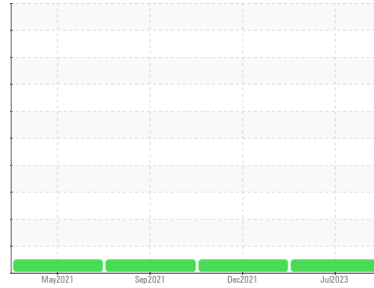




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**401143**

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>GFL0076996</b>	GFL0035394	GFL0024387
Sample Date	Client Info		<b>30 Jul 2023</b>	04 Dec 2021	27 Sep 2021
Machine Age	hrs	Client Info	<b>3585</b>	763	2377
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>42</b>	37	16
Chromium	ppm	ASTM D5185(m) >20	<b>1</b>	4	1
Nickel	ppm	ASTM D5185(m) >4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>3</b>	4	3
Lead	ppm	ASTM D5185(m) >40	<b>9</b>	3	5
Copper	ppm	ASTM D5185(m) >330	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
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	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>2</b>	5	4
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>64</b>	61	62
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>1053</b>	1058	1042
Calcium	ppm	ASTM D5185(m) 1070	<b>1114</b>	1109	1114
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1103</b>	1062	1087
Zinc	ppm	ASTM D5185(m) 1270	<b>1279</b>	1282	1277
Sulfur	ppm	ASTM D5185(m) 2060	<b>2435</b>	2502	2498
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>7</b>	6	8
Sodium	ppm	ASTM D5185(m)	<b>6</b>	5	5
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	6	4

## INFRA-RED

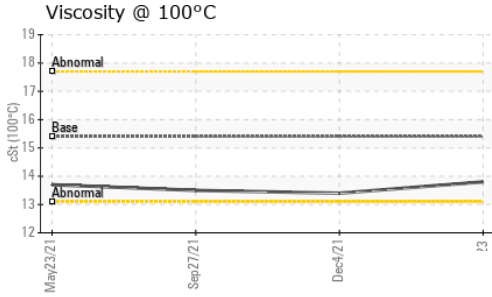
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.4</b>	0	0.1
Nitration	Abs/cm	ASTM D7624* >20	<b>11.0</b>	4.4	9.3
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>23.0</b>	14.4	21.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>19.2</b>	7.6	16.8



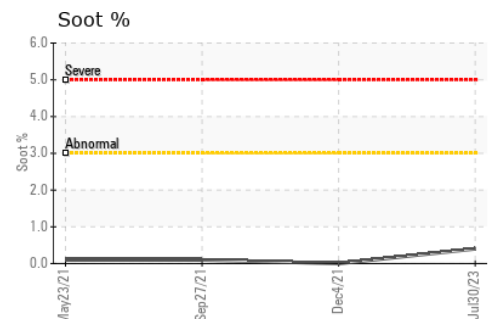
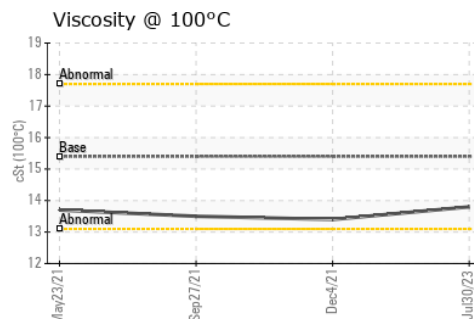
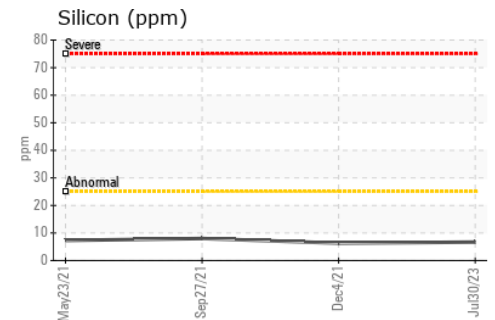
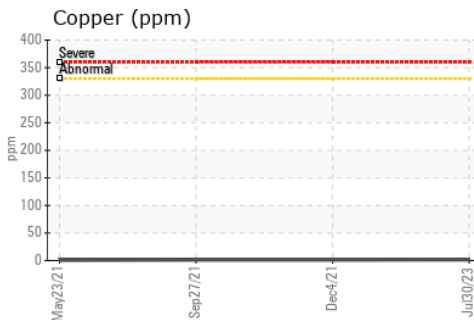
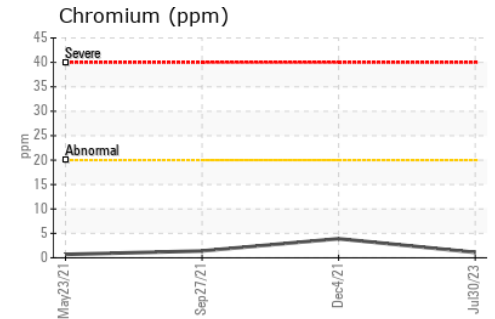
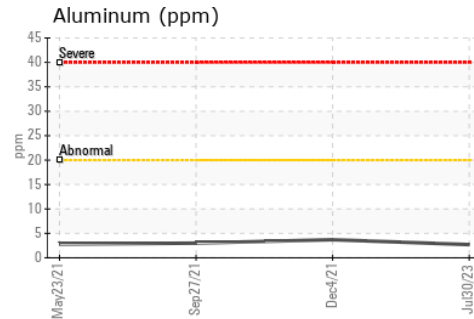
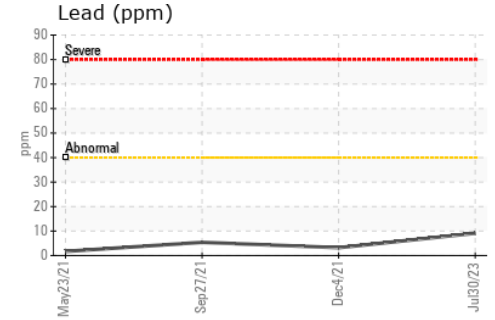
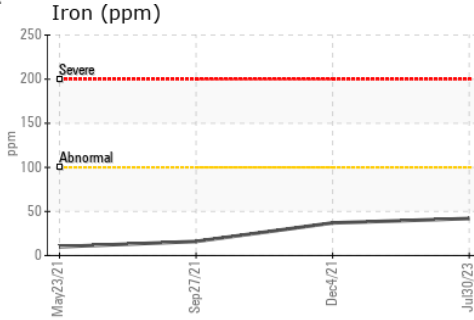
# OIL ANALYSIS REPORT



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	13.4	13.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling  
**Sample No.** : GFL0076996 **Received** : 02 Aug 2023 38950 Queens Way,  
**Lab Number** : 02573581 **Diagnosed** : 02 Aug 2023 Squamish, BC  
**Unique Number** : 5618632 **Diagnostician** : Wes Davis CA V8B 0K8  
**Test Package** : MOB 1 Contact: Dean Imbeau  
dimbeau@gflenv.com

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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