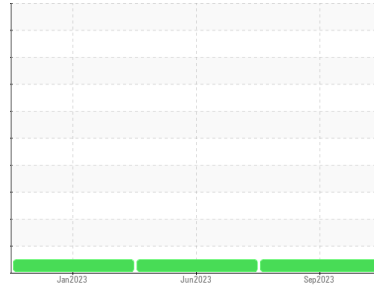




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**400551**  
 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>GFL0093124</b>	GFL0070454	GFL0018960
Sample Date	Client Info			<b>04 Sep 2023</b>	13 Jun 2023	05 Jan 2023
Machine Age	kms	Client Info		<b>654256</b>	644421	614010
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	0.8
Glycol	WC Method			<b>NEG</b>	NEG	0.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>110	<b>25</b>	25	28
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>4</b>	10	9
Lead	ppm	ASTM D5185(m)	>45	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185(m)	>85	<b>&lt;1</b>	3	3
Tin	ppm	ASTM D5185(m)	>4	<b>0</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>15</b>	4	23
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>50</b>	55	17
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>801</b>	884	242
Calcium	ppm	ASTM D5185(m)		<b>1224</b>	1230	2163
Phosphorus	ppm	ASTM D5185(m)		<b>1004</b>	1059	1051
Zinc	ppm	ASTM D5185(m)		<b>1168</b>	1232	1216
Sulfur	ppm	ASTM D5185(m)		<b>2728</b>	2591	3005
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

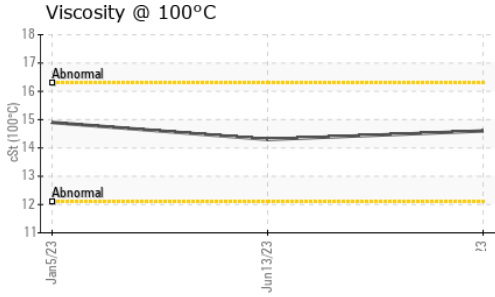
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>30	<b>5</b>	6	6
Sodium	ppm	ASTM D5185(m)	>406	<b>2</b>	4	5
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	6

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0</b>	1	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.5</b>	12.6	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.5</b>	25.1	23.9

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>12.7</b>	20.9	16.9



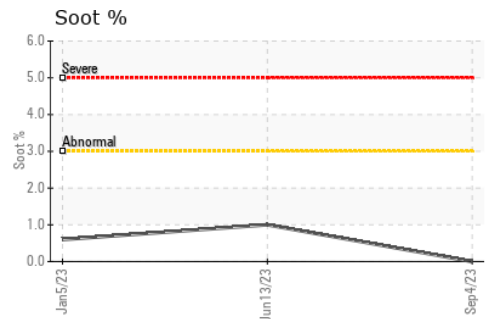
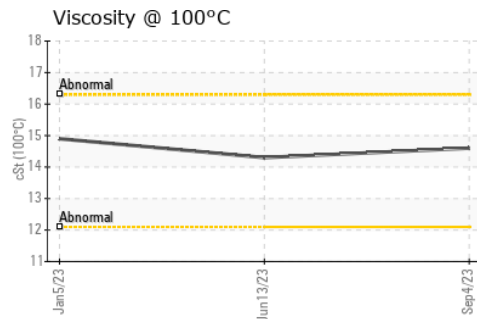
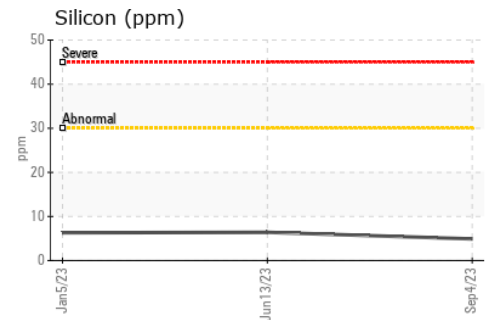
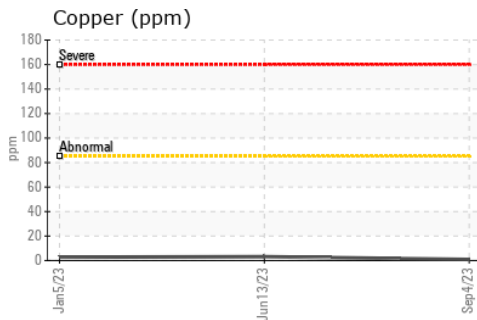
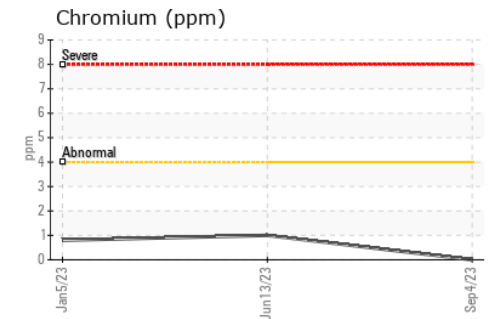
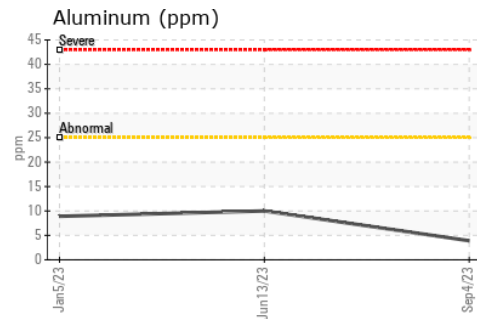
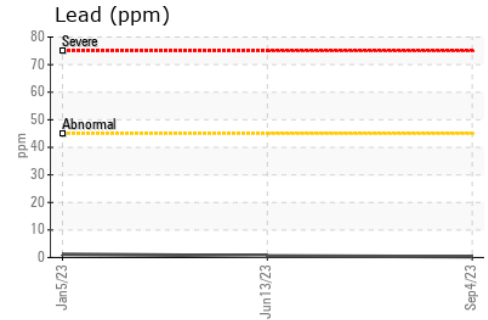
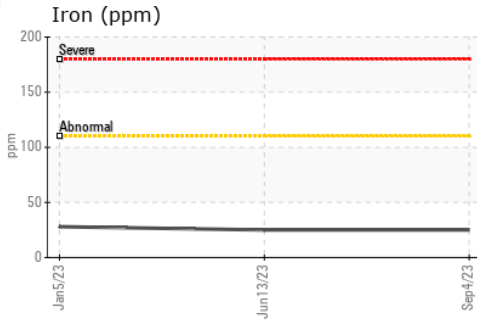
# OIL ANALYSIS REPORT



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)	<b>14.6</b>	14.3	14.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 860 - Fredericton  
**Sample No.** : GFL0093124 **Received** : 10 Oct 2023 160 BLIZZARD ST  
**Lab Number** : 02587950 **Diagnosed** : 10 Oct 2023 FREDERICTON, NB  
**Unique Number** : 5657016 **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.