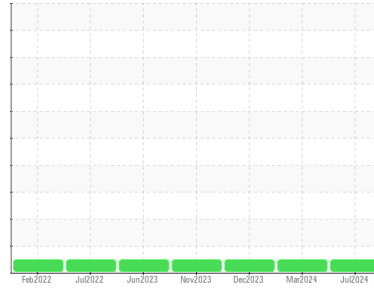




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**901123**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 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>GFL0125530</b>	GFL0100602	GFL0100638
Sample Date	Client Info		<b>02 Jul 2024</b>	01 Mar 2024	15 Dec 2023
Machine Age	kms	Client Info	<b>312010</b>	16670	301513
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
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)	>110	<b>31</b>	18	11
Chromium	ppm	ASTM D5185(m)	>4	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>4</b>	4	3
Lead	ppm	ASTM D5185(m)	>45	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>85	<b>2</b>	2	1
Tin	ppm	ASTM D5185(m)	>4	<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>2</b>	3	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	60	58
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>957</b>	957	947
Calcium	ppm	ASTM D5185(m)	1070	<b>1062</b>	1078	1055
Phosphorus	ppm	ASTM D5185(m)	1150	<b>945</b>	1000	991
Zinc	ppm	ASTM D5185(m)	1270	<b>1191</b>	1182	1162
Sulfur	ppm	ASTM D5185(m)	2060	<b>2396</b>	2640	2688
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

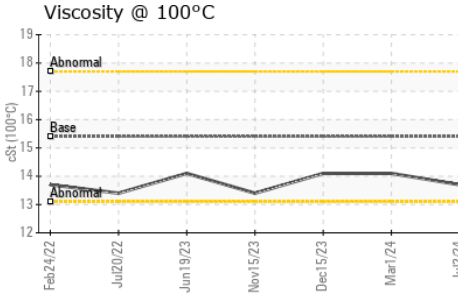
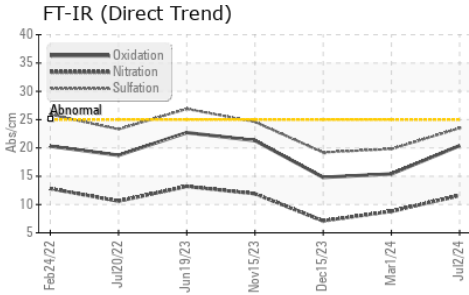
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	<b>7</b>	5	3
Sodium	ppm	ASTM D5185(m)		<b>7</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	2	1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>1</b>	0.6	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.6</b>	8.8	7.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.5</b>	19.8	19.2



# OIL ANALYSIS REPORT



## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	20.4	15.4	14.8

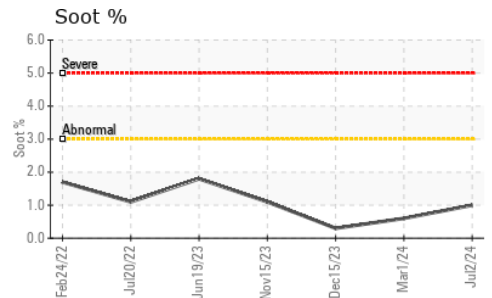
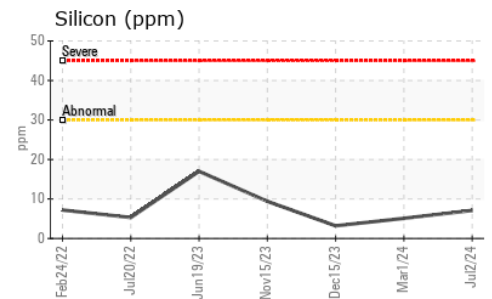
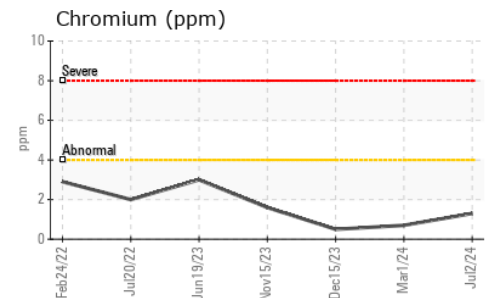
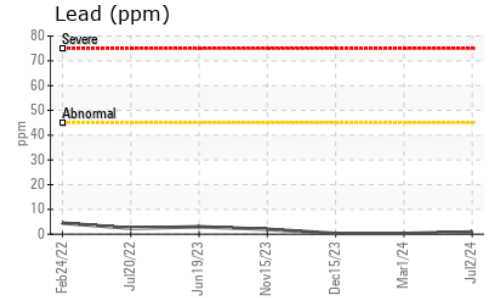
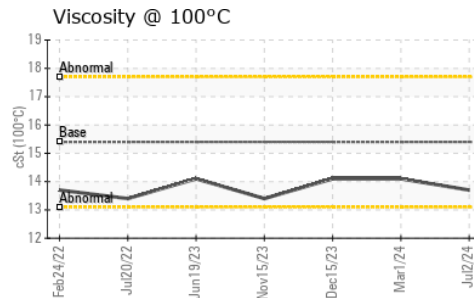
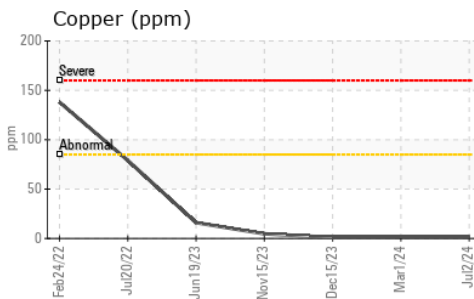
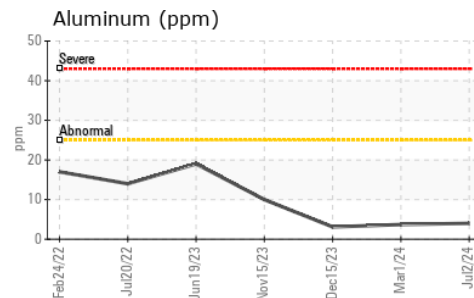
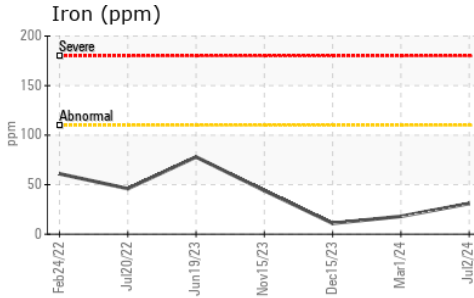
## VISUAL

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

## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 100°C	cSt ASTM D7279(m)	15.4	13.7	14.1	14.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0125530  
**Lab Number** : 02645764  
**Unique Number** : 5803303  
**Test Package** : MOB 1

**GFL Environmental - 575 - Squamish Hauling**  
 38950 Queens Way,  
 Squamish, BC  
 CA V8B 0K8  
 Contact: Dean Imbeau  
 dimbeau@gflenv.com  
 T: (604)892-5604  
 F: (604)892-5238

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.