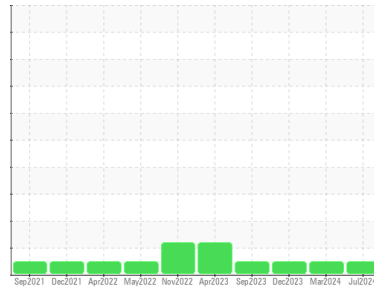




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**744007**

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>GFL0119143</b>	GFL0115476	GFL0094236
Sample Date	Client Info		<b>03 Jul 2024</b>	22 Mar 2024	08 Dec 2023
Machine Age	hrs	Client Info	<b>25471</b>	5845	5375
Oil Age	hrs	Client Info	<b>5845</b>	470	303
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>19</b>	20	5
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185m >35	<b>2</b>	<1	<1
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>6</b>	4	26
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	11
Molybdenum	ppm	ASTM D5185m 50	<b>58</b>	58	49
Manganese	ppm	ASTM D5185m 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 560	<b>780</b>	879	542
Calcium	ppm	ASTM D5185m 1510	<b>1280</b>	1071	1459
Phosphorus	ppm	ASTM D5185m 780	<b>947</b>	1045	752
Zinc	ppm	ASTM D5185m 870	<b>1164</b>	1245	910
Sulfur	ppm	ASTM D5185m 2040	<b>2693</b>	3381	2790

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>4</b>	3	3
Sodium	ppm	ASTM D5185m	<b>26</b>	18	4
Potassium	ppm	ASTM D5185m >20	<b>19</b>	9	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>11.8</b>	10.3	8.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>22.0</b>	20.5	18.5

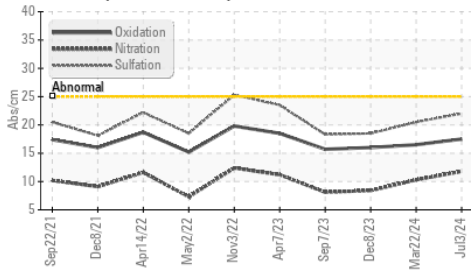
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>17.5</b>	16.5	16.0
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.7</b>	8.7	7.6

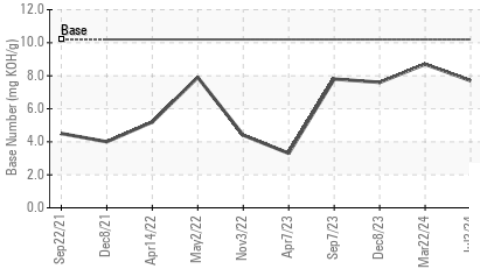


# OIL ANALYSIS REPORT

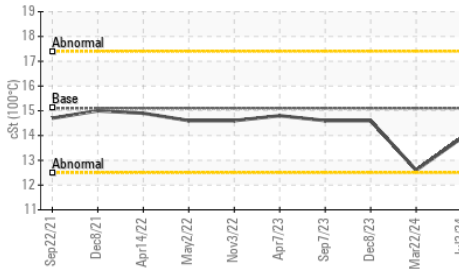
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

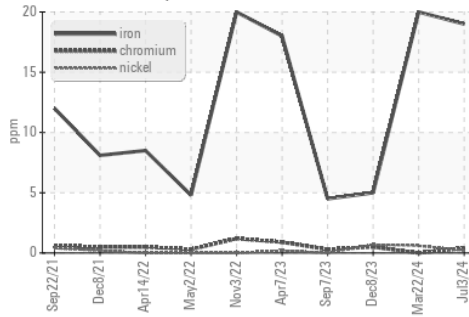


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

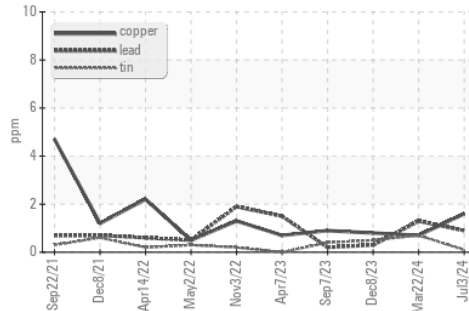
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.9	12.6

## GRAPHS

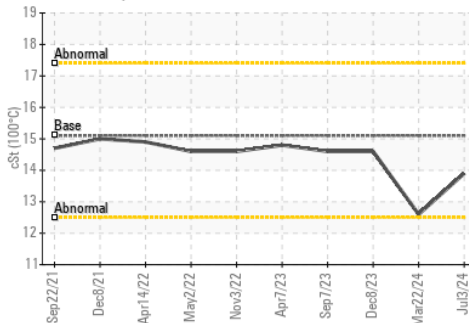
Ferrous Alloys



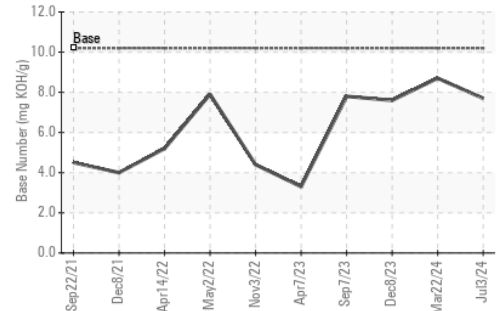
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0119143  
 Lab Number : 06229966  
 Unique Number : 11113459  
 Test Package : FLEET

Received : 08 Jul 2024  
 Tested : 09 Jul 2024  
 Diagnosed : 09 Jul 2024 - Wes Davis

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: