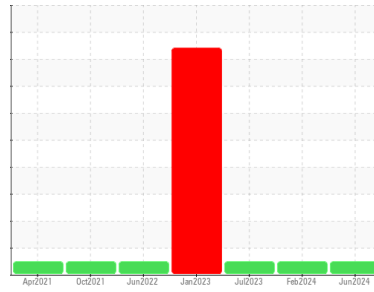




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**731012**  
 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>GFL0100772</b>	GFL0100722	GFL0079577
Sample Date	Client Info		<b>17 Jun 2024</b>	22 Feb 2024	05 Jul 2023
Machine Age	kms	Client Info	<b>137649</b>	6291	78725
Oil Age	kms	Client Info	<b>0</b>	0	78725
Oil Changed	Client Info		<b>N/A</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>---</b>	---	0.0

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	<b>8</b>	14	19
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>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>9	<b>1</b>	3	1
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	1	<1
Copper	ppm	ASTM D5185(m)	>35	<b>&lt;1</b>	2	3
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
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)		<b>6</b>	5	8
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	5
Molybdenum	ppm	ASTM D5185(m)		<b>53</b>	56	52
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	3
Magnesium	ppm	ASTM D5185(m)		<b>548</b>	562	538
Calcium	ppm	ASTM D5185(m)		<b>1594</b>	1725	1491
Phosphorus	ppm	ASTM D5185(m)		<b>665</b>	733	676
Zinc	ppm	ASTM D5185(m)		<b>909</b>	944	892
Sulfur	ppm	ASTM D5185(m)		<b>2010</b>	2176	1958
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>	5	14
Sodium	ppm	ASTM D5185(m)	>406	<b>2</b>	4	5
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	5	29

## INFRA-RED

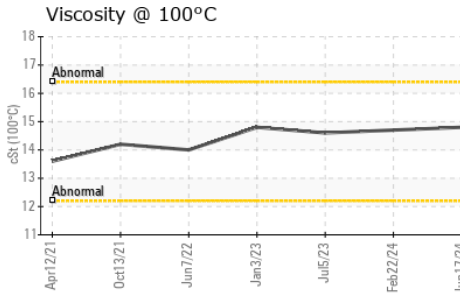
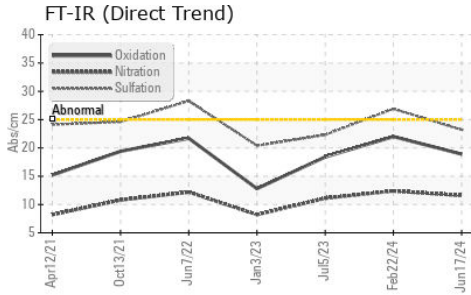
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.6</b>	12.4	11.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.2</b>	26.9	22.3

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>18.9</b>	22.0	18.4



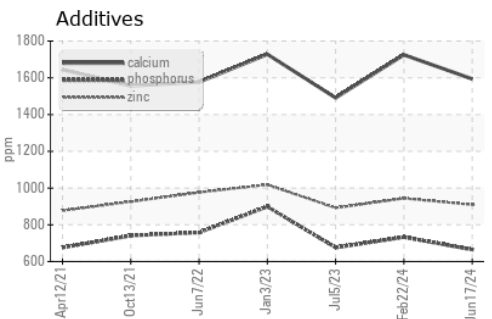
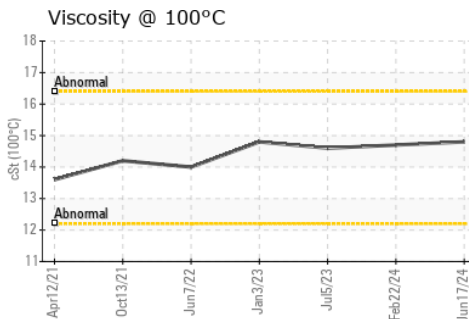
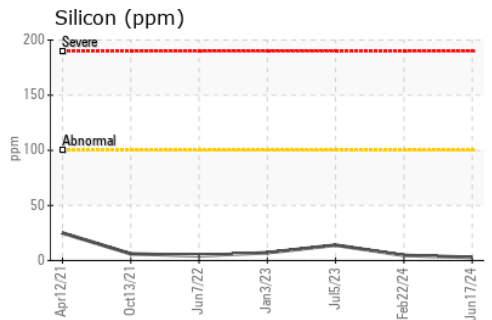
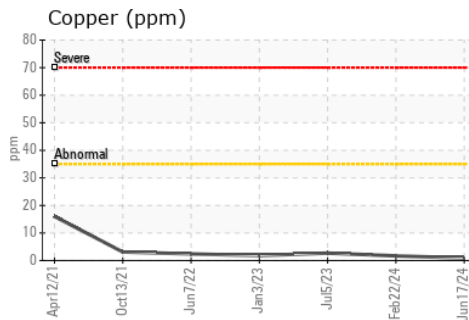
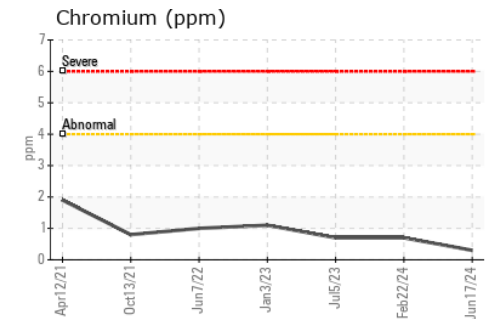
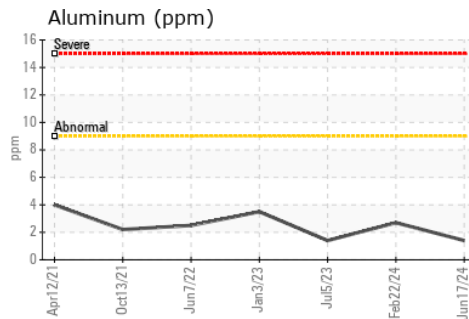
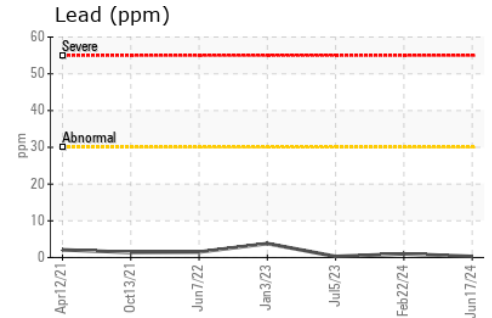
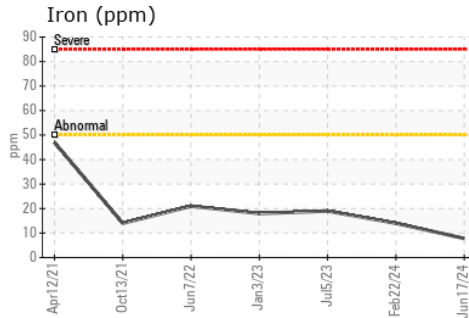
# OIL ANALYSIS REPORT



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)	14.8	14.7	14.6

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0100772  
**Lab Number** : 02643138  
**Unique Number** : 5800677  
**Test Package** : MOB 1

**GFL Environmental - 277 - Niagara Regional**  
 C/O Metro Truck Niagara Inc., 411 Glendale Avenue  
 St. Catharines, ON  
 CA L2P 3Y1  
 Contact: Kelly Bremner  
 kbremner@gflenv.com  
 T: (437)235-6849  
 F:

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.