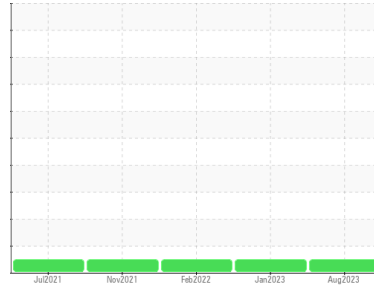




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**819000**  
 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 condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0084157</b>	GFL0063611	GFL0039133
Sample Date	Client Info		<b>15 Aug 2023</b>	16 Jan 2023	21 Feb 2022
Machine Age	hrs	Client Info	<b>10392</b>	8787	0
Oil Age	hrs	Client Info	<b>0</b>	1200	0
Oil Changed	Client Info		<b>N/A</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >50	<b>15</b>	23	9
Chromium	ppm	ASTM D5185(m) >4	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	2	<1
Titanium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >9	<b>2</b>	3	1
Lead	ppm	ASTM D5185(m) >30	<b>3</b>	11	1
Copper	ppm	ASTM D5185(m) >35	<b>&lt;1</b>	2	<1
Tin	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
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	history1	history2
Boron	ppm	ASTM D5185(m) 50	<b>15</b>	13	19
Barium	ppm	ASTM D5185(m) 5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>57</b>	67	53
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185(m) 560	<b>630</b>	722	600
Calcium	ppm	ASTM D5185(m) 1510	<b>1721</b>	2039	1566
Phosphorus	ppm	ASTM D5185(m) 780	<b>845</b>	997	747
Zinc	ppm	ASTM D5185(m) 870	<b>1019</b>	1161	936
Sulfur	ppm	ASTM D5185(m) 2040	<b>2102</b>	2336	2027
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >+100	<b>5</b>	5	3
Sodium	ppm	ASTM D5185(m)	<b>8</b>	11	6
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

## INFRA-RED

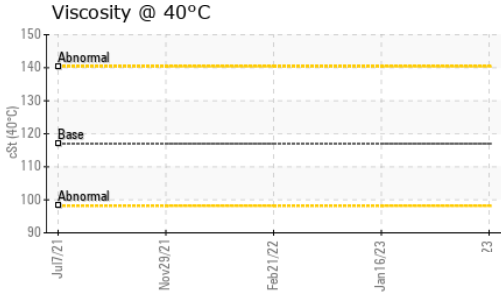
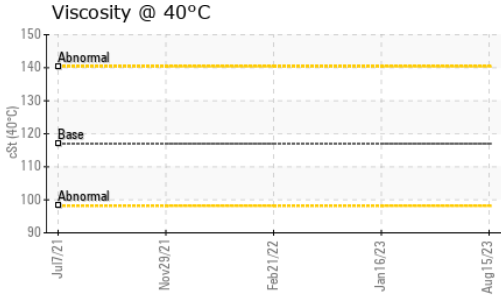
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	<b>&gt;20</b>	11.8	4.3
Sulfation	Abs/.1mm	ASTM D7415*	<b>&gt;30</b>	27.0	14.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	<b>&gt;25</b>	19.3	21.2



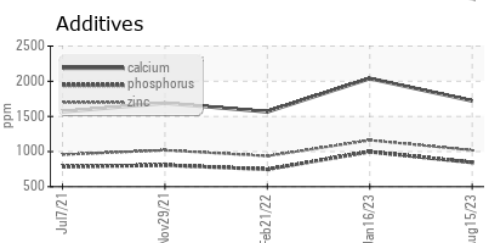
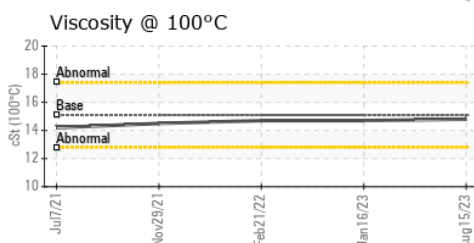
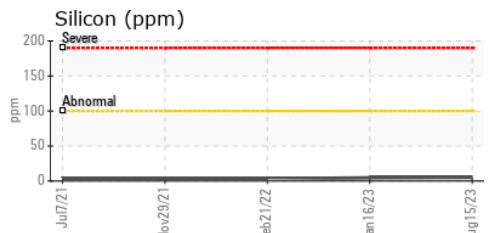
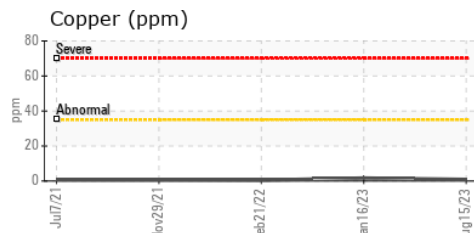
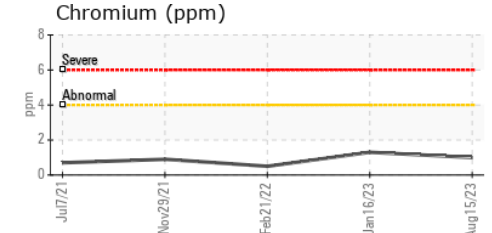
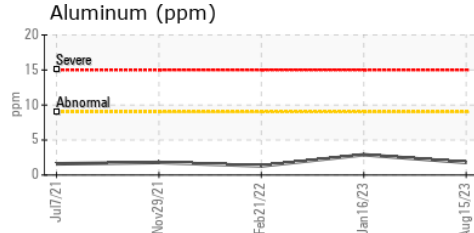
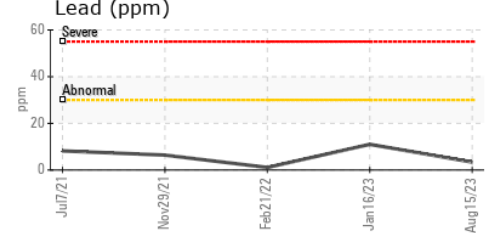
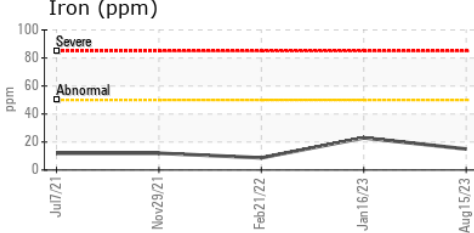
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	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 @ 40°C	cSt	ASTM D7279(m)	117.0	<b>116</b>	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	<b>14.8</b>	14.7
Viscosity Index (VI)	Scale	ASTM D2270*	134	<b>131</b>	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 573 - Vancouver Hauling  
**Sample No.** : GFL0084157 **Received** : 08 Sep 2023  
**Lab Number** : 02581091 **Diagnosed** : 08 Sep 2023  
**Unique Number** : 5642156 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI, Visual )

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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