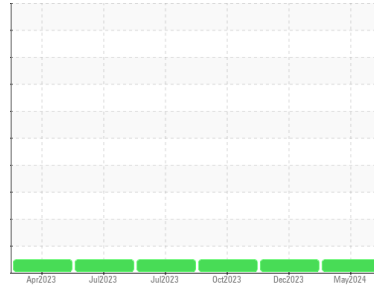




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**3589C AUTOCAR ACX**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (48 QTS)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### 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.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0117502</b>	GFL0094647	GFL0094698
Sample Date	Client Info		<b>28 May 2024</b>	12 Dec 2023	06 Oct 2023
Machine Age	mls	Client Info	<b>95436</b>	24450	23895
Oil Age	mls	Client Info	<b>70986</b>	555	1254
Oil Changed	Client Info		<b>Not Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>25</b>	20	14
Chromium	ppm	ASTM D5185m >4	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>5</b>	3	7
Lead	ppm	ASTM D5185m >30	<b>15</b>	16	6
Copper	ppm	ASTM D5185m >35	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>2</b>	<1	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>18</b>	10	10
Barium	ppm	ASTM D5185m 5	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m 50	<b>61</b>	57	55
Manganese	ppm	ASTM D5185m 0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>715</b>	600	598
Calcium	ppm	ASTM D5185m 1510	<b>1898</b>	1687	1673
Phosphorus	ppm	ASTM D5185m 780	<b>971</b>	779	738
Zinc	ppm	ASTM D5185m 870	<b>1166</b>	1001	1035
Sulfur	ppm	ASTM D5185m 2040	<b>2965</b>	2873	2571

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>10</b>	13	14
Sodium	ppm	ASTM D5185m	<b>9</b>	7	9
Potassium	ppm	ASTM D5185m >20	<b>2</b>	4	2

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.4</b>	11.9	10.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>25.8</b>	25.9	22.5

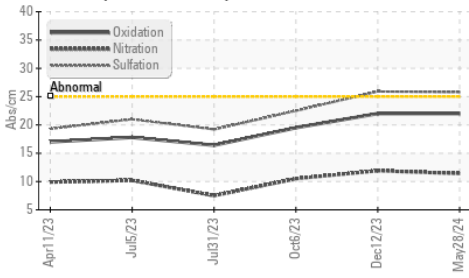
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>22.0</b>	22.0	19.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>5.4</b>	3.4	4.5

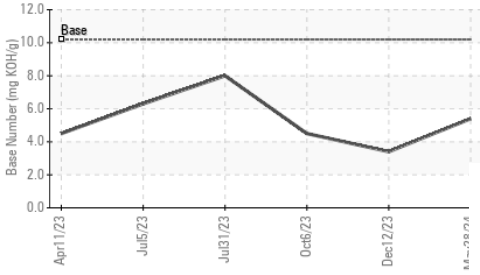


# OIL ANALYSIS REPORT

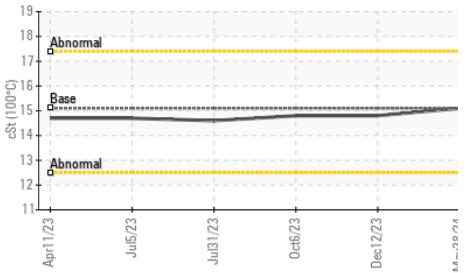
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

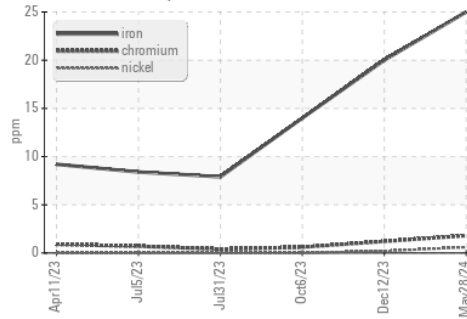


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

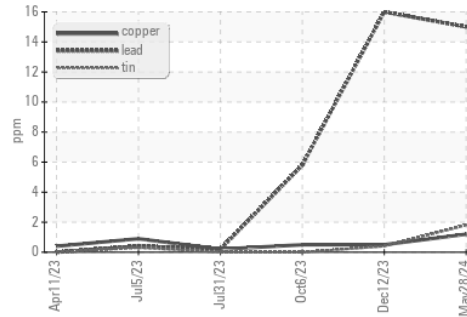
PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.8	14.8

## GRAPHS

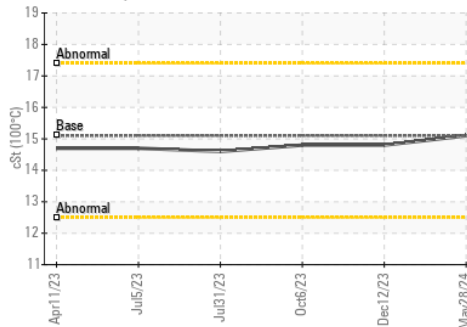
Ferrous Alloys



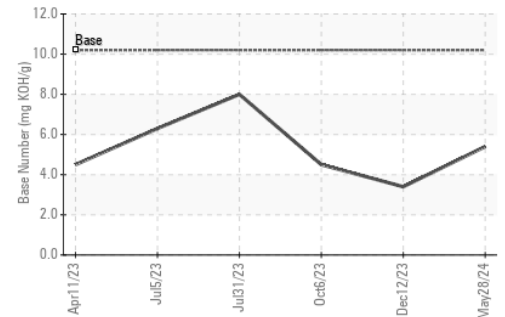
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0117502  
 Lab Number : 06195274  
 Unique Number : 11057397  
 Test Package : FLEET

Received : 30 May 2024  
 Tested : 31 May 2024  
 Diagnosed : 31 May 2024 - Wes Davis

GFL Environmental - 001 - Raleigh(CNG)  
 3741 Conquest Drive  
 Garner, NC  
 US 27529

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)

Contact: James Lawson  
 james.lawson@gflenv.com

T: (919)534-3733

F: (919)662-1730