



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

Machine Id  
**945012**  
 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>GFL0106909</b>	GFL0092171	GFL0084658
Sample Date		Client Info		<b>11 Apr 2024</b>	01 Feb 2024	06 Nov 2023
Machine Age	hrs	Client Info		<b>56952</b>	56406	0
Oil Age	hrs	Client Info		<b>600</b>	35391	0
Filter Age	hrs	Client Info		<b>600</b>	35391	0
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**

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	<b>8</b>	8	13
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>&lt;1</b>	2	0
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>35	<b>0</b>	2	0
Tin	ppm	ASTM D5185m	>4	<b>1</b>	1	0
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.

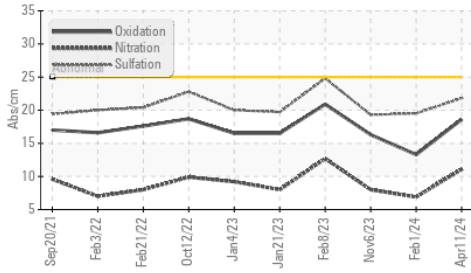
Silicon	ppm	ASTM D5185m	>+100	<b>5</b>	7	14
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	3	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	1.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.1</b>	6.9	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.8</b>	19.5	19.3
Silt	scalar	*Visual	NONE	<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**

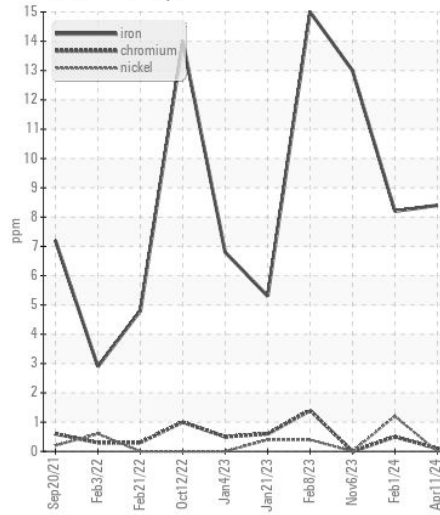
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>6</b>	7	6
Boron	ppm	ASTM D5185m	50	<b>9</b>	6	26
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>51</b>	51	52
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	0
Magnesium	ppm	ASTM D5185m	560	<b>522</b>	519	692
Calcium	ppm	ASTM D5185m	1510	<b>1589</b>	1481	1663
Phosphorus	ppm	ASTM D5185m	780	<b>663</b>	650	888
Zinc	ppm	ASTM D5185m	870	<b>897</b>	906	1092
Sulfur	ppm	ASTM D5185m	2040	<b>2521</b>	2315	2702
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.6</b>	13.3	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>4.5</b>	8.5	7.9
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.6</b>	14.6	14.7

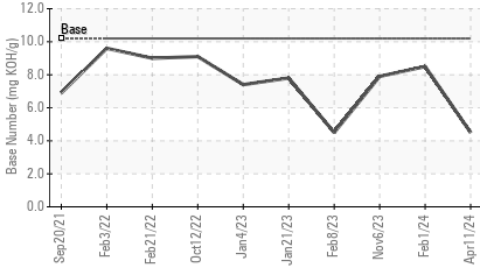
**FT-IR (Direct Trend)**



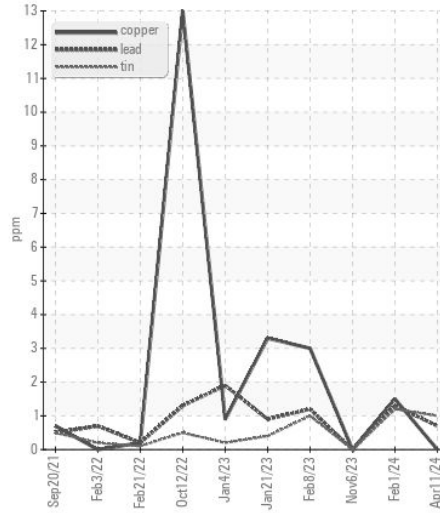
**Ferrous Alloys**



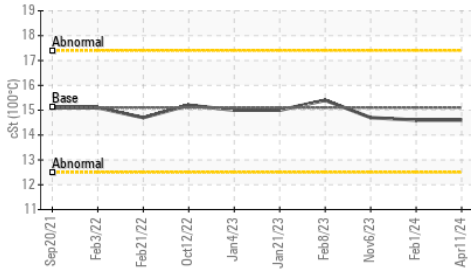
**Base Number**



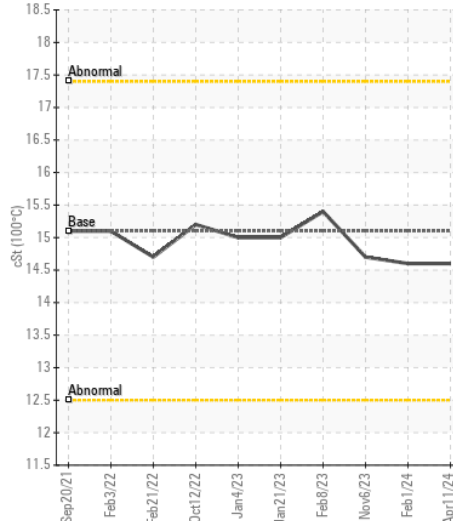
**Non-ferrous Metals**



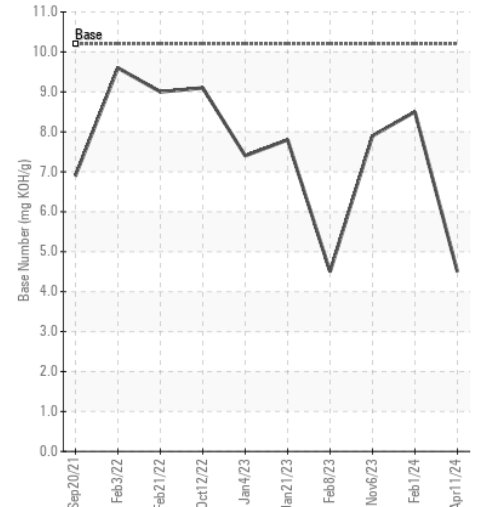
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0106909  
**Lab Number** : 06151498  
**Unique Number** : 10981576  
**Test Package** : FLEET

**Received** : 17 Apr 2024  
**Tested** : 18 Apr 2024  
**Diagnosed** : 18 Apr 2024 - Wes Davis

**GFL Environmental - 856 - Houston South**  
 8515 Highway 6 South  
 Houston, TX  
 US 77083  
 Contact: Jose Gonzalez  
 jgonzalez2@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)

T:  
F: