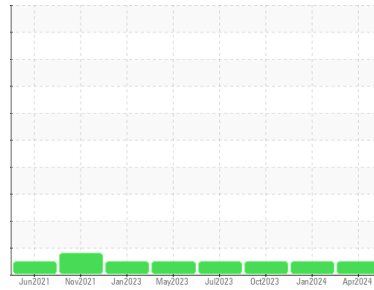




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**744015-361631**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (7 GAL)**

## 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>GFL0114566</b>	GFL0081080	GFL0081105
Sample Date	Client Info		<b>24 Apr 2024</b>	17 Jan 2024	13 Oct 2023
Machine Age	hrs	Client Info	<b>18190</b>	17941	17910
Oil Age	hrs	Client Info	<b>280</b>	31	1200
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	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>10</b>	2	15
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>1</b>	<1	3
Lead	ppm	ASTM D5185m >30	<b>0</b>	0	2
Copper	ppm	ASTM D5185m >35	<b>0</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	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>22</b>	30	11
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m 50	<b>50</b>	44	48
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185m 560	<b>555</b>	490	568
Calcium	ppm	ASTM D5185m 1510	<b>1602</b>	1364	1358
Phosphorus	ppm	ASTM D5185m 780	<b>820</b>	730	698
Zinc	ppm	ASTM D5185m 870	<b>985</b>	849	920
Sulfur	ppm	ASTM D5185m 2040	<b>2682</b>	2187	2233

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>7</b>	4	8
Sodium	ppm	ASTM D5185m	<b>5</b>	4	4
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	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>9.1</b>	7.2	11.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.9</b>	18.8	22.0

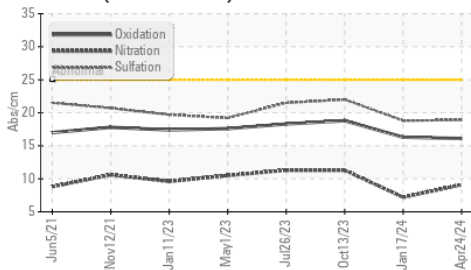
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.1</b>	16.3	18.8
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>6.3</b>	8.2	5.0

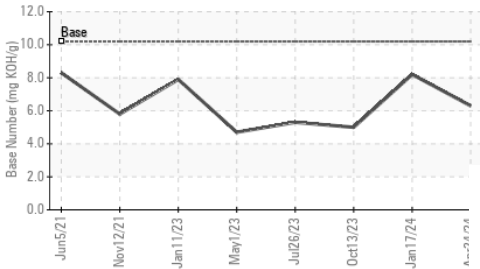


# OIL ANALYSIS REPORT

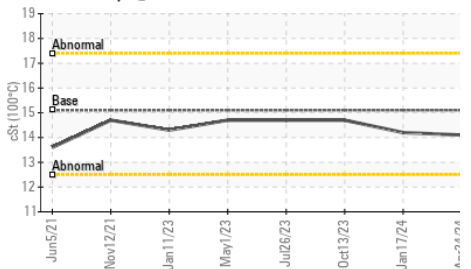
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

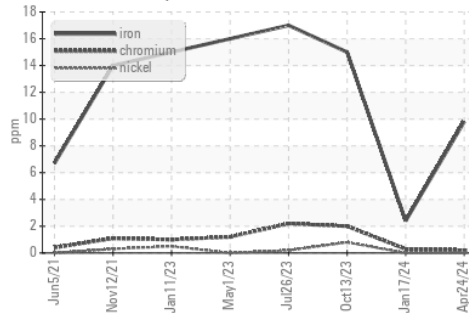


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

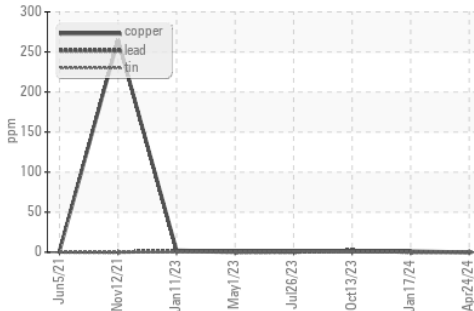
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.1	14.2

## GRAPHS

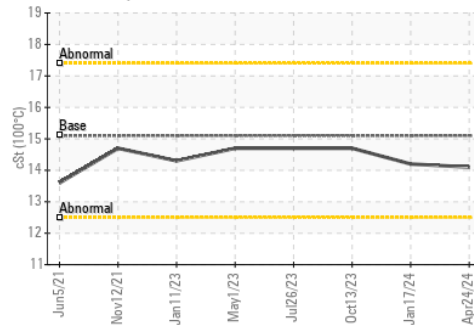
Ferrous Alloys



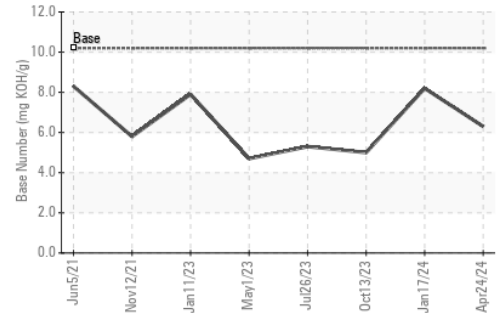
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0114566  
 Lab Number : 06160147  
 Unique Number : 10995570  
 Test Package : FLEET

GFL Environmental - 884 - Lake County - Tavares  
 321 Southridge Industrial Way  
 Tavares, FL  
 US 32778  
 Contact: JEFF COOPERSMITH

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: