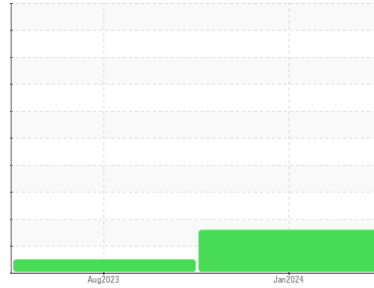




# OIL ANALYSIS REPORT

Sample Rating Trend

DEGRADATION



Machine Id  
**933011**  
 Component  
**Natural Gas Engine**  
 Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for faulty combustion and a possible overheat condition. We recommend that you drain the oil from the component if this has not already been done.

### Wear

All component wear rates are normal.

### Contamination

There is an abnormal level of sulfation indicated.

### Fluid Condition

A small degree of oil oxidation was indicated. The oil is no longer serviceable.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0102639</b>	GFL0090610	---
Sample Date	Client Info		<b>12 Jan 2024</b>	24 Aug 2023	---
Machine Age	hrs	Client Info	<b>72560</b>	2248	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	Changed	---
Sample Status			<b>ABNORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	<b>31</b>	19	---
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	2	---
Nickel	ppm	ASTM D5185(m)	>4	<b>2</b>	<1	---
Titanium	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>25	<b>11</b>	8	---
Lead	ppm	ASTM D5185(m)	>40	<b>5</b>	1	---
Copper	ppm	ASTM D5185(m)	>150	<b>4</b>	2	---
Tin	ppm	ASTM D5185(m)	>4	<b>1</b>	<1	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	50	<b>6</b>	8	---
Barium	ppm	ASTM D5185(m)	5	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	50	<b>65</b>	57	---
Manganese	ppm	ASTM D5185(m)	0	<b>1</b>	1	---
Magnesium	ppm	ASTM D5185(m)	560	<b>704</b>	625	---
Calcium	ppm	ASTM D5185(m)	1510	<b>1955</b>	1744	---
Phosphorus	ppm	ASTM D5185(m)	780	<b>902</b>	814	---
Zinc	ppm	ASTM D5185(m)	870	<b>1099</b>	968	---
Sulfur	ppm	ASTM D5185(m)	2040	<b>2300</b>	1993	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	9	---
Sodium	ppm	ASTM D5185(m)		<b>14</b>	11	---
Potassium	ppm	ASTM D5185(m)	>20	<b>10</b>	10	---
Glycol	%	ASTM D7922*		<b>0.0</b>	0.0	---

## INFRA-RED

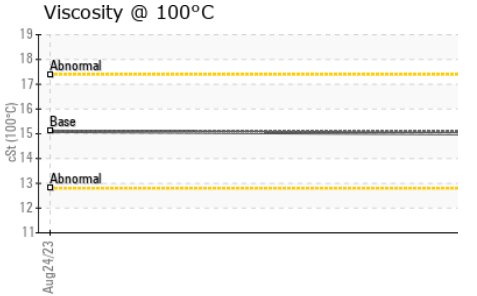
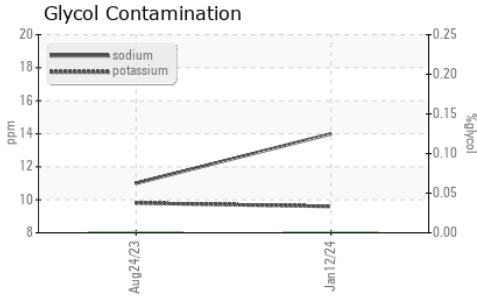
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>14.2</b>	12.5	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>▲ 32.2</b>	28.3	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>▲ 30.5</b>	23.1	---



