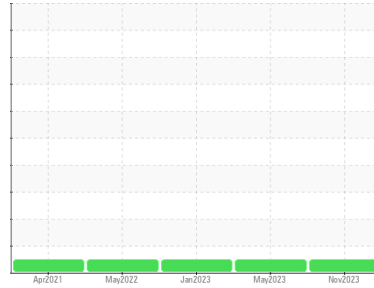




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**731010**  
 Component  
**Natural Gas Engine**  
 Fluid  
**CASTROL 15W40 (--- 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>GFL0100753</b>	GFL0079568	GFL0041669
Sample Date	Client Info		<b>28 Nov 2023</b>	10 May 2023	09 Jan 2023
Machine Age	kms	Client Info	<b>121482</b>	100260	87282
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	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>12</b>	8	15
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	3
Lead	ppm	ASTM D5185(m)	>30	<b>2</b>	<1	1
Copper	ppm	ASTM D5185(m)	>35	<b>1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
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)		<b>7</b>	9	4
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>55</b>	51	56
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185(m)		<b>584</b>	549	615
Calcium	ppm	ASTM D5185(m)		<b>1739</b>	1626	1721
Phosphorus	ppm	ASTM D5185(m)		<b>752</b>	738	818
Zinc	ppm	ASTM D5185(m)		<b>959</b>	918	973
Sulfur	ppm	ASTM D5185(m)		<b>1956</b>	2012	2068
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>5</b>	3	6
Sodium	ppm	ASTM D5185(m)	>406	<b>3</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1

## INFRA-RED

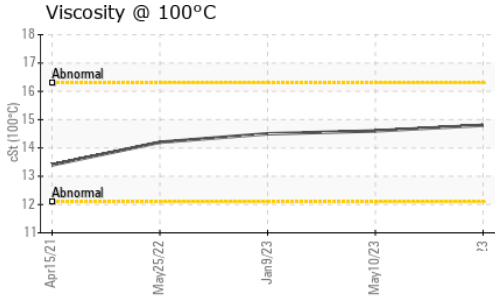
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.5</b>	10.9	11.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>26.5</b>	22.9	25.5

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.1</b>	18.7	20.0



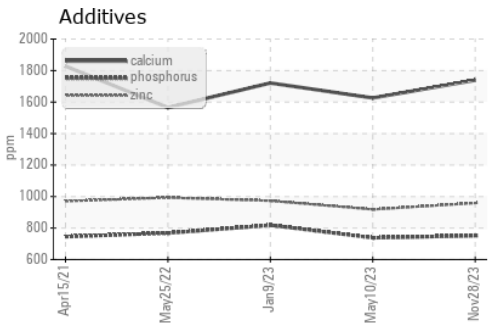
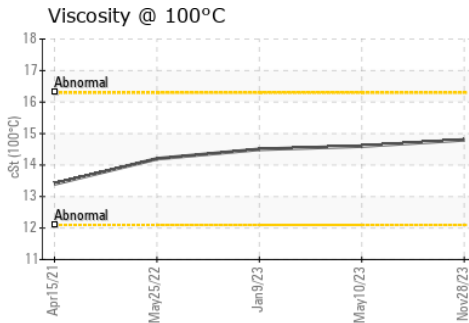
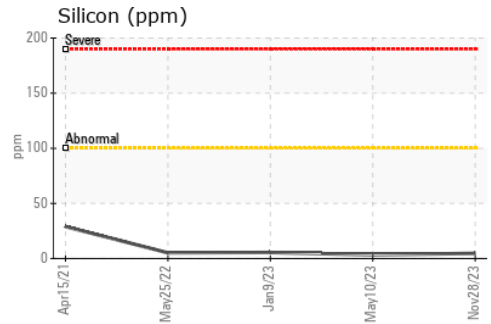
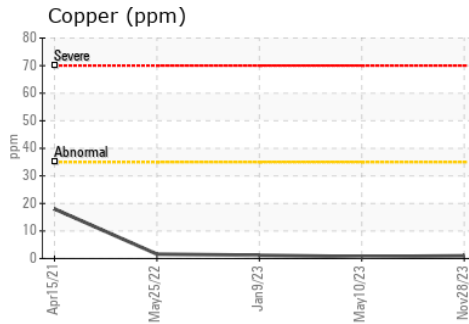
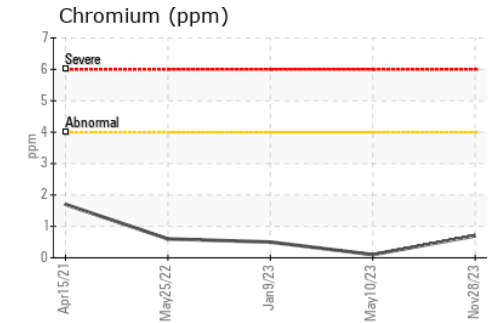
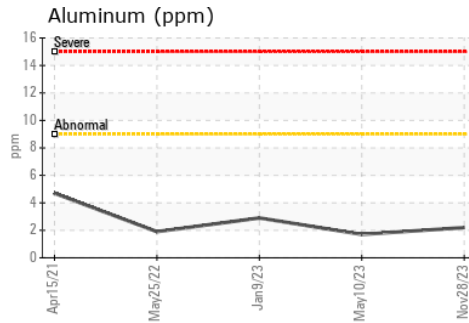
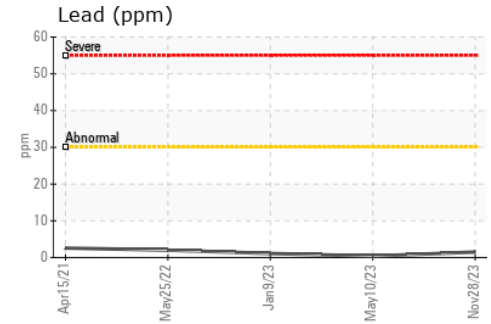
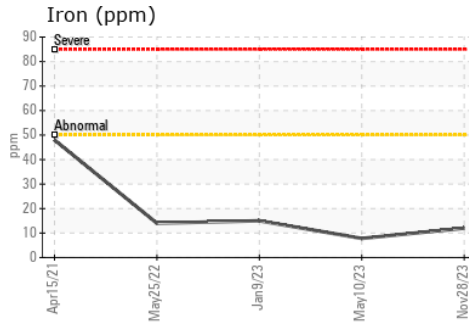
# OIL ANALYSIS REPORT



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>	14.6	14.5

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 277 - Niagara Regional**  
**Sample No.** : GFL0100753 **Received** : 29 Nov 2023 **C/O Metro Truck Niagara Inc., 411 Glendale Avenue**  
**Lab Number** : 02599601 **Diagnosed** : 30 Nov 2023 **St. Catharines, ON**  
**Unique Number** : 5684681 **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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