



Machine Id  
**731046**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117134</b>	GFL0097767	GFL0097758
Sample Date		Client Info		<b>17 May 2024</b>	31 Oct 2023	03 Oct 2023
Machine Age	hrs	Client Info		<b>6474</b>	5352	5491
Oil Age	hrs	Client Info		<b>1200</b>	1200	1200
Filter Age	hrs	Client Info		<b>1200</b>	1200	1200
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<b>17</b>	15	11
Chromium	ppm	ASTM D5185(m)	>4	<b>2</b>	2	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>9	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>5</b>	9	3
Copper	ppm	ASTM D5185(m)	>35	<b>2</b>	2	1
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

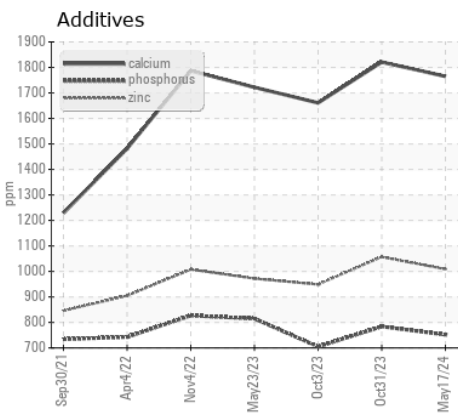
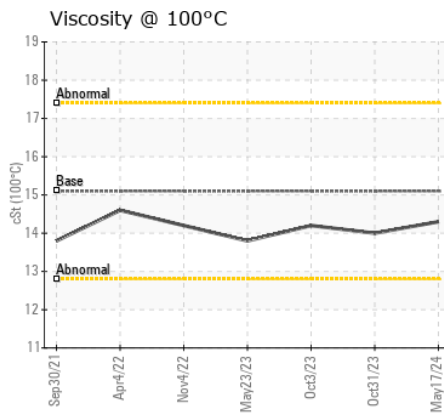
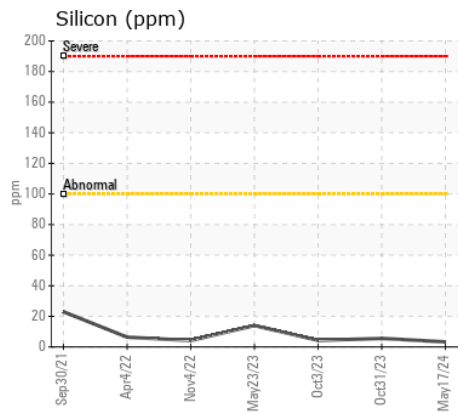
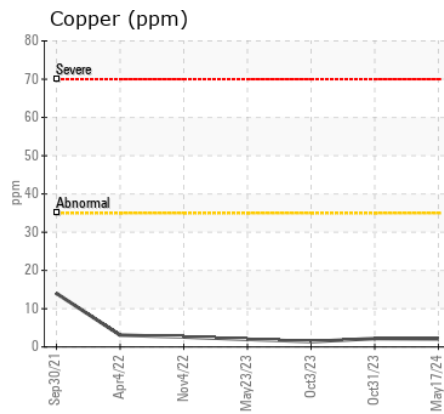
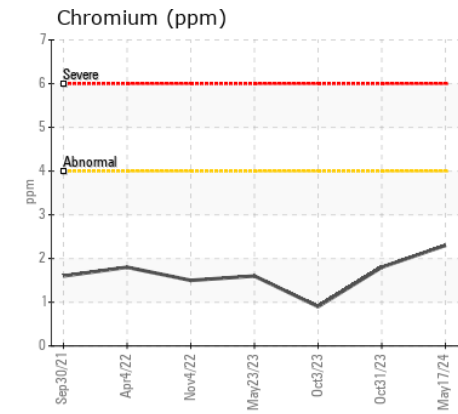
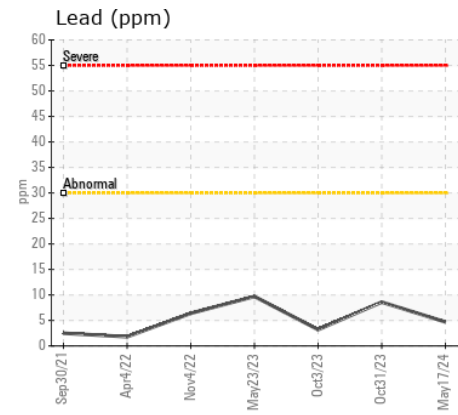
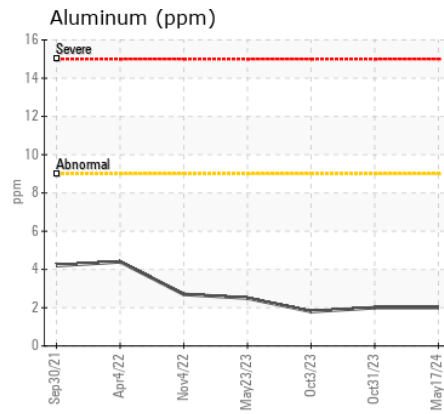
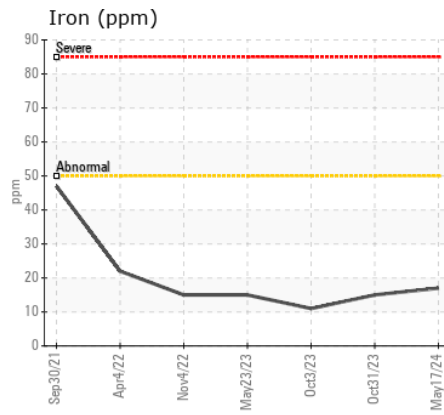
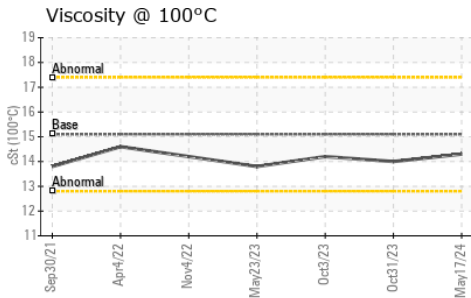
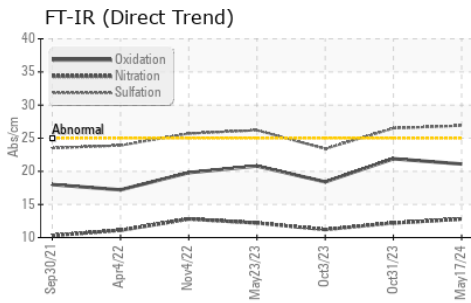
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	<b>3</b>	6	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.8</b>	12.2	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>26.9</b>	26.5	23.4
Emulsified Water	scalar	Visual*	>0.1	<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>9</b>	10	8
Boron	ppm	ASTM D5185(m)	50	<b>8</b>	6	9
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	66	65
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	<b>652</b>	679	602
Calcium	ppm	ASTM D5185(m)	1510	<b>1765</b>	1821	1661
Phosphorus	ppm	ASTM D5185(m)	780	<b>752</b>	784	705
Zinc	ppm	ASTM D5185(m)	870	<b>1009</b>	1057	949
Sulfur	ppm	ASTM D5185(m)	2040	<b>2083</b>	2230	2086
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>21.1</b>	21.9	18.4
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	<b>14.3</b>	14.0	14.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0117134  
**Lab Number** : 02637395  
**Unique Number** : 5786557  
**Test Package** : MOB 1  
**Received** : 24 May 2024  
**Tested** : 24 May 2024  
**Diagnosed** : 24 May 2024 - Wes Davis

**GFL Environmental - 209 - Hamilton**  
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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.