



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

Area

(MR7426)

Machine Id

**AUTOCAR 3684C**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON GEO LD 15W40 (6 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. ( Customer Sample Comment: Sample hours in system messed up, unknown fluid, and filter age. )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0109615</b>	GFL0109586	GFL0087501
Sample Date		Client Info		<b>12 Jul 2024</b>	07 Feb 2024	13 Dec 2023
Machine Age	hrs	Client Info		<b>18882</b>	33559	18322
Oil Age	hrs	Client Info		<b>100</b>	1283	941
Filter Age	hrs	Client Info		<b>100</b>	1283	941
Oil Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>14</b>	20	10
Chromium	ppm	ASTM D5185m	>4	<b>1</b>	2	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>4</b>	3	2
Lead	ppm	ASTM D5185m	>30	<b>1</b>	9	3
Copper	ppm	ASTM D5185m	>35	<b>6</b>	3	2
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	1	0
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.

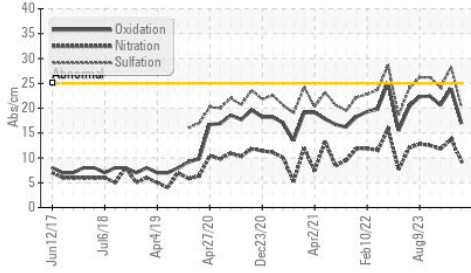
Silicon	ppm	ASTM D5185m	>+100	<b>5</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0</b>	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.3</b>	13.7	11.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	28.3	24.1
Silt	scalar	*Visual	NONE	<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**

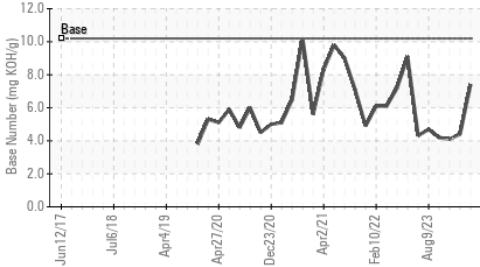
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>11</b>	8	10
Boron	ppm	ASTM D5185m	50	<b>29</b>	9	6
Barium	ppm	ASTM D5185m	5	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m	50	<b>61</b>	71	62
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	560	<b>656</b>	686	538
Calcium	ppm	ASTM D5185m	1510	<b>1815</b>	1861	1706
Phosphorus	ppm	ASTM D5185m	780	<b>918</b>	886	715
Zinc	ppm	ASTM D5185m	870	<b>1114</b>	1153	1038
Sulfur	ppm	ASTM D5185m	2040	<b>2720</b>	2664	1897
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.9</b>	23.9	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>7.4</b>	4.4	4.1
Visc @ 100°C	cSt	ASTM D445	15.1	<b>14.3</b>	15.0	14.8

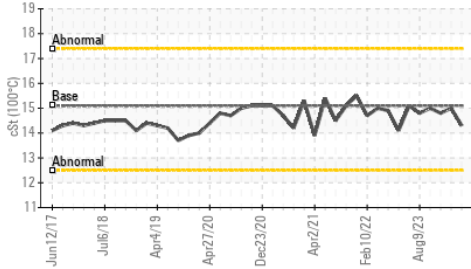
**FT-IR (Direct Trend)**



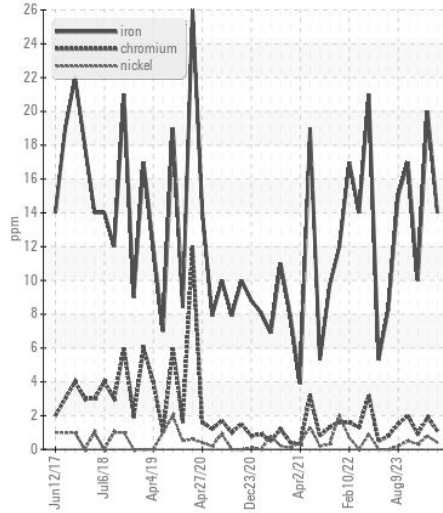
**Base Number**



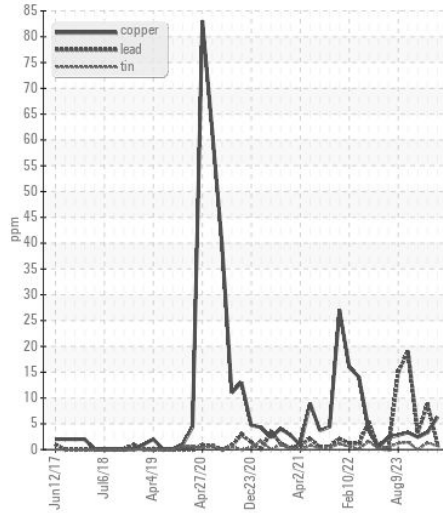
**Viscosity @ 100°C**



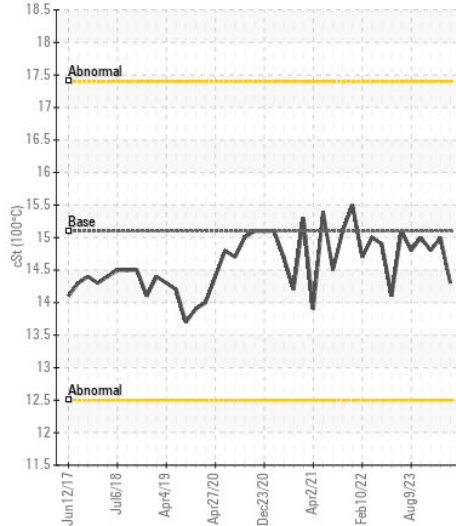
**Ferrous Alloys**



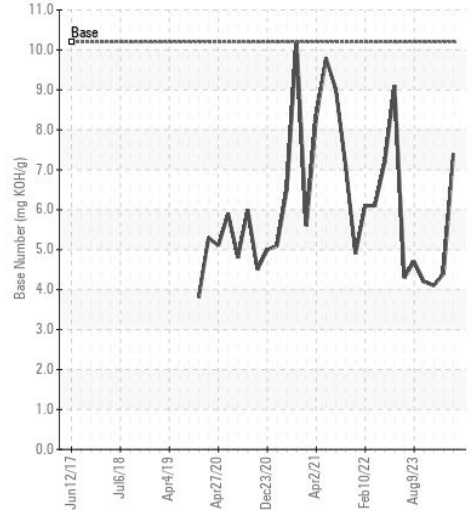
**Non-ferrous Metals**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109615 **Received** : 18 Jul 2024  
**Lab Number** : 06239856 **Tested** : 18 Jul 2024  
**Unique Number** : 11128690 **Diagnosed** : 19 Jul 2024 - Don Baldrige  
**Test Package** : FLEET

**GFL Environmental - 331 - Columbus**  
 180 Ada Moore Rd  
 Columbus, NC  
 US 28722  
 Contact: Matt Segars  
 matt.segars@gflenv.com  
 T: (800)207-6618  
 F: (252)617-2494

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)