



# OIL ANALYSIS REPORT

Sample Rating Trend

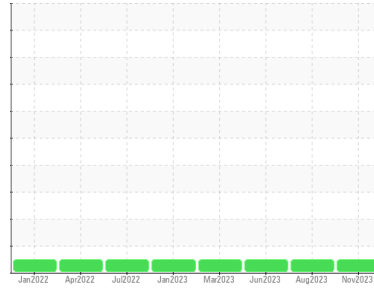
**NORMAL**



Area  
**[1177603]**  
Machine Id  
**810046**

Component  
**Diesel Engine**  
Fluid

**DIESEL ENGINE OIL SAE 40 (--- 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>GFL0093944</b>	GFL0062940	GFL0062929	
Sample Date	Client Info	<b>14 Nov 2023</b>	21 Aug 2023	22 Jun 2023	
Machine Age	hrs	Client Info	<b>4704</b>	4202	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 >5	<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) >80	<b>24</b>	18	22
Chromium	ppm ASTM D5185(m) >5	<b>1</b>	1	1
Nickel	ppm ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm ASTM D5185(m) >3	<b>&lt;1</b>	0	<1
Aluminum	ppm ASTM D5185(m) >30	<b>4</b>	4	3
Lead	ppm ASTM D5185(m) >30	<b>&lt;1</b>	0	0
Copper	ppm ASTM D5185(m) >150	<b>3</b>	2	2
Tin	ppm ASTM D5185(m) >5	<b>&lt;1</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) 250	<b>6</b>	5	7
Barium	ppm ASTM D5185(m) 10	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185(m) 100	<b>61</b>	59	58
Manganese	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 450	<b>971</b>	953	927
Calcium	ppm ASTM D5185(m) 3000	<b>1101</b>	1077	1065
Phosphorus	ppm ASTM D5185(m) 1150	<b>994</b>	1054	1011
Zinc	ppm ASTM D5185(m) 1350	<b>1223</b>	1201	1168
Sulfur	ppm ASTM D5185(m) 4250	<b>2452</b>	2514	2383
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>5</b>	5	7
Sodium	ppm ASTM D5185(m) >216	<b>8</b>	8	8
Potassium	ppm ASTM D5185(m) >20	<b>6</b>	8	4

## INFRA-RED

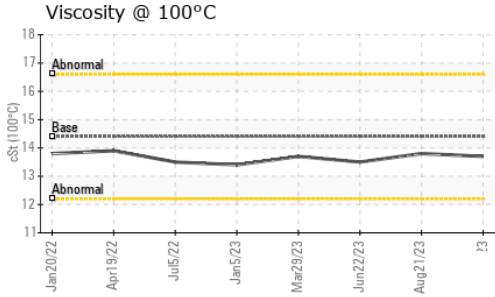
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.5</b>	0.4	0.4
Nitration	Abs/cm ASTM D7624* >20	<b>9.9</b>	9.3	9.7
Sulfation	Abs/.1mm ASTM D7415* >30	<b>21.4</b>	21.2	20.9

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>18.0</b>	17.1	18.2



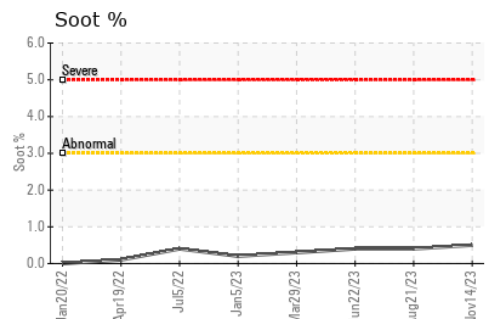
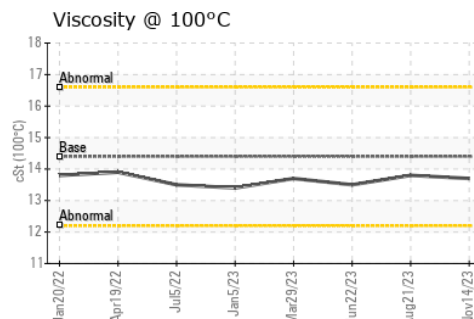
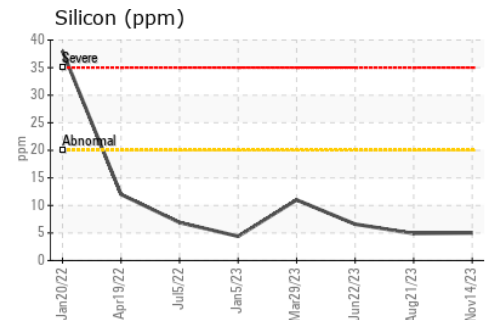
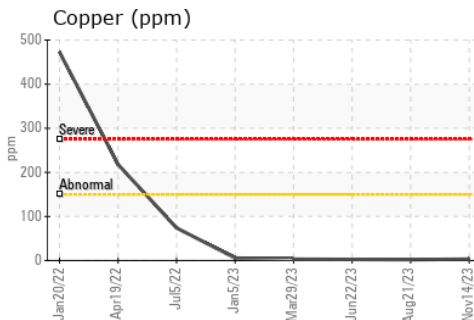
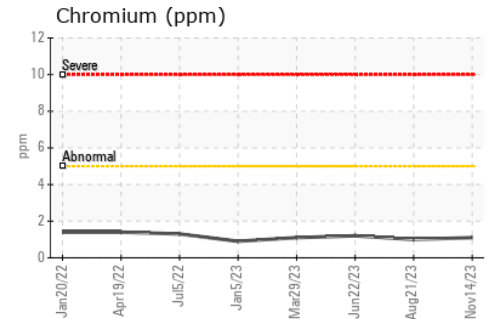
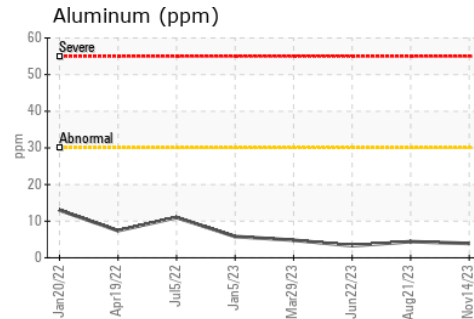
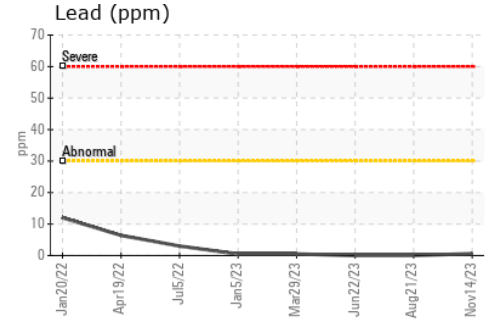
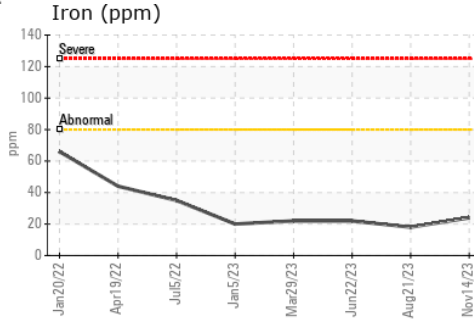
# OIL ANALYSIS REPORT



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)	14.4	13.7	13.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 777 - Belleville-Municipal waste  
**Sample No.** : GFL0093944 **Received** : 16 Nov 2023 197 Putman Industrial Road  
**Lab Number** : 02596769 **Diagnosed** : 16 Nov 2023 Belleville, ON  
**Unique Number** : 5681849 **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.

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