



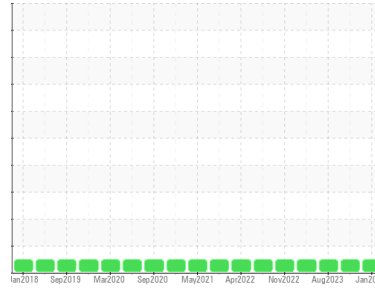
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[1214978]**  
 Machine Id  
**901018**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (36 LTR)**



## 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>GFL0093955</b>	GFL0093930	GFL0062937
Sample Date	Client Info		<b>31 Jan 2024</b>	18 Oct 2023	16 Aug 2023
Machine Age	hrs	Client Info	<b>15180</b>	14649	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
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
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)	>120	<b>8</b>	7	15
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	2	4
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	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)	250	<b>8</b>	6	14
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>60</b>	54	64
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>930</b>	867	973
Calcium	ppm	ASTM D5185(m)	3000	<b>1117</b>	987	1134
Phosphorus	ppm	ASTM D5185(m)	1150	<b>974</b>	879	1021
Zinc	ppm	ASTM D5185(m)	1350	<b>1145</b>	1078	1191
Sulfur	ppm	ASTM D5185(m)	4250	<b>2510</b>	2124	2296
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

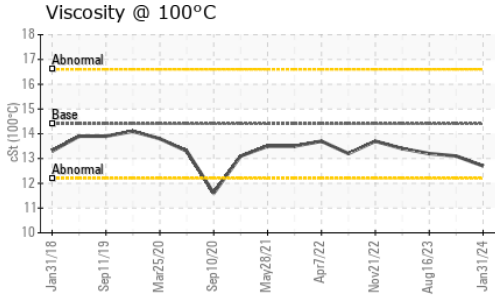
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	5
Sodium	ppm	ASTM D5185(m)	>158	<b>4</b>	5	7
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	3

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.2</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.4</b>	9.4	11.2
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>23.6</b>	22.0	26.8



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	20.8	19.6, 24.9

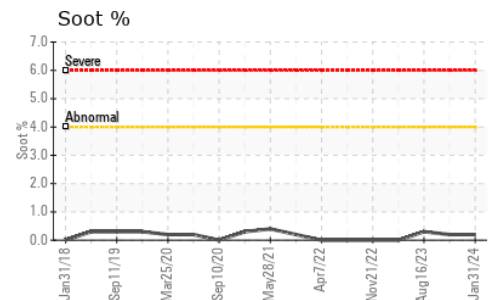
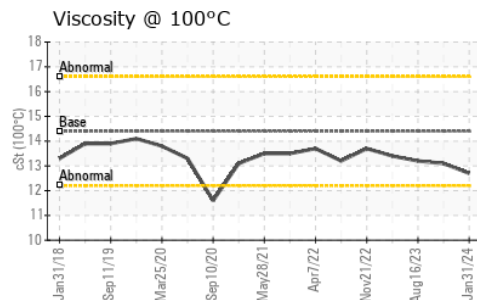
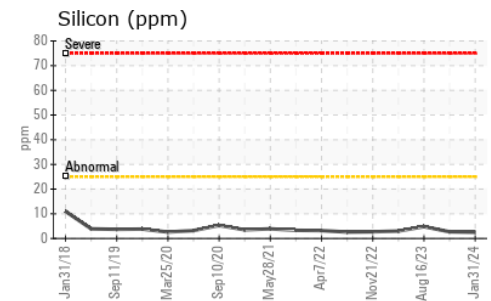
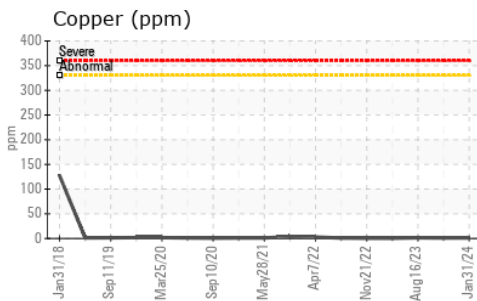
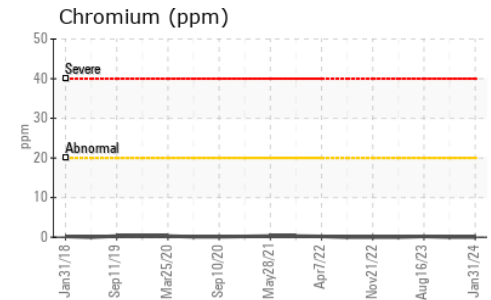
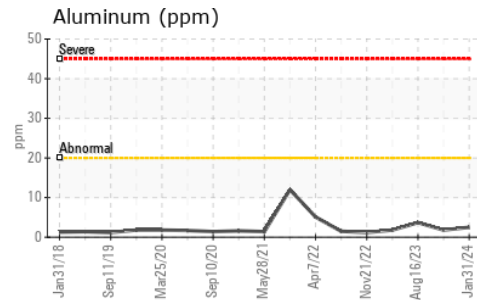
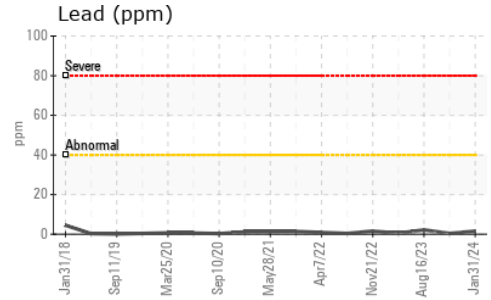
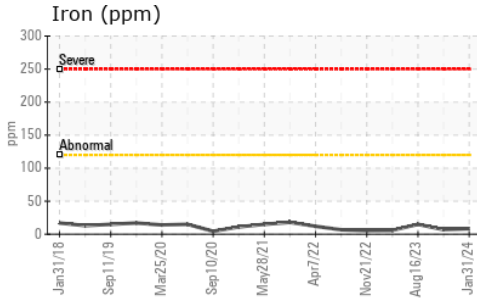
### VISUAL

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

### FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	12.7	13.1, 13.2

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 777 - Belleville-Municipal waste  
**Sample No.** : GFL0093955 **Received** : 01 Feb 2024 197 Putman Industrial Road  
**Lab Number** : 02612759 **Diagnosed** : 01 Feb 2024 Belleville, ON  
**Unique Number** : 5721854 **Diagnostician** : Wes Davis CA K8N 4Z6  
**Test Package** : MOB 1

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.

Contact: Andrea Michael  
 amichael@gflenv.com  
 T: (613)962-7144  
 F: (613)962-1994