



# OIL ANALYSIS REPORT

Sample Rating Trend

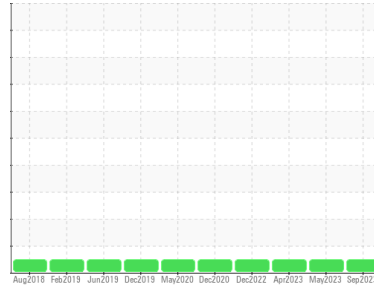
**NORMAL**



Machine Id  
**801045**

Component  
**Diesel Engine**

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



## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### 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>GFL</b>	GFL0081980	GFL0077233	
Sample Date	Client Info	<b>05 Sep 2023</b>	30 May 2023	05 Apr 2023	
Machine Age	hrs	Client Info	<b>0</b>	9846	4601
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</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>21</b>	13	21
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>0</b>	<1	<1
Silver	ppm ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >20	<b>2</b>	2	3
Lead	ppm ASTM D5185(m) >40	<b>0</b>	0	<1
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</b>	<1	1
Tin	ppm ASTM D5185(m) >15	<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>4</b>	6	10
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>60</b>	61	58
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	<b>967</b>	964	879
Calcium	ppm ASTM D5185(m) 1070	<b>1043</b>	1123	1178
Phosphorus	ppm ASTM D5185(m) 1150	<b>1032</b>	1079	1058
Zinc	ppm ASTM D5185(m) 1270	<b>1214</b>	1202	1169
Sulfur	ppm ASTM D5185(m) 2060	<b>2380</b>	2570	2522
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>6</b>	2	3
Sodium	ppm ASTM D5185(m)	<b>8</b>	6	5
Potassium	ppm ASTM D5185(m) >20	<b>4</b>	<1	2

## INFRA-RED

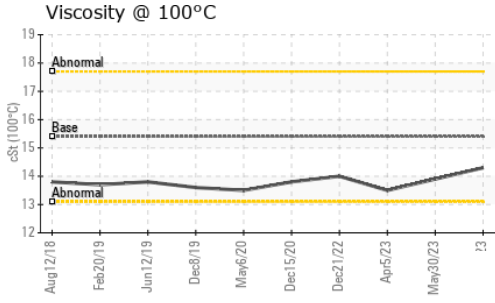
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.8</b>	0.3	0.4
Nitration	Abs/cm ASTM D7624* >20	<b>10.3</b>	8.3	9.6
Sulfation	Abs/.1mm ASTM D7415* >30	<b>22.8</b>	19.9	23.1

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>17.3</b>	15.9	17.4



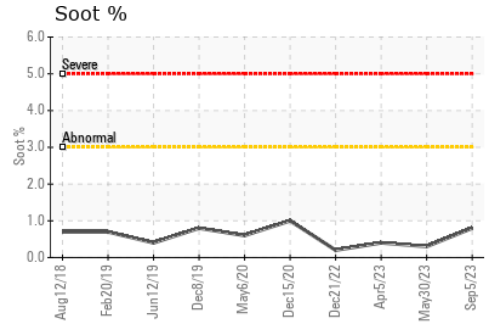
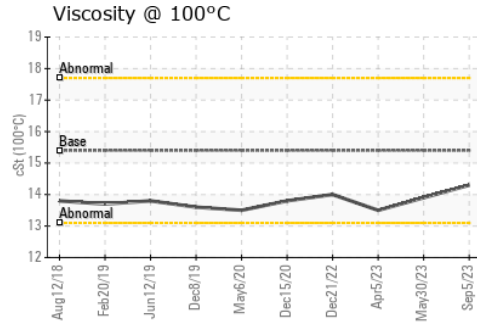
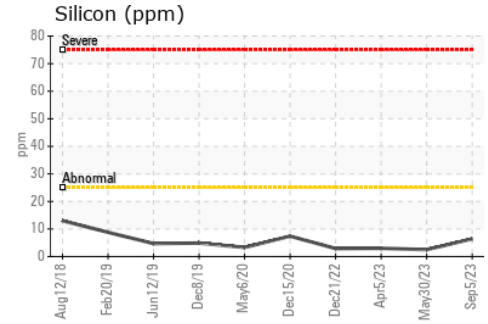
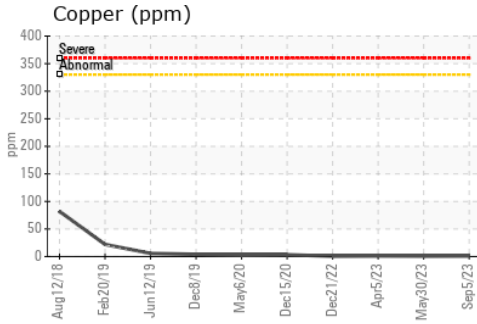
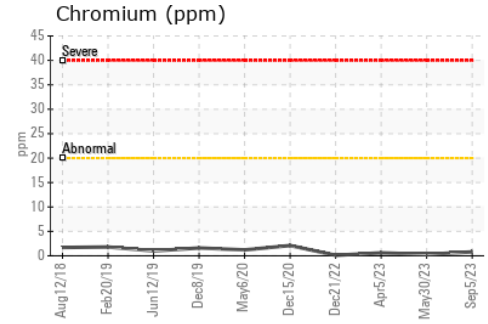
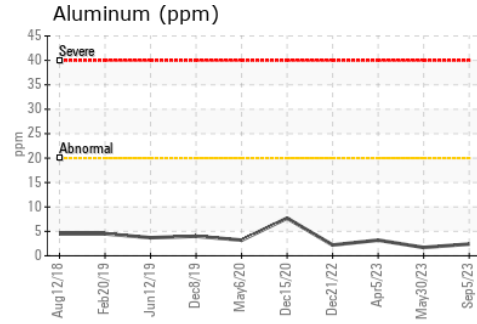
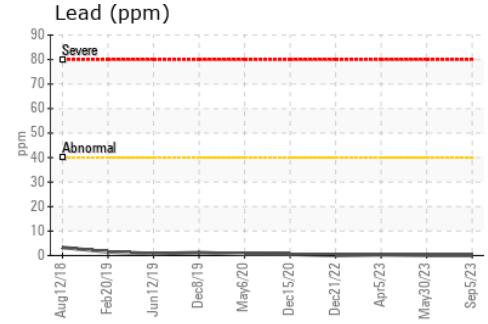
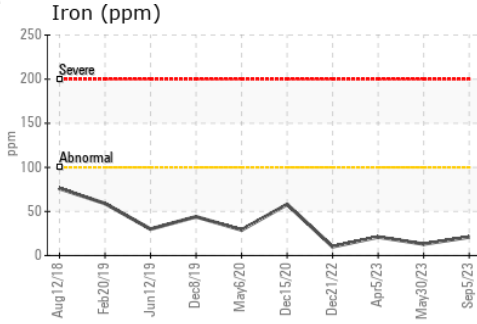
# OIL ANALYSIS REPORT



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>14.3</b>	13.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL **Received** : 06 Sep 2023  
**Lab Number** : 02580568 **Diagnosed** : 06 Sep 2023  
**Unique Number** : 5633628 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

**GFL Environmental - 217 - Aurora**  
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 AURORA, ON  
 CA L4G 0K6  
 Contact: Mike Havens  
 MHavens@gflenv.com  
 T:  
 F: (905)713-2445

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.