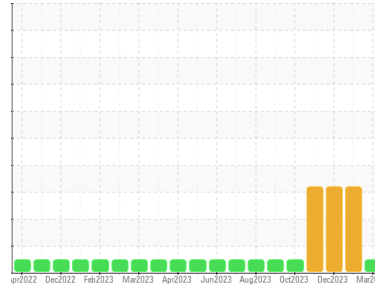




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**731116**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- 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>GFL0114092</b>	GFL0103302	GFL0099913
Sample Date	Client Info	<b>05 Mar 2024</b>	16 Jan 2024	06 Dec 2023
Machine Age	hrs	<b>6593</b>	6307	6168
Oil Age	hrs	<b>0</b>	1200	0
Oil Changed	Client Info	<b>Not Changed</b>	Changed	Not Changed
Sample Status		<b>NORMAL</b>	ABNORMAL	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>12</b>	▲ 235	▲ 101
Chromium	ppm ASTM D5185m >4	<b>0</b>	▲ 13	▲ 9
Nickel	ppm ASTM D5185m >2	<b>0</b>	▲ 8	▲ 5
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>	▲ 17	▲ 13
Lead	ppm ASTM D5185m >30	<b>2</b>	14	11
Copper	ppm ASTM D5185m >35	<b>&lt;1</b>	4	2
Tin	ppm ASTM D5185m >4	<b>0</b>	2	<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>7</b>	6	5
Barium	ppm ASTM D5185m 5	<b>0</b>	4	0
Molybdenum	ppm ASTM D5185m 50	<b>57</b>	89	75
Manganese	ppm ASTM D5185m 0	<b>0</b>	5	3
Magnesium	ppm ASTM D5185m 560	<b>527</b>	708	626
Calcium	ppm ASTM D5185m 1510	<b>1553</b>	1877	1800
Phosphorus	ppm ASTM D5185m 780	<b>627</b>	851	773
Zinc	ppm ASTM D5185m 870	<b>891</b>	1136	1007
Sulfur	ppm ASTM D5185m 2040	<b>2208</b>	2719	2474

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	<b>4</b>	80	54
Sodium	ppm ASTM D5185m	<b>6</b>	13	14
Potassium	ppm ASTM D5185m >20	<b>0</b>	8	2

## INFRA-RED

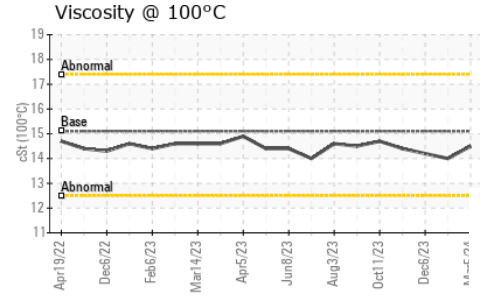
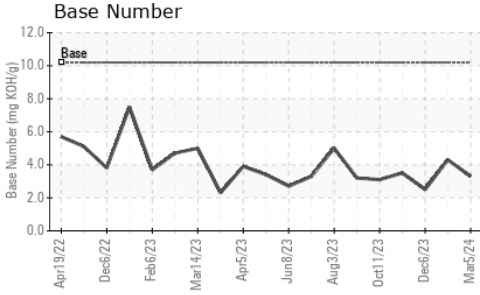
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	<b>0</b>	0.1	0.1
Nitration	Abs/cm *ASTM D7624 >20	<b>11.5</b>	15.3	13.2
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>24.4</b>	28.7	28.4

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>20.0</b>	26.3	25.1
Base Number (BN)	mg KOH/g ASTM D2896 10.2	<b>3.3</b>	4.3	2.5



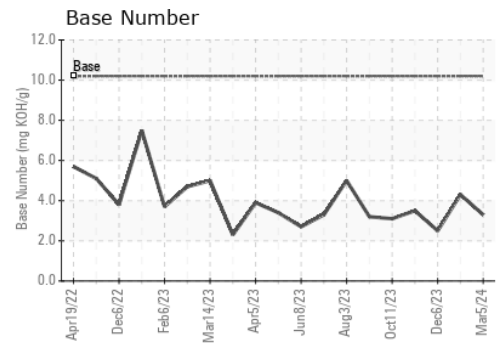
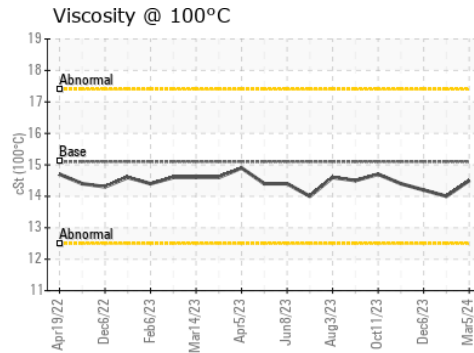
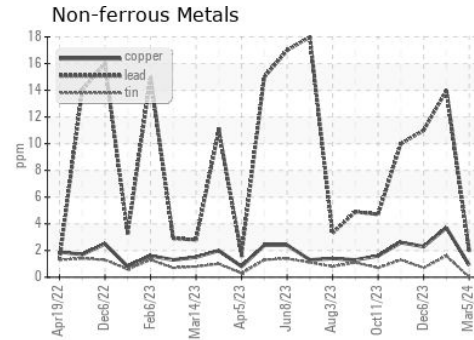
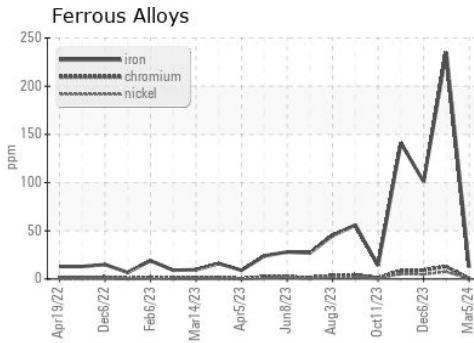
# OIL ANALYSIS REPORT



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	14.0	14.2

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0114092  
 Lab Number : 06113854  
 Unique Number : 10922687  
 Test Package : FLEET

Received : 11 Mar 2024  
 Tested : 11 Mar 2024  
 Diagnosed : 11 Mar 2024 - Wes Davis

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: