



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

Machine Id  
**828002**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SAE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0088355</b>	GFL0088358	GFL0056360
Sample Date		Client Info		<b>24 Apr 2024</b>	06 Nov 2023	04 Jan 2023
Machine Age	hrs	Client Info		<b>5722</b>	5147	87248
Oil Age	hrs	Client Info		<b>500</b>	600	0
Filter Age	hrs	Client Info		<b>500</b>	600	0
Oil Changed		Client Info		<b>Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>29</b>	21	35
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>8</b>	6	8
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

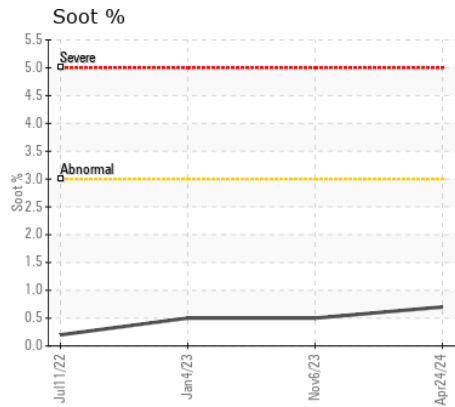
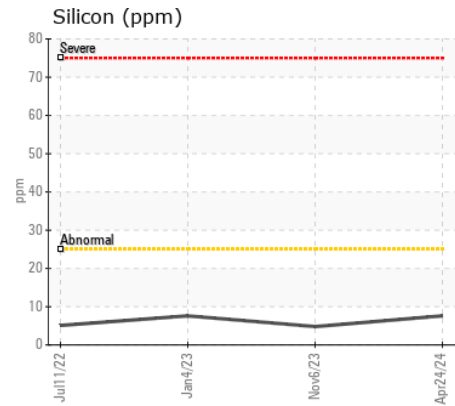
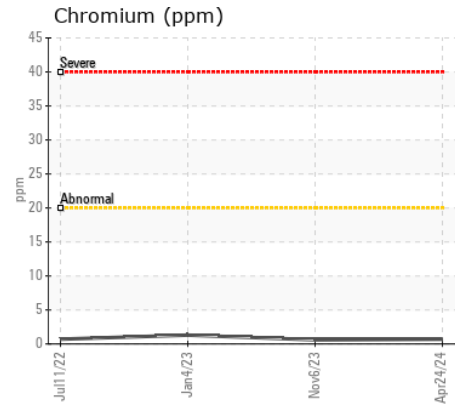
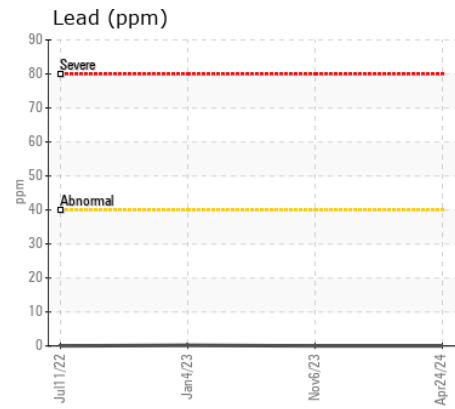
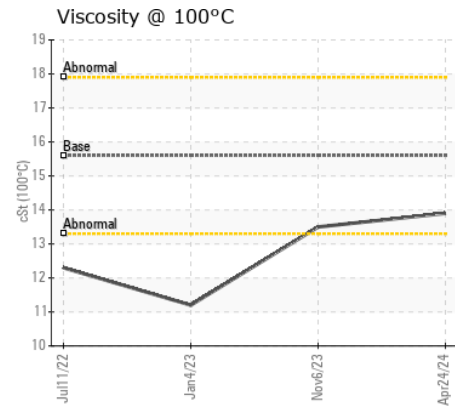
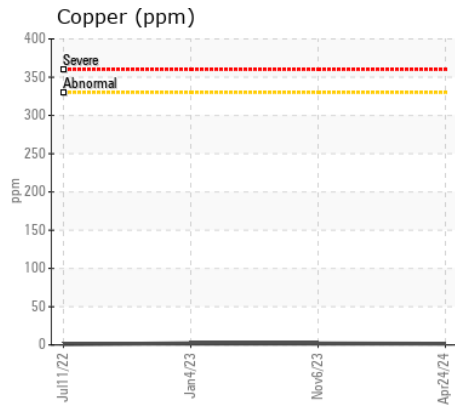
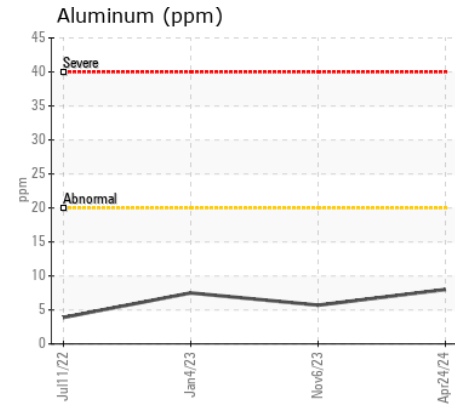
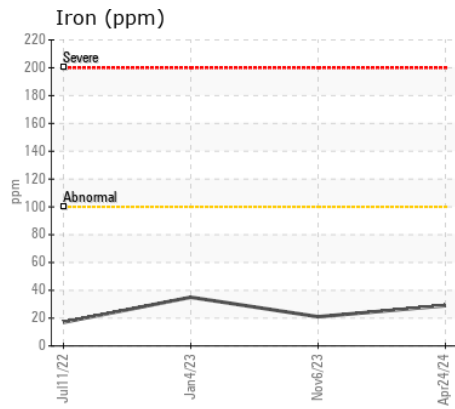
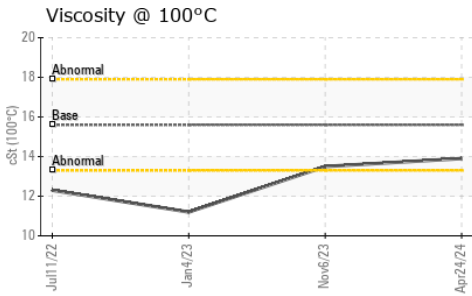
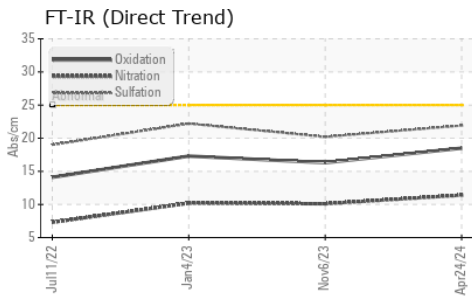
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>8</b>	5	8
Potassium	ppm	ASTM D5185(m)	>20	<b>9</b>	6	8
Fuel		WC Method	>2.0	<b>&lt;1.0</b>	<1.0	1.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.7</b>	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.4</b>	10.1	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.9</b>	20.2	22.2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	5	7
Boron	ppm	ASTM D5185(m)	1	<b>3</b>	11	18
Barium	ppm	ASTM D5185(m)	1	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>63</b>	63	65
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1002</b>	928	848
Calcium	ppm	ASTM D5185(m)	1070	<b>1129</b>	1083	1250
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1012</b>	940	961
Zinc	ppm	ASTM D5185(m)	1270	<b>1240</b>	1170	1104
Sulfur	ppm	ASTM D5185(m)	2060	<b>2457</b>	2459	2620
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.5</b>	16.3	17.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>13.9</b>	13.5	▲ 11.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0088355 **Received** : 25 Apr 2024  
**Lab Number** : 02631273 **Tested** : 25 Apr 2024  
**Unique Number** : 5772426 **Diagnosed** : 25 Apr 2024 - Wes Davis  
**Test Package** : MOB 1

**GFL Environmental - 508**  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.