



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



Area  
**(42KM5B)**  
Machine Id  
**834053**  
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>GFL0118813</b>	GFL0114164	GFL0114170
Sample Date		Client Info		<b>18 Apr 2024</b>	28 Mar 2024	25 Mar 2024
Machine Age	hrs	Client Info		<b>1339</b>	1194	1163
Oil Age	hrs	Client Info		<b>145</b>	1194	1037
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>8</b>	30	25
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	4	5
Lead	ppm	ASTM D5185m	>30	<b>1</b>	2	2
Copper	ppm	ASTM D5185m	>35	<b>2</b>	6	7
Tin	ppm	ASTM D5185m	>4	<b>1</b>	1	2
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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.

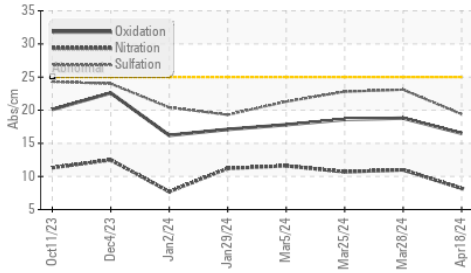
Silicon	ppm	ASTM D5185m	>+100	<b>6</b>	8	10
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	4	5
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	11.0	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.4</b>	23.1	22.8
Silt	scalar	*Visual	NONE	<b>NONE</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**

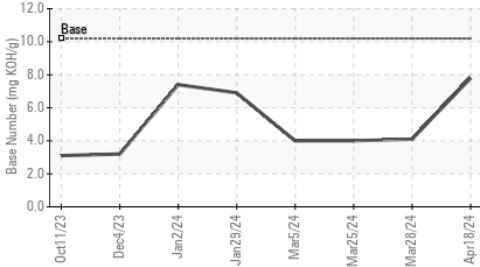
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	7	8
Boron	ppm	ASTM D5185m	50	<b>28</b>	8	9
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	50	<b>51</b>	54	55
Manganese	ppm	ASTM D5185m	0	<b>1</b>	2	2
Magnesium	ppm	ASTM D5185m	560	<b>522</b>	613	547
Calcium	ppm	ASTM D5185m	1510	<b>1474</b>	1829	1663
Phosphorus	ppm	ASTM D5185m	780	<b>779</b>	787	754
Zinc	ppm	ASTM D5185m	870	<b>889</b>	1122	1001
Sulfur	ppm	ASTM D5185m	2040	<b>2571</b>	3121	2496
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	18.8	18.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>7.8</b>	4.1	4.0
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.4</b>	14.3	14.3

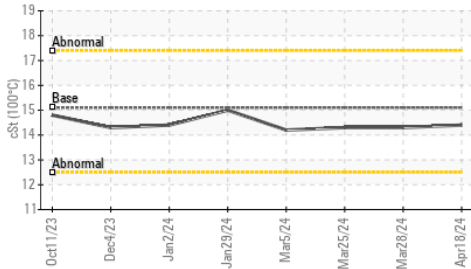
**FT-IR (Direct Trend)**



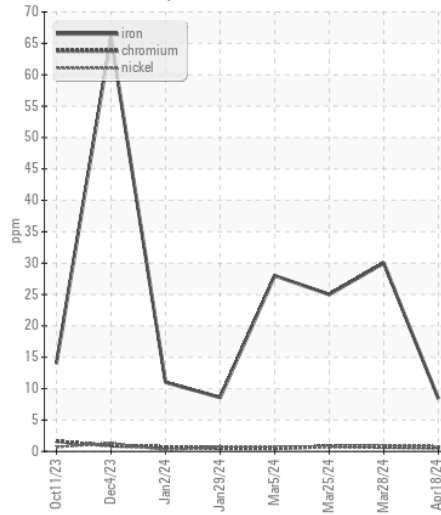
**Base Number**



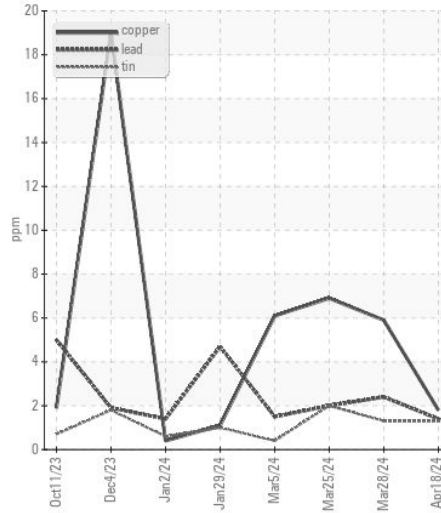
**Viscosity @ 100°C**



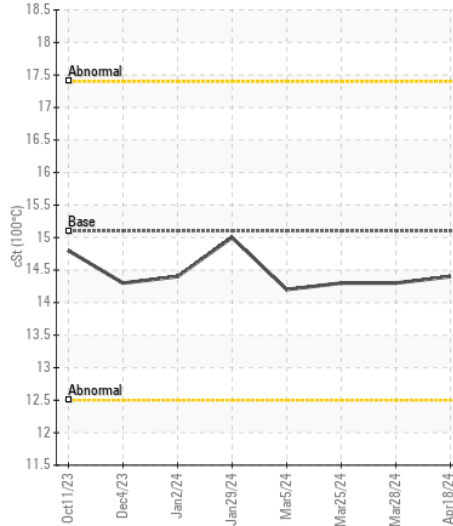
**Ferrous Alloys**



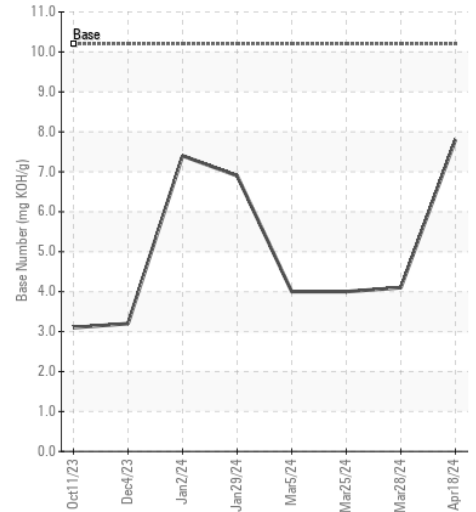
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0118813  
**Lab Number** : 06156747  
**Unique Number** : 10992170  
**Test Package** : FLEET

**Received** : 22 Apr 2024  
**Tested** : 23 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Wes Davis

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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: