



# OIL ANALYSIS REPORT

Sample Rating Trend

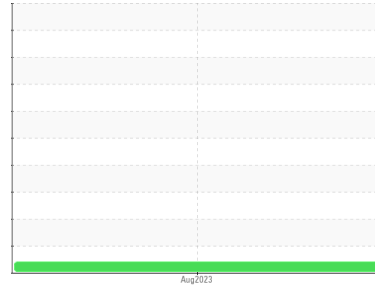
VISCOSITY



Machine Id  
**NO UNIT GFL0090576**

Component  
**Gasoline Engine**

Fluid  
**GASOLINE ENGINE OIL SAE 5W30 (--- GAL)**



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as (GENERIC) GASOLINE ENGINE OIL SAE 5W30, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. 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>GFL0090576</b>	---	---
Sample Date	Client Info		<b>28 Aug 2023</b>	---	---
Machine Age	kms	Client Info	<b>224958</b>	---	---
Oil Age	kms	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<b>&lt;1.0</b>	---	---
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >150	<b>26</b>	---	---
Chromium	ppm	ASTM D5185(m) >20	<b>1</b>	---	---
Nickel	ppm	ASTM D5185(m) >5	<b>1</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >40	<b>4</b>	---	---
Lead	ppm	ASTM D5185(m) >50	<b>3</b>	---	---
Copper	ppm	ASTM D5185(m) >155	<b>8</b>	---	---
Tin	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	---	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 75	<b>2</b>	---	---
Barium	ppm	ASTM D5185(m) 5	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 100	<b>67</b>	---	---
Manganese	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185(m) 12	<b>994</b>	---	---
Calcium	ppm	ASTM D5185(m) 2100	<b>1033</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 650	<b>964</b>	---	---
Zinc	ppm	ASTM D5185(m) 850	<b>1175</b>	---	---
Sulfur	ppm	ASTM D5185(m) 2500	<b>2269</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >30	<b>13</b>	---	---
Sodium	ppm	ASTM D5185(m) >400	<b>6</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>1</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	<b>0</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.6</b>	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>30.0</b>	---

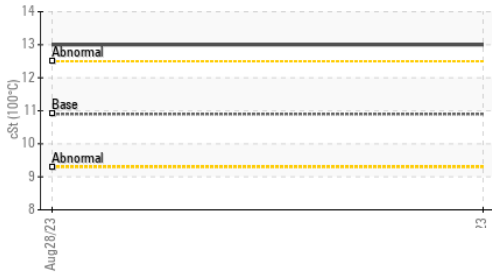
## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>27.9</b>	---



# OIL ANALYSIS REPORT

▲ Viscosity @ 100°C

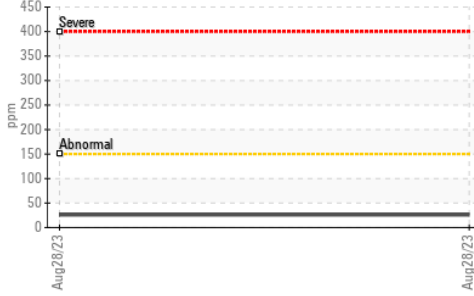


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

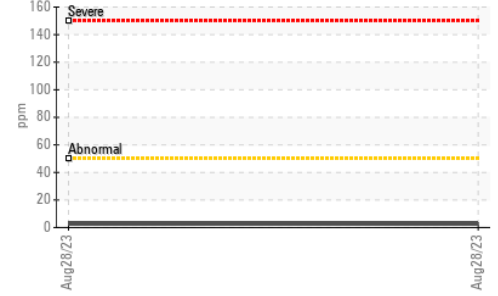
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	10.9 ▲ 13.0	---	---

## GRAPHS

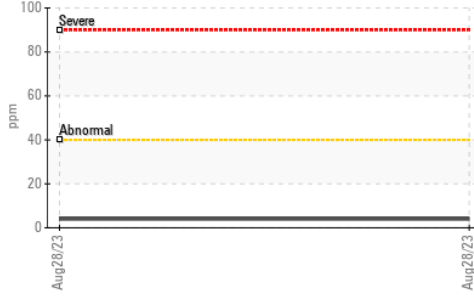
Iron (ppm)



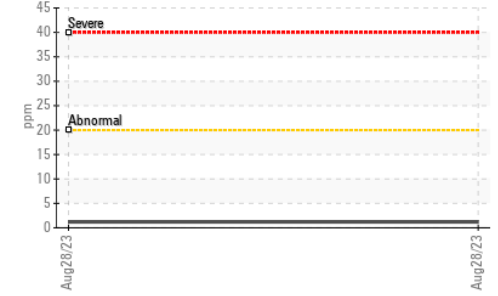
Lead (ppm)



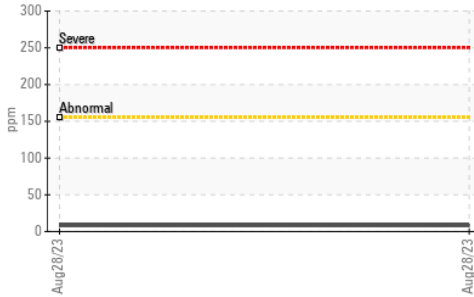
Aluminum (ppm)



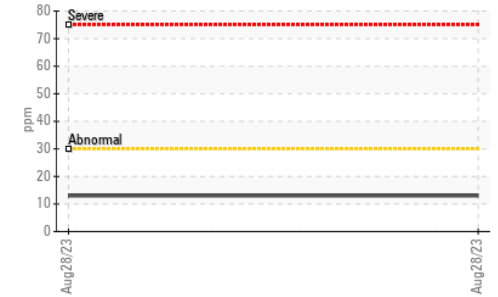
Chromium (ppm)



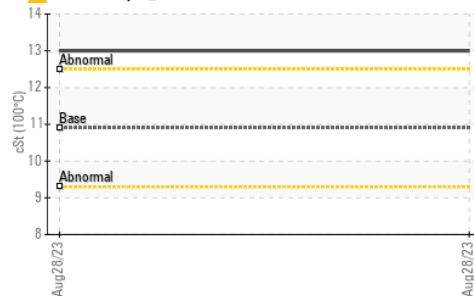
Copper (ppm)



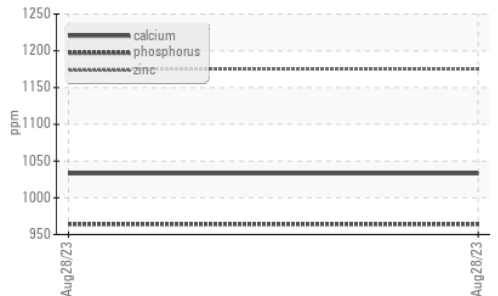
Silicon (ppm)



▲ Viscosity @ 100°C



Additives



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0090576 **Received** : 08 Sep 2023  
**Lab Number** : 02581142 **Diagnosed** : 08 Sep 2023  
**Unique Number** : 5642207 **Diagnostician** : Kevin Marson  
**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: Tim Greig  
tgreig@gflenv.com

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