



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>GFL0122916</b>	GFL0122934	GFL0118787
Sample Date		Client Info		<b>25 Jun 2024</b>	05 Jun 2024	13 May 2024
Machine Age	hrs	Client Info		<b>1788</b>	1638	1488
Oil Age	hrs	Client Info		<b>1344</b>	1344	1343
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>11</b>	12	12
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	3	4
Lead	ppm	ASTM D5185m	>30	<b>1</b>	2	2
Copper	ppm	ASTM D5185m	>35	<b>1</b>	2	3
Tin	ppm	ASTM D5185m	>4	<b>1</b>	1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<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.

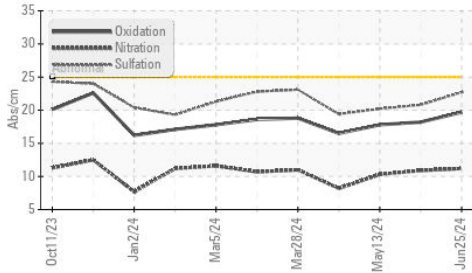
Silicon	ppm	ASTM D5185m	>+100	<b>7</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	8
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	10.9	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.7</b>	20.8	20.2
Silt	scalar	*Visual	NONE	<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**

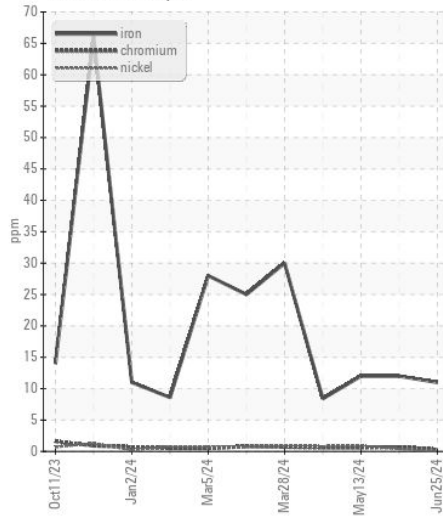
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>6</b>	7	6
Boron	ppm	ASTM D5185m	50	<b>11</b>	7	11
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>50</b>	54	49
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	560	<b>542</b>	557	522
Calcium	ppm	ASTM D5185m	1510	<b>1621</b>	1609	1508
Phosphorus	ppm	ASTM D5185m	780	<b>668</b>	624	763
Zinc	ppm	ASTM D5185m	870	<b>943</b>	935	930
Sulfur	ppm	ASTM D5185m	2040	<b>2493</b>	2272	2685
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.7</b>	18.2	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.7</b>	4.9	5.5
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.7</b>	14.8	14.8

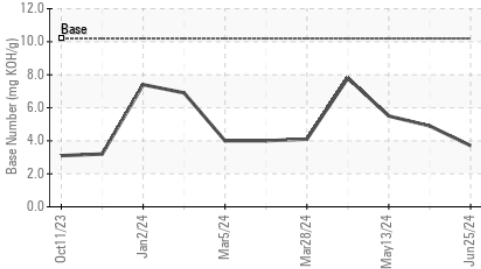
**FT-IR (Direct Trend)**



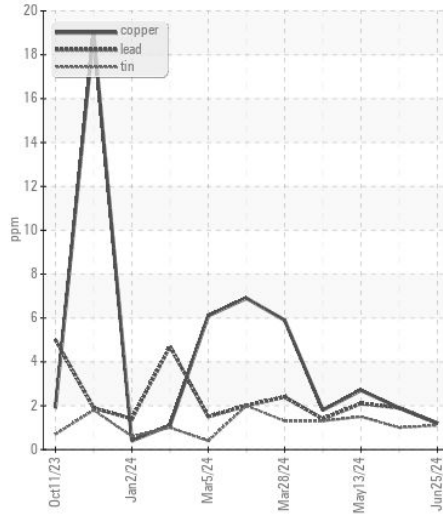
**Ferrous Alloys**



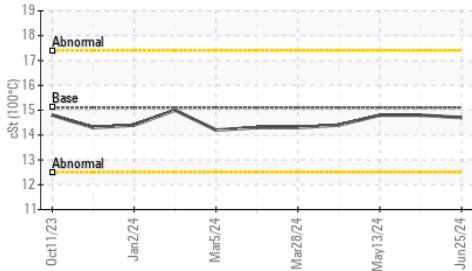
**Base Number**



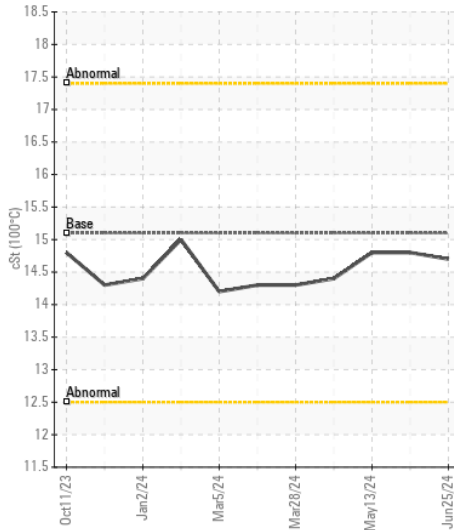
**Non-ferrous Metals**



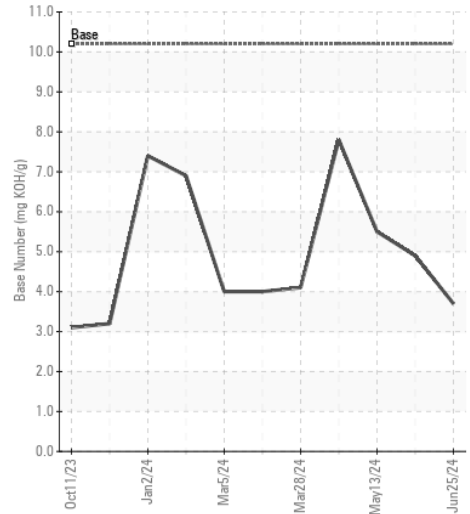
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122916  
**Lab Number** : 06225622  
**Unique Number** : 11103819  
**Test Package** : FLEET

**Received** : 01 Jul 2024  
**Tested** : 03 Jul 2024  
**Diagnosed** : 03 Jul 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: