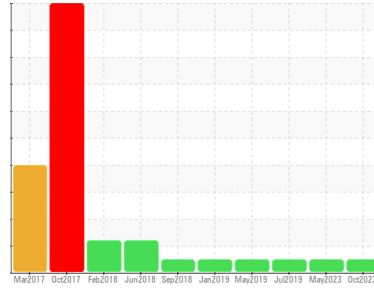




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**8216**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. 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>GFL</b>	GFL0077976	GFL12221613
Sample Date	Client Info		<b>22 Oct 2023</b>	04 May 2023	26 Jul 2019
Machine Age	hrs	Client Info	<b>0</b>	17232	3068
Oil Age	hrs	Client Info	<b>0</b>	0	443
Oil Changed	Client Info		<b>N/A</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>4</b>	7	42
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	2
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	0	1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	1
Lead	ppm	ASTM D5185(m) >40	<b>0</b>	<1	3
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	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	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>2</b>	2	2
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>59</b>	58	70
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m) 1010	<b>972</b>	964	1210
Calcium	ppm	ASTM D5185(m) 1070	<b>1035</b>	1091	1189
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1033</b>	1083	1197
Zinc	ppm	ASTM D5185(m) 1270	<b>1173</b>	1158	1278
Sulfur	ppm	ASTM D5185(m) 2060	<b>2613</b>	2707	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>4</b>	4	5
Sodium	ppm	ASTM D5185(m)	<b>2</b>	1	6
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	0	1
Fuel	%	ASTM D7593* >5	<b>0.8</b>	0.6	<1.0

## INFRA-RED

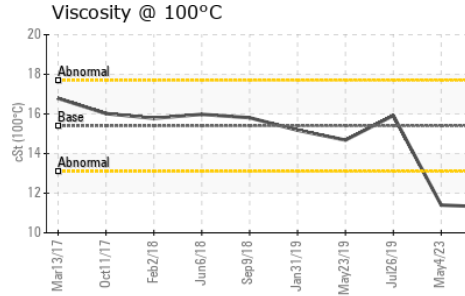
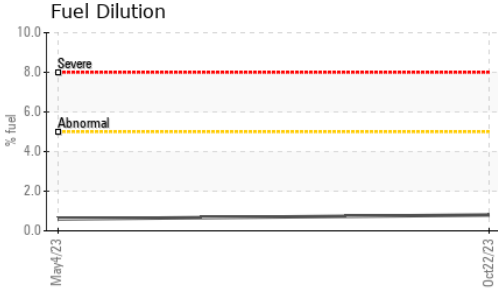
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	0	1.08
Nitration	Abs/cm	ASTM D7624* >20	<b>4.7</b>	5.0	16.4
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>17.9</b>	18.5	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>13.4</b>	13.4	16.9



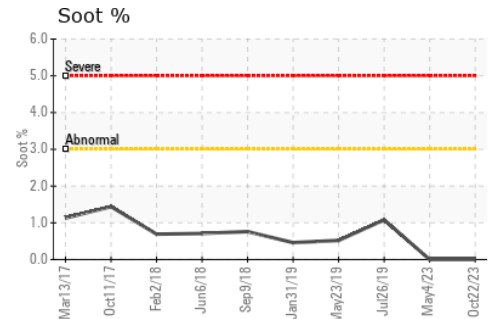
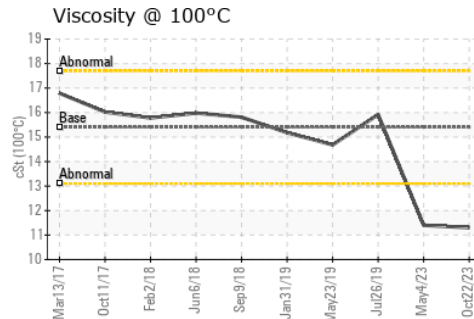
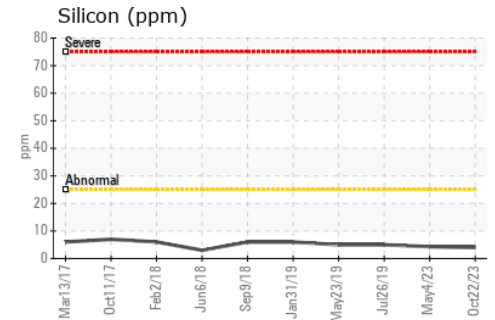
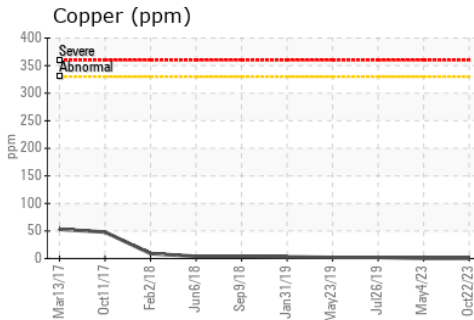
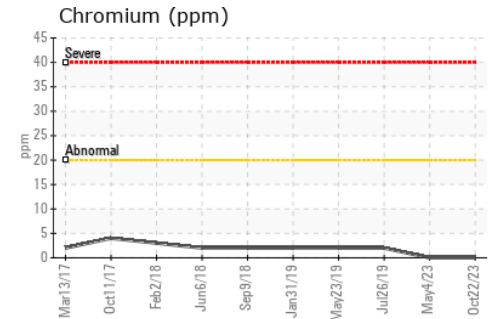
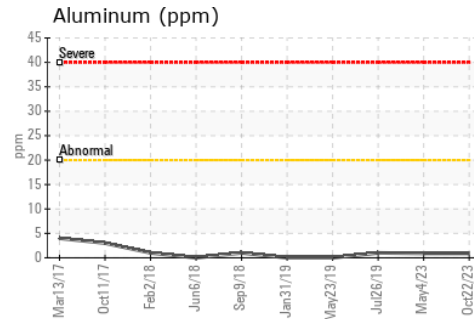
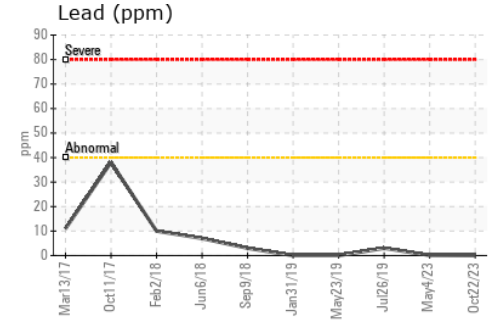
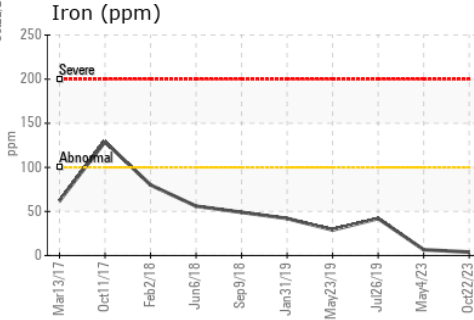
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	11.3	11.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL **Received** : 23 Oct 2023  
**Lab Number** : 02590930 **Diagnosed** : 25 Oct 2023  
**Unique Number** : 5668009 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: FUELDILUTION, PercentFuel )

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 T: (780)509-2640  
 F: (780)444-8851

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.