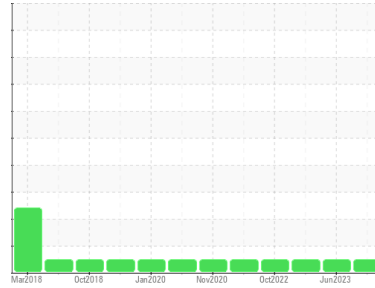




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**801035**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (22 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>GFL0094203</b>	GFL0086474	GFL0068345
Sample Date	Client Info		<b>13 Sep 2023</b>	13 Jun 2023	21 Dec 2022
Machine Age	hrs	Client Info	<b>86836</b>	10520	86836
Oil Age	hrs	Client Info	<b>0</b>	0	5998
Oil Changed	Client Info		<b>Changed</b>	Not Changd	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) >80	<b>18</b>	12	16
Chromium	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >2	<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) >30	<b>3</b>	2	4
Lead	ppm	ASTM D5185(m) >30	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >150	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >5	<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>2</b>	8	6
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>60</b>	58	61
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>984</b>	930	965
Calcium	ppm	ASTM D5185(m) 1070	<b>1066</b>	1114	1116
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1064</b>	1093	1076
Zinc	ppm	ASTM D5185(m) 1270	<b>1217</b>	1221	1194
Sulfur	ppm	ASTM D5185(m) 2060	<b>2414</b>	2646	2515
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	<b>7</b>	4	3
Sodium	ppm	ASTM D5185(m)	<b>8</b>	3	8
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	1	3

## INFRA-RED

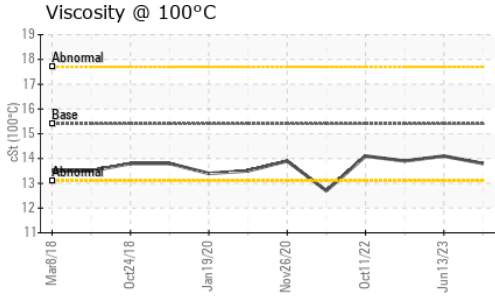
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.4</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624* >20	<b>10.0</b>	7.2	9.9
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>21.2</b>	19.7	22.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>18.0</b>	15.5	18.9



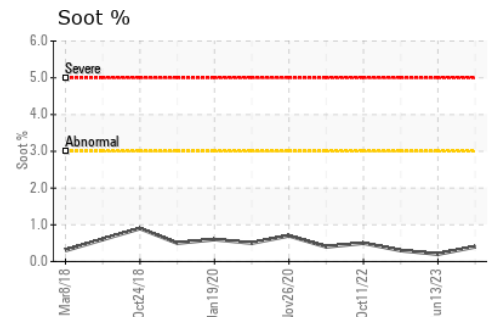
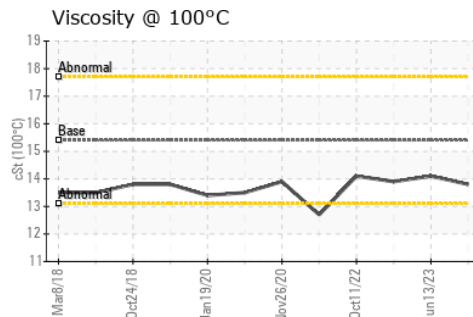
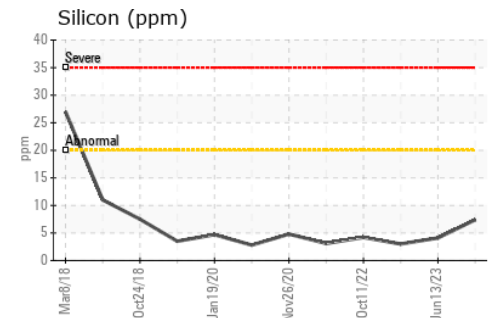
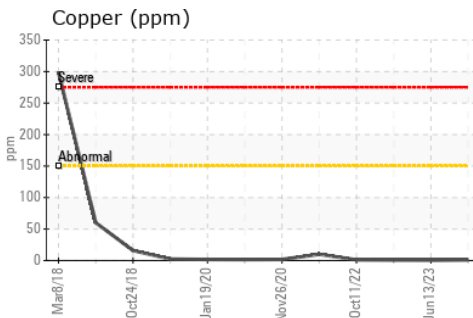
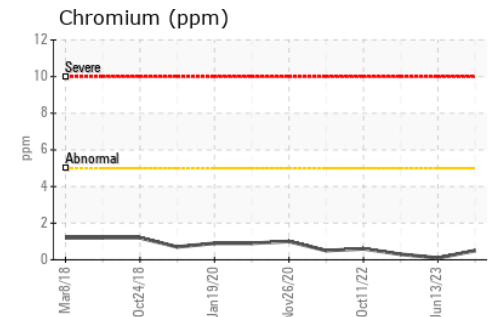
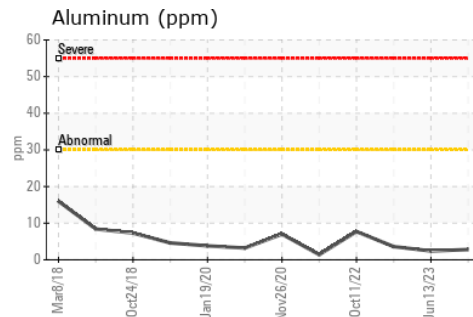
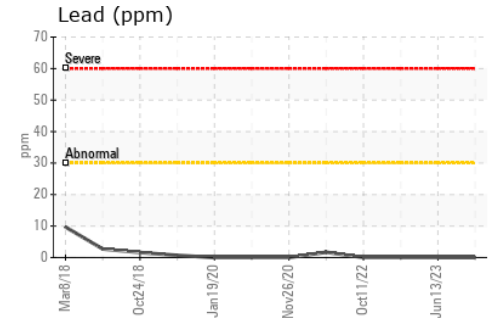
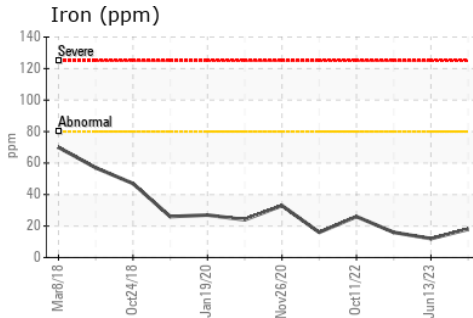
# OIL ANALYSIS REPORT



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	13.8	14.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0094203  
**Lab Number** : 02583099  
**Unique Number** : 5644164  
**Test Package** : MOB 1

**GFL Environmental - 217 - Aurora**  
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 AURORA, ON  
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 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.