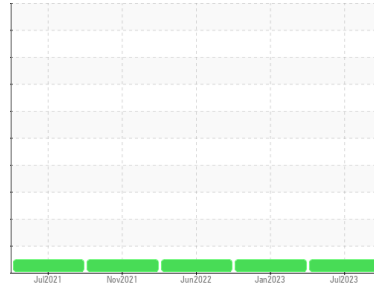




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**401142**

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>GFL0076995</b>	GFL0054666	GFL0024419	
Sample Date	Client Info	<b>28 Jul 2023</b>	04 Jan 2023	06 Jun 2022	
Machine Age	hrs	Client Info	<b>16178</b>	15345	14538
Oil Age	hrs	Client Info	<b>0</b>	0	600
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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

### WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>31</b>	32	27
Chromium	ppm ASTM D5185(m) >20	<b>2</b>	2	2
Nickel	ppm ASTM D5185(m) >4	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	<1	0
Silver	ppm ASTM D5185(m) >3	<b>0</b>	0	<1
Aluminum	ppm ASTM D5185(m) >20	<b>2</b>	4	3
Lead	ppm ASTM D5185(m) >40	<b>11</b>	7	7
Copper	ppm ASTM D5185(m) >330	<b>2</b>	1	1
Tin	ppm ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185(m)	<b>0</b>	<1	<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>3</b>	3	3
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>67</b>	64	67
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>1101</b>	1055	1118
Calcium	ppm ASTM D5185(m) 1070	<b>1172</b>	1208	1192
Phosphorus	ppm ASTM D5185(m) 1150	<b>1159</b>	1172	1166
Zinc	ppm ASTM D5185(m) 1270	<b>1341</b>	1317	1381
Sulfur	ppm ASTM D5185(m) 2060	<b>2596</b>	2661	2666
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>8</b>	13	16
Sodium	ppm ASTM D5185(m)	<b>5</b>	5	5
Potassium	ppm ASTM D5185(m) >20	<b>2</b>	5	5

### INFRA-RED

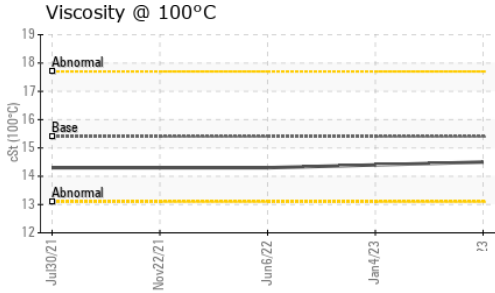
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.6</b>	0.5	0
Nitration	Abs/cm ASTM D7624* >20	<b>13.6</b>	13.6	4.0
Sulfation	Abs/.1mm ASTM D7415* >30	<b>25.9</b>	25.6	14.7

### FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>21.5</b>	21.3	5.8



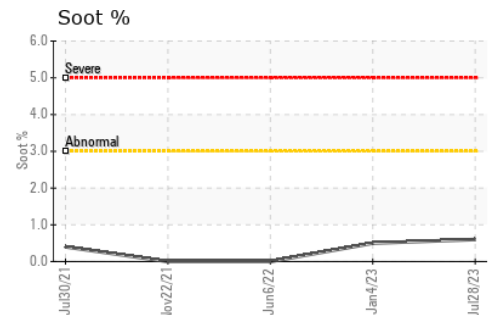
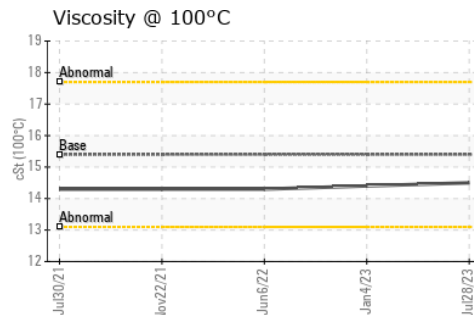
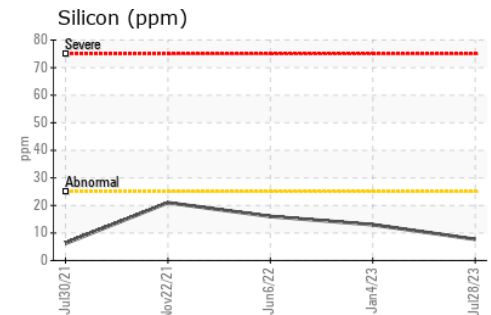
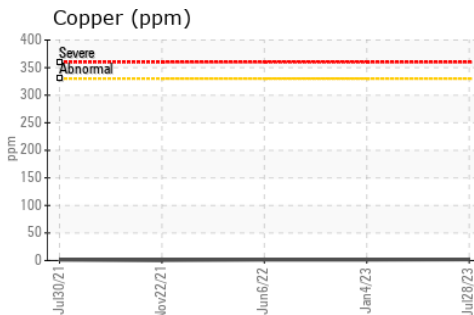
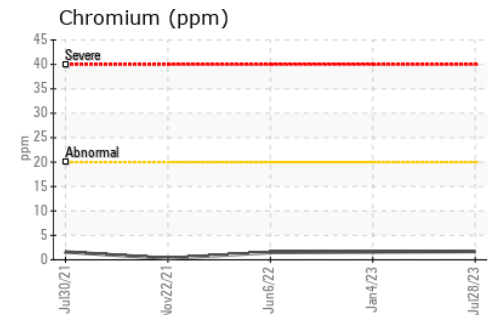
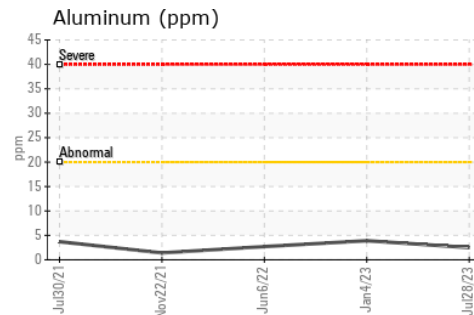
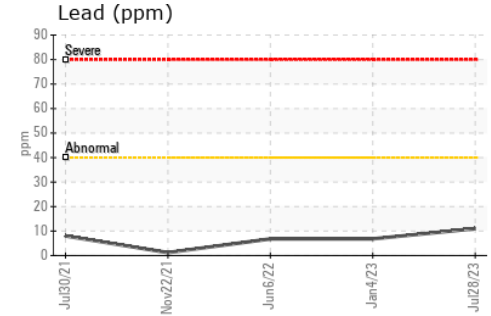
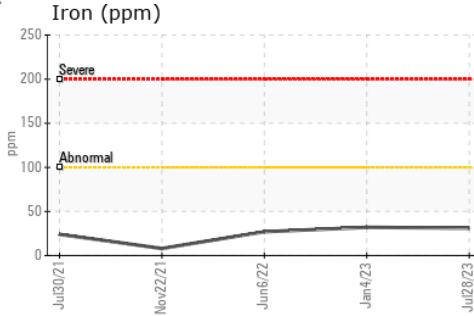
# OIL ANALYSIS REPORT



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>14.5</b>	14.4	14.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling  
**Sample No.** : GFL0076995 **Received** : 02 Aug 2023 38950 Queens Way,  
**Lab Number** : **02573577** **Diagnosed** : 02 Aug 2023 Squamish, BC  
**Unique Number** : 5618628 **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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