



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

Machine Id  
**748000-361684**  
 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>GFL0114568</b>	GFL0081037	GFL0081124
Sample Date		Client Info		<b>24 Apr 2024</b>	06 Dec 2023	13 Sep 2023
Machine Age	hrs	Client Info		<b>15735</b>	14788	14275
Oil Age	hrs	Client Info		<b>947</b>	1513	1200
Filter Age	hrs	Client Info		<b>947</b>	1513	1200
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>12</b>	8	15
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>1</b>	1	2
Lead	ppm	ASTM D5185m	>30	<b>2</b>	<1	5
Copper	ppm	ASTM D5185m	>35	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
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.

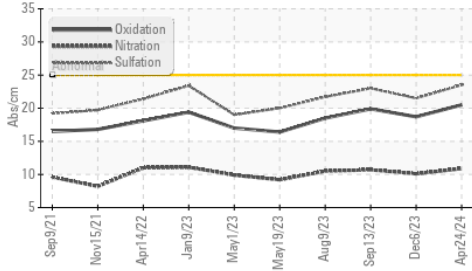
Silicon	ppm	ASTM D5185m	>+100	<b>6</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	0	4
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.9</b>	10.1	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.5</b>	21.5	23.0
Silt	scalar	*Visual	NONE	<b>NONE</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**

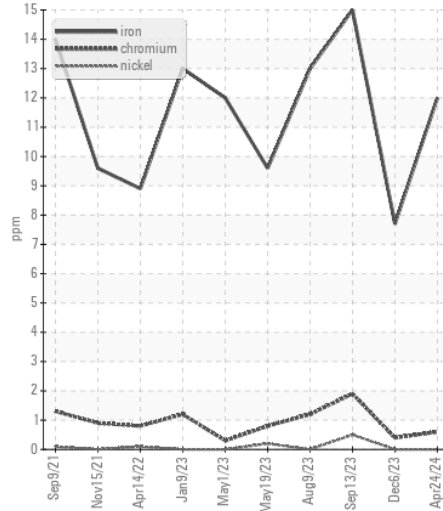
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>16</b>	5	8
Boron	ppm	ASTM D5185m	50	<b>8</b>	12	8
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>56</b>	50	57
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	560	<b>557</b>	544	573
Calcium	ppm	ASTM D5185m	1510	<b>1695</b>	1215	1835
Phosphorus	ppm	ASTM D5185m	780	<b>770</b>	625	767
Zinc	ppm	ASTM D5185m	870	<b>998</b>	780	1027
Sulfur	ppm	ASTM D5185m	2040	<b>2571</b>	2026	2802
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.5</b>	18.7	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.5</b>	5.0	3.8
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.7</b>	15.2	15.1

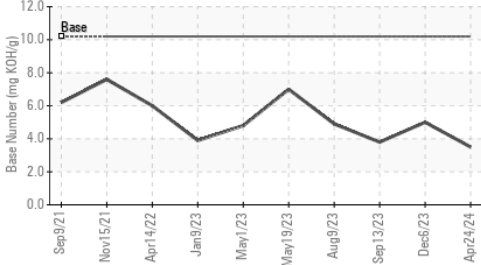
**FT-IR (Direct Trend)**



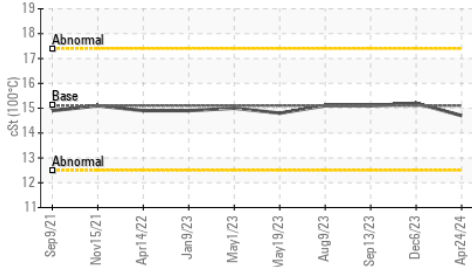
**Ferrous Alloys**



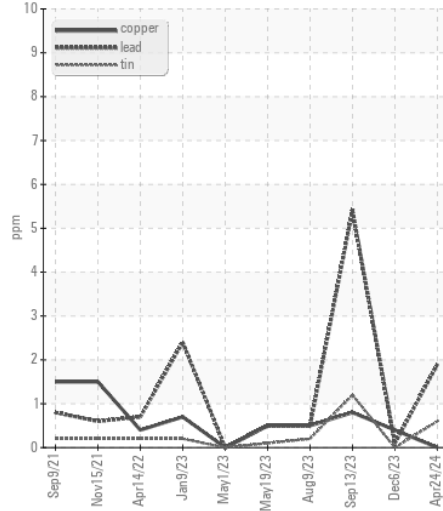
**Base Number**



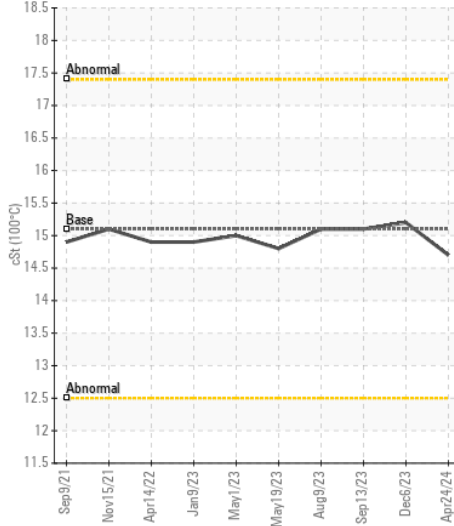
**Viscosity @ 100°C**



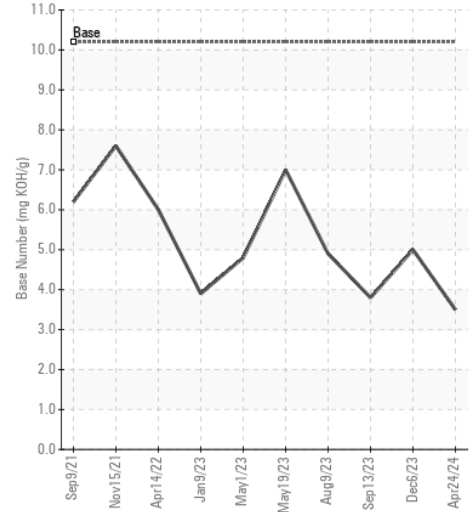
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0114568  
**Lab Number** : 06160149  
**Unique Number** : 10995572  
**Test Package** : FLEET

**Received** : 25 Apr 2024  
**Tested** : 26 Apr 2024  
**Diagnosed** : 26 Apr 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)

T:  
F: