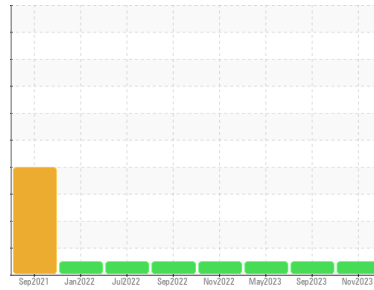




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**719004**  
Component  
**Diesel 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>GFL0093122</b>	GFL0093114	GFL0070458
Sample Date	Client Info		<b>21 Nov 2023</b>	26 Sep 2023	23 May 2023
Machine Age	kms	Client Info	<b>77399</b>	72639	62266
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	>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)	>80	<b>14</b>	29	17
Chromium	ppm	ASTM D5185(m)	>5	<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	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>5</b>	10	6
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	2	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
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>9</b>	10	19
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>46</b>	34	34
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>714</b>	501	528
Calcium	ppm	ASTM D5185(m)		<b>1223</b>	1501	1498
Phosphorus	ppm	ASTM D5185(m)		<b>950</b>	852	1033
Zinc	ppm	ASTM D5185(m)		<b>1102</b>	1085	1157
Sulfur	ppm	ASTM D5185(m)		<b>2766</b>	2719	2909
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

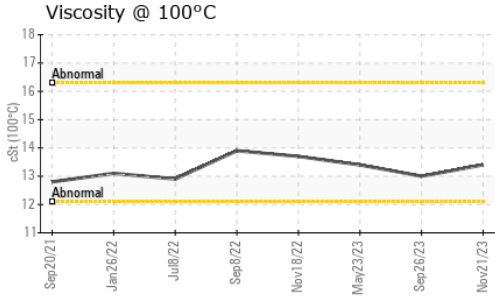
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>2</b>	4	3
Sodium	ppm	ASTM D5185(m)	>406	<b>&lt;1</b>	2	1
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	6	3

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.6	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.8</b>	10.9	9.3
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>19.2</b>	20.6	19.0



# OIL ANALYSIS REPORT

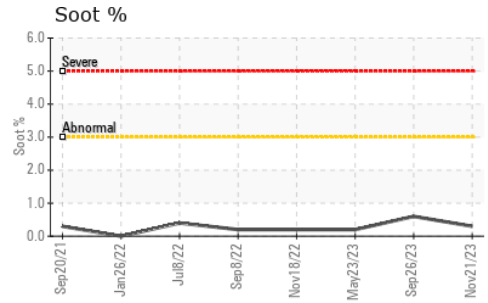
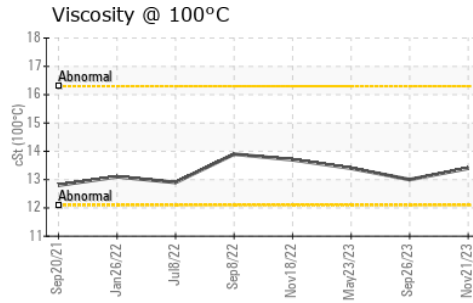
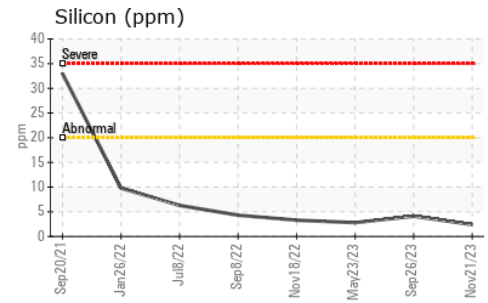
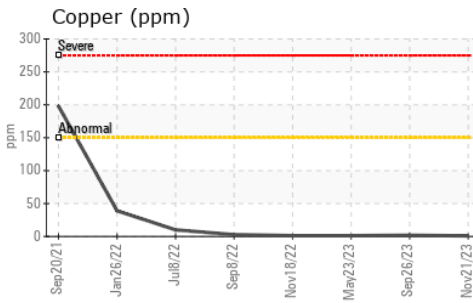
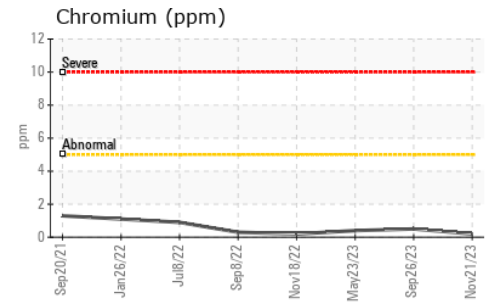
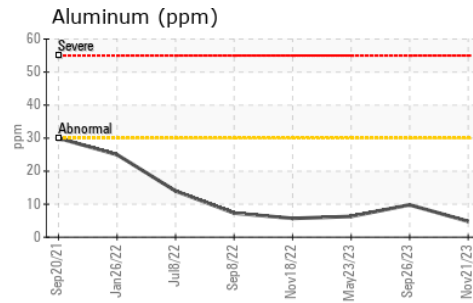
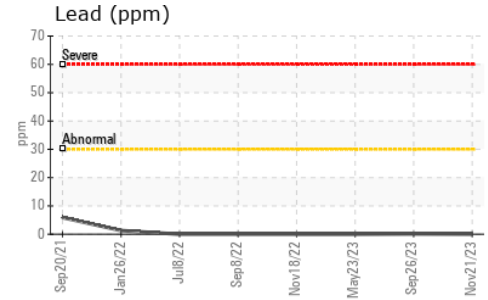
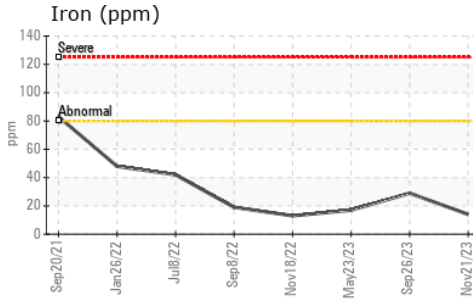


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>15.1</b>	16.0	14.5

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 @ 100°C	cSt	ASTM D7279(m)	<b>13.4</b>	13.0	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 860 - Fredericton**  
**Sample No.** : GFL0093122 **Recieved** : 24 Jan 2024 **160 BLIZZARD ST**  
**Lab Number** : **02610840** **Diagnosed** : 24 Jan 2024 **FREDERICTON, NB**  
**Unique Number** : 5719935 **Diagnostician** : Wes Davis **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.