



Machine Id  
**9172**  
Component  
**Natural Gas Engine**  
Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0117106</b>	GFL0085905	GFL0064334
Sample Date		Client Info		<b>24 May 2024</b>	28 Sep 2023	22 Mar 2023
Machine Age	kms	Client Info		<b>296189</b>	275225	1584
Oil Age	kms	Client Info		<b>0</b>	2400	600
Filter Age	kms	Client Info		<b>0</b>	2400	600
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>28</b>	17	23
Chromium	ppm	ASTM D5185(m)	>4	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	<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)	>9	<b>4</b>	2	5
Lead	ppm	ASTM D5185(m)	>30	<b>4</b>	2	1
Copper	ppm	ASTM D5185(m)	>35	<b>5</b>	18	6
Tin	ppm	ASTM D5185(m)	>4	<b>1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

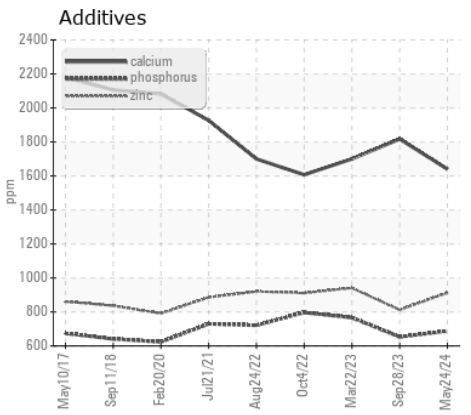
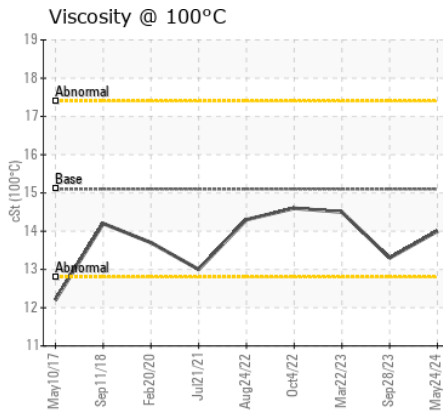
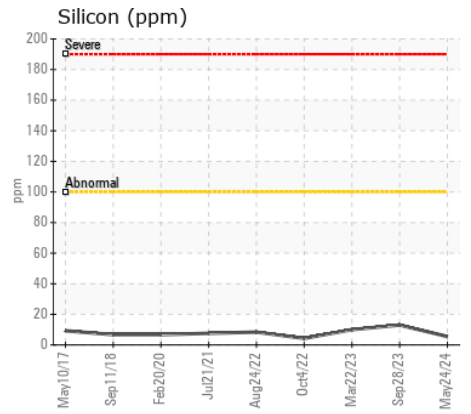
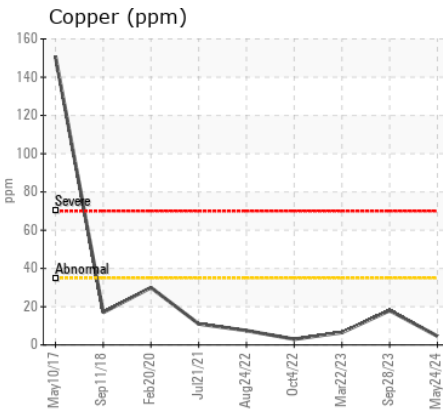
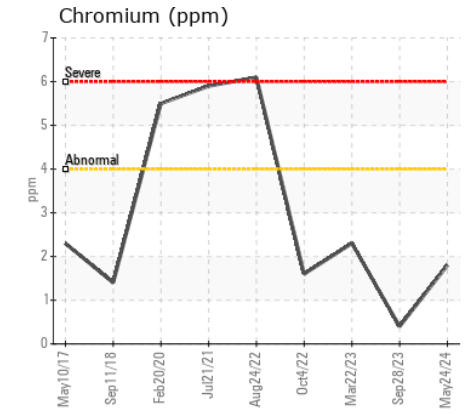
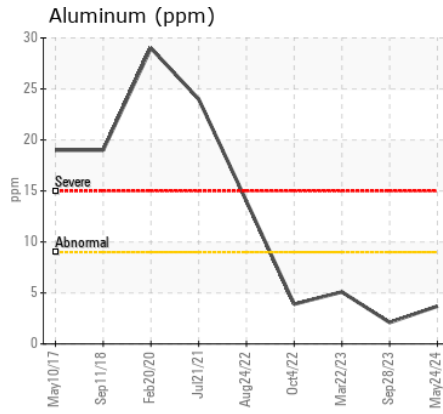
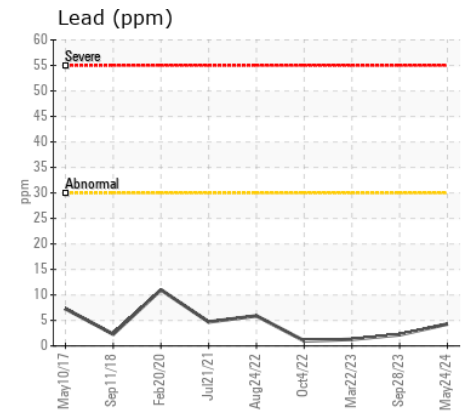
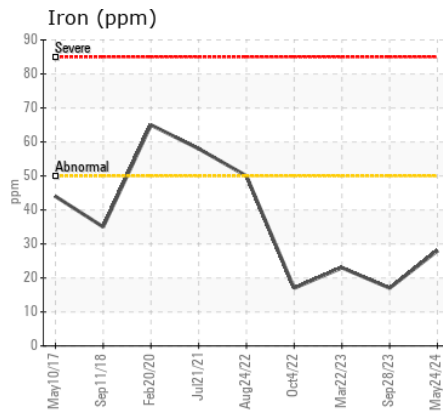
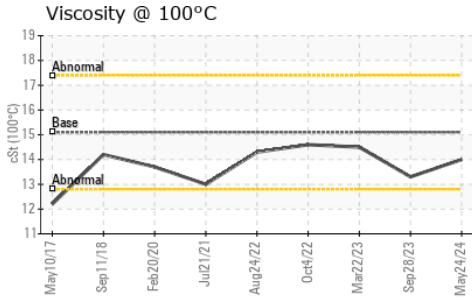
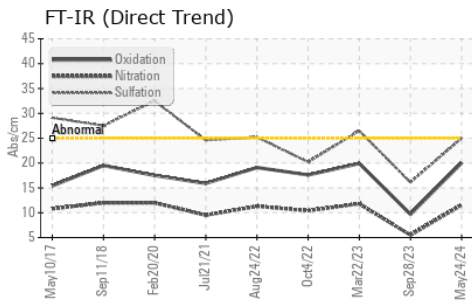
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	<b>6</b>	13	10
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
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>11.6</b>	5.5	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.0</b>	16.1	26.5
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
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>10</b>	3	8
Boron	ppm	ASTM D5185(m)	50	<b>5</b>	29	10
Barium	ppm	ASTM D5185(m)	5	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>62</b>	108	54
Manganese	ppm	ASTM D5185(m)	0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	560	<b>526</b>	121	575
Calcium	ppm	ASTM D5185(m)	1510	<b>1640</b>	1817	1700
Phosphorus	ppm	ASTM D5185(m)	780	<b>688</b>	653	767
Zinc	ppm	ASTM D5185(m)	870	<b>913</b>	812	941
Sulfur	ppm	ASTM D5185(m)	2040	<b>1936</b>	2169	2042
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.0</b>	9.7	19.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	<b>14.0</b>	13.3	14.5



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0117106  
**Lab Number** : 02643137  
**Unique Number** : 5800676  
**Test Package** : MOB 1 ( Additional Tests: Visual )

**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.