



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



Machine Id  
**834052**  
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>GFL0124075</b>	GFL0120195	GFL0120240
Sample Date		Client Info		<b>16 Jul 2024</b>	12 Jun 2024	03 Jun 2024
Machine Age	hrs	Client Info		<b>1238</b>	1063	1020
Oil Age	hrs	Client Info		<b>1238</b>	0	0
Filter Age	hrs	Client Info		<b>1238</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>17</b>	12	15
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>5	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	9	4
Lead	ppm	ASTM D5185m	>40	<b>4</b>	17	3
Copper	ppm	ASTM D5185m	>150	<b>4</b>	10	4
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	2	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	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.

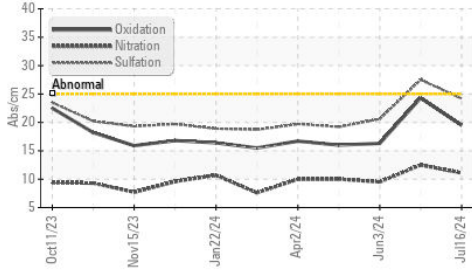
Silicon	ppm	ASTM D5185m	>25	<b>8</b>	12	8
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	2
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.1</b>	12.5	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.2</b>	27.5	20.6
Silt	scalar	*Visual	NONE	<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**

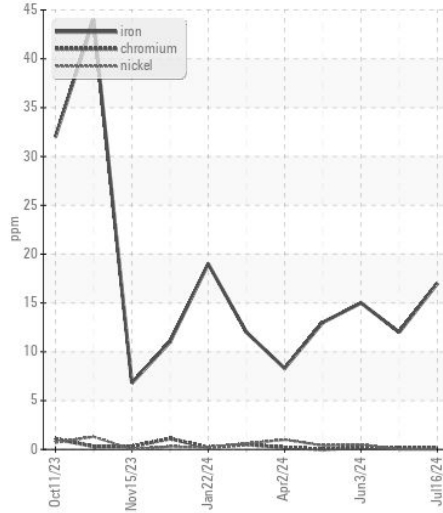
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	6	0
Boron	ppm	ASTM D5185m	50	<b>6</b>	9	6
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	2
Molybdenum	ppm	ASTM D5185m	50	<b>51</b>	56	55
Manganese	ppm	ASTM D5185m	0	<b>2</b>	1	1
Magnesium	ppm	ASTM D5185m	560	<b>525</b>	588	529
Calcium	ppm	ASTM D5185m	1510	<b>1633</b>	1644	1607
Phosphorus	ppm	ASTM D5185m	780	<b>705</b>	793	714
Zinc	ppm	ASTM D5185m	870	<b>904</b>	980	1012
Sulfur	ppm	ASTM D5185m	2040	<b>2659</b>	2742	2814
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.5</b>	24.3	16.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>2.8</b>	▲ 2.0	5.6
Visc @ 100°C	cSt	ASTM D445	15.1	<b>13.9</b>	13.5	14.0

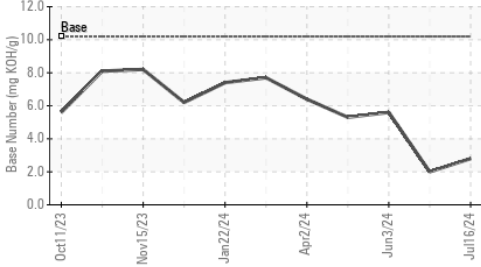
**FT-IR (Direct Trend)**



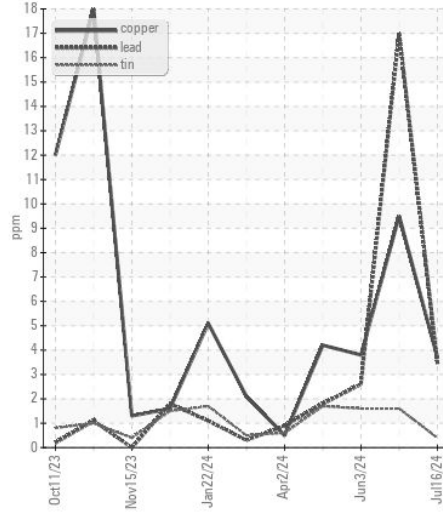
**Ferrous Alloys**



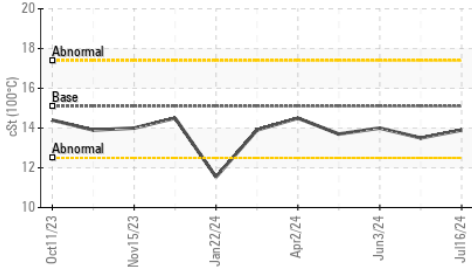
**Base Number**



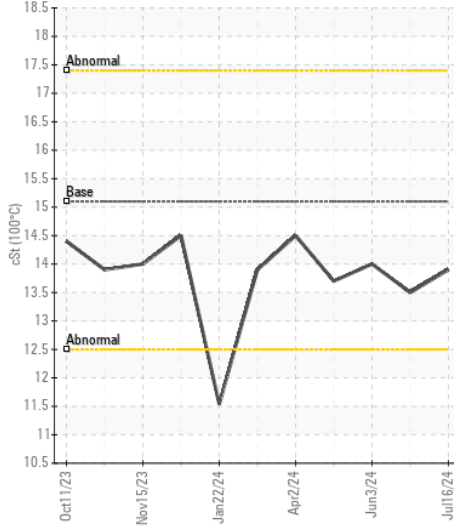
**Non-ferrous Metals**



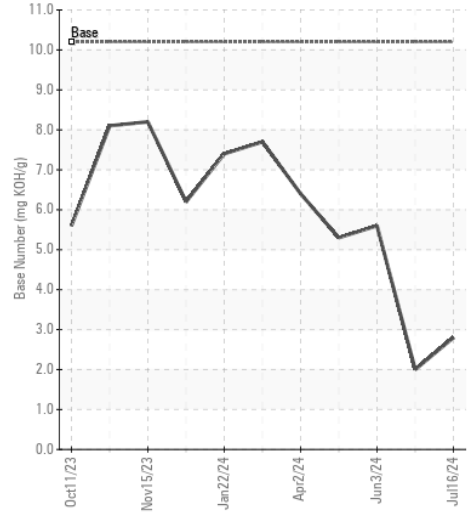
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0124075  
**Lab Number** : 06241494  
**Unique Number** : 11130328  
**Test Package** : FLEET

**Received** : 19 Jul 2024  
**Tested** : 22 Jul 2024  
**Diagnosed** : 22 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: