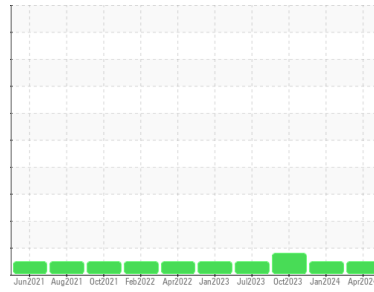




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**744000**

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>GFL0115513</b>	GFL0106995	GFL0094253
Sample Date	Client Info		<b>24 Apr 2024</b>	19 Jan 2024	12 Oct 2023
Machine Age	hrs	Client Info	<b>25737</b>	25241	24593
Oil Age	hrs	Client Info	<b>25737</b>	648	660
Oil Changed	Client Info		<b>Not Changed</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## 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>21</b>	23	10
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	<1	1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>9	<b>1</b>	1	2
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	<1	▲ 104
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>1</b>	2	9
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>61</b>	61	48
Manganese	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	560	<b>895</b>	869	503
Calcium	ppm	ASTM D5185m	1510	<b>1130</b>	1065	1352
Phosphorus	ppm	ASTM D5185m	780	<b>1026</b>	980	676
Zinc	ppm	ASTM D5185m	870	<b>1240</b>	1197	838
Sulfur	ppm	ASTM D5185m	2040	<b>3511</b>	3114	2082

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	<b>3</b>	3	3
Sodium	ppm	ASTM D5185m		<b>19</b>	12	6
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	10	3

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		<b>1.4</b>	1.5	0
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	10.0	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.6</b>	20.8	19.7

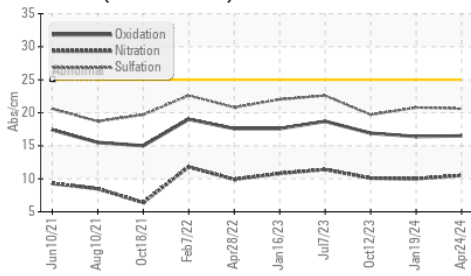
## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.5</b>	16.4	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	<b>8.7</b>	8.6	4.9

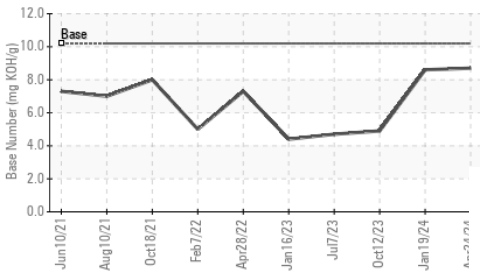


# OIL ANALYSIS REPORT

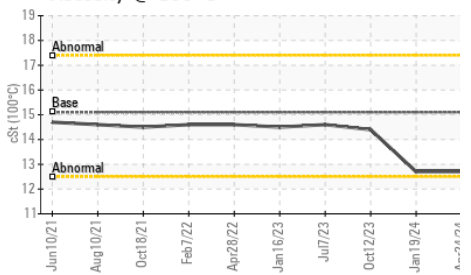
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

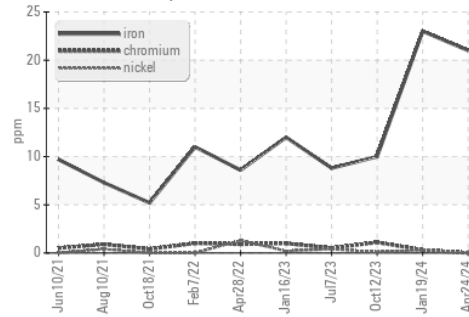


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

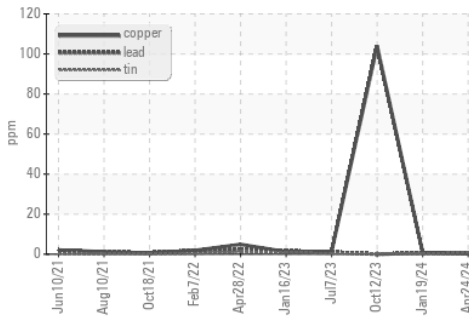
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	12.7	12.7

## GRAPHS

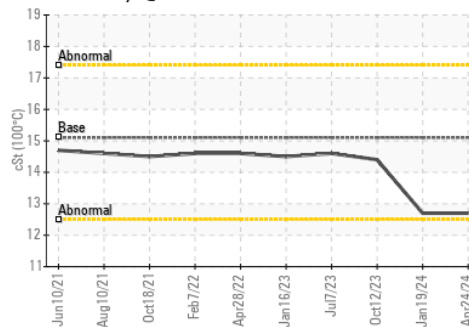
Ferrous Alloys



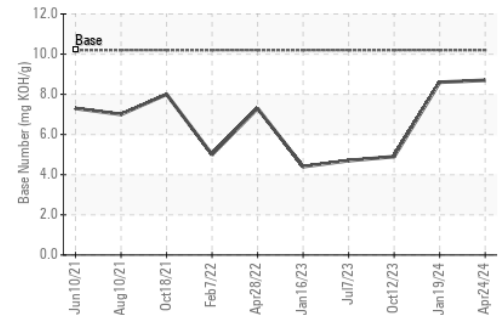
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0115513  
 Lab Number : 06161214  
 Unique Number : 10996637  
 Test Package : FLEET

Received : 26 Apr 2024  
 Tested : 26 Apr 2024  
 Diagnosed : 29 Apr 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)