



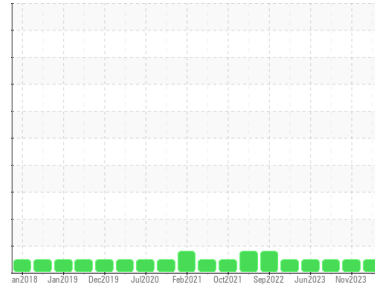
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**801033**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (22 LTR)**



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. 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>GFL0107117</b>	WC0875084	GFL0094219
Sample Date	Client Info		<b>25 Jan 2024</b>	10 Nov 2023	12 Sep 2023
Machine Age	hrs	Client Info	<b>14144</b>	13586	11393
Oil Age	hrs	Client Info	<b>0</b>	369	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	<b>13</b>	10	16
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>5</b>	3	5
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
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)	0	<b>209</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>79</b>	59	59
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>479</b>	949	955
Calcium	ppm	ASTM D5185(m)	1070	<b>1257</b>	1021	1037
Phosphorus	ppm	ASTM D5185(m)	1150	<b>997</b>	990	1057
Zinc	ppm	ASTM D5185(m)	1270	<b>1188</b>	1197	1183
Sulfur	ppm	ASTM D5185(m)	2060	<b>2715</b>	2501	2476
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

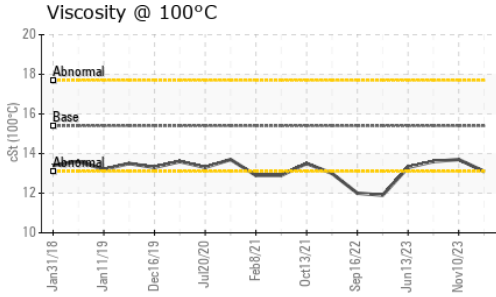
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>5</b>	4	7
Sodium	ppm	ASTM D5185(m)		<b>6</b>	6	8
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	2	3

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.2	0.4
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.7</b>	8.4	9.5
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>22.9</b>	19.4	20.0



# OIL ANALYSIS REPORT

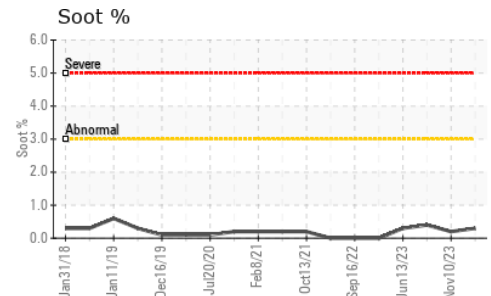
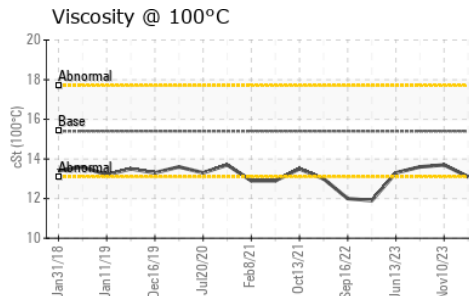
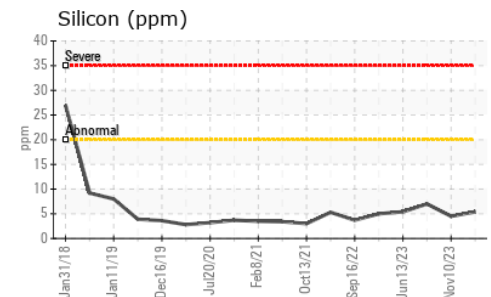
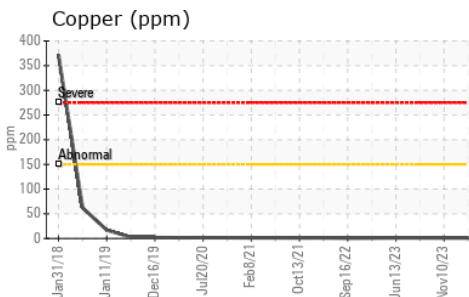
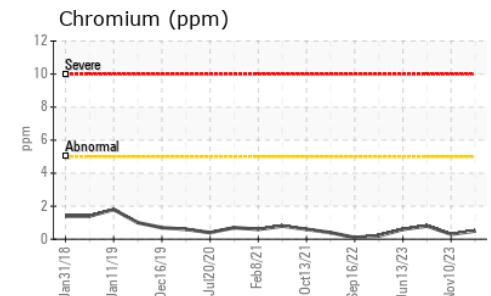
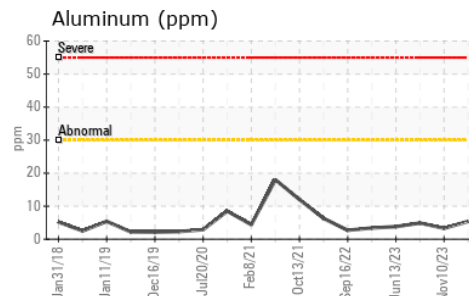
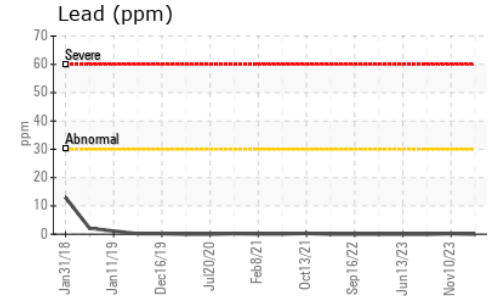
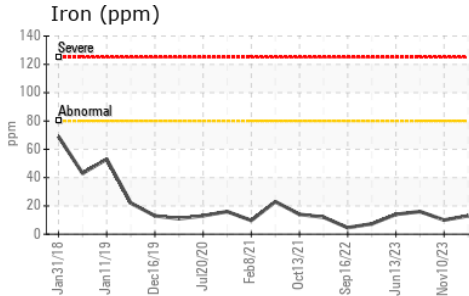


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/1mm	ASTM D7414*	>25	<b>17.9</b>	15.6	16.4

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>13.1</b>	13.7	13.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0107117  
**Lab Number** : 02612028  
**Unique Number** : 5721123  
**Test Package** : MOB 1

**GFL Environmental - 217 - Aurora**  
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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.