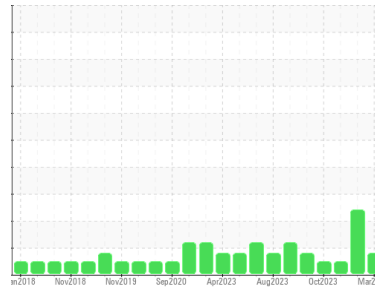




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**801027**

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>GFL0111724</b>	GFL0111721	GFL0107139
Sample Date	Client Info	<b>18 Mar 2024</b>	11 Mar 2024	28 Dec 2023
Machine Age	hrs	<b>139415</b>	14085	13526
Oil Age	hrs	<b>600</b>	600	600
Oil Changed	Client Info	<b>Not Chngd</b>	Changed	Changed
Sample Status		<b>MARGINAL</b>	SEVERE	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >80	<b>6</b>	23	18
Chromium	ppm ASTM D5185(m) >5	<b>0</b>	<1	<1
Nickel	ppm ASTM D5185(m) >2	<b>0</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >30	<b>0</b>	2	3
Lead	ppm ASTM D5185(m) >30	<b>0</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>7</b>	11	37
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 60	<b>56</b>	58	64
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm ASTM D5185(m) 1010	<b>924</b>	887	877
Calcium	ppm ASTM D5185(m) 1070	<b>1025</b>	1013	1150
Phosphorus	ppm ASTM D5185(m) 1150	<b>951</b>	965	1026
Zinc	ppm ASTM D5185(m) 1270	<b>1100</b>	1128	1212
Sulfur	ppm ASTM D5185(m) 2060	<b>2433</b>	2417	2655
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

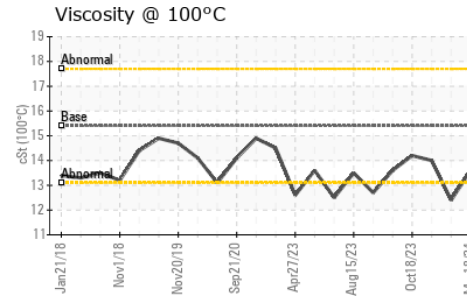
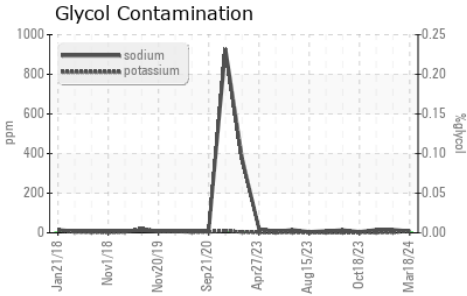
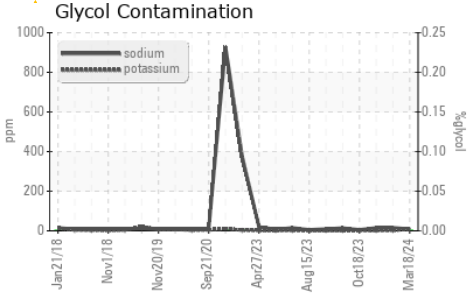
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<b>3</b>	4	5
Sodium	ppm ASTM D5185(m)	<b>8</b>	16	15
Potassium	ppm ASTM D5185(m) >20	<b>9</b>	2	0
Fuel	% ASTM D7593* >5	<b>▲ 3.1</b>	▲ 8.3	<1.0
Glycol	% ASTM D7922*	<b>0.0</b>	NEG	NEG

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.1</b>	0.5	0.4
Nitration	Abs/cm ASTM D7624* >20	<b>6.3</b>	11.2	10.2
Sulfation	Abs/.1mm ASTM D7415* >30	<b>18.4</b>	22.5	21.6



# OIL ANALYSIS REPORT

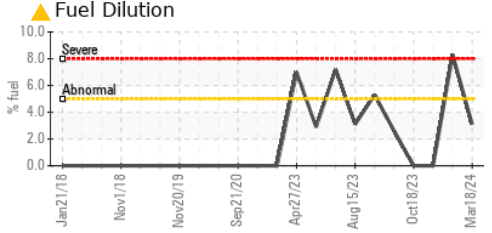
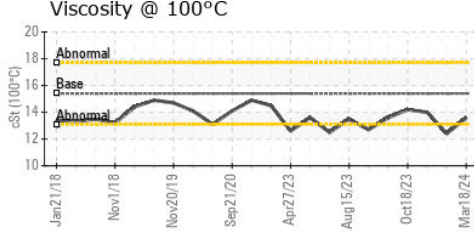
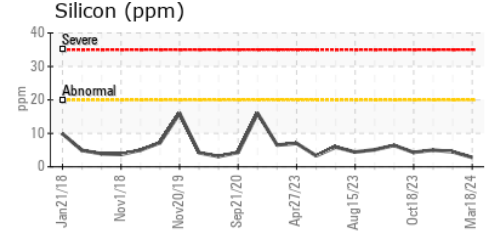
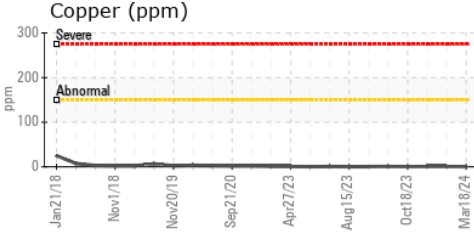
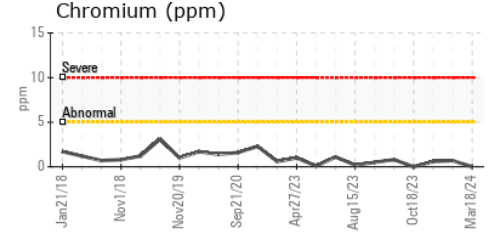
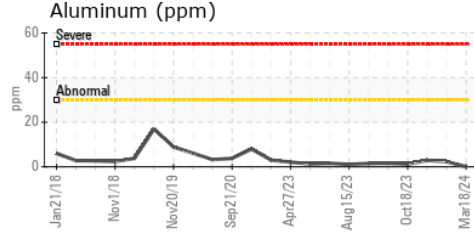
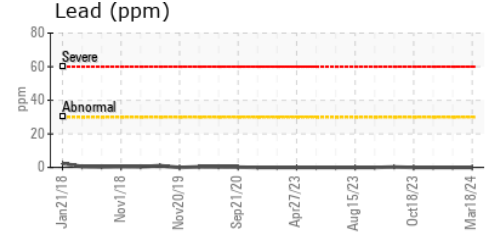
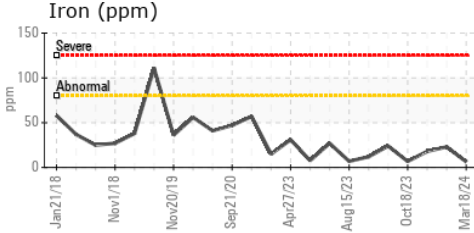


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	13.9	20.0	18.0

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.6	▲ 12.4	14.0

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0111724  
**Lab Number** : 02623657  
**Unique Number** : 5748776  
**Test Package** : MOB 1 ( Additional Tests: Glycol, PercentFuel, Visual )

**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.