



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

Area

**(YA115865)**

Machine Id

**10421C**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON GEO LD 15W40 (30 QTS)**

**RECOMMENDATION**

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0082424</b>	GFL0123413	GFL0050748
Sample Date		Client Info		<b>24 Jun 2024</b>	18 Jun 2024	25 Jan 2023
Machine Age	hrs	Client Info		<b>0</b>	99414	16435
Oil Age	hrs	Client Info		<b>0</b>	99414	1606
Filter Age	hrs	Client Info		<b>0</b>	99414	1606
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>26</b>	7	13
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	1	2
Lead	ppm	ASTM D5185m	>30	<b>21</b>	3	2
Copper	ppm	ASTM D5185m	>35	<b>4</b>	2	1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

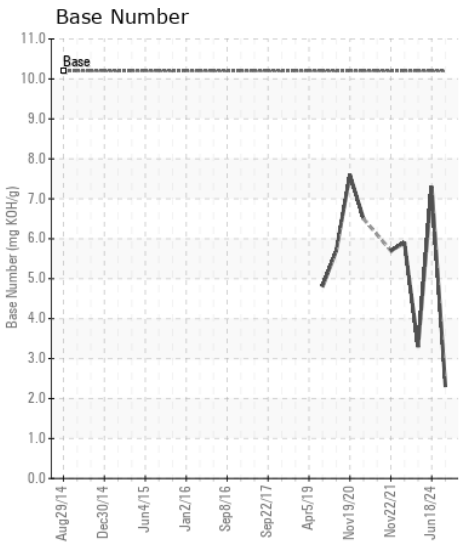
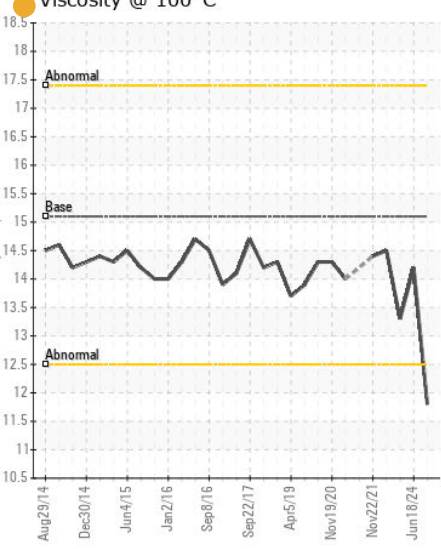
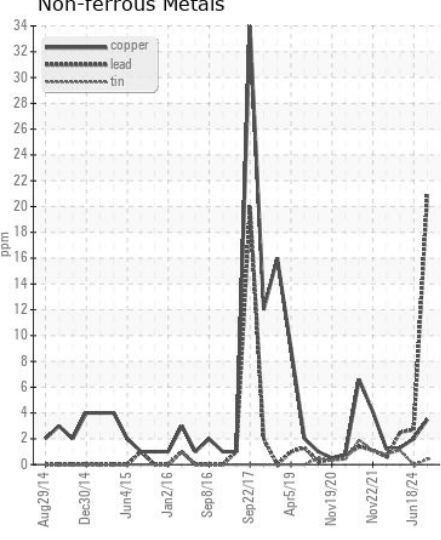
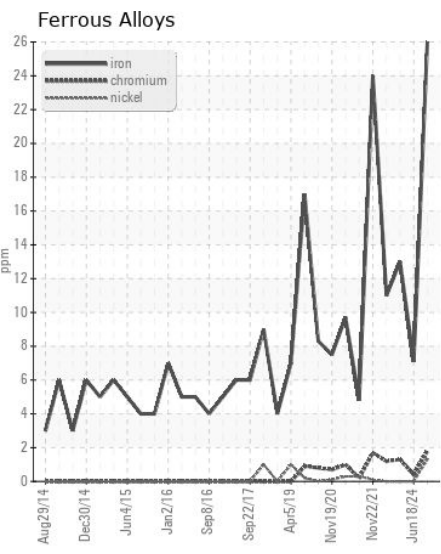
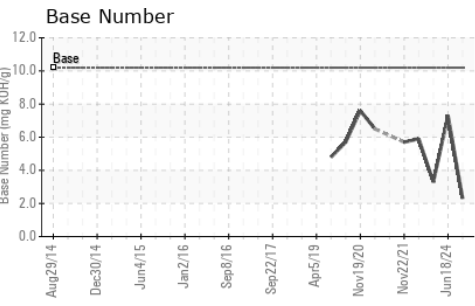
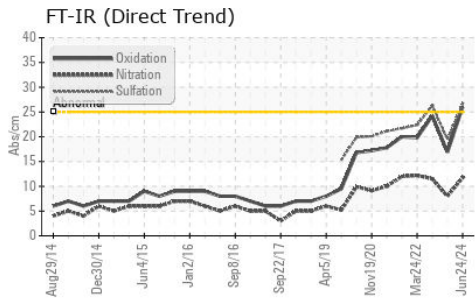
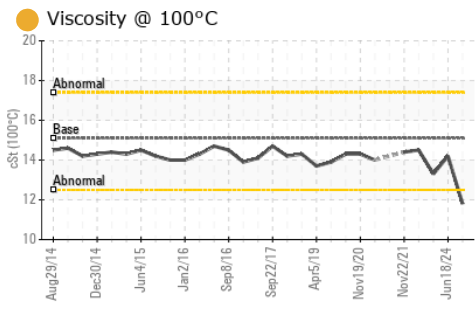
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	<b>10</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	2	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.7</b>	8.0	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.6</b>	19.5	26.3
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		<b>11</b>	10	11
Boron	ppm	ASTM D5185m	50	<b>14</b>	31	12
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>48</b>	49	50
Manganese	ppm	ASTM D5185m	0	<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>540</b>	581	485
Calcium	ppm	ASTM D5185m	1510	<b>1521</b>	1667	1530
Phosphorus	ppm	ASTM D5185m	780	<b>770</b>	853	627
Zinc	ppm	ASTM D5185m	870	<b>890</b>	1012	832
Sulfur	ppm	ASTM D5185m	2040	<b>2738</b>	3020	2559
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>26.0</b>	16.9	24.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>2.3</b>	7.3	3.3
Visc @ 100°C	cSt	ASTM D445	15.1	<b>11.8</b>	14.2	13.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0082424  
**Lab Number** : 06219430  
**Unique Number** : 11097627  
**Test Package** : FLEET  
**Received** : 25 Jun 2024  
**Tested** : 28 Jun 2024  
**Diagnosed** : 28 Jun 2024 - Jonathan Hester

**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) F: (910)253-4179