b>	GFL0093317	GFL0054359
Sample Date		Client Info		<b>07 Feb 2024</b>	27 Oct 2023	23 Feb 2023
Machine Age	hrs	Client Info		<b>6479</b>	5892	5071
Oil Age	hrs	Client Info		<b>6479</b>	5892	5071
Filter Age	hrs	Client Info		<b>0</b>	5892	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>26</b>	11	22
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>15</b>	1	8
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
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**

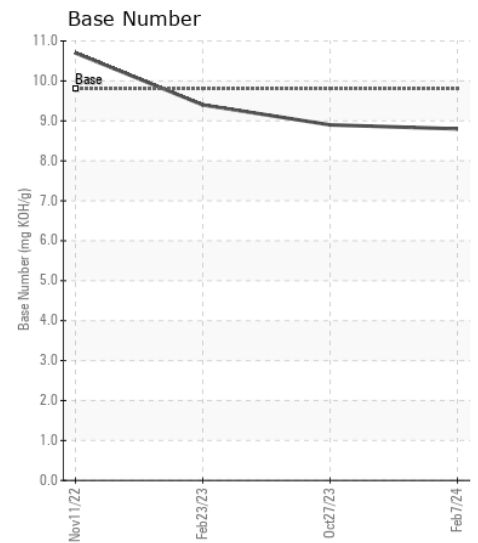
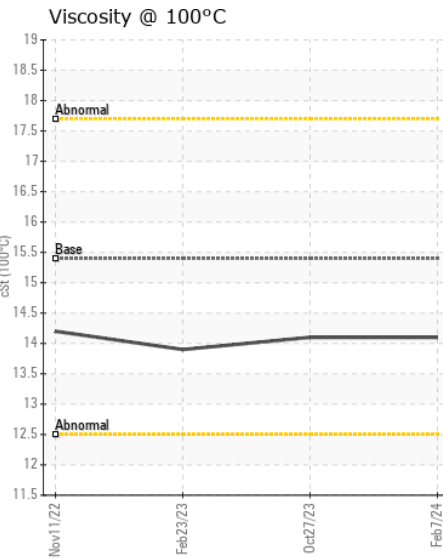
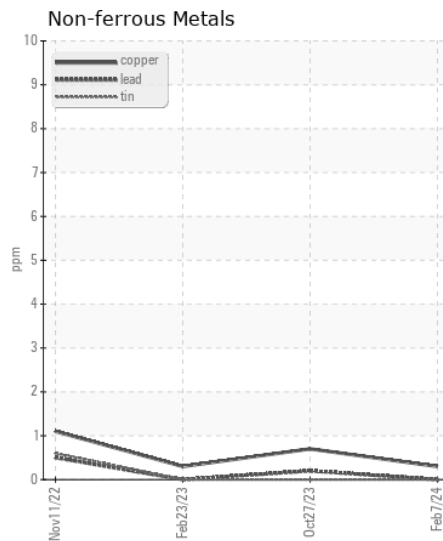
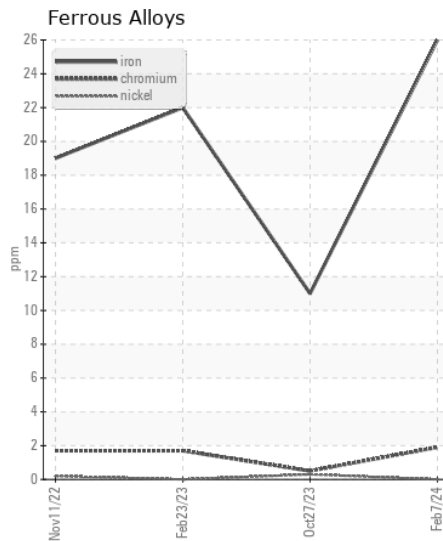
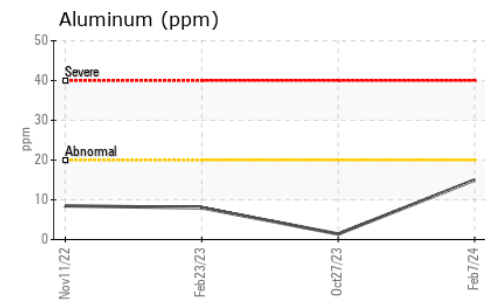
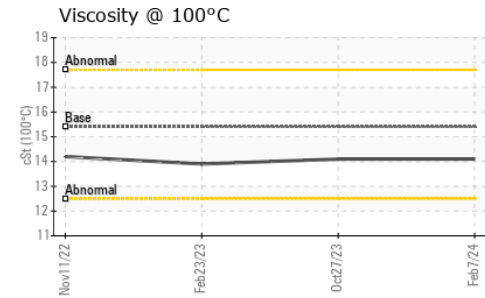
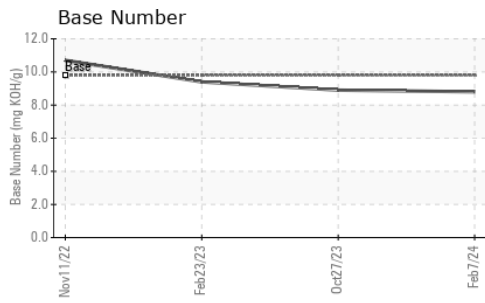
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	3
Potassium	ppm	ASTM D5185m	>20	<b>44</b>	4	17
Fuel		WC Method	>5	<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	>3	<b>0.8</b>	0.1	0.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.9</b>	5.1	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.4</b>	17.4	19.4
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	3
Boron	ppm	ASTM D5185m	0	<b>0</b>	2	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	5	0
Molybdenum	ppm	ASTM D5185m	60	<b>60</b>	56	59
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m	1010	<b>960</b>	836	942
Calcium	ppm	ASTM D5185m	1070	<b>1110</b>	980	1078
Phosphorus	ppm	ASTM D5185m	1150	<b>1028</b>	886	998
Zinc	ppm	ASTM D5185m	1270	<b>1308</b>	1106	1234
Sulfur	ppm	ASTM D5185m	2060	<b>3121</b>	3075	3615
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	13.3	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>8.8</b>	8.9	9.4
Visc @ 100°C	cSt	ASTM D445	15.4	<b>14.1</b>	14.1	13.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0103984  
**Lab Number** : 06085603  
**Unique Number** : 10873048  
**Test Package** : FLEET

**Received** : 12 Feb 2024  
**Tested** : 12 Feb 2024  
**Diagnosed** : 12 Feb 2024 - Wes Davis

**GFL Environmental - 865 - East Mount Hauling**  
 7213 East Mount Houston Road  
 Houston, TX  
 US 77050  
 Contact: Saul Castillo  
 saul.castillo@gflenv.com

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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F: