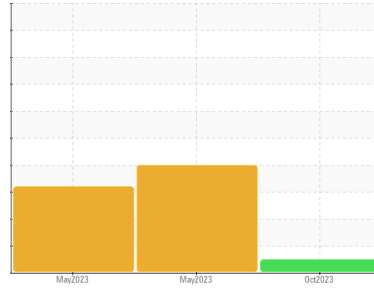




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**GFL253**  
Machine Id  
**933015**  
Component  
**Natural Gas Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 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>GFL0094835</b>	GFL0079547	GFL0079538
Sample Date	Client Info		<b>19 Oct 2023</b>	10 May 2023	03 May 2023
Machine Age	hrs	Client Info	<b>2382</b>	1254	1197
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	SEVERE	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >50	<b>23</b>	9	▲ 50
Chromium	ppm	ASTM D5185(m) >5	<b>2</b>	0	1
Nickel	ppm	ASTM D5185(m) >4	<b>1</b>	<1	2
Titanium	ppm	ASTM D5185(m) >5	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>15</b>	3	▲ 16
Lead	ppm	ASTM D5185(m) >40	<b>2</b>	1	2
Copper	ppm	ASTM D5185(m) >150	<b>3</b>	2	15
Tin	ppm	ASTM D5185(m) >4	<b>1</b>	<1	2
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>	<1	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 250	<b>7</b>	34	6
Barium	ppm	ASTM D5185(m) 10	<b>&lt;1</b>	0	2
Molybdenum	ppm	ASTM D5185(m) 100	<b>59</b>	48	59
Manganese	ppm	ASTM D5185(m)	<b>2</b>	2	11
Magnesium	ppm	ASTM D5185(m) 450	<b>662</b>	615	813
Calcium	ppm	ASTM D5185(m) 3000	<b>1723</b>	1555	1511
Phosphorus	ppm	ASTM D5185(m) 1150	<b>777</b>	830	827
Zinc	ppm	ASTM D5185(m) 1350	<b>1002</b>	929	948
Sulfur	ppm	ASTM D5185(m) 4250	<b>2016</b>	2180	1981
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>10</b>	8	▲ 25
Sodium	ppm	ASTM D5185(m) >158	<b>10</b>	6	7
Potassium	ppm	ASTM D5185(m) >20	<b>10</b>	2	8
Glycol	%	ASTM D7922*	<b>0.0</b>	0.0	0.0

## INFRA-RED

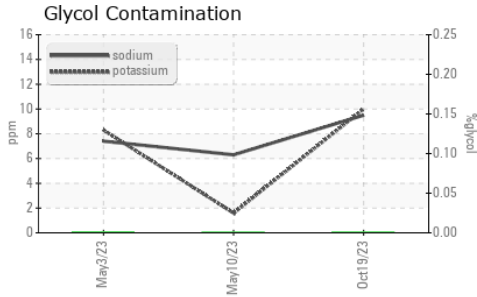
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	<b>&gt;20</b>	11.9	13.2
Sulfation	Abs/.1mm	ASTM D7415*	<b>&gt;30</b>	12.9	26.9

## FLUID DEGRADATION

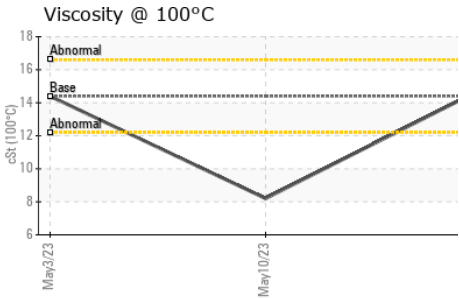
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	<b>&gt;25</b>	17.3	24.5



# OIL ANALYSIS REPORT

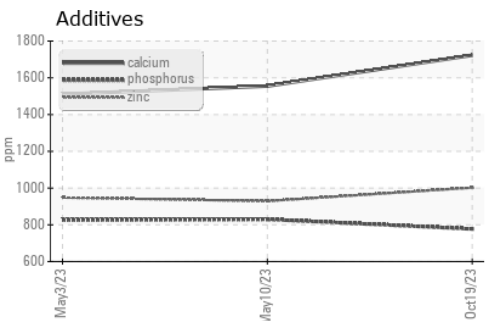
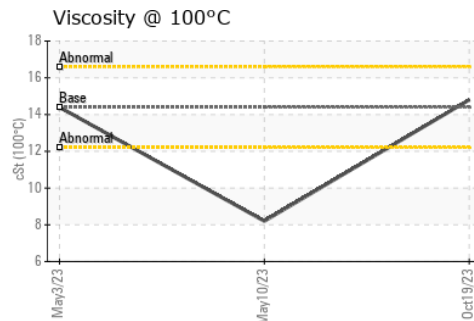
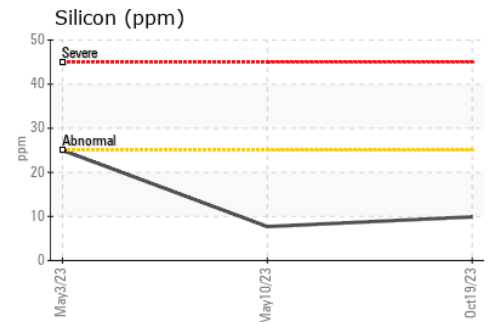
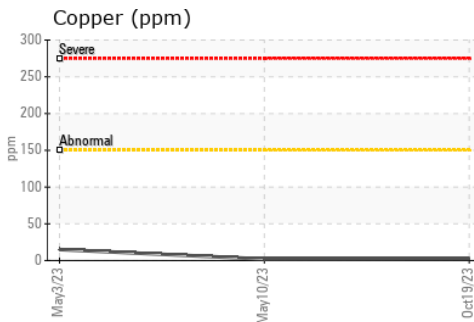
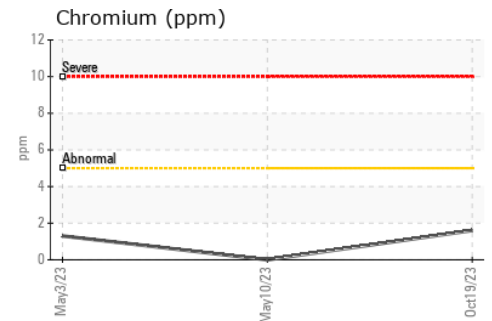
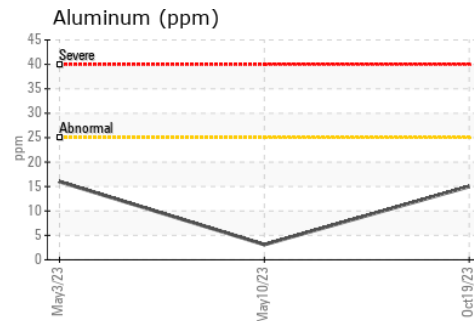
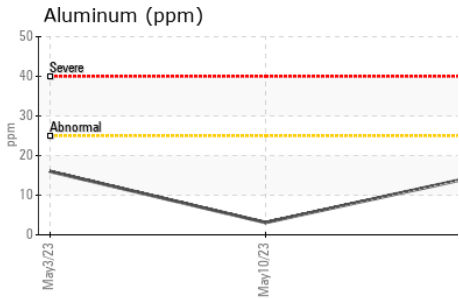
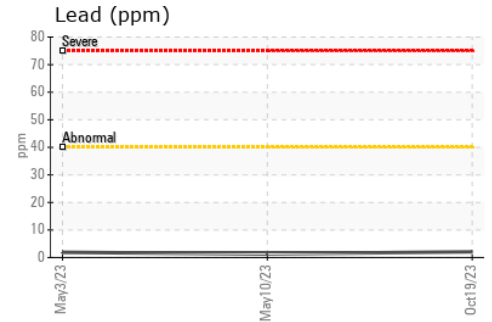
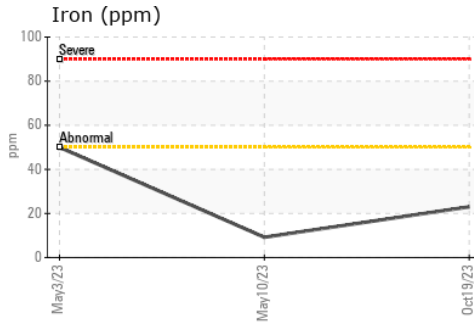


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	▲ .5%
Free Water	scalar	Visual*		NEG	NEG



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.8	8.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0094835 **Received** : 16 Nov 2023  
**Lab Number** : 02596740 **Diagnosed** : 17 Nov 2023  
**Unique Number** : 5681820 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**GFL Environmental - 216**  
 15 Bermondsey Road  
 Toronto, ON  
 CA M4B 1Y9  
 Contact: Tom Hatzioannidis  
 thatzioannidis@gflenv.com  
 T: (416)678-9340  
 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.