



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

Area

**(YA163861)**

Machine Id

**931017**

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>GFL0123411</b>	GFL0082499	GFL0050726
Sample Date		Client Info		<b>18 Jun 2024</b>	28 Aug 2023	28 Mar 2023
Machine Age	hrs	Client Info		<b>6474</b>	6474	5234
Oil Age	hrs	Client Info		<b>6474</b>	1240	1669
Filter Age	hrs	Client Info		<b>6474</b>	1240	1669
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>14</b>	18	29
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	2
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	1	2
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>2</b>	2	4
Lead	ppm	ASTM D5185m	>30	<b>5</b>	6	17
Copper	ppm	ASTM D5185m	>35	<b>2</b>	1	3
Tin	ppm	ASTM D5185m	>4	<b>0</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

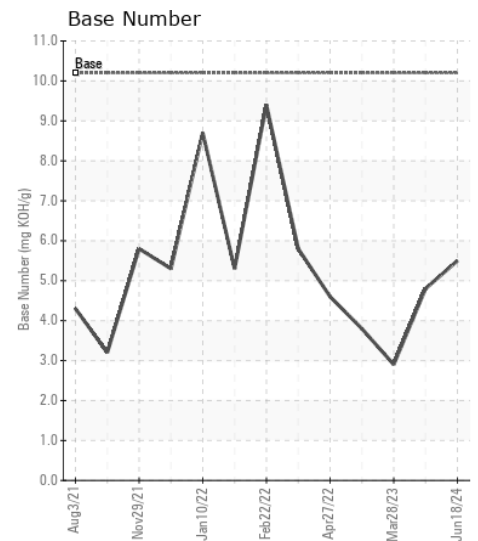
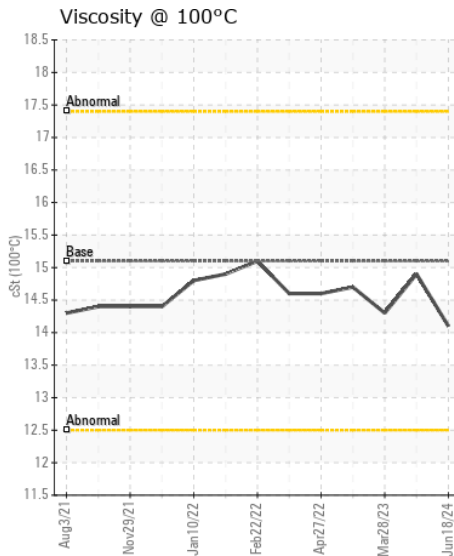
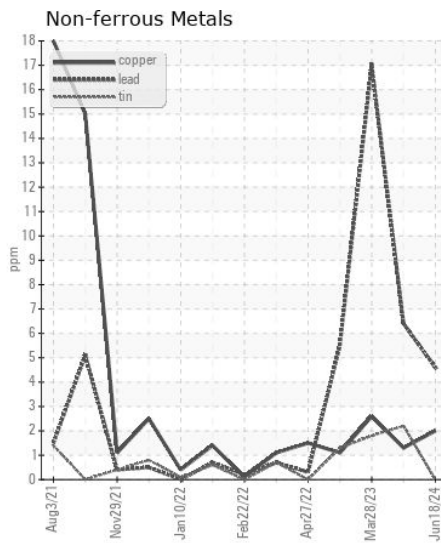
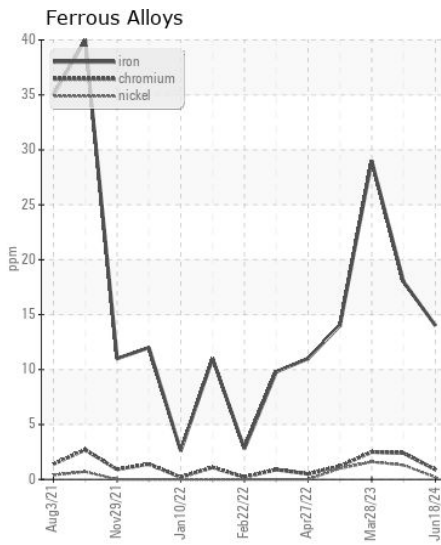
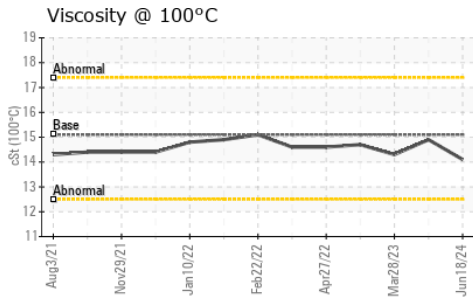
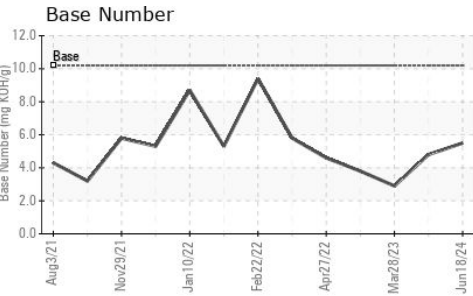
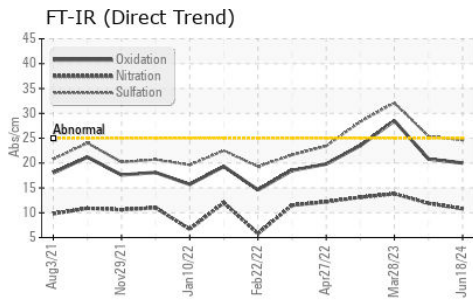
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>5</b>	6	6
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	3	3
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.8</b>	11.9	13.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.6</b>	25.4	32.1
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	>0.1	<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>14</b>	9	15
Boron	ppm	ASTM D5185m	50	<b>17</b>	11	6
Barium	ppm	ASTM D5185m	5	<b>&lt;1</b>	44	<1
Molybdenum	ppm	ASTM D5185m	50	<b>58</b>	62	73
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	2	1
Magnesium	ppm	ASTM D5185m	560	<b>658</b>	636	682
Calcium	ppm	ASTM D5185m	1510	<b>1930</b>	1750	2067
Phosphorus	ppm	ASTM D5185m	780	<b>949</b>	839	944
Zinc	ppm	ASTM D5185m	870	<b>1147</b>	1084	1186
Sulfur	ppm	ASTM D5185m	2040	<b>3034</b>	2724	2812
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.0</b>	20.8	28.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>5.5</b>	4.8	2.9
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.1</b>	14.9	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0123411  
**Lab Number** : 06215559  
**Unique Number** : 11088423  
**Test Package** : FLEET

**Received** : 20 Jun 2024  
**Tested** : 21 Jun 2024  
**Diagnosed** : 21 Jun 2024 - Wes Davis

**GFL Environmental - 007 - Brunswick**  
 2809 Galloway Road  
 Bolivia, NC  
 US 28422  
 Contact: DONALD CRAVEN  
 dcraven@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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