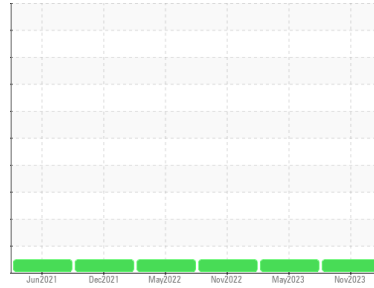




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**731018**  
 Component  
**Natural Gas Engine**  
 Fluid  
**CASTROL 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0100762</b>	GFL0079562	GFL0041626
Sample Date	Client Info		<b>22 Nov 2023</b>	18 May 2023	14 Nov 2022
Machine Age	kms	Client Info	<b>109113</b>	91886	4534
Oil Age	kms	Client Info	<b>0</b>	0	1200
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	<b>9</b>	15	16
Chromium	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
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)	>9	<b>2</b>	2	4
Lead	ppm	ASTM D5185(m)	>30	<b>2</b>	3	4
Copper	ppm	ASTM D5185(m)	>35	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	1	1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	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)		<b>7</b>	8	6
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)		<b>53</b>	61	55
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>541</b>	873	616
Calcium	ppm	ASTM D5185(m)		<b>1694</b>	1337	1686
Phosphorus	ppm	ASTM D5185(m)		<b>688</b>	928	796
Zinc	ppm	ASTM D5185(m)		<b>937</b>	1103	974
Sulfur	ppm	ASTM D5185(m)		<b>2028</b>	2415	2093
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	<b>3</b>	4	6
Sodium	ppm	ASTM D5185(m)	>406	<b>2</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1

## INFRA-RED

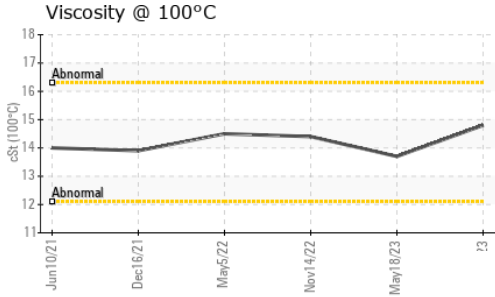
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.8</b>	11.1	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>24.5</b>	25.4	26.6

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.2</b>	19.4	21.5



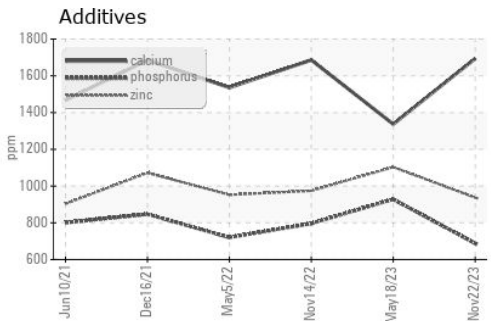
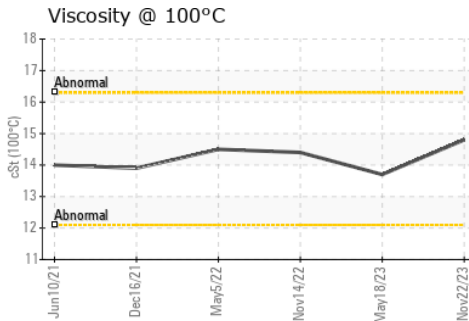
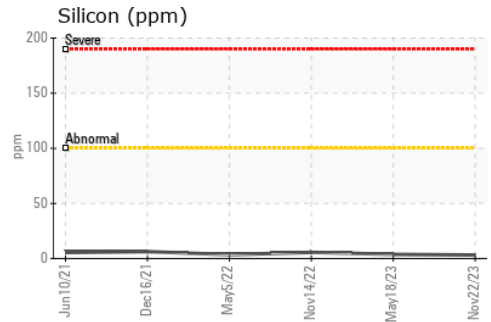
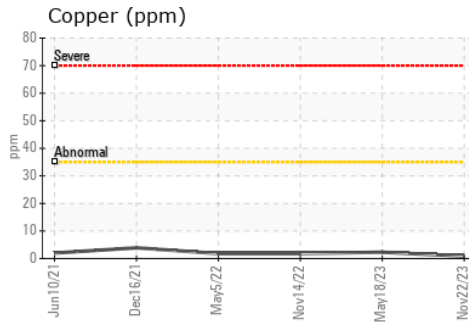
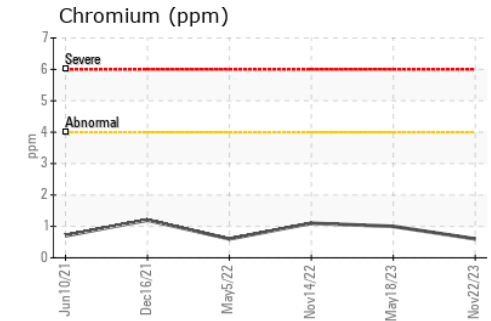
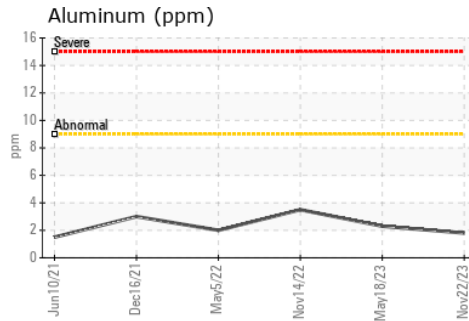
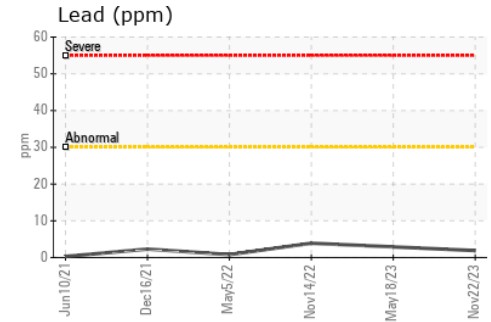
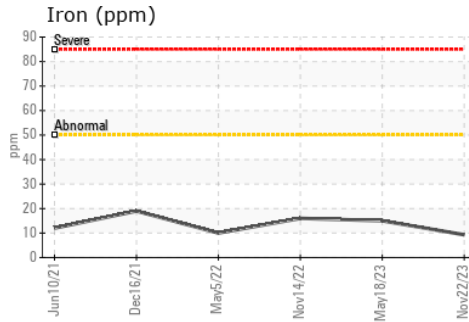
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	<b>14.8</b>	13.7	14.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 277 - Niagara Regional**  
**Sample No.** : GFL0100762 **Received** : 24 Nov 2023 **C/O Metro Truck Niagara Inc., 411 Glendale Avenue**  
**Lab Number** : 02598660 **Diagnosed** : 24 Nov 2023 **St. Catharines, ON**  
**Unique Number** : 5683740 **Diagnostician** : Kevin Marson **CA L2P 3Y1**  
**Test Package** : MOB 1

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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