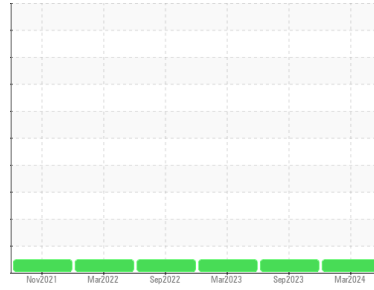




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**101110**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA 10W30 (--- GAL)**

## 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>GFL0090754</b>	GFL0090744	GFL0069704
Sample Date	Client Info		<b>18 Mar 2024</b>	18 Sep 2023	07 Mar 2023
Machine Age	hrs	Client Info	<b>11797</b>	11252	10507
Oil Age	hrs	Client Info	<b>600</b>	600	600
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
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>12</b>	16	14
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<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>2</b>	3	2
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<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)		<b>2</b>	2	3
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>65</b>	62	61
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>1015</b>	1035	1016
Calcium	ppm	ASTM D5185(m)		<b>1130</b>	1078	1153
Phosphorus	ppm	ASTM D5185(m)		<b>1069</b>	1102	1152
Zinc	ppm	ASTM D5185(m)		<b>1239</b>	1241	1260
Sulfur	ppm	ASTM D5185(m)		<b>2769</b>	2549	2672
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

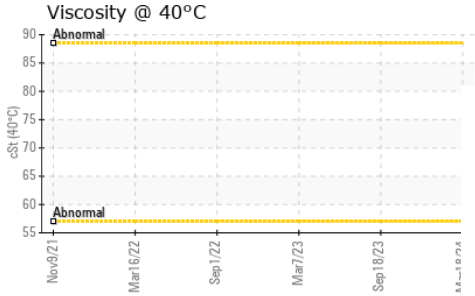
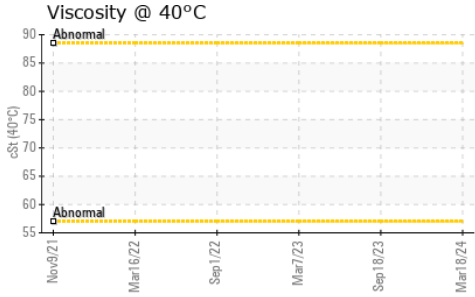
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>3</b>	4	3
Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	4	4

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.2</b>	0.3	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.1</b>	10.0	9.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.2</b>	20.8	22.4



# OIL ANALYSIS REPORT

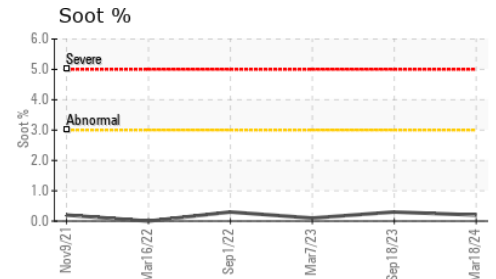
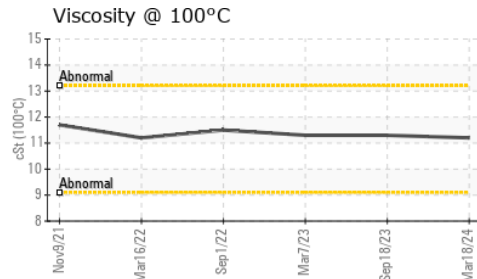
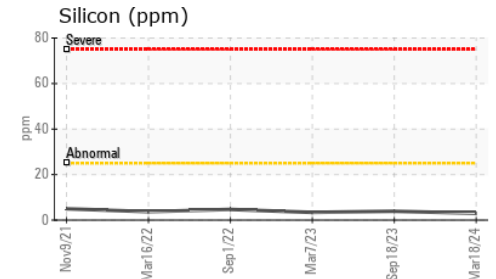
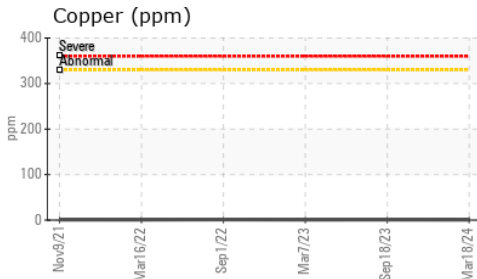
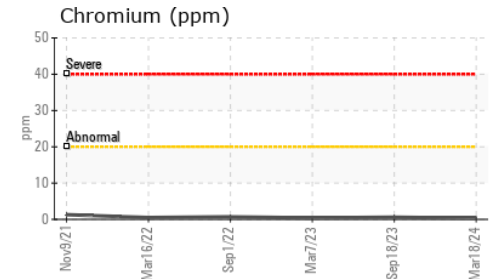
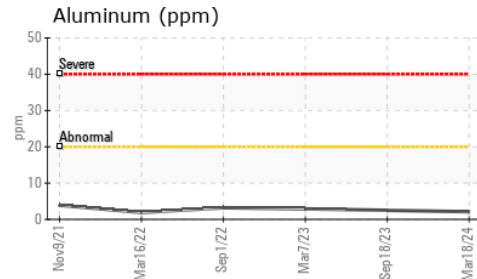
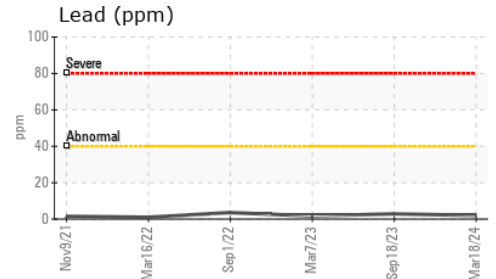
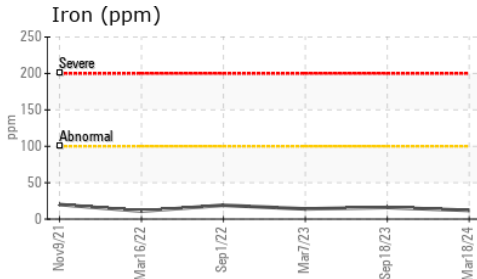


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.0</b>	17.7	17.3

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)		<b>73.3</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		<b>11.2</b>	11.3	11.3
Viscosity Index (VI)	Scale	ASTM D2270*		<b>144</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0090754  
**Lab Number** : 02622971  
**Unique Number** : 5748090  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

**GFL Environmental - 504 - Edmonton**  
 12015 28 Street NE  
 Edmonton, AB  
 CA T6S 1E2  
 Contact: Jerrod Adair  
 jerrodadair@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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