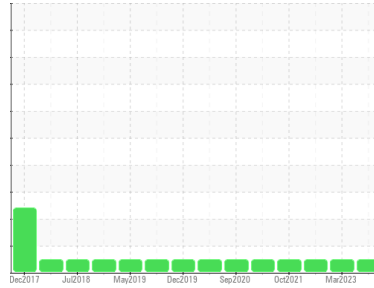




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**701032**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (25 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>GFL0086510</b>	GFL0068335	GFL0059490
Sample Date	Client Info		<b>12 Jul 2023</b>	17 Mar 2023	27 Sep 2022
Machine Age	hrs	Client Info	<b>90855</b>	90855	9080
Oil Age	hrs	Client Info	<b>0</b>	81775	0
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)	>80	<b>33</b>	35	16
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>5</b>	5	4
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>150	<b>1</b>	1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
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>5</b>	6	6
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	61	61
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>963</b>	961	933
Calcium	ppm	ASTM D5185(m)	1070	<b>1045</b>	1118	1098
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1005</b>	1040	1050
Zinc	ppm	ASTM D5185(m)	1270	<b>1178</b>	1190	1176
Sulfur	ppm	ASTM D5185(m)	2060	<b>2277</b>	2361	2465
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>11</b>	12	4
Sodium	ppm	ASTM D5185(m)		<b>10</b>	9	8
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	5	4

## INFRA-RED

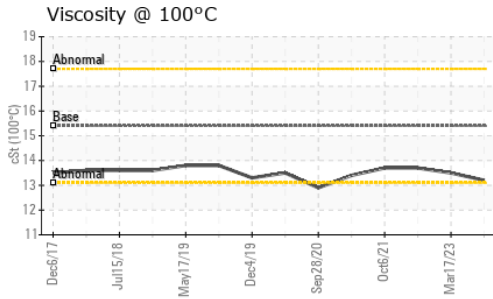
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.0</b>	12.2	9.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.8</b>	26.5	21.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.1</b>	22.5	18.3



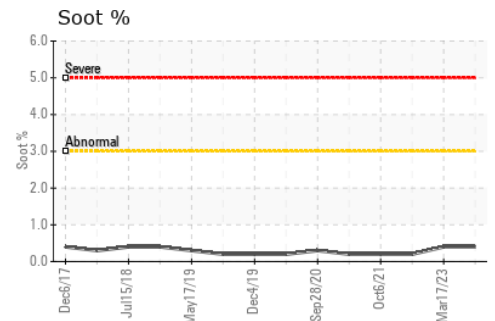
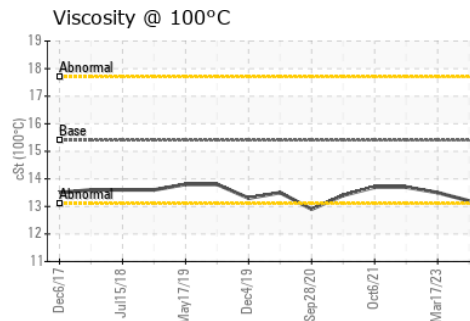
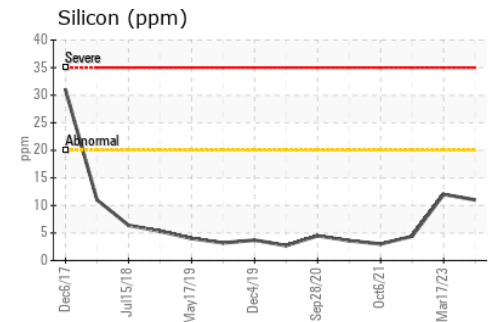
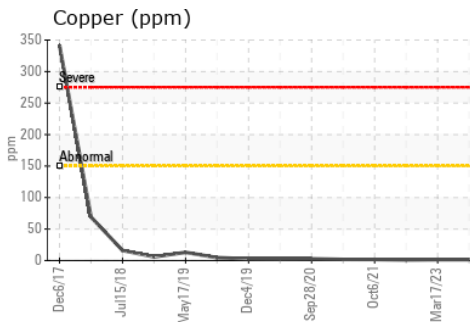
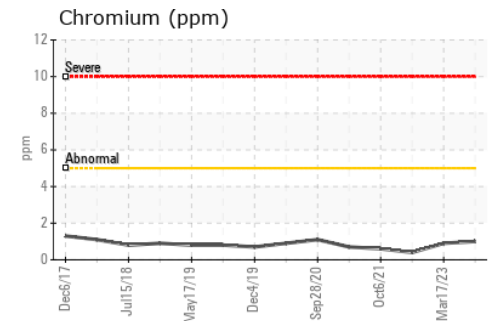
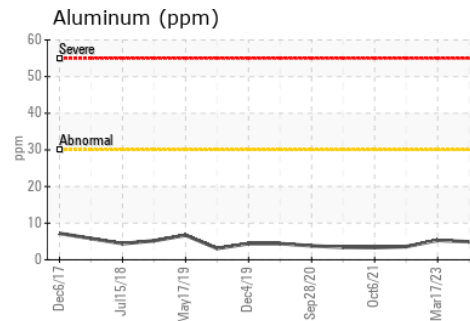
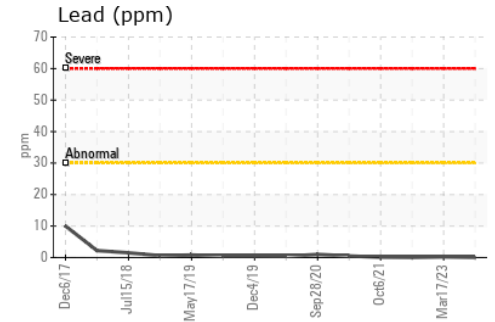
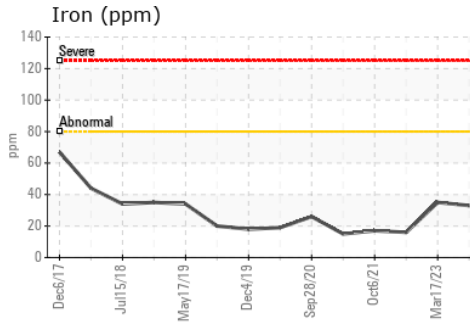
# OIL ANALYSIS REPORT



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	13.2	13.5

## GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : GFL0086510  
 Lab Number : 02570338  
 Unique Number : 5607384  
 Test Package : MOB 1

**GFL Environmental - 217 - Aurora**  
 14131 BAYVIEW AVE, AURORA YARD  
 AURORA, ON  
 CA L4G 0K6  
 Contact: Mike Havens  
 MHavens@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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