



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



Machine Id  
**834050**  
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>GFL0122865</b>	GFL0122808	GFL0122819
Sample Date		Client Info		<b>05 Jul 2024</b>	14 Jun 2024	22 May 2024
Machine Age	hrs	Client Info		<b>1786</b>	1616	1458
Oil Age	hrs	Client Info		<b>1786</b>	1616	1458
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>58</b>	59	67
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	1	2
Titanium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>25	<b>5</b>	4	5
Lead	ppm	ASTM D5185m	>40	<b>3</b>	3	4
Copper	ppm	ASTM D5185m	>150	<b>14</b>	11	13
Tin	ppm	ASTM D5185m	>4	<b>2</b>	2	3
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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.

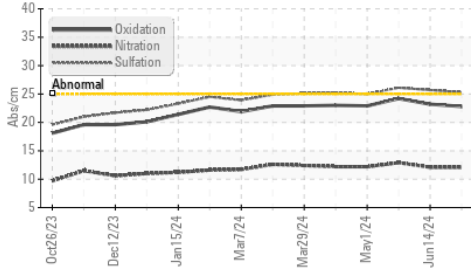
Silicon	ppm	ASTM D5185m	>25	<b>14</b>	16	20
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.1</b>	12.1	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.3</b>	25.7	26.1
Silt	scalar	*Visual	NONE	<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**

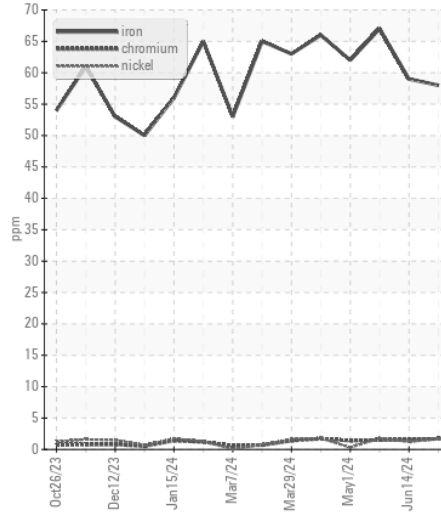
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>4</b>	5	5
Boron	ppm	ASTM D5185m	50	<b>8</b>	14	9
Barium	ppm	ASTM D5185m	5	<b>0</b>	2	<1
Molybdenum	ppm	ASTM D5185m	50	<b>71</b>	67	70
Manganese	ppm	ASTM D5185m	0	<b>6</b>	8	9
Magnesium	ppm	ASTM D5185m	560	<b>751</b>	780	827
Calcium	ppm	ASTM D5185m	1510	<b>1505</b>	1462	1365
Phosphorus	ppm	ASTM D5185m	780	<b>878</b>	836	794
Zinc	ppm	ASTM D5185m	870	<b>1069</b>	1049	1054
Sulfur	ppm	ASTM D5185m	2040	<b>2338</b>	2840	2770
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.8</b>	23.2	24.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>3.8</b>	4.7	2.8
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.5</b>	14.3	14.2

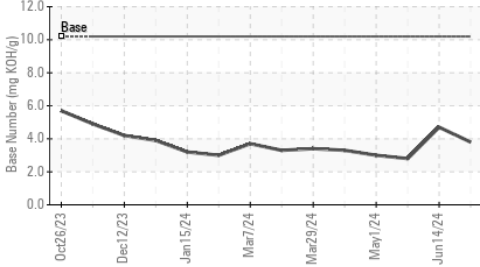
**FT-IR (Direct Trend)**



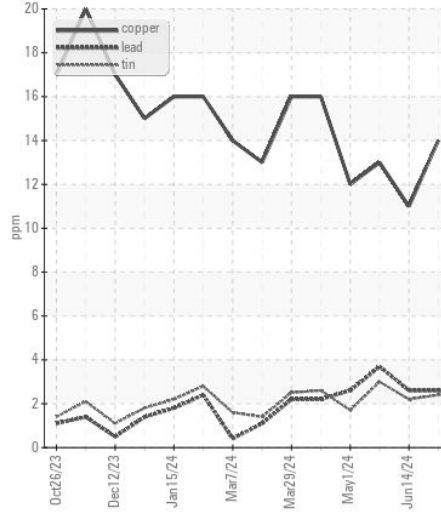
**Ferrous Alloys**



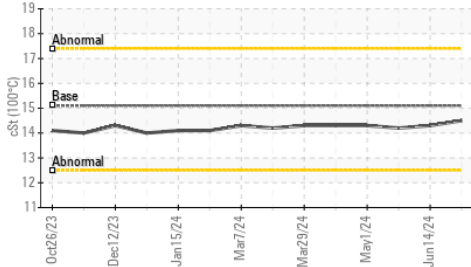
**Base Number**



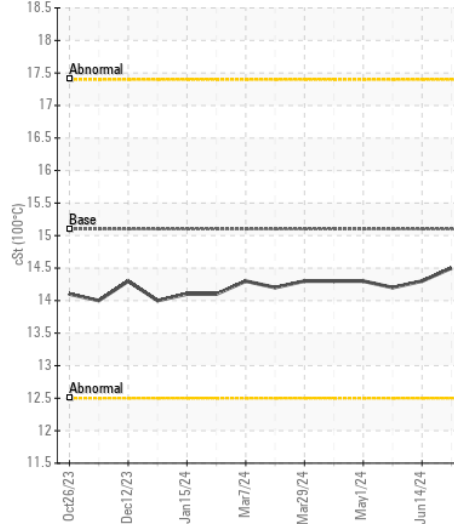
**Non-ferrous Metals**



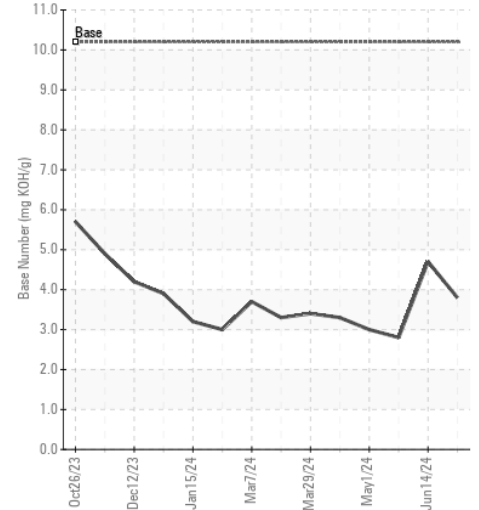
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122865  
**Lab Number** : 06234722  
**Unique Number** : 11123556  
**Test Package** : FLEET

**Received** : 12 Jul 2024  
**Tested** : 15 Jul 2024  
**Diagnosed** : 15 Jul 2024 - Don Baldrige

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: SARA PATRICK  
 spatrick@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: