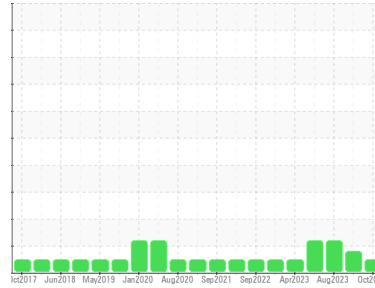




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**701027**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (22 LTR)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected 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>GFL0094192</b>	GFL0094198	GFL0091068
Sample Date	Client Info		<b>18 Oct 2023</b>	13 Oct 2023	23 Aug 2023
Machine Age	kms	Client Info	<b>186902</b>	186902	186902
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status			<b>NORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	0.0	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >80	<b>7</b>	27	12
Chromium	ppm	ASTM D5185(m) >5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >30	<b>2</b>	4	2
Lead	ppm	ASTM D5185(m) >30	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185(m) >150	<b>&lt;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>70</b>	6	7
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>60</b>	57	56
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>810</b>	866	897
Calcium	ppm	ASTM D5185(m) 1070	<b>1065</b>	976	996
Phosphorus	ppm	ASTM D5185(m) 1150	<b>956</b>	872	998
Zinc	ppm	ASTM D5185(m) 1270	<b>1115</b>	1077	1119
Sulfur	ppm	ASTM D5185(m) 2060	<b>2487</b>	2203	2411
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>5</b>	6	5
Sodium	ppm	ASTM D5185(m)	<b>6</b>	18	11
Potassium	ppm	ASTM D5185(m) >20	<b>2</b>	7	4
Fuel	%	ASTM D7593* >5	<b>1.7</b>	▲ 6.6	▲ 5.5

## INFRA-RED

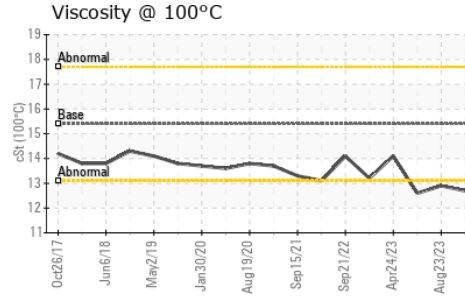
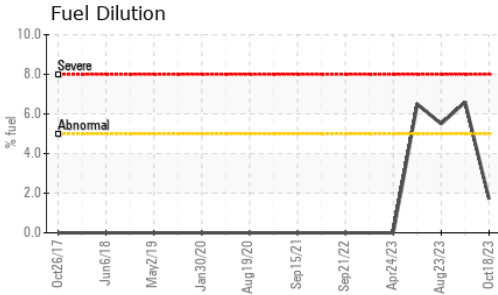
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	0.3	0.2
Nitration	Abs/cm	ASTM D7624* >20	<b>6.3</b>	13.0	10.3
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>19.5</b>	24.1	21.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>15.1</b>	25.2	18.6



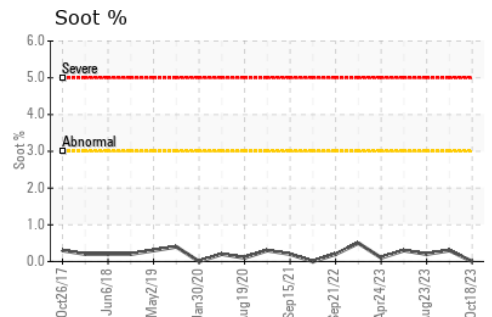
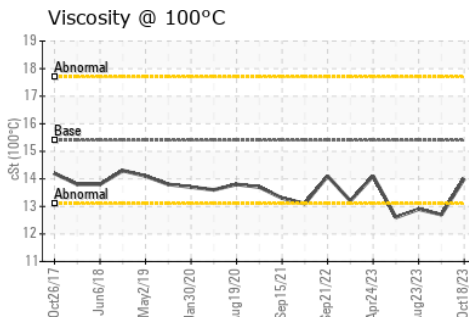
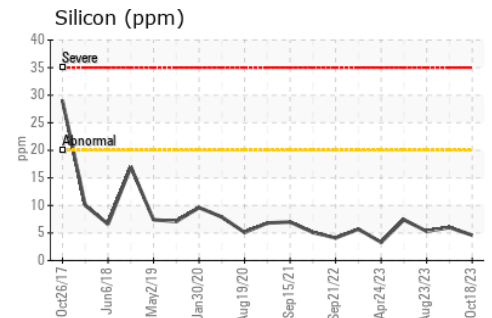
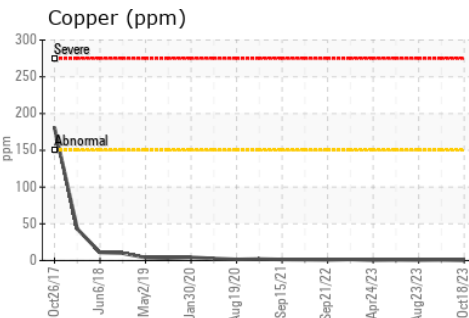
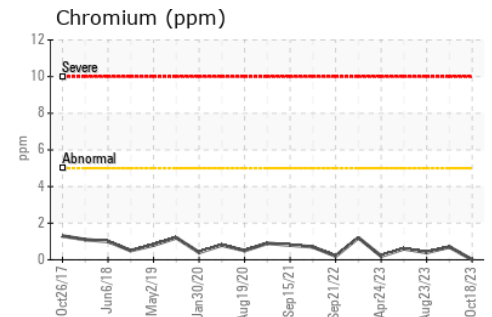
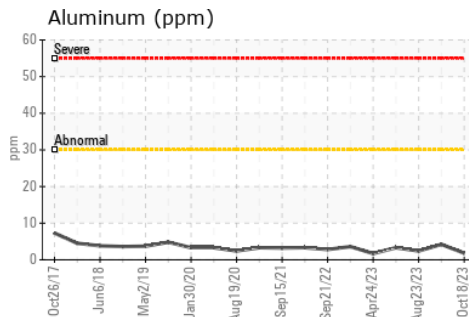
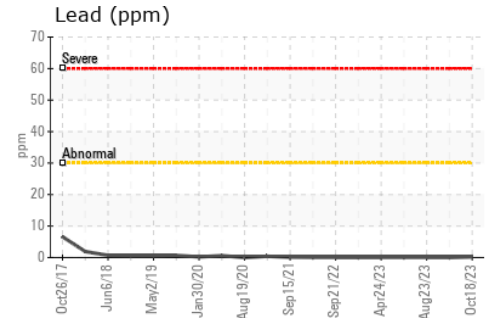
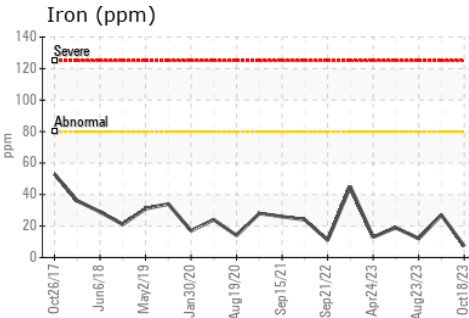
# OIL ANALYSIS REPORT



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	14.0	12.7 ▲ 12.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0094192  
**Lab Number** : 02590568  
**Unique Number** : 5659634  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

**GFL Environmental - 217 - Aurora**  
 14131 BAYVIEW AVE, AURORA YARD  
 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.