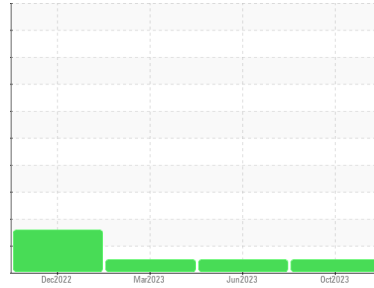




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**900120**  
 Component  
**Diesel 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>GFL0093115</b>	GFL0070453	GFL0070460
Sample Date	Client Info		<b>03 Oct 2023</b>	12 Jun 2023	27 Mar 2023
Machine Age	kms	Client Info	<b>526141</b>	511858	500114
Oil Age	kms	Client Info	<b>0</b>	0	0
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	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>120	<b>12</b>	9	13
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>5</b>	5	8
Lead	ppm	ASTM D5185(m)	>40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	1	2
Tin	ppm	ASTM D5185(m)	>15	<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>	12	13
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>49</b>	34	37
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>780</b>	539	513
Calcium	ppm	ASTM D5185(m)		<b>1286</b>	1539	1653
Phosphorus	ppm	ASTM D5185(m)		<b>973</b>	1019	1022
Zinc	ppm	ASTM D5185(m)		<b>1194</b>	1177	1152
Sulfur	ppm	ASTM D5185(m)		<b>2452</b>	2753	2777
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>6</b>	5	8
Sodium	ppm	ASTM D5185(m)	>406	<b>2</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	2

## INFRA-RED

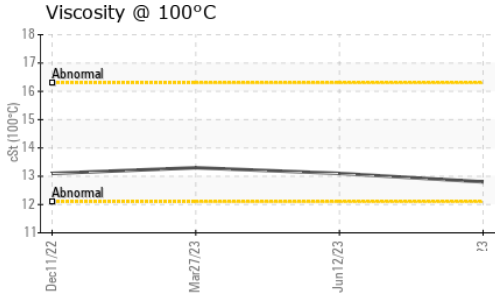
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.3</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.4</b>	8.9	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.9</b>	20.6	23.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>16.5</b>	15.3	16.1



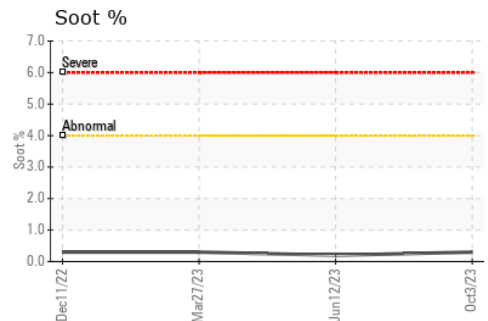
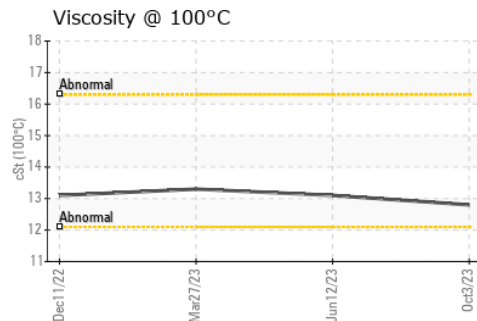
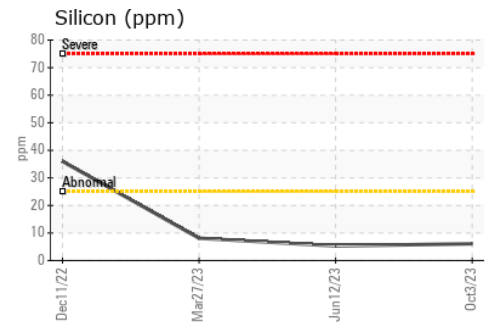
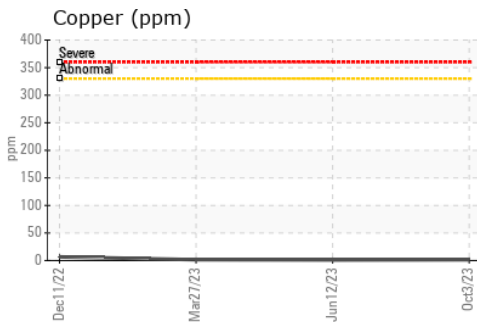
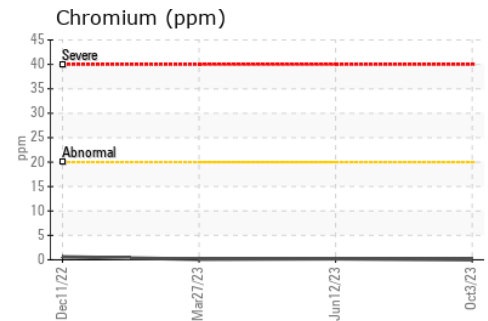
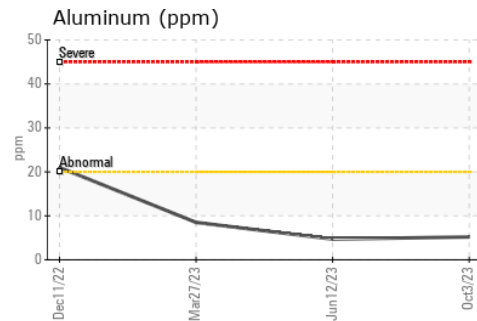
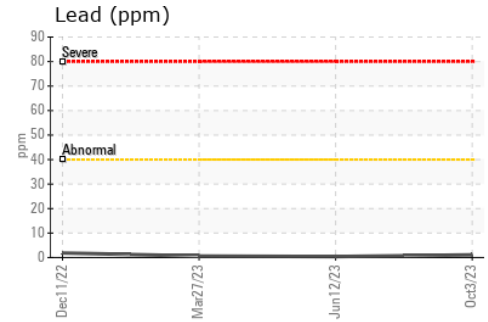
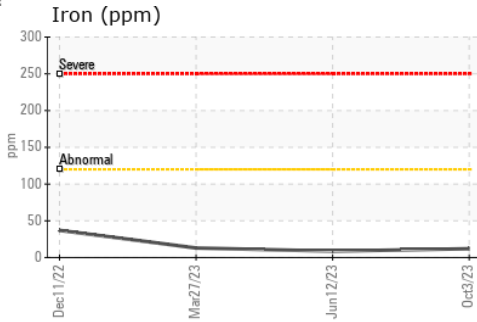
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.8	13.1	13.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 860 - Fredericton**  
**Sample No.** : GFL0093115 **Received** : 10 Oct 2023 160 BLIZZARD ST  
**Lab Number** : 02587952 **Diagnosed** : 10 Oct 2023 FREDERICTON, NB  
**Unique Number** : 5657018 **Diagnostician** : Kevin Marson CA E3B 8K2  
**Test Package** : MOB 1 Contact: Crystal Beach-Nassuai  
cbeachnassuai@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.