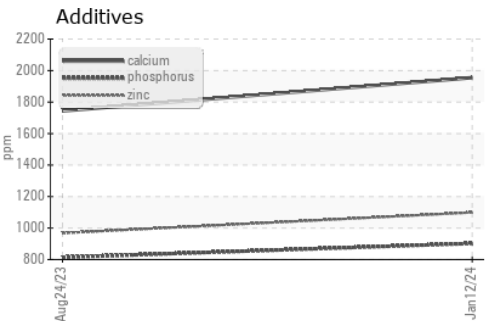
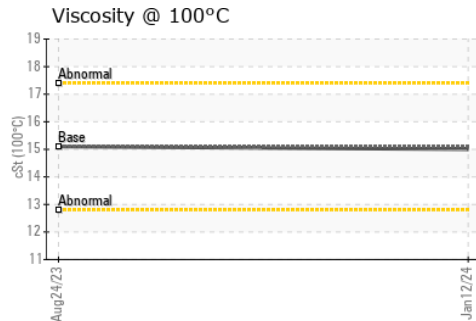
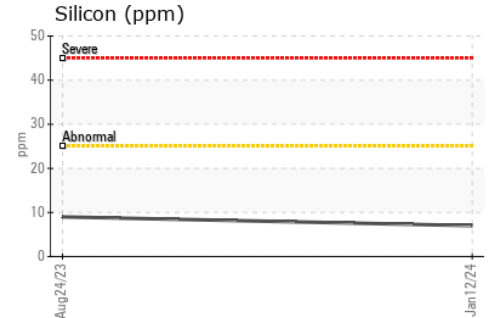
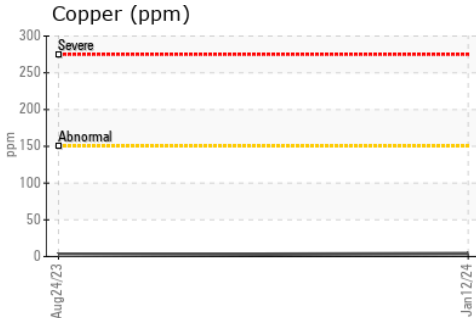
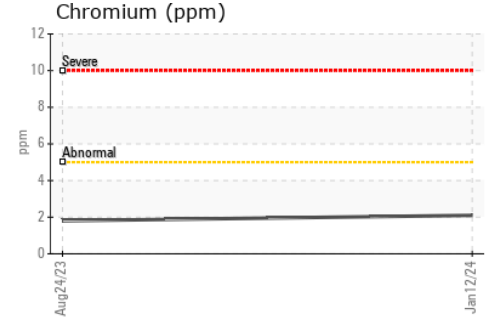
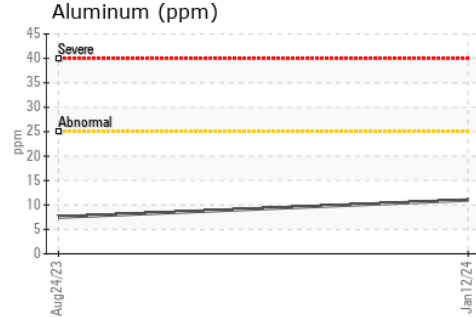
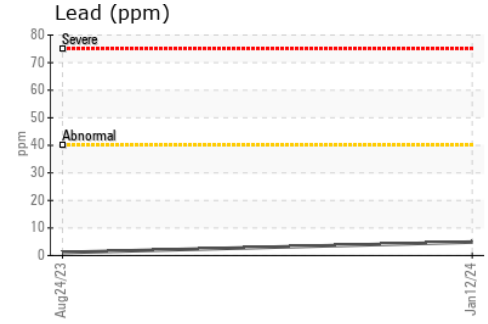
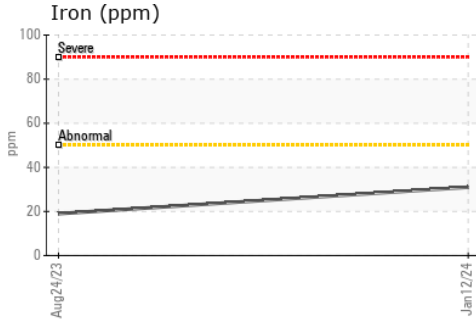
# OIL ANALYSIS REPORT



PARAMETER	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	15.1	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0102639 **Received** : 22 Jan 2024  
**Lab Number** : 02610178 **Diagnosed** : 23 Jan 2024  
**Unique Number** : 5711264 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

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