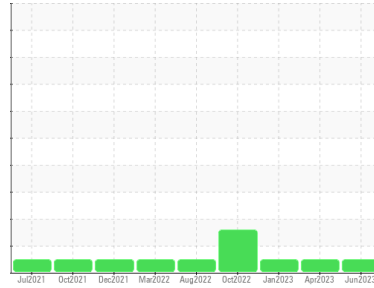




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**401112**

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>GFL0084050</b>	GFL0073212	GFL0063602
Sample Date	Client Info	<b>08 Jun 2023</b>	19 Apr 2023	18 Jan 2023
Machine Age	hrs	<b>28684</b>	28236	27797
Oil Age	hrs	<b>0</b>	0	600
Oil Changed	Client Info	<b>N/A</b>	N/A	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>16</b>	19	20
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Nickel	ppm ASTM D5185(m) >4	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Silver	ppm ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >20	<b>1</b>	1	2
Lead	ppm ASTM D5185(m) >40	<b>1</b>	<1	<1
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</b>	<1	<1
Tin	ppm ASTM D5185(m) >15	<b>0</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>4</b>	4	2
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>62</b>	63	62
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>1007</b>	1006	1005
Calcium	ppm ASTM D5185(m) 1070	<b>1088</b>	1147	1113
Phosphorus	ppm ASTM D5185(m) 1150	<b>1089</b>	1135	1109
Zinc	ppm ASTM D5185(m) 1270	<b>1229</b>	1242	1223
Sulfur	ppm ASTM D5185(m) 2060	<b>2565</b>	2697	2650
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>	10	16
Sodium	ppm ASTM D5185(m)	<b>4</b>	4	4
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	0	0

## INFRA-RED

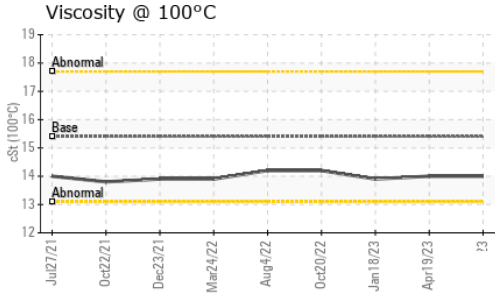
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.4</b>	0.6	0.6
Nitration	Abs/cm ASTM D7624* >20	<b>8.9</b>	8.6	9.5
Sulfation	Abs/.1mm ASTM D7415* >30	<b>21.2</b>	20.8	22.7

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>17.2</b>	16.3	17.9



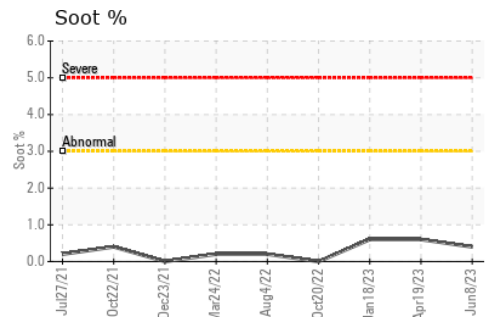
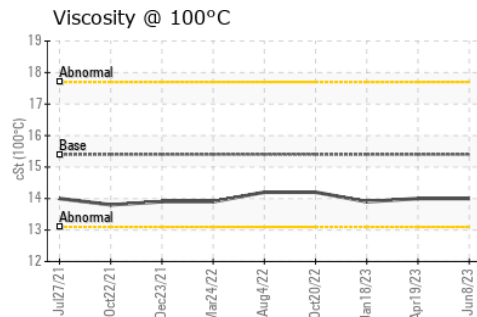
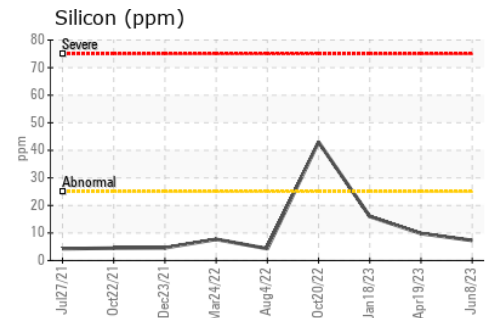
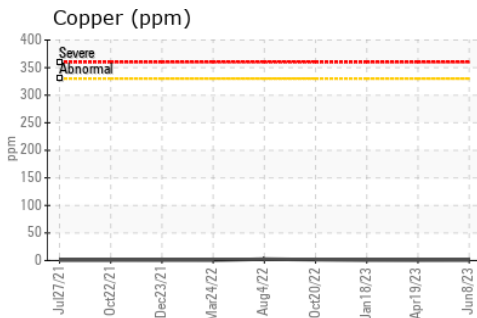
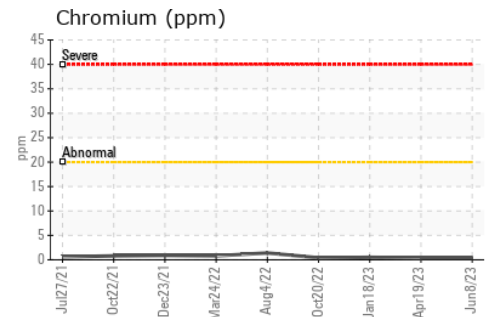
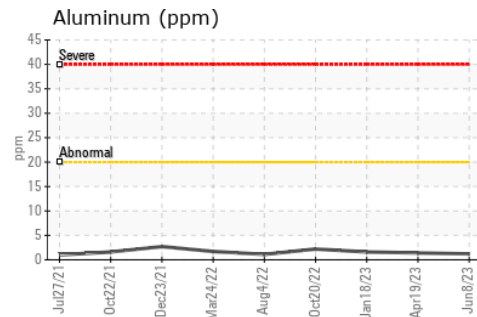
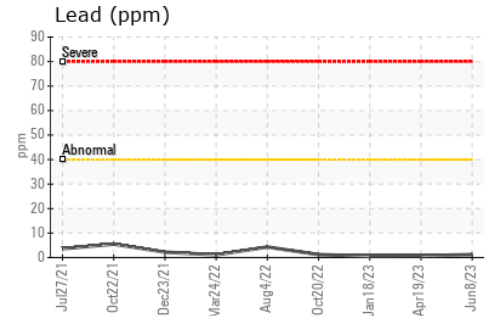
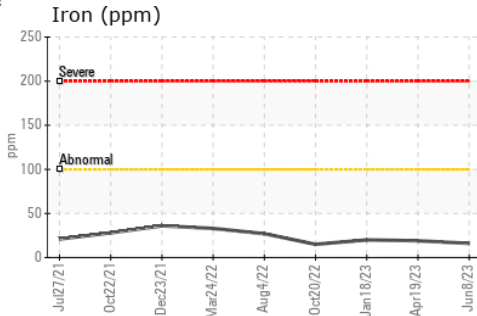
# OIL ANALYSIS REPORT



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	<b>14.0</b>	14.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 574 - Vancouver Fleet  
**Sample No.** : GFL0084050 **Received** : 14 Jul 2023  
**Lab Number** : 02569968 **Diagnosed** : 14 Jul 2023  
**Unique Number** : 5607014 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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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