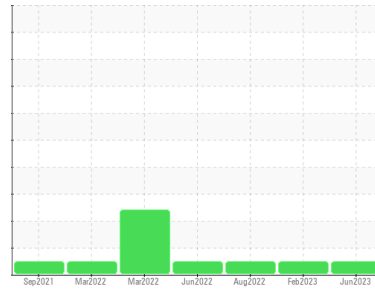




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**831040**

Component  
**Natural Gas Engine**

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	<b>GFL0085918</b>	GFL0064094	GFL0057732
Sample Date	Client Info	<b>26 Jun 2023</b>	16 Feb 2023	11 Aug 2022
Machine Age	hrs	<b>4142</b>	0	0
Oil Age	hrs	<b>0</b>	3259	0
Oil Changed	Client Info	<b>Changed</b>	N/A	Changed
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history 1	history 2
Glycol	WC Method	---	---	---

## WEAR METALS

method	limit/base	current	history 1	history 2	
Iron	ppm	ASTM D5185(m) >50	<b>16</b>	11	8
Chromium	ppm	ASTM D5185(m) >4	<b>2</b>	1	<1
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >9	<b>3</b>	2	3
Lead	ppm	ASTM D5185(m) >30	<b>3</b>	2	2
Copper	ppm	ASTM D5185(m) >35	<b>15</b>	38	76
Tin	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history 1	history 2	
Boron	ppm	ASTM D5185(m) 50	<b>6</b>	11	8
Barium	ppm	ASTM D5185(m) 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>54</b>	51	50
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 560	<b>570</b>	549	538
Calcium	ppm	ASTM D5185(m) 1510	<b>1620</b>	1641	1623
Phosphorus	ppm	ASTM D5185(m) 780	<b>706</b>	769	674
Zinc	ppm	ASTM D5185(m) 870	<b>892</b>	890	877
Sulfur	ppm	ASTM D5185(m) 2040	<b>1882</b>	1943	1915
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

method	limit/base	current	history 1	history 2	
Silicon	ppm	ASTM D5185(m) >+100	<b>4</b>	4	5
Sodium	ppm	ASTM D5185(m)	<b>9</b>	3	2
Potassium	ppm	ASTM D5185(m) >20	<b>3</b>	1	7

## INFRA-RED

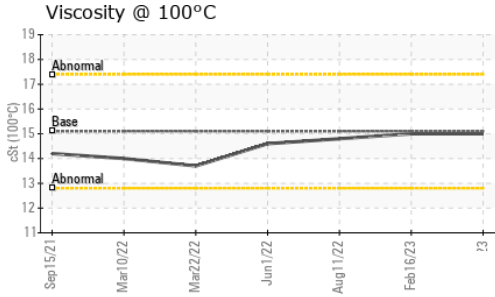
method	limit/base	current	history 1	history 2		
Soot %	%	ASTM D7844*	<b>0</b>	0	0	
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.2</b>	9.1	11.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.1</b>	22.0	22.2

## FLUID DEGRADATION

method	limit/base	current	history 1	history 2		
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.0</b>	15.5	19.0



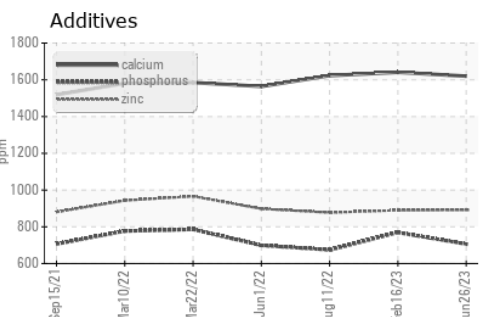
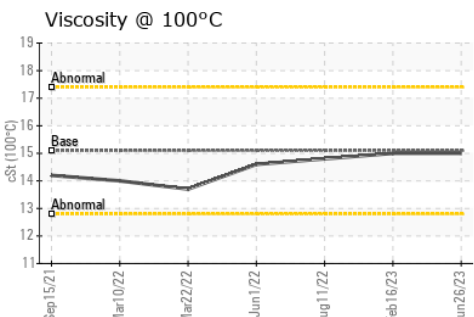
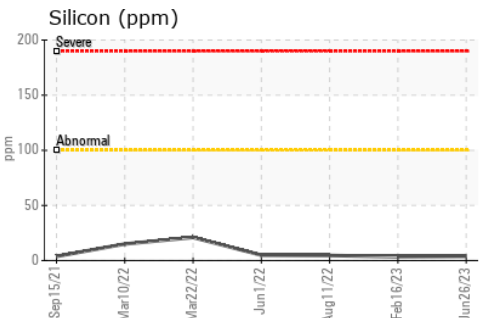
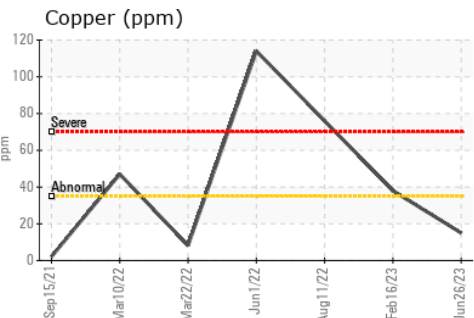
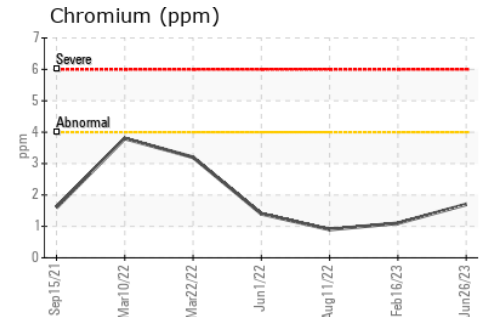
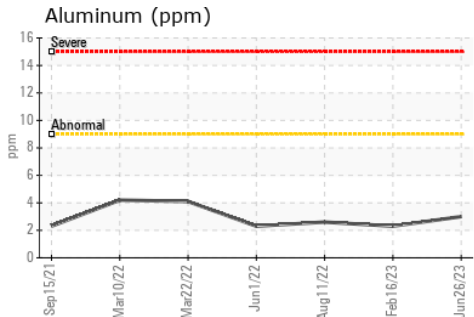
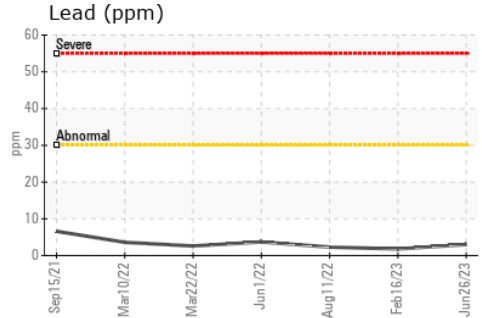
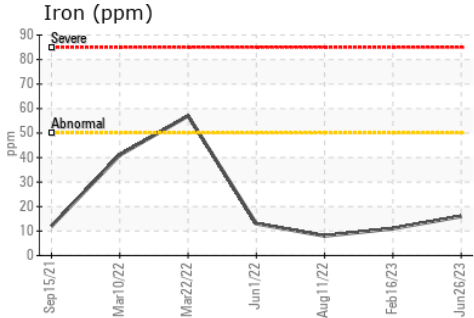
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	15.0	14.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0085918 **Received** : 04 Jul 2023  
**Lab Number** : 02567696 **Diagnosed** : 04 Jul 2023  
**Unique Number** : 5604742 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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.

Contact: Tim Greig  
 tgreig@gflenv.com

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