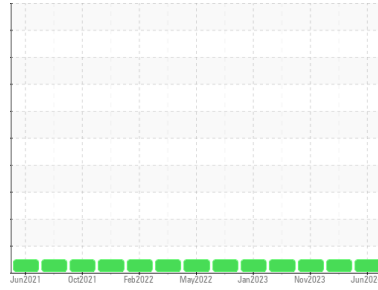




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**426084**

Component

**Natural Gas Engine**

Fluid

**PETRO CANADA DURON GEO LD 15W40 (--- LTR)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### 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>GFL0119115</b>	GFL0106992	GFL0094244
Sample Date	Client Info		<b>19 Jun 2024</b>	01 Mar 2024	09 Nov 2023
Machine Age	hrs	Client Info	<b>21600</b>	20677	19894
Oil Age	hrs	Client Info	<b>21600</b>	783	902
Oil Changed	Client Info		<b>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>	18	5
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	<1	2
Lead	ppm	ASTM D5185m >30	<b>1</b>	0	<1
Copper	ppm	ASTM D5185m >35	<b>2</b>	0	1
Tin	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>6</b>	2	27
Barium	ppm	ASTM D5185m 5	<b>0</b>	1	<1
Molybdenum	ppm	ASTM D5185m 50	<b>70</b>	58	53
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m 560	<b>974</b>	880	566
Calcium	ppm	ASTM D5185m 1510	<b>1474</b>	1012	1507
Phosphorus	ppm	ASTM D5185m 780	<b>992</b>	1002	813
Zinc	ppm	ASTM D5185m 870	<b>1385</b>	1182	960
Sulfur	ppm	ASTM D5185m 2040	<b>3035</b>	2638	2598

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>5</b>	2	3
Sodium	ppm	ASTM D5185m	<b>40</b>	17	5
Potassium	ppm	ASTM D5185m >20	<b>32</b>	6	3

### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>1.1</b>	1.5	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>11.7</b>	10.1	8.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>21.7</b>	20.9	18.8

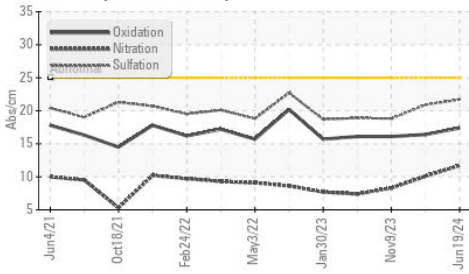
### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.4</b>	16.4	16.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.8</b>	8.6	7.9

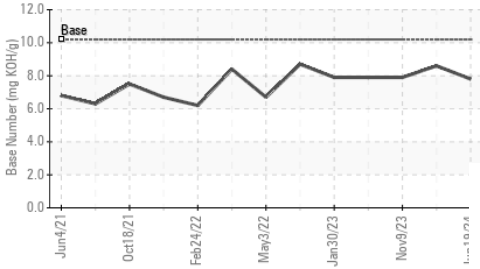


# OIL ANALYSIS REPORT

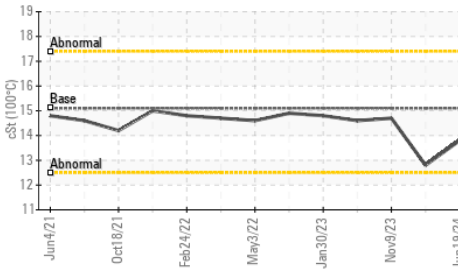
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

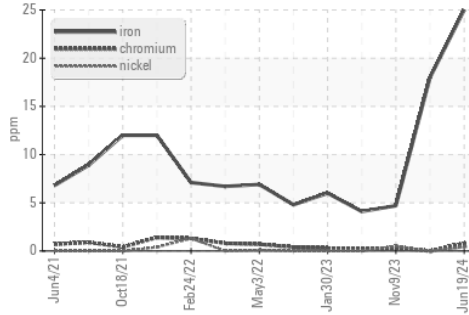


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

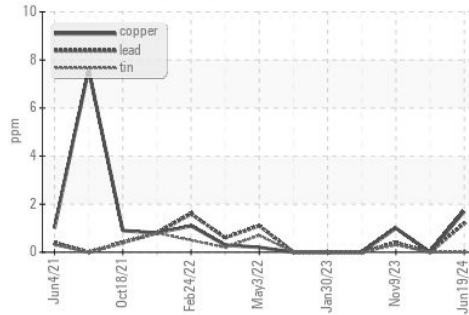
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.8	12.8

## GRAPHS

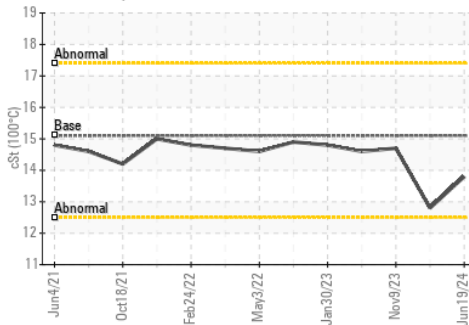
Ferrous Alloys



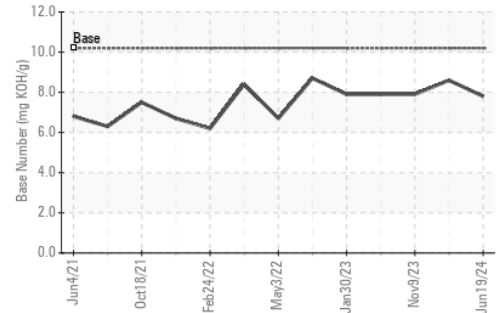
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0119115  
 Lab Number : 06216610  
 Unique Number : 11089474  
 Test Package : FLEET

Received : 21 Jun 2024  
 Tested : 24 Jun 2024  
 Diagnosed : 24 Jun 2024 - Sean Felton

GFL Environmental - 882 - Gainesville  
 5002 SW 41st Blvd  
 Gainesville, FL  
 US 32608  
 Contact: ROBERT CLARK  
 robert.clark@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)

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F: