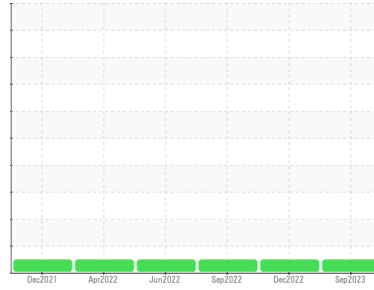




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**426015**  
 Component  
**Diesel 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>GFL0090869</b>	GFL0065904	GFL0051173
Sample Date	Client Info	<b>05 Sep 2023</b>	01 Dec 2022	14 Sep 2022
Machine Age	hrs	<b>0</b>	14379	13826
Oil Age	hrs	<b>15961</b>	558	569
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
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
Glycol	WC Method	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >120	<b>6</b>	5	6
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Nickel	ppm ASTM D5185(m) >5	<b>&lt;1</b>	2	1
Titanium	ppm ASTM D5185(m) >2	<b>0</b>	<1	<1
Silver	ppm ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >20	<b>1</b>	2	2
Lead	ppm ASTM D5185(m) >40	<b>&lt;1</b>	<1	2
Copper	ppm ASTM D5185(m) >330	<b>&lt;1</b>	<1	2
Tin	ppm ASTM D5185(m) >15	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185(m)	<b>0</b>	<1	<1
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>46</b>	3	5
Barium	ppm ASTM D5185(m) 10	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 100	<b>11</b>	58	57
Manganese	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 450	<b>143</b>	945	929
Calcium	ppm ASTM D5185(m) 3000	<b>1957</b>	1126	1108
Phosphorus	ppm ASTM D5185(m) 1150	<b>943</b>	1063	1047
Zinc	ppm ASTM D5185(m) 1350	<b>1111</b>	1189	1182
Sulfur	ppm ASTM D5185(m) 4250	<b>2633</b>	2556	2448
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>3</b>	2	3
Sodium	ppm ASTM D5185(m) >158	<b>4</b>	3	4
Potassium	ppm ASTM D5185(m) >20	<b>5</b>	0	0

## INFRA-RED

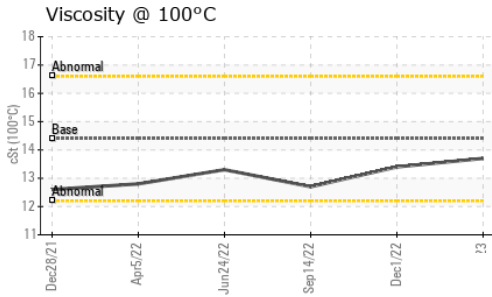
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >4	<b>0.2</b>	0	0.1
Nitration	Abs/cm ASTM D7624* >20	<b>10.4</b>	9.9	9.2
Sulfation	Abs/.1mm ASTM D7415* >30	<b>26.3</b>	21.2	21.7

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	<b>20.3</b>	17.3	17.2



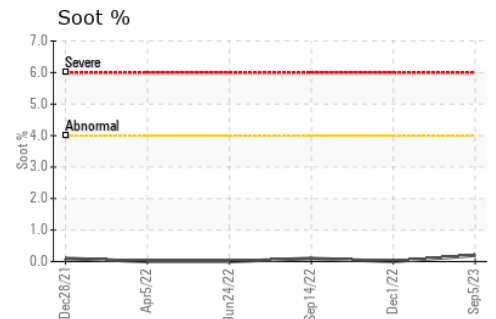
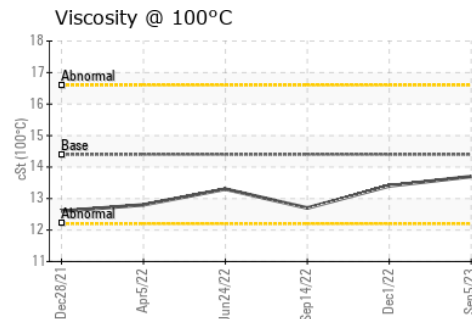
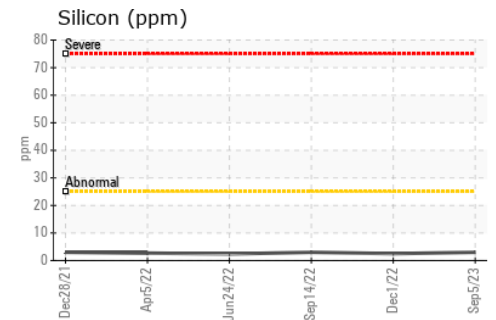
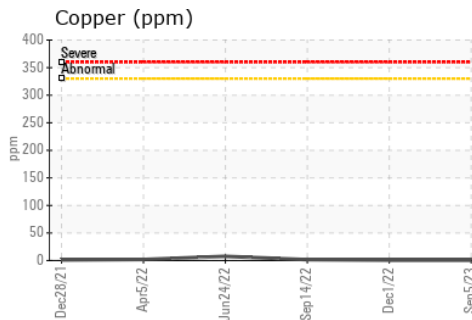
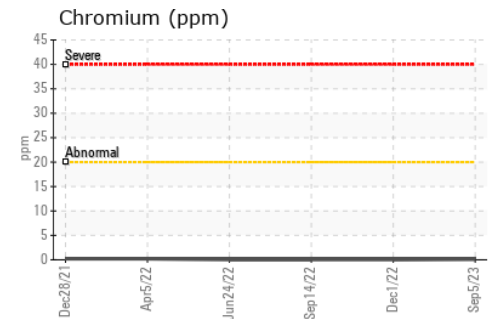
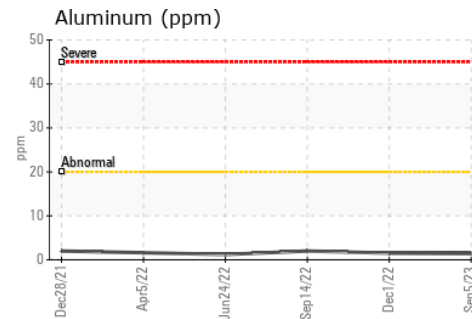
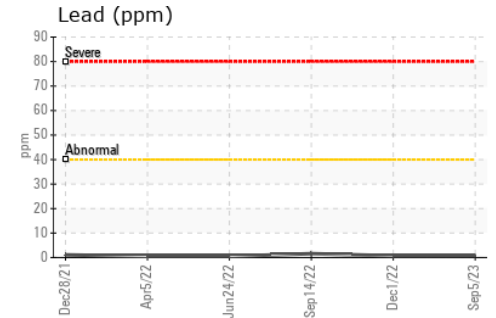
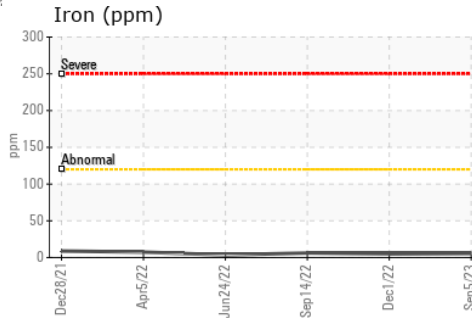
# OIL ANALYSIS REPORT



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	13.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 246 - Windsor**  
**Sample No.** : GFL0090869 **Received** : 08 Sep 2023  
**Lab Number** : 02581068 **Diagnosed** : 08 Sep 2023  
**Unique Number** : 5642133 **Diagnostician** : Wes Davis  
**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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