

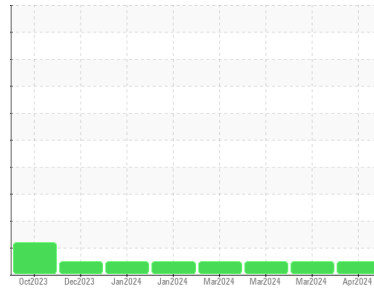


# OIL ANALYSIS REPORT



Area  
**(42KM5B)**  
 Machine Id  
**834053**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## Sample Rating Trend



**NORMAL**



## 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>GFL0118813</b>	GFL0114164	GFL0114170
Sample Date	Client Info		<b>18 Apr 2024</b>	28 Mar 2024	25 Mar 2024
Machine Age	hrs	Client Info	<b>1339</b>	1194	1163
Oil Age	hrs	Client Info	<b>145</b>	1194	1037
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Not Chngd
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>8</b>	30	25
Chromium	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<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>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>3</b>	4	5
Lead	ppm	ASTM D5185m >30	<b>1</b>	2	2
Copper	ppm	ASTM D5185m >35	<b>2</b>	6	7
Tin	ppm	ASTM D5185m >4	<b>1</b>	1	2
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	<b>28</b>	8	9
Barium	ppm	ASTM D5185m 5	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m 50	<b>51</b>	54	55
Manganese	ppm	ASTM D5185m 0	<b>1</b>	2	2
Magnesium	ppm	ASTM D5185m 560	<b>522</b>	613	547
Calcium	ppm	ASTM D5185m 1510	<b>1474</b>	1829	1663
Phosphorus	ppm	ASTM D5185m 780	<b>779</b>	787	754
Zinc	ppm	ASTM D5185m 870	<b>889</b>	1122	1001
Sulfur	ppm	ASTM D5185m 2040	<b>2571</b>	3121	2496

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>6</b>	8	10
Sodium	ppm	ASTM D5185m	<b>4</b>	7	8
Potassium	ppm	ASTM D5185m >20	<b>6</b>	4	5

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0</b>	0	0
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.2</b>	11.0	10.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.4</b>	23.1	22.8

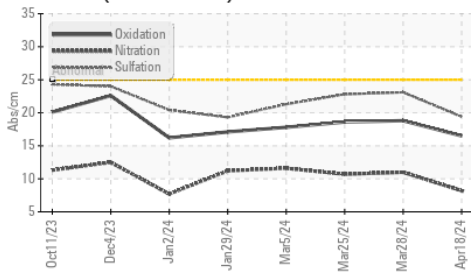
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>16.5</b>	18.8	18.6
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	<b>7.8</b>	4.1	4.0

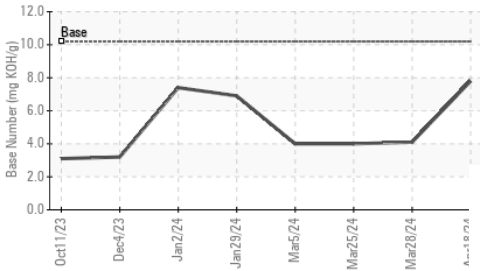


# OIL ANALYSIS REPORT

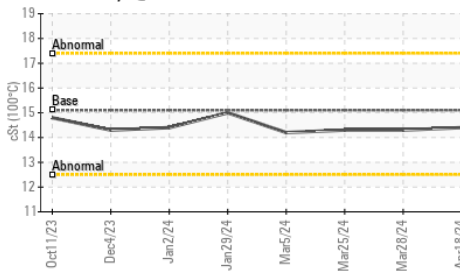
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

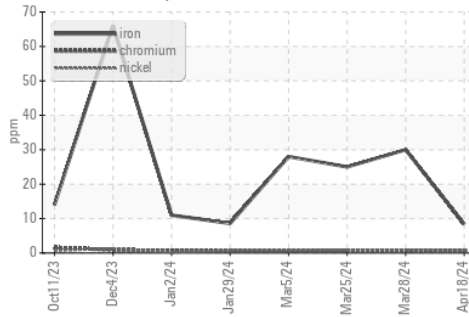


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

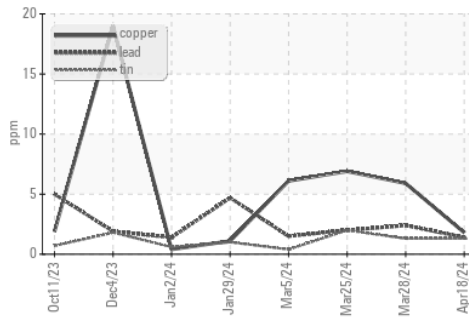
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.3

## GRAPHS

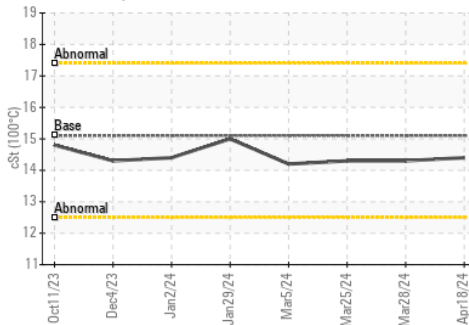
Ferrous Alloys



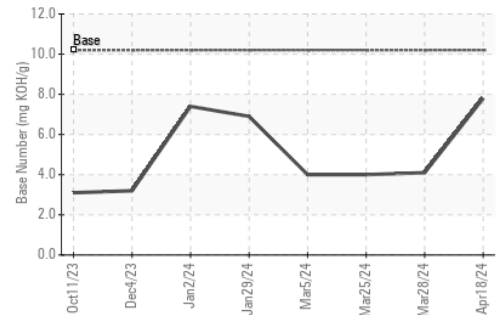
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0118813  
 Lab Number : 06156747  
 Unique Number : 10992170  
 Test Package : FLEET

GFL Environmental - 836 - Kansas City Hauling  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@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: