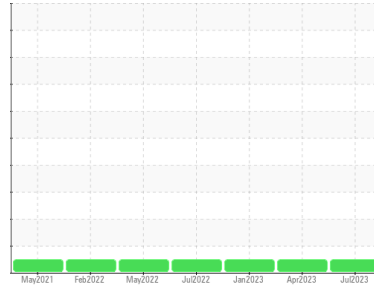




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**501076**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

## 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>GFL0088922</b>	GFL0074265	GFL0061099
Sample Date	Client Info	<b>24 Jul 2023</b>	14 Apr 2023	17 Jan 2023
Machine Age	hrs	<b>13818</b>	13204	0
Oil Age	hrs	<b>13204</b>	588	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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>6</b>	6	3
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	0
Nickel	ppm ASTM D5185(m) >4	<b>0</b>	<1	0
Titanium	ppm ASTM D5185(m)	<b>0</b>	<1	0
Silver	ppm ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >20	<b>1</b>	2	1
Lead	ppm ASTM D5185(m) >40	<b>0</b>	0	0
Copper	ppm ASTM D5185(m) >330	<b>1</b>	<1	<1
Tin	ppm ASTM D5185(m) >15	<b>0</b>	<1	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>4</b>	5	4
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>59</b>	60	59
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>970</b>	987	970
Calcium	ppm ASTM D5185(m) 1070	<b>1032</b>	1122	1095
Phosphorus	ppm ASTM D5185(m) 1150	<b>1037</b>	1101	1082
Zinc	ppm ASTM D5185(m) 1270	<b>1171</b>	1217	1179
Sulfur	ppm ASTM D5185(m) 2060	<b>2553</b>	2724	2689
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>4</b>	5	4
Sodium	ppm ASTM D5185(m)	<b>1</b>	2	2
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	0	0

## INFRA-RED

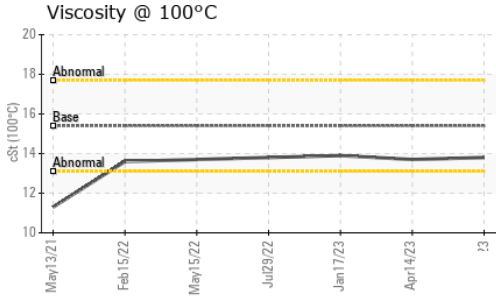
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0</b>	0	0
Nitration	Abs/cm ASTM D7624* >20	<b>5.7</b>	5.9	5.6
Sulfation	Abs/.1mm ASTM D7415* >30	<b>18.1</b>	18.7	19.2

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>13.3</b>	14.3	14.1



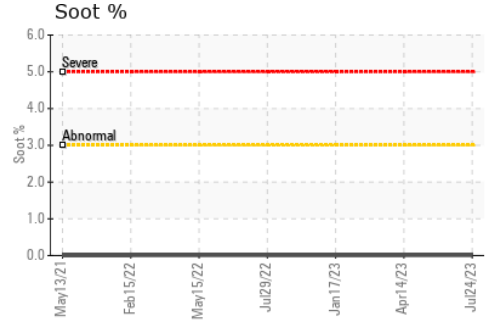
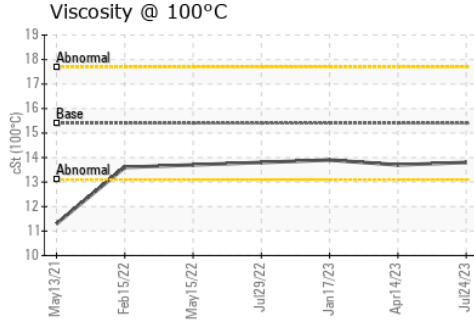
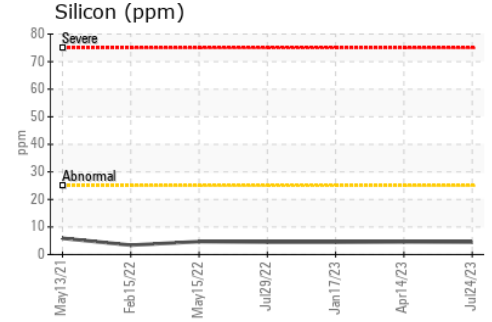
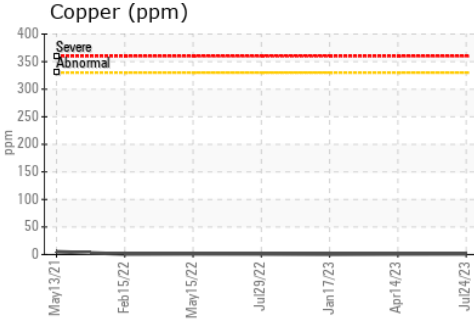
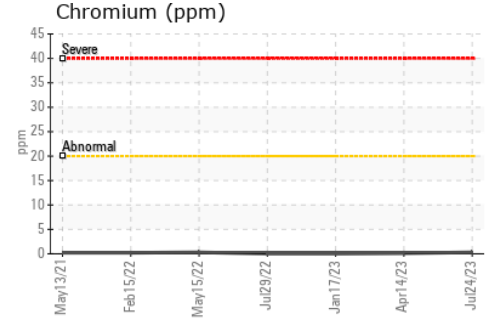
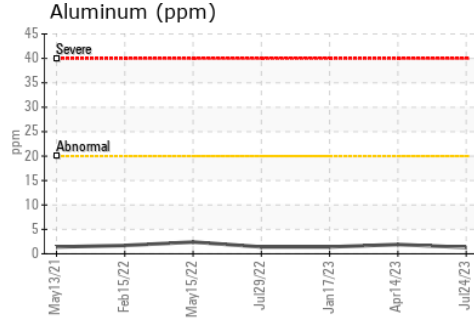
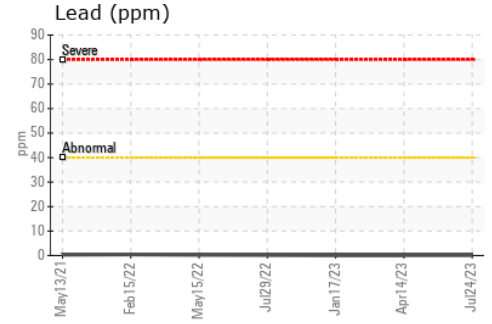
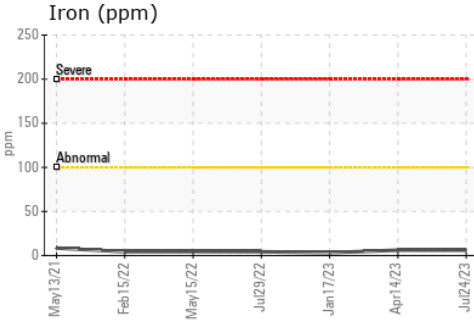
# OIL ANALYSIS REPORT



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	13.8	13.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0088922     **Received** : 25 Jul 2023  
**Lab Number** : 02571902     **Diagnosed** : 25 Jul 2023  
**Unique Number** : 5616953     **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**GFL Environmental - 216**  
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 Toronto, ON  
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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.