



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

Area

**(P8253B)**

Machine Id

**849001- 101296**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON GEO LD 15W40 (7 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120944</b>	GFL0114571	GFL0081088
Sample Date		Client Info		<b>05 Jul 2024</b>	01 May 2024	20 Feb 2024
Machine Age	hrs	Client Info		<b>13334</b>	12910	12650
Oil Age	hrs	Client Info		<b>1200</b>	300	1200
Filter Age	hrs	Client Info		<b>1200</b>	300	1200
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>6</b>	7	9
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
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	2
Lead	ppm	ASTM D5185m	>30	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m	>4	<b>0</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.

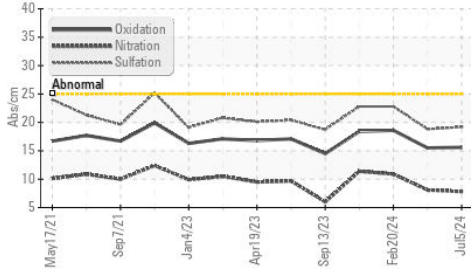
Silicon	ppm	ASTM D5185m	>+100	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	<1	5
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.8</b>	8.1	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.2</b>	18.8	22.8
Silt	scalar	*Visual	NONE	<b>NONE</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**

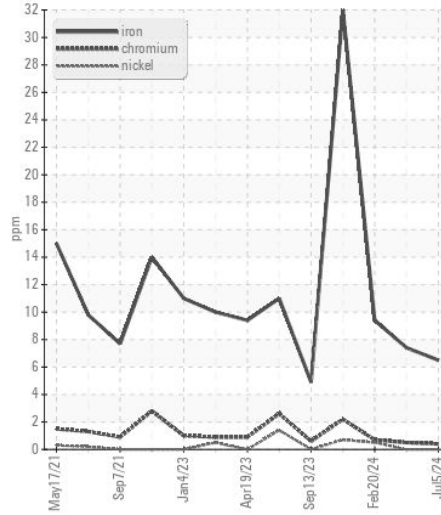
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>5</b>	6	6
Boron	ppm	ASTM D5185m	50	<b>19</b>	3	12
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>50</b>	53	53
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	560	<b>584</b>	535	546
Calcium	ppm	ASTM D5185m	1510	<b>1424</b>	1681	1601
Phosphorus	ppm	ASTM D5185m	780	<b>931</b>	819	755
Zinc	ppm	ASTM D5185m	870	<b>1011</b>	958	999
Sulfur	ppm	ASTM D5185m	2040	<b>2587</b>	2954	2360
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.6</b>	15.5	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>7.5</b>	6.5	5.2
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.6</b>	14.3	15.0

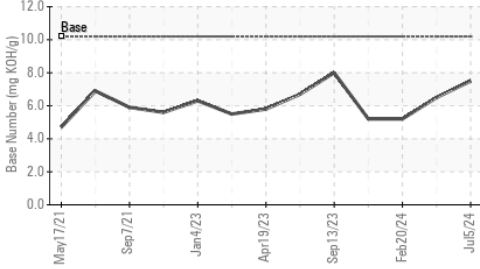
**FT-IR (Direct Trend)**



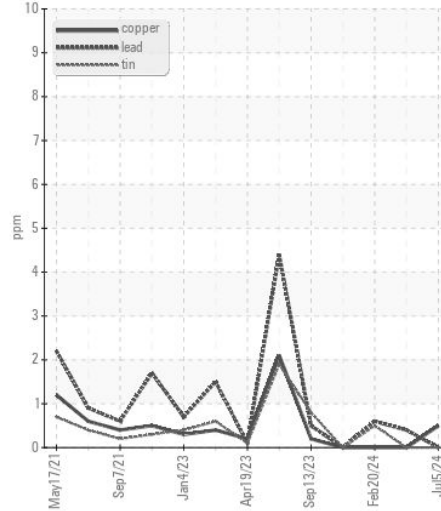
**Ferrous Alloys**



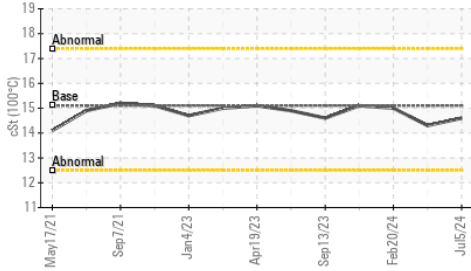
**Base Number**



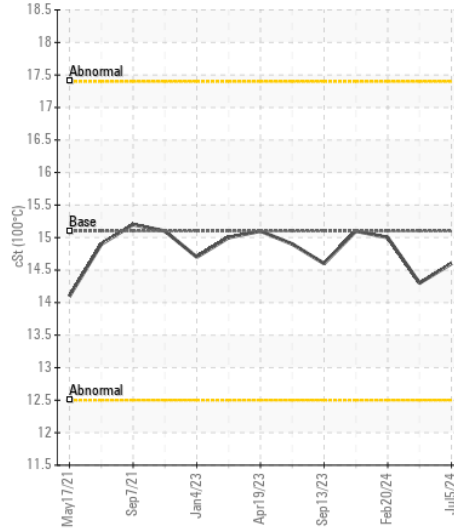
**Non-ferrous Metals**



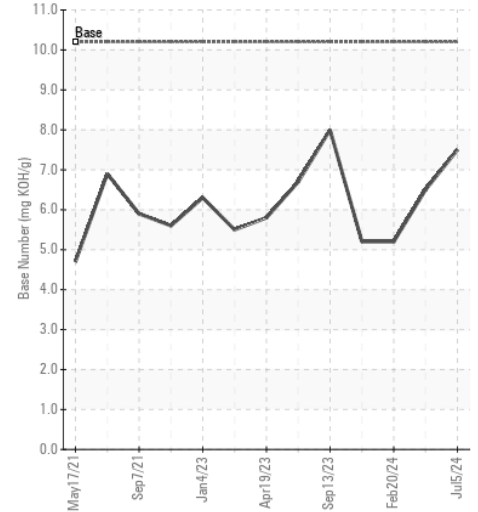
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120944  
**Lab Number** : 06229969  
**Unique Number** : 11113462  
**Test Package** : FLEET

**Received** : 08 Jul 2024  
**Tested** : 09 Jul 2024  
**Diagnosed** : 09 Jul 2024 - Wes Davis

**GFL Environmental - 884 - Lake County - Tavares**  
 321 Southridge Industrial Way  
 Tavares, FL  
 US 32778  
 Contact: JEFF COOPERSMITH

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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F